House of Commons

Environmental Audit Committee

The Green Investment Bank

Second Report of Session 2010–11

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Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

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The current staff of the Committee are Simon Fiander (Clerk), Edward White (Second Clerk), Lee Nicholson (Committee Specialist), Andrew Wallace (Senior Committee Assistant), Susan Ramsay (Committee Assistant), Emily Harrisson (Sandwich Student) and Nicholas Davies (Media Officer).

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Summary

The UK has a legal commitment to reduce its carbon emissions by 2050, and also to generate a higher percentage of energy from renewable sources by 2020. The Committee on Climate Change and others have called for a 'step change' to deliver the new low carbon infrastructure required to meet these targets. The scale of investment needed is unprecedented: most estimates range between £200 billion and £1 trillion over the next 10-20 years. Traditional sources of capital for investment in green infrastructure can only provide £50 to £80 billion up to 2025, leaving a funding gap running into hundreds of billions of pounds.

The Government's top priority is to cut the deficit, so investment will have to come predominately from the private sector. To bring in this investment, there are a number of market failures and investment barriers that require urgent remedial action. A Green Investment Bank will be an essential means of unlocking the enormous scale of private sector investment needed.

In June 2010, the Green Investment Bank Commission recommended that a Green Investment Bank be set up by the end of 2010. The Government is currently still considering and market testing options, and has said that it will make an announcement on the business model for the Bank in May this year. It expects the Bank to be operational in late 2012. A key issue has been whether the new body will be a 'bank' or a 'fund', which in turn hinges on the National Accounts treatment of the Bank. There have been persistent reports of disagreement within government about whether the Bank will be able to raise money from the finance markets, due to such classification issues. We welcome the Business Secretary's ambition for the Green Investment Bank to be "a lot more than a fund", being able to lend and borrow, but the Government must deliver swiftly, and in full, on that ambition. The Bank must to be able to start making investments within 12 months.

The Green Investment Bank must not be just another 'fund' to disburse Government money, but a 'bank' able to raise its own finance and fill a gap in the market for government-backed bonds, bring in banking expertise and offer a range of commercially-driven interventions—loans, equity and risk-reduction finance. Capitalising it with £1 billion, as the Government plan to do in 2013–14, plus unknown and unspecified proceeds from the future sale of government assets, will only be enough to start to lever in the scale of private sector finance required if it is able to operate as a 'bank'. The Government must keep the level of capitalisation under review, and be ready to increase it as soon as the fiscal position allows. In the meantime, investing the proceeds from the sale of government assets will not count as an impact on the public sector fiscal position, and offers the Government a useful way of building up the Bank's capital which it should fully utilise.

Setting up a Green Investment Bank able to raise its own finance is complicated by its possible classification in the National Accounts, which will affect the Government's deficit reduction plans. If the Bank is classified by the Office for National Statistics (ONS) as being within the public sector, then its borrowing will be included on the Government's balance sheet, thus working against measures to reduce the deficit. The ONS will make its decision

on the basis of the overall extent of government control over the Bank.

The Government's primary policy objective is reducing the deficit. The Government also expects green growth to be a major future driver of the economy, generating jobs and helping to transform the UK to a low carbon economy. That 'step change' needed makes this an urgent agenda. If it has not already done so, the Department for Business, Innovation and Skills (BIS) should raise with the Treasury the scope for a 'temporary and extraordinary' exclusion of a public sector Green Investment Bank from the strictures of the Government's fiscal controls. If, however, the Treasury's deficit reduction strategy prohibits such adjustment, and the Treasury can only support a Green Investment Bank that does not sit on the Government balance sheet, then compromises in the ideal Green Investment Bank set-up may have to be contemplated. A red-line, however, should be that the Green Investment Bank is a 'bank', explicitly charged with a specific green investment purpose and backed by government, able to operate commercially and attract private sector investors, rather than a relatively small un-leveraged 'fund'.

Provided that the wider fiscal question can be resolved, the Government will need to address particular aspects of the Bank's governance and remit. In particular:

- While the Bank could offer government-guaranteed green bonds to raise much of the finance it will need, green ISAs should also play their part. They could provide up to £2 billion per year of finance for a Green Investment Bank and a symbolic way of enabling individuals to contribute to the low carbon transition, linking savings with tangible things that help people, society and the planet. It is disappointing that the Government sees green ISAs as only a longer term proposal. Instead, the Government should encourage the Green Investment Bank to offer green ISAs and tailor these to the types of investments that different groups of potential customers wish to invest in.

- To attract private sector investment, the Bank must be seen to be operating commercially, making sound investment decisions free from day-to-day control. The Government should not interfere in the Bank's day-to-day management and individual investment decisions. The Green Investment Bank Commission recommended particular priority areas for the Bank, including offshore wind. Nevertheless, there are other areas that the Bank could support, and existing carbon budgets might provide a useful tool to enable the Bank to prioritise its investments.

- The Green Investment Bank will need to be given a clearly defined 'green investment' mandate by the Government to help deliver the transition to a low-carbon economy, and possibly citing the objectives of the Climate Change Act for at least some of its activities. Its remit should include a requirement to consult the Committee on Climate Change and take its recommendations into account. The aim should be to stop the Bank straying into more profitable but less green investments. Nevertheless, the Government should not constrain the role of the Bank too rigidly, to allow the possibility in due course of the Bank supporting environmental protection schemes where it can be determined that these offer a commercial rate of return in the long term.

- The Bank's remit should include a requirement to invest in the UK first, even though overseas investments might provide a more cost-effective way of cutting emissions, because UK investment will be needed to deliver our carbon targets and could greatly contribute to the green economy. The Government must use the opportunity provided by its forthcoming 'Green Economy Roadmap' to set out ambitious policies to support green growth, and set out what supporting role the Bank could play.

- It is not clear how the three components necessary for the Green Deal will be made available: sufficiently low-cost financing for households, individual loans aggregated to a size attractive to large investors, and sufficiently long term loans. The Government should therefore not rule out the opportunity for the Green Investment Bank to provide additional low-cost capital to support the Green Deal.

- A fundamental role of a Green Investment Bank should be to advise the Government on low carbon and green infrastructure policy, to ensure policies are joined up across departments and to help meet investors' need for stable policy frameworks to give them the confidence and certainty to invest. The Government should therefore give the Bank a remit to monitor the Electricity Market Reform and Carbon Floor Price proposals, and other initiatives to come that will affect low-carbon investment, and to advise the Government on the need for any further policy and regulatory reforms.

- For the Bank to adopt that advisory role, it will require systems (as will the Government) to collect good quality and timely data on investment levels, the impact of new policies or regulations, any signs of 'crowding out' of other investment, and the costs and effectiveness of different types of investment.

- The Government needs to clarify the ambiguity about whether Green Investment Bank support for new nuclear would constitute a subsidy. In any case, however, it would not be appropriate for the Green Investment Bank to support nuclear, where the technology is already established.

- If the Green Investment Bank is established as a corporate body, Parliament must be given a strong role in scrutinising its initial governance and remit. If an arms-length body, Parliament must be allowed also to examine its evolving strategy and operating principles. The Government should consider how Parliament (as well as the third sector) might be represented on an 'advisory council' of the Bank.

More immediately, we recommend that the Government:

- works proactively with the ONS to ensure that the Bank can be developed in such a way as to maximise its investments, whilst minimising its impact on the fiscal position.

- engages with all classes of investors in undertaking the remainder of its market testing work, and undertakes a thorough and transparent consultation exercise with them. The Government could also conduct a brief public consultation on the proposals to be announced by the Government in May.

- starts negotiations immediately with the European Commission to ensure prior approval is secured for exemption from state aid rules, as these could otherwise be a restricting factor on what the Bank would be able to do. Getting state aid exemption approval can take up to two years, and we are surprised that the Government has not yet contacted the European Commission.

- concludes its review of existing low carbon government institutions and funds with the aim of improving efficiency and making it easier for investors to navigate access to them. The rationalisation of current institutions and funds as part of the establishment of the Green Investment Bank could be helpful in the longer term.

- sets out clear performance reporting arrangements that should include data on a range of key indicators about the Bank's performance in advancing green objectives. Monitoring of the Bank in its early years will be important to gauge its impact and assess whether it has been designed and set up in the right way. Before its announcement in May on the favoured model for the Bank, ideally in this month's Budget, the Government should also define precisely its three tests of effectiveness, affordability and transparency. The full results of those tests should then be published when the Government makes its announcement in May for each of the models considered, so that there is an opportunity for the House, potential investors and the public alike to understand the decisions that have been reached.

If the Government is going to be able to demonstrate that it is the 'greenest ever', it must take advantage of the current momentum behind the Green Investment Bank, and set up a Bank with the potential to deliver the scale of investment required, significantly helping to put us on the path to a low-carbon economy and achieving our challenging emission reduction and renewable energy targets. It is the firm view of this Committee that if the Green Investment Bank were unable to raise private finance there would be little if any prospect of the Government meeting those goals.

1 Introduction

The need for government action

1. The Climate Change Act 2008 sets out a legal commitment for the UK to reduce its carbon emissions, relative to a 1990 baseline, by at least 34% by 2020 (reflecting the advice of the Committee on Climate Change), and by at least 80% by 2050. To help meet those targets, an emissions reduction path is set out by a series of quinquennial carbon budgets that place legally binding ceilings on UK emissions. Also, the EU Renewable Energy Directive includes a target of generating 15% of energy from renewable sources by 2020.

2. The previous Government's 2009 'Low Carbon Transition Plan' describes how the UK will meet its carbon budgets up to 2020. It would involve increasing renewable energy generation five-fold, installing smart meters in every home, and new cars being 40% more efficient. The Plan recognised that substantial private sector investment will be needed to deliver the new low carbon infrastructure required, and emphasised the importance of a supportive climate for timely investment in a diverse mix of low carbon technologies.[1]

3. In October 2009, the Committee on Climate Change published its first progress report on the carbon budgets. It found that a 'step change' in the pace of emissions reduction was essential, and recommended that Government consider new rules that would strengthen the investment climate in low-carbon power generation and make a major shift in the strategy on residential energy efficiency.[2] The Committee's second progress report, published in June 2010, found that some progress had been made but new policies were needed to drive the step change required.[3] The previous Environmental Audit Committee's reports on carbon budgets[4] and the EU Emissions Trading Scheme[5] also identified the need for new policy frameworks to ensure the necessary investment decisions are made. The Committee argued that market mechanisms needed to be adjusted to generate a much higher carbon price, to incentivise investment in low-carbon infrastructure.[6]

4. In October 2010, the Treasury and InfrastructureUK published the National Infrastructure Plan. This stated that the UK's approach to infrastructure has been too timid and uncoordinated to support balanced and sustainable economic growth, and that the UK was ranked 33rd for the quality of its infrastructure in 2010. A 'step change' was needed in both the level and type of investment for a number of reasons, including competition from other countries investing heavily in improving their infrastructure and the need to mitigate and adapt to climate change. The Plan noted that 'most infrastructure is carbon intensive

1 HM Government, *The UK Low Carbon Transition Plan: National strategy for climate and energy*, July 2009.

2 Committee on Climate Change, *Meeting Carbon Budgets — the need for a step change: Progress report to Parliament*, October 2009.

3 Committee on Climate Change, *Meeting Carbon Budgets — ensuring a low-carbon recovery: 2nd Progress report to Parliament*, June 2010.

4 Environmental Audit Committee, Third Report of Session 2009–10, *Carbon budgets*, HC 228.

5 Environmental Audit Committee, Second Report of Session 2006–07, *The EU Emissions Trading Scheme: Lessons for the Future*, HC 70; Environmental Audit Committee, Fourth Report of Session 2009–10, *The role of carbon markets in preventing dangerous climate change*, HC 290.

6 Environmental Audit Committee, *The role of carbon markets in preventing dangerous climate change*, paragraph 77.

and a revolution is needed, particularly in transport and energy, to meet legally binding targets'.[7]

5. It is against this background that we decided to undertake this inquiry. We took oral evidence from RenewableUK, Green Alliance, the Aldersgate Group, the Carbon Trust, the Energy Technologies Institute, Ofgem, Bob Wigley (Chairman of the Green Investment Bank Commission), James Cameron from Climate Change Capital, the National Association of Pension Funds, Ernst and Young, E3G, Consumer Focus, the Co-operative Group, Woodland Trust, the UK Sustainable Investment and Finance Association, the Environmental Industries Commission, Scottish Power, and EDF energy. We also explored the issues with Justine Greening MP, the Economic Secretary to the Treasury, and Vince Cable MP, the Secretary of State for Business, Innovation and Skills (BIS). We received a note on accounting issues affecting the classification of a Green Investment Bank from the House of Commons Scrutiny unit. We are grateful to them, and to the 32 others who submitted written evidence. Three members of the Committee also visited the state-owned German development bank, KfW, to discuss their experiences in promoting green investment (Annex A).

The case for a Green Investment Bank

6. There are various estimates of the amount of investment needed in the UK, over a range of timescales, to meet emissions reduction and renewable energy targets, ranging from £200 billion to £1 trillion (Figure 1 on page 12). Whichever estimate is used, the scale of the challenge is unprecedented. Only £11 billion was invested in the UK's 'dash for gas' in the 1990s, which was considered transformational at the time.[8] Urgent action is needed to help raise the scale of investment.

7. The current Chancellor of the Exchequer, whilst in opposition, tasked an independent group of business experts—the Green Investment Bank Commission—to identify how the UK could accelerate the private sector investment required to deliver the UK's transition to a low carbon economy. The Commission reported in June 2010 and called for a Green Investment Bank to be established quickly to tackle the barriers and market failures limiting private sector investment in green infrastructure:

- utility companies' balance sheets being constrained—'Utilities face uncertain energy demand, increased borrowing costs and the need to reduce their [debt] leverage to protect their credit ratings, and other demands for their capital [as][…]most of the UK's large utilities also operate in other European countries';
- the scale of investment needed and the short timescale—'pools of capital are neither large nor long enough';
- high political and regulatory risk—changing policies and regulations could have adverse impacts on investments returns;
- new technologies by their nature carrying additional risks to investors; and

7 HM Treasury and InfrastructureUK, *National Infrastructure Plan 2010*, October 2010.

8 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p xiii.

- investment opportunities not currently being aggregated in a form suitable for large investors—particularly for energy efficiency improvements where millions of homes will need retrofitting.[9]

The Commission set out a number of models for a Bank that would raise finance from a range of sources, including institutional investors and the general public, and use this to fund different types of low-carbon infrastructure.

8. In July 2010, the new Government published its Annual Energy Statement, which aimed to set out how government would develop a clear, transparent, and long-term policy framework to act as a catalyst for private sector investment. Alongside a Green Investment Bank, the Annual Energy Statement set out a range of other prospective initiatives such as the 'Green Deal' to improve domestic energy efficiency, a review of the electricity market, measures to bolster the carbon price, and publishing a national renewables delivery plan.[10] These initiatives are at early stages, so it is not clear how much of the required investment they will deliver. Rupert Steele from Scottish Power told us that these initiatives were fundamental:

> If the business case is not there to make the investments in the relevant low carbon generation, the Green Investment Bank cannot create that business case. That has to be done through the market framework. What the Green Investment Bank can do is help increase the speed with which the industry is able to respond to the opportunities that are created by the [Electricity Market Reform].[11]

9. Ernst and Young estimate that, in the meantime, traditional sources of capital for investment in green infrastructure (utility companies, project finance and infrastructure funds) can provide £50 to £80 billion of the £450 billion it estimates is needed by 2025, leaving a funding gap running to hundreds of billions of pounds.[12] With the Government's top priority being to tackle the deficit, it is clear that the significant majority of investment to fill this funding gap will have to come from the private sector.

10. The Green Investment Bank must be an integral part of the Government's efforts to deliver on its ambitions: the Prime Minister has committed the Government to being "the greenest ever";[13] and the Government expects green growth to be a major future driver of the economy, as it attempts to build 'a new and more responsible economic model'.[14]

11. Although committed to set up a Green Investment Bank, the Government has not formally responded to the Green Investment Bank Commission's recommendations, but it is carrying out its own work looking at 'the market and institutional failures and constraints that can limit the availability of finance needed to deliver the scale and pace of

9 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 5 & 6.

10 DECC, *Annual Energy Statement: DECC Departmental Memorandum*, July 2010.

11 Q 277

12 Ernst and Young, *Capitalising the Green Investment Bank: key issues and next steps*, October 2010.

13 www.number10.gov.uk/news/speeches-and-transcripts/2010/05/pms-speech-at-decc-50113

14 HM Government, *The Coalition: our programme for government*, May 2010, p 9.

investment required to deliver the Government's green growth objectives'.[15] A timeline of events in relation to the Green Investment Bank is in Figure 2 on page 13.

Urgency of action

12. The Green Investment Bank Commission reported in June 2010 and found that urgent action was need to help radically increase investment in low-carbon infrastructure and technology. It recommended that a Green Investment Bank be set up by the end of 2010. Bob Wigley, Chairman of the Commission, told us that the Commission set a deliberately challenging timetable to provoke action.[16] However, the Government's current timetable envisages the Bank being operational in September 2012—nearly two years later than recommended by the Commission. Philip Wolfe from the Aldersgate Group called for the Bank to be effective from 2011 and described the Government's timetable as "excessively slow"[17] He saw clear risks from the Green Investment Bank only becoming operational in 2012:

> [...] if we do delay now, the natural inclination will be that investment in the short term goes into the established technologies, the known technologies, those technologies that have a lower perceived political risk. That means there is a danger that if we don't have the mechanism to invest in low carbon technologies we will, as a default in the short term, be investing in high carbon technologies.[18]

13. Gordon Edge from RenewableUK told us that the UK will lose out as demand switches to other countries:

> [...] a hiatus in investment and build will [...] prevent us from building up the demand and develop an industry out of it. That is one of the key benefits of taking a lead in offshore wind. If there is a gap, while we work out where the money comes from, then everybody steps back. If we don't get the investment in the factories here, they'll go elsewhere where there is more certain demand, places like Germany.[19]

> [...] if we had a Bank that was only there in 2013, and then took time to get that new capital into [the offshore wind sector], the big ramp-up in offshore wind that we expect and hope for, post 2015, might be inhibited because you simply don't have the quantity of capital there to build it up to 3,000 or 4,000 megawatts a year, which is £10 billion to £12 billion a year of new capital every year.[20]

James Cameron from Climate Change Capital similarly cautioned against a lengthy internal government process:

> [...] if you spend too long waiting to get it all exactly right at day one, you're often too late to really intervene decisively to resolve the problem that you started with. So, I'm

15 Ev 133

16 Q 59

17 Q 4

18 Q 3

19 *Ibid.*

20 Q 6

> all for trying to complete a task so that what you're finished with is fit for the purpose, but delay is not helpful and the more time we spend discussing what could be, the less time we're spending channelling capital into the solution. And, in fact, there is a chilling effect on investment flow as people wait in expectation of something coming through called the Green Investment Bank.[21]

Bob Wigley further explained the potential chilling effect on investment from delays:

> [...] investors will naturally say, "Well, if a [Green Investment Bank] is coming, since we don't know what degree of subsidy it might involve, we'd better wait because otherwise we might invest now and there might have been better terms available later, so we'll wait". That's the risk.[22]

14. With funding from the Treasury provided for 2013–14, we asked the Business Secretary about the Bank starting work soon. He told us:

> We are not setting it up immediately because you have to have due diligence and you have to have proper feasibility studies, which is what we are doing. Certainly we do want to see this operating quickly. That is why we are talking about staff being appointed by the end of the year and investments beginning to take place next year. There are frictions we can't just assume away, like the need for state aid, and this is going to take time.[23]

15. **If a Green Investment Bank only became operational in September 2012 investors may put off investment while there is uncertainty about how the Bank will operate. Investment may go abroad or into high carbon projects. A Green Investment Bank operational in late 2012 may not have the time needed to grow and build its balance sheet sufficiently to provide the level of investment support needed to meet 2020 emission reduction and renewable energy targets. The Bank must to be able to start making investments within 12 months.**

The purpose of this report

16. The Government informed us that it plans to include an update on its work developing the Bank in the Budget later this month, and to announce the proposed business model in May.[24] Our aim in this inquiry is to contribute to those deliberations and, we hope, to encourage their quicker conclusion and to prompt action.

17. This report sets out our findings in five parts:

- Part 2 examines the differences between a government 'fund' and a 'bank', explores the rationale for setting up a 'bank', and its possible sources of finance.

21 Q 60

22 Q 64

23 Q 387

24 Q 331

- Part 3 explores governance issues to be considered by Government and looks at the various options for the role and remit of the Bank, and different areas the Bank could invest in including the Green Deal.
- Part 4 considers the Government's current work designing and testing models for the Green Investment Bank.
- Part 5 explores the need for a clear policy framework for low carbon infrastructure, and the relationship between the Green Investment Bank and other Government green initiatives.
- Part 6 explores the potential impact of a Green Investment Bank on the public finances.

Figure 1: Different assessments of capitalisation required for a Green Investment Bank

Amount of investment required	Over what period	Level of capitalisation suggested	For what purposes	Source	Date of assessment
£234 bn	By 2025	£7 bn of additional income to fund equity share of investment	Clean energy investment to meet UK's existing energy goals	*Securing the UK's Energy Future: Meeting the finance challenge*, Ernst and Young	February 2009
£500 bn, up to £50 bn per year	Over next ten years	No estimate given	Infrastructure, not just low carbon (not smart grid)	*Delivering a 21st Century Infrastructure for Britain,* Dieter Helm, James Wardlaw & Ben Caldicott, Policy exchange	June 2009
Between £160 bn to £500 bn		£3–5 bn	Accelerate the transition towards a low carbon economy	*The case for a Green Investment Bank*, Green Alliance	October 2009
£200 bn	2020	Does not specify	Energy investment — secure and sustainable electricity and gas	*Project Discovery*, Ofgem	February 2010
Between £40 bn and £50 bn per year (up to £1 trillion)	Up to 2030	£2 bn	UK's economic infrastructure, low-carbon sector and new energy and transport	*Strategy for National Infrastructure*, HM Treasury	March 2010
At least £750 bn	over the next two to three decades	£2 bn	UK's low carbon transition	*Accelerating the transition to a low carbon economy; the case for a green investment bank*, E3G	May 2010
£550 bn	To 2020	Does not specify — calls for further analysis before Spending Review	To meet UK climate change and renewable energy targets	*Unlocking investment to deliver Britain's low carbon future,* Green Investment Bank Commission	June 2010

£550 bn	to 2020	£4–6 bn over next four years	Infrastructure, power generation, new and existing buildings, and new manufacturing industries	*Financing the Future*, Aldersgate Group	September 2010
£450 bn	2025	£4–6 bn	UK's low carbon agenda, including all the energy efficiency programme capital requirements	*Capitalising the Green Investment Bank*, Ernst and Young	October 2010

Figure 2: Timeline of significant events in relation to the Green Investment Bank

Late 2009	Green Investment Bank Commission set up by the then shadow Chancellor of the Exchequer and shadow Minister for Climate Change.
May 2010	Creation of Green Investment Bank included in the 'Coalition Agreement '.
June 2010	Green Investment Bank Commission published its report—*Unlocking investment to deliver Britain's low carbon future.*
July 2010	Department for Business Innovation and Skills' Structural Reform Plan included an action to 'develop proposals for a Green Investment Bank to support private investment in clean energy and green technologies' by April 2011.
October 2010	Spending Review 2010 detailed funding commitment for a Green Investment Bank: £1 billion in 2013–14, plus proceeds from the sale of government assets.
November 2010	Department for Business Innovation and Skills published its Business Plan 2011–2015, which set out the timetable for the creation of a Green Investment Bank: • May 2011—Design complete and published; • May to December 2011—Continuation of market testing; • December 2011—Staff and back office systems in place; • September 2012—Green Investment Bank operational; and • May 2013—First annual data released on the funds in, and size of, investments made by the Green Investment Bank.

2 A Green Investment 'Bank', not a 'fund'

18. There has been much debate about whether the Green Investment Bank will be a 'bank' or a 'fund', including it seems within the Government (paragraphs 37–39). Investment 'banks' raise their own finance from capital markets and create financial products for investors. They use this finance to lend money, or to invest in companies or financial products, in order to make a financial return.[25] A 'fund' would have finite resources, which would be disbursed as grants, loans or investments aimed at specific purposes.

The advantages of a 'bank'

19. The overwhelming majority of our witnesses supported the Green Investment Bank being a 'bank', able to raise its own finance, and not just another 'fund' to disburse government funding. They identified a range of benefits, as follows.

A bank is able to raise its own finance

20. The Spending Review 2010 announced that the Government will capitalise the Green Investment Bank in 2013–14 with £1 billion, together with proceeds from the sale of government assets.[26] The Economic Secretary to the Treasury was unable to explain to our satisfaction the basis for the £1 billion figure. She told us that it would be "unwise" to provide any details of the assets to be sold or when proceeds would be available.[27] Giving details could prejudice the Government's commercial position during the sales.[28]

21. Ernst and Young estimated that over the current Spending Review period (until 2014–15) the Green Investment Bank would require capitalisation of £4–6 billion in order to tackle the investment barriers in offshore wind, carbon capture and storage and associated infrastructure, and large-scale roll-out of micro-generation and energy efficiency[29] Green Alliance believed that £1 billion plus further unspecified amounts in a fund, without the ability to raise its own funds, would not solve the green infrastructure funding problem.[30] The Aldersgate Group, similarly, believed that £1 billion alone, without being topped up from any additional proceeds, would be unlikely to lever in finance at ratios achieved by other development banks, such as KfW (the German state-owned development bank) and the European Investment Bank.[31]

22. **Capitalising the Green Investment Bank with £1 billion, plus unknown and unspecified proceeds from the future sale of government assets, will only be enough to start to lever in the scale of private sector finance required if it is able to operate as a**

25 Q 34 [Mr Hewett]

26 HM Treasury, *Spending Review 2010*, Cm 7942, October 2010, paragraphs 1.41 & 1.42.

27 Qq 228–230

28 HC Deb, 28 February 2011, col 295W.

29 Ernst and Young, *Capitalising the Green Investment Bank: Key issues and next steps*, October 2010, p iii.

30 Qq 6, 13

31 Qq 13, 34

'bank'. The Government must keep the level of capitalisation under review, and be ready to increase it as soon as the fiscal position allows.

A bank is able to raise finance quickly

23. Gordon Edge from RenewableUK told us that a Green Investment Bank would be needed to help deliver the investment in green infrastructure at the pace required:

> [...] if we had all the time in the world, we could probably do that investment, find vehicles for the investment and the institutional investors to come into the market. They'd get used to the risks; they'd work it out; they'd find the right structures. But we don't have the time. It is because we need to be building this stuff at the pace, certainly according to the timeframes of the institutional investors, of a sprint that we need that aid, that buying down of the risk through a governmental or quasi-governmental institution.[32]

A bank will bring in expertise

24. Green Alliance considered that the barriers for financing green infrastructure were different from those that existed five years ago. A Green Investment Bank would help to bring finance expertise into government so that new barriers could be anticipated and tackled.[33] Sir Rob Margetts from the Energy Technologies Institute noted that a well-run bank, rather than a government fund, would bring in professional skills from the private sector to help make judgments about projects.[34]

A bank would signify independence and permanence

25. The transition to a low carbon economy is a multi-decade project that requires a long term redirection of private capital. If the market is to develop confidence in the longevity of Green Investment Bank investments, then isolating the Bank from day-to-day political interference would be essential. This is particularly important for attracting the capital in pension and insurance funds which seek investments over a longer term.[35] A Treasury-controlled fund, with finite resources allocated only for the four years of a Spending Review period will not have the permanence to satisfy investors that it will be a lasting and safe place for their money. Investors will work on the assumption that any money allocated by a Government could be taken away again in the next Spending Review.[36]

26. Independence from Government will remove any suspicion investors have that the Green Investment Bank is, as one witnesses called it, the "plaything of politicians"[37]

32 Q 28

33 Q 26

34 Q 45

35 Ev 127

36 Q 34 [Mr Hewett, Green Alliance]

37 Q 14 [Mr Hewett]

European investment banks have a clear governance structure that separates government from those banks,[38] an issue we discussed on our visit to KfW in Germany (Annex A).

A bank can offer a wider range of interventions

27. Ingrid Holmes from E3G supported the case for a Green Investment Bank that could provide a range of tools to back policy, and remove risks for investors. She pointed out that the Bank will need to be able to do things a fund would not, such as making equity and debt investments, providing technical assistance and packaging loans and selling these as bonds to investors.[39]

A bank would be able to fill the gap in the market for government-backed bonds

28. The most important advantage of a 'bank', however, would be its ability to issue 'green bonds' to attract significant sums from the private sector. Green Alliance argued that:

> The Bank needs the powers to issue Green Bonds [to] give the institutional investors a vehicle by which to invest in the low carbon economy. At the moment, it's very easy for pension funds to invest in the high carbon economy [...] It's very hard for those large pools of capital to access the low carbon market at the moment.[40]

29. David Paterson from the National Association of Pension Funds told us that there is an undersupply of long-dated, index-linked securities (for example bonds) that pension funds can hold to maturity. Providing a strong government guarantee, or government backing, for these securities would make such investments more attractive to investors. There is a gap at that end of the market.[41] For example, green bonds issued by the World Bank, the European Investment Bank and other institutions have been bought up by the New York State and European pension funds.[42]

30. **The Green Investment Bank needs to be a bank, able to raise its own finance, fill a gap in the market for government-backed bonds, bring in banking expertise, be permanent and independent from government, and have the flexibility to offer a range of interventions.**

Raising private finance—Green Bonds

31. A bond—effectively an IOU—is a formal contract to repay borrowed money, with interest, at fixed intervals until it reaches maturity. Bonds are bought and traded mostly by central banks, pension funds, insurance companies and banks. A 'green bond' is a bond whose proceeds are ring-fenced for green projects.[43] The Green Investment Bank

38 Q 123

39 Q 113

40 Q 28

41 Q 107

42 Q 28 [Mr Hewett, Green Alliance]

43 Q 110

Commission suggested that well-structured green bonds would be a key way of accessing the £1.5 trillion of assets managed by UK pension funds.[44] (The Green Investment Bank could also raise finance through other types of financial product, Green ISAs for example, which we discuss more fully in Part 3.) As the Green Investment Bank Commission explained:

> Pension funds and life insurance companies have long-term investment horizons with liabilities averaging 20 years or more. Their investing is naturally driven into equities and long-term bonds, which fits well with climate-related projects [...] The lack of supply of high-quality sterling bonds is driving such funds to invest in non sterling assets [...] [This] suggests the existence of substantial potential demand for bonds issued by the Green Investment Bank—up to £10 billion per annum on some estimates.[45]

32. The BT Pension Scheme, the largest corporate pension fund in the UK, emphasised to us the importance of designing green bonds to meet the needs of pension funds. Pension funds have a fiduciary duty to invest in the most commercially competitive bonds after considering price, credit risk and liquidity.[46] Our evidence suggested a number of practical considerations that a Green Investment Bank should consider in developing successful bonds that appeal to pension funds:

- The need to start early to kick-start the market and get investment flowing.[47] Pension funds approach new investment areas cautiously, so work needs to start immediately if the capital is to be available in the timeframe required.[48]
- The need for a commitment from the Bank or Government to the long term issuance of bonds—to create an ongoing supply and liquidity, enabling the bonds to be traded.[49]
- 'Green' branding alone will not attract institutional investors. Green bonds should essentially resemble any other bond in the market so that big investors readily understand them.[50]
- Pension funds and other institutional investors will require a good reason to shift from the types of investment they are already comfortable with such as gilts, private equity, venture capital and real estate.[51] They may need to be more financially attractive to offset any preconceptions of higher political or technological risk, or greater due diligence requirements arising from their unfamiliarity.[52]

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44 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 10.

45 *Ibid.* p 19.

46 Ev w75 *[Note: references to 'Ev wXX' are references to written evidence published in the volume of additional written evidence published on the Committee's website]*

47 Q 110

48 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 10.

49 Q 112

50 Q 99; Ev 98

51 Ev w44

52 Ev 113

- Bonds must be long-dated to match investors' preferences.[53] Many of the Green Investment Bank's investments will take several years to produce a cash flow, and in the interim there may be a need for the Bank to cover the cost of servicing the bond.[54]

- A guarantee or explicit Government backing behind the Bank's bonds may be desirable, because the Bank initially will not have a track record in raising bonds or have a credit rating.[55]

33. The last point—Government backing—is perhaps key. KfW, the state owned German development bank, has a government guarantee for its bonds. This underpins its 'AAA' credit rating, enabling it to raise finance from issuing bonds in the German and international capital markets (€75 billion in 2009).[56] The Government could provide a similar guarantee to investors that some or all of their green bonds or other investments in the Green Investment Bank would be protected. Such a guarantee would be particularly important early on, as the Green Investment Bank gets going and starts offering green bonds. Ingrid Holmes from E3G told us:

> [...] a bank issuing bonds without any track record and without any rating will struggle to get people interested unless you have a Government guarantee in the first instance.[57]

34. A degree of Government guarantee would increase the Bank's credit rating and thereby lower the Bank's financing costs as investors would require a lower return commensurate with that lower investment risk. Without a government guarantee, it is unclear how the Green Investment Bank would achieve a sufficiently high credit rating.[58] There may be scope, however, for fine-tuning the depth of the guarantee, to take account of the prospective public/private classification of the Bank (Part 6) as well as to reflect a range of views on investors' risk appetite. There were different views on what kind of risk and return institutional investors would look for from green bonds. We were told that while some investors would seek 'AAA'-rated bonds, others may want a lower rating, perhaps 'A', to allow a higher return from them.[59]

35. **We expect the Government to allow the Green Investment Bank, as a bank, to issue bonds to institutional investors to raise much of its finance. It is clear that they will need to be backed by a government guarantee, calibrated to make them still attractive while paying out low rates of interest, and also minimising the potential government liability (and the consequences for the fiscal deficit).** The Green Investment Bank could be assisted by the Treasury's Debt Management Office, who could share their experience in packaging government bond ('gilt') issues to maximise the sums raised.

53 Q 42

54 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 21.

55 Q 114

56 Ev 135; Annex A

57 Q 114

58 Q 114 [Ingrid Holmes, E3G]

59 Qq 42, 121 [Ingrid Holmes]

36. We recognise that setting up the Green Investment Bank as a bank, able to raise its own finance, is not a straightforward matter. How the Bank is likely to be classified in the National Accounts will impact on the Government's management of its fiscal objectives and will therefore be a key consideration. If the Bank is classified as within the public sector, then its borrowing will also be included; if it is classified as being in the private sector, then its borrowing will not. The Office for National Statistics (ONS) decides the treatment in the National Accounts, and the amount of government control over the Bank will be a key issue when the ONS makes its decision. This is discussed in more detail in Part 6.

37. Throughout the course of our inquiry there have been persistent reports of disagreement within government about whether the Bank will be able to raise money from the finance markets, due to such classification issues.[60] Bob Wigley put it thus:

> [...] what's happening is an intelligent debate and analysis between a group of people who, as far as I can see, are all committed to creating a substantive Green Investment Bank that has a real impact over time but, on the other hand, safeguarding the savings to the public sector borrowing requirement, public sector net debt, and reduction of the deficit that has just been hard fought for through the Comprehensive Spending Review.[61]

38. When we questioned the Business Secretary on the debate as to whether the Green Investment Bank should be a 'bank' rather than a 'fund', he responded:

> I want to make it clear that we see this as being more than a fund; that is a slightly false dichotomy, I think, between a fund and a bank. What we want to do is to deliver a range of financial products into the market and reinvest the proceeds [...] We certainly envisage it being a lot more than a fund. Certainly the analysis that has been done so far suggests that there is certainly a scope for—and a need for—borrowing over and above any injection from the Government in our additional allocation and in asset sales. Banks perform a variety of functions: they lend, they borrow, and this institution would do the same and it would certainly merit the label of a Green Investment Bank.[62]

The Economic Secretary to the Treasury told us that there was no difference of opinion between the Treasury and BIS about whether the Green Investment Bank should be a bank or a fund.[63] But the Business Secretary indicated that the need to take account of the fiscal position could entail a sliding scale of private funding as the position improved:

> There is an immediate net debt objective that the Government has, a key fiscal target, together with deficit reduction, for 2014–2015, and we have to operate within that. We don't know what the fiscal position will be subsequently. I think we probably

60 See articles: http://www.guardian.co.uk/environment/2010/oct/13/treasury-battle-green-investment-bank/print
http://www.guardian.co.uk/environment/2010/nov/18/chris-huhne-green-investment-bank
http://www.guardian.co.uk/environment/2011/feb/01/oliver-letwin-green-investment-bank
http://www.guardian.co.uk/politics/2011/feb/17/treasury-nick-clegg-green-agenda

61 Q 66

62 Qq 331, 334

63 Qq 193, 194, 199–213

> both assume it will be a lot better than it is now, and this will give a great deal more scope for institutions of this kind. We think of this in a long-term sense. It will have to start on a modest scale, partly because it has to establish its track record and its credibility, partly because it is operating within borrowing constraints. But over the long term it could well develop into a very substantial institution.[64]

39. It is clear to us from our many witnesses that the extent to which the Green Investment Bank is a 'bank' or a 'fund' is a key consideration as to whether the significant investment needed for the UK to meet its emission reduction and renewable energy targets will be raised. **We welcome the Business Secretary's ambition for the Green Investment Bank to be "a lot more than a fund", being able to lend and borrow. We recommend that Ministers deliver swiftly, and in full, on this ambition.**

64 Q 336

3 The Green Investment Bank's governance and remit

40. The extent to which a Green Investment Bank is a 'bank' or a 'fund' will have a fundamental impact on the governance arrangements and remit of the Bank, including the types of financial support the Bank could offer and in what areas.

Governance

41. How independent the Green Investment Bank is from government is an important consideration not just for the Government's ability to influence what the bank does, but also the Bank's ability to raise finance from private sector investors. A fully independent Bank, beyond day-to-day political control, will help gain the confidence of investors, but this may reduce government's ability to influence and direct the Bank's priorities. Strong governance arrangements are therefore needed to tackle this tension. The Green Investment Bank Commission suggested establishing:

- An advisory council made up of shareholder representatives, Ministers and individuals representing the public interest or with an environmental or social focus. The council would advise on the areas they would like the Bank to focus its efforts upon.
- Below this advisory council would sit a board of directors with legal responsibility for the commercial operation of the Bank. The board would be primarily made up of professional financiers, independent commercial business leaders and sector investors. The board would be responsible for approving strategy and could have final say on whether investment proposals were approved.
- A management team, led by a chief executive, would be responsible for day-to-day operations within the strategic framework approved by the board.[65]

We agree with the Green Investment Bank Commission that governance arrangements distinguishing between an advisory council and a board of directors would be helpful.

42. KfW, the German development bank, was set up as an independent and permanent institution by legislation. This provides the legal basis for KfW's German government guarantee. When the Queen's Speech was presented, the Government indicated that the Energy Bill could contain measures to create a Green Investment Bank.[66] The Bill was introduced in the Lords in December 2010, but there is no mention of the Green Investment Bank in the Bill. We questioned BIS on this last month, and they told us that:

> There are other legislative opportunities and we have a list of those. The likeliest form is probably a public corporation. But the question of how much that would need to be done in statute, and how much could be done by secondary legislation, is

65 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 37 & 38.

66 http://www.number10.gov.uk/queens-speech/2010/05/queens-speech-energy-security-and-green-economy-bill-50650

> not yet determined, so that is one of the areas that is actively under review as we do the planning work [for the Bank].[67]

43. **If the Government concludes that it does not need to introduce an amendment to the Energy Bill, it should without delay be transparent about what legislative route it intends to take to set up the Green Investment Bank. That would ensure that this can be built into the parliamentary timetable so as to allow for sufficient scrutiny.**

Banking reform

44. The Government expects the Green Investment Bank to have an explicit mandate to tackle risk that the market currently cannot adequately finance. This will help 'catalyse further private sector investment and facilitate the entrance of new types of investor into green infrastructure'.[68] Indeed, the Business Secretary told us that there are "high-risk projects that have an important environmental aim—wind projects would be a good example—that are not going to happen on the scale that they should without the investment of an institution of this kind".[69]

45. The Coalition Agreement sets out the Government's plan for reform of the banking system. This included putting in place a framework to promote responsible and sustainable banking, where regulators have greater powers to curb unsustainable lending practices, and to take action to promote more competition in the banking sector.[70] In June 2010, the Business Secretary and the Chancellor announced the creation of an Independent Commission on Banking, chaired by Sir John Vickers, to tackle systemic risk in the banking system. The Commission was asked to consider reforms to promote financial stability and competition, and to make recommendations to the Government by September 2011. In a speech at the London Business School on the 22 January, Sir John is reported to have said that plans to separate banks' trading and retail operations were being examined. These might require banks to put their investment arms into separate entities that could now be allowed to collapse without precipitating a run on the retail banking sector.[71] We questioned the Business Secretary as to whether the Green Investment Bank—as an investment bank—would be allowed to fail, and he told us that:

> If it was a Government institution, then, by definition, it would not [fail]. If it was a purely private bank at some stage in the future, or if it were to spin off as a private bank, then certainly that would be the definition of a private bank, would it not? I think the exercise that Sir John Vickers and the Commission are concerned with is a rather different one. It is concerned with these very, very large global banks—of which we have three major ones in the UK […] which are so enormous in their scope that they can destabilise the whole economy. The Commission is looking at

67 Q 365 [Janice Munday]

68 Ev 133

69 Q 372

70 HM Government, *The Coalition: our programme for Government*, May 2010, p 9.

71 See article: http://www.bbc.co.uk/news/business-12259716?print=true

how to make them safe. This is a very different kind of exercise from the risks that would be associated with an institution of the kind we are talking about.[72]

46. In setting up the Green Investment Bank, the Government faces a dilemma. It sees a Bank investing in riskier areas where private sector finance is currently reluctant to venture, but its banking reform agenda aims to reduce the likelihood of banks over-extending themselves. A Green Investment Bank backed by government guarantee would prevent it from failing, which would help it to raise funds and lend them on at a lower rate—an important consideration for some potential areas of investment, as below.

47. The Government will need skills from both the banking and environmental sectors. Having the right mix of expertise within the Green Investment Bank, once it is operational, will have an important impact on investors. Philip Wolfe from the Aldersgate Group told us that many large scale investors do not have specific expertise on environmental markets.[73] James Cameron from Climate Change Capital explained that the culture of the organisation should be expert and it should be able to attract very high quality people so that it will have status and clout in commercial markets, otherwise the other institutions that it would need to work with will not give it sufficient respect.[74]

48. In the short term, as it is establishing itself, the Green Investment Bank will need to attract banking and environmental talent from existing companies. Ben Warren from Ernst and Young told us that the Bank's ability to attract talent will largely be influenced by the remuneration packages it offers, including bonuses. On the other hand, the ability to outsource work and expertise should be considered to avoid building an unduly large overhead for the institution.[75] The Westminster Sustainable Business Forum argued that the Bank must find a balance between offering appropriate remuneration structures to attract talent with its responsibility as a publicly funded body.[76] RegenSW believed that it was essential that there was representation from the third sector on the Green Investment Bank's board and executive team to ensure that investment priorities are balanced, not only between economic and environmental issues but also with social issues.[77]

49. **Once operational, the right skills mix within the Green Investment Bank will be vital for attracting investors, and that will require competitive remuneration. Representation from the third sector on the Green Investment Bank's board could help ensure a balance between economic, environmental and social issues in the Bank's investment priorities.** (We make further recommendations about the Bank's board below).

72 Q 379

73 Q 29

74 Q 78

75 Ev 134

76 http://www.policyconnect.org.uk/wsbf/position-paper-green-investment-bank

77 Ev w19

Oversight

50. We welcome the Government's intention to publish data on the funds in the Green Investment Bank, and on investments made by it, by May 2013.[78] KfW, whose remit includes functions similar to those likely to be given to the Green Investment Bank, measures its performance by the impact achieved by the different programmes it manages—jobs created, emissions avoided, the volume of investments generated, etc.[79] Transform and E3G recommended that the Green Investment Bank should be tasked with producing a comprehensive annual public report on its activities.[80]

51. Private sector companies do not currently have explicit obligations to report on sustainability. Many voluntarily include 'corporate social responsibility' commentaries in their Annual Accounts, and some larger and 'greener' companies produce separate 'sustainability reports'. In the public sector, the Treasury is overseeing an initiative whereby central government departments and bodies will produce 'sustainability reports' alongside their Accounts, providing as a minimum information on greenhouse gas emissions, waste minimisation and management, use of finite resources, biodiversity, and sustainable procurement. It is planned that departments will produce sustainability reports from 2011–12 onwards, preceded by dry-run reports in 2010–11.[81]

52. **Monitoring of the Bank in its early years will be important to gauge its impact and assess whether it has been designed and set up in the right way. The Government needs to set out clear performance reporting arrangements that should include data on a range of key indicators about its performance in advancing green objectives.** As a centre of expertise for 'green' investment, it naturally follows that the Bank should observe best-practice on 'sustainability reporting'.

Type of financial support—equity, loans and risk-reduction

53. There are a number of types of intervention that a Green Investment Bank could make. It could provide direct investments in projects, alongside other investors or on its own. These investments could be in the form of equity—investments in return for a share of the company or future profits—or loans. The Bank could also offer different types of 'de-risking products' that help tackle particular areas of investment risk to help get private investor finance following, such as insurance.

54. The Green Investment Bank Commission has provided a thorough review of these many interventions, and we have therefore not explored this complex area in any great detail. However, our evidence has provided some important considerations for Government when designing the Green Investment Bank, which we set out below.

55. There was support for the Green Investment Bank providing equity investments, rather than only providing loans. RenewableUK argued that if the Bank were to take equity stakes in offshore wind projects, this could unlock further financing by allowing developers to

78 Department for Business, Innovation and Skills, *Business Plan 2011–2015*, November 2010.

79 Ev 135

80 Ev 120

81 http://www.hm-treasury.gov.uk/d/frem_sustainability_reporting_201011.pdf

raise more money through loans elsewhere. As an equity investor, the Bank could sell its shareholding in due course and recycle this capital into other projects. RenewableUK argued that the Bank could offer loans, but probably not enough to make a difference in that sector. They pointed out that equity investment would also have an important symbolic affect, providing:

> [...] a significant confidence boost […] as other investors could see that the Government had a direct stake in the success of projects part-owned by the Bank, and thus could be better relied upon to ensure the policy environment was stable.[82]

EDF energy similarly argued that the primary focus of the Bank should be to provide equity funding, and that it should not look to provide loans to projects at the development stage, because the utility sector is constrained in its ability to deliver the required investment by over-stretched balance sheets. It told us that loans:

> [...] could be considered to be a subsidy, given that commercial lenders are generally not prepared to finance riskier large scale projects during their early stages. The [Green Investment Bank] would therefore not be able to demonstrate that it was behaving commercially, and may therefore be considered to be providing State Aid.[83]

56. The Energy Technologies Institute and Green Alliance, however, supported the case for the Green Investment Bank offering loans.[84]

57. One way of bringing new capital into the renewables market is to reduce risks for other investors.[85] The Bank could support businesses and lenders by providing 'de-risking' funds that can act as a guarantee to lower the risk to other lenders, thus enabling more lending to flow.[86] Many of those who submitted evidence for our inquiry favoured the Green Investment Bank offering extreme weather insurance to support offshore wind development. The Government appears to favour this de-risking approach. The Business Secretary told a conference organised by the Aldersgate Group:

> It will have a mandate to tackle risk inherent in financing green infrastructure that the market currently cannot adequately accommodate. For example, in offshore wind the construction risk can be a prohibitive issue for investors, and government is looking at types of de-risking products for construction and operating phases, to help the private sector introduce cheaper forms of low risk capital.[87]

58. The Government has stated that it will decide on the role and operating model of the Bank after market-testing its design. The Business Secretary told us that an announcement on the Bank's 'concrete business operating model' will be made in May.[88] Witnesses had mixed opinions as to how rigidly the Bank's role should be defined. Prashant Vaze from

82 Ev 110

83 Ev 108

84 Ev 94, Ev 127

85 Ev 110

86 Ev 92; Q 108 [Ben Warren, Ernst & Young]

87 http://www.aldersgategroup.org.uk/report_controller/17

88 Q 331

Consumer Focus warned against setting a rigid role for the Bank in advance, to allow it to develop over time:

> When [KfW] was first set up, it was created in order to rebuild Germany after the Second World War. The [European Bank for Reconstruction and Development] was created for issues to do with stimulating market economies in the eastern bloc countries. We must not be too specific about what its purpose and function is because these things develop over time.[89]

However, Elliot Mannis from the Woodland Trust advocated setting out clearly the Bank's role:

> I think in the mandate to the Green Investment Bank, there must be a very clear statement around the purpose and intent and how funds ought to be deployed because it is our money. It is the antithesis of a bank in the traditional sense, capitalised from private funds.[90]

59. Not all infrastructure investment is green, and there is a risk that the Bank could face demands from many quarters for funding. The World Development Movement suggested that 'green standards' need to be at the core of all investments promoted by the Green Investment Bank, and that these should be defined so that they drive investment to the leading edge of low carbon energy.[91] Penny Shepherd from the UK Sustainable Investment and Finance Association wanted to see the Bank having a robust process for evaluating broader social and environmental risks and benefits of potential investments, rather than an "exclusion list".[92] Green Alliance suggested reinforcing green investment by linking the Bank's remit to the Climate Change Act.[93]

60. When deciding on the role of the Green Investment Bank, there may be advantages for it being able to start small and not being expected to tackle every barrier to investment straight away. This could help build investor confidence. Penny Shepherd from the UK Sustainable Investment and Finance Association told us that it is very important from an investor's perspective that the Bank would have the freedom to select simple things to do first and that it would not be asked to address every possible opportunity. It would need to build up the trust of investors by being successful in its early years.[94] Kirsty Hamilton from Chatham House suggested that for simplicity and confidence-building the Bank could aim to facilitate projects getting to completion that otherwise would not.[95]

89 Q 145

90 Q 144

91 Ev w49

92 Q 328

93 Ev 127

94 Q 285

95 Ev w58

Areas the Green Investment Bank could invest in

61. There are a range of different areas a Green Investment Bank could be active in. The Green Investment Bank Commission suggested that:

> [...] in its initial phase, the Green Investment Bank focuses on supporting the areas where maximum impact and speed to implementation can be achieved. For example, the scale up of investment in proven energy efficiency projects that can lower the overall development need of renewable energy sources. Investment in enabling technology, such as smart grids, that reduce the cost for other low carbon investments, and support of both proven and high impact third-round offshore wind, should all be priorities.[96]

Nevertheless, we heard evidence also in favour of a wider range of potential areas for investment, as follows.

Large energy de-carbonisation projects

62. The World Development Movement supported a Green Investment Bank that only financed projects or technologies that reduced the carbon intensity of energy production, or else it warned that the UK may not meet its emission targets.[97] EDF energy supported a Bank that initially focused on investing in energy generation projects and technologies that have the potential to deliver a positive environmental impact by 2025, to allow it to generate a return on a portion of its investments within a reasonable timeframe, and thereby build confidence in the Bank as an ongoing financial player.[98] Scottish and Southern Energy argued that the Bank could have the most impact in pre-construction stages of capital intensive, low carbon electricity generation projects such as carbon capture and storage, nuclear and renewables.[99]

Small and Medium sized Enterprises

63. The current economic environment is very challenging for businesses, particularly start-ups and SMEs wanting to raise finance for developing innovative green technologies.[100] Unite the Union argued that it was vital that an investment strategy for SMEs is included in the objectives of the Green Investment Bank, because innovation comes predominantly through SMEs and SMEs make up 80% of the UK manufacturing base. Without investment in SMEs, Unite was concerned that the supply chain would not be in place to support big energy projects. James Wilde from the Carbon Trust also believed there was a massive opportunity to unlock energy efficiency in Small and Medium sized Enterprises.[101]

96 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p xiv.

97 Ev w49

98 Ev 108

99 Ev w35

100 Ev w34

101 Q 39

Innovation

64. The Creativity Partnership found that a lack of finance for innovation often meant that innovations have to go overseas to be exploited, and hence 'UK plc' only gets a small proportion of the value that our innovators create. What finance is available for small business is poorly suited to entrepreneurial activity; a bank loan secured on assets is of little use to an innovative small business that really needs capital that can be subject to risk. If 5% of the Green Investment Bank's lending were allocated for 'green innovation' by SMEs, the Creativity Partnership believed it would be 'transformational'.[102]

New technologies and Research & Development

65. New technologies carry an extra risk in that it is often unclear how the business model for their exploitation will work. New technologies will often require significant investment to demonstrate the commercial opportunities they present. Ingrid Holmes from E3G told us that through its investments the Green Investment Bank could deliver a 'proof of concept'—that significant investment would be viable—before stepping back and allowing private sector investors to step in.[103]

Community scale action

66. TransformUK and E3G told us that a substantive pipeline of viable community renewable energy projects exists, but financial and legal expertise combined with lack of equity funding is preventing these deals from going ahead.[104] The Co-operative Group suggested that supporting community action schemes would be a perfect role for the Green Investment Bank because it would be addressing a market failure that other bodies are not tackling: a lack of funding for planning such schemes.[105]

67. The Environmental Industries Commission told us that measures to protect the environment can yield significant economic benefits as well as ecological gains. The UK is at risk of getting left behind its international competitors, as they continue to put in place ambitious support measures for their environmental industries.[106] Other development banks provide support for environment protection.[107] The Woodland Trust told us that woodland creation could be supported by the Bank, to deliver a range of benefits including absorbing atmospheric carbon and improved flood management and water quality.[108]

102 Ev w7

103 Q 116

104 Ev 120

105 Q 154; Ev 92

106 Ev 139

107 For example, the Brazilian Development Bank (BNDES) offers loans aimed at the reforestation, conservation and forest recovery of degraded areas.

108 Ev 98

Investment priorities

68. It is clear that the Green Investment Bank will need a way of prioritising its investment decisions. Achieving the right balance of areas to focus on, at least initially, will be an important task for the Government and the Green Investment Bank. The Co-operative Group argued that the Green Investment Bank should not be pulled into a narrow focus; enabling a range of renewable schemes could have positive knock-on effects such as educating and enabling people to make further improvements as to how they use and save energy.[109] Scottish and Southern Energy, on the other hand, argued that the Bank should become a specialist in its chosen areas, so that it could understand and price risks: It should not try to fund every facet of green energy, 'otherwise it runs the risk of spreading itself too thinly and diluting its potential impact'.[110]

69. Investments made by the Green Investment Bank, depending on their size, could mean that the Bank is effectively 'picking winners'. Witnesses warned of the potential pitfalls of doing that.[111] Philip Wolfe from the Aldersgate Group told us that in any case there will be important enabling investments in smart grids and heat networks, which will be necessary early on to enable other technologies to come through.[112] The Energy Technologies Institute has developed an 'energy systems model' that it told us could be a tool for the Green Investment Bank to choose projects that are both economic and practical.[113] Perhaps, most helpful, the Government is piloting a departmental carbon budget system which could offer the Bank an existing assessment of what needs to be done in particular sectors, and any pressing needs in particular, which could help prioritise the sequence of its investments.[114]

Nuclear power

70. When it comes to new nuclear power, there are particular issues that impinge on whether the Green Investment Bank should support it: whether that would constitute a subsidy; whether new nuclear is the sort of technology that might not otherwise be funded because of 'market failure'; and whether in any case the scale of investment involved would be a disproportionate use of the resources of a Green Investment Bank.

71. The Coalition Agreement sets out the political agreement reached between the Conservative party and the Liberal Democrats on nuclear power. It envisages the replacement of existing nuclear power stations provided that they receive 'no public subsidy'.[115] On 18 October 2010, the Secretary of State for Energy and Climate Change

109 Ev 92

110 Ev w35

111 Ev 108 [EDF Energy], Ev w29 [Energy Services and Technology Association]

112 Q 23

113 Q 50

114 The carbon budget system involves reducing operational emissions from individual departments and also emissions from sectors of the economy that a department has responsibility for (for example Defra would be responsible for reducing emissions from agriculture). The system is currently at an early stage of implementation, and the current Government is reviewing it.

115 HM Government, *The Coalition: our programme for Government*, May 2010, p 17.

made a Written Statement on energy National Policy Statements, which laid out further details on what 'no public subsidy' means:

> [...] there will be no levy, direct payment or market support for electricity supplied or capacity provided by a private sector new nuclear operator, unless similar support is also made available more widely to other types of generation. New nuclear power will, for example, benefit from any general measures that are in place or may be introduced as part of wider reform of the electricity market to encourage investment in low-carbon generation [...] Our 'no subsidy' policy will [...] need to be applied having regard to proportionality and materiality.[116]

72. A Green Investment Bank, backed by the Government, might be able to provide finance at lower rates than would otherwise be available from commercial banks. Scottish Power and EDF energy argued that if the Green Investment Bank operated in a commercial way, investing in nuclear alongside utility companies on equal terms, that should not be considered a subsidy.[117] We questioned the Economic Secretary to the Treasury on whether a lower than 'market' interest rate from the Green Investment Bank would constitute a subsidy, to which she responded:

> [...] it is very clear-cut in the guidelines that DECC has issued that there won't be a levy, there won't be direct payment or market support for electricity that's supplied or capacity provided by private sector new nuclear operators [...] I don't think it's fair for me to jump the gun and say what the Green Investment Bank will or won't be investing in. What I can assure you is that we're going to stick to the guidelines that DECC has issued.[118]

The Business Secretary offered a similar view.[119]

73. Rupert Steele from Scottish Power questioned the role that the Bank could play with the limited resources so far committed for it.[120] Paul Spence from EDF energy, which may build four new nuclear power stations, told us that those investments would be very large and "we need to find some creative ways to obtain that financing and I wouldn't rule out the Green Investment Bank having a role to play in that [...] the Bank can send a signal to other sources of funding, other investors, that this is good project to invest in. Their impact isn't what they put in, it is the multiplication of that by providing confidence for other investors, and that then doesn't use up the funding".[121]

74. **In our judgement there remains some ambiguity about whether, under the terms of the Government's statement, Green Investment Bank support for new nuclear would constitute a subsidy—whether, for example, support would be regarded as market support similar to that made also available to other types of generation. The**

116 HC Deb, 18 October 2010, col 42–46WS

117 Q 316

118 Qq 217–219

119 Q 332

120 Q 312

121 Qq 312, 321

Government needs to provide greater clarity on what would constitute a subsidy in regards to Green Investment Bank support for new nuclear.

75. There was a range of views about whether a Green Investment Bank investing in nuclear would deter some potential investors. Paul Spence from EDF energy told us that its polling showed growing support for nuclear to play a substantial role in a balanced energy mix and that he would not expect nuclear power to have a material effect in deterring investors.[122] Penny Shepherd from the UK Sustainable Investment and Finance Association suggested that when institutional investors look at the overall risk-adjusted return that they can get from the Green Investment Bank, they will take a view on the risks associated with nuclear as part of that mix. However, when looking at individual investors, there could be a more mixed impact, as she explained:

> [...] there are some private investors who will be more than happy to invest in nuclear; whereas for others, if the Green Investment Bank is investing in nuclear, that will put it outside the sphere of opportunities they are interested in. It seems to me that in that environment the Green Investment Bank might wish to look seriously at being able to offer hypothecated investments that are, for want of a better phrase, nuclear-free.[123]

76. Some potential private investors may be put off investing through the Green Investment Bank if it were possible that it could invest in nuclear power. **It would, however, not be appropriate for the Green Investment Bank to invest in nuclear, where the technology is already established. There is a range of other potential interventions for the Green Investment Bank,** as we discuss below, **where its support will be vital and will make a real difference.**

Green ISAs

77. The bulk of the Green Investment Bank's source of finance is likely to be through the issue of green bonds (Part 2). However, 'green ISAs' could provide additional sources of finance, while also providing a symbolic way for individuals to contribute to a low carbon economy. They could get people saving and start linking savings with tangible things that help people, society and the planet.

78. The Coalition Agreement commits the Government, when creating a Green Investment Bank, to create green financial products to provide individuals with opportunities to invest in the infrastructure needed to support the new green economy.[124] Over 18 million people—around one in three adults—have an ISA, with more than £220 billion invested.[125] The Green Investment Bank Commission suggested that green ISAs may be only a small part of the solution to the funding gap, but would provide a visible and symbolic way for individuals to make a contribution to the Green Investment Bank. It estimated that over time it may be possible for the Bank to capture 10% (£2 billion) of the

122 Q 317

123 *Ibid.*

124 HM Government, *The Coalition: our programme for government*, May 2010, p 17.

125 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 22.

annual amount of cash ISAs raised.[126] Incentives could be provided through greater future increases to personal ISA allowances for green ISAs.

79. Green ISAs might provide a way of people building trust in savings and investments after the financial crisis.[127] James Cameron from Climate Change Capital told us that because of the ISAs' link to infrastructure, people can understand that their savings have built something in their community that they use, restoring faith in what investment is really for.[128] Jonny Mulligan from the Environmental Industries Commission suggested that the Green Investment Bank should be clear when asking people for their savings about where it will invest these.[129] Elliott Mannis from the Woodland Trust suggested differently packaged products, each developed with specific purposes in mind, for example a 'woodland bond'.[130]

80. The Treasury told us that its current work is looking at what a Green Investment Bank could do to promote the green ISAs already offered by a number of banks and companies, as well as the potential for those banks or companies to invest with the Green Investment Bank.[131] The Energy Technologies Institute argued that delaying the introduction of ISAs until the Bank is established and proven would be prudent.[132] The Business Secretary told us that the Government was also thinking along such lines:

> I think that is a longer term proposition. Certainly we are not envisaging retail finance as a first stage but [...] I have suggested an evolutionary approach. Of course retail finance and green ISAs are quite an attractive concept, and in the longer term I can envisage this being part of the mix.[133]

81. **We are disappointed that the Government sees 'green ISAs' and other retail investments as a longer term option—they could provide an important symbolic way of enabling individuals to contribute to the low carbon transition. The Government should give the Green Investment Bank the power to offer green ISAs once it becomes established, and should consider how it might get green ISAs off to a good start, for example by making the ISA investment limit higher for Green Investment Bank-issued ISAs.** The Bank could tailor green ISAs and similar products to the types of investments that different groups of potential customers wish to invest in, for example 'woodland bonds'.

Support for the Green Deal

82. The greater uptake of energy efficiency measures in homes and businesses is vital for cutting energy demand. Producing over a quarter of the UK's carbon emissions, the

126 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 22.

127 Q 330

128 Q 100

129 Qq 282, 318

130 Qq 169–170

131 Q 241

132 Ev 94

133 Q 392

housing stock is an important source of rising energy demand.[134] The Green Investment Bank Commission reported that:

> One of the essential elements in delivering a low carbon Britain is to introduce energy efficiency improvements such as high efficiency windows, lighting, temperature control and more efficient boilers in millions of homes and commercial buildings in the public and private sectors.[135]

83. The level of investment required for energy efficiency measures is enormous. Ernst and Young stated that the cost of retrofitting the UK's 26 million homes to a high energy efficiency standard would be up to £230 billion, between now and 2025.[136] The scale of finance needed is only one barrier. Energy efficiency measures are often not attractive to investors because they comprise many individual, low value investments, as the Green Investment Bank Commission pointed out:

> The challenges of aggregation, making funds available and then repaying them, deal execution and transaction cost management are surmountable, but the current institutional frameworks and capital markets are unlikely to execute what is required. 'Retrofitting' older homes with new energy saving appliances is a perfect example because of the huge number of small buildings involved [...] The sheer scale of the projects will require a nationally coordinated response.[137]

84. There are factors that affect demand for energy efficiency measures. The Energy Saving Trust, surveying households, classified barriers into three categories:

- *Awareness*—residents unaware of the measures, or do not know how to take them up. 15% say they have never thought of installing cavity wall or loft insulation.

- *Motivational*—they have not taken the measures because they consider it a hassle, or they are 'putting it off'.

- *Affordability*—installing loft or cavity wall insulation is considered to be too expensive or the payback period too long.[138]

85. Our witnesses supported the idea of the Green Investment Bank having a role in energy efficiency improvements. This role included:

- Aggregating domestic energy efficiency improvements into much larger packages, opening up investment from private sector investors.[139]

- Providing low-cost finance directly to households.[140]

134 Ev 115

135 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 7.

136 Ev 120

137 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 7.

138 Ev w38

139 Ev w56

140 *Ibid.*

- Providing finance to develop energy efficiency industries: Consumer Focus pointed out that a low cost financing mechanism is needed to develop immature industries related to energy efficiency, such as solid wall insulation, making these measures more affordable.[141] This is a pressing issue as the Committee on Climate Change estimates that 2.3 million homes will need to have solid wall insulation fitted by 2022 to meet climate change targets—equivalent to nearly 210,000 each year from 2011[142] (there are currently only 16,000 to 23,000 solid wall insulation refurbishments undertaken each year).[143]

- Providing finance to businesses for energy efficiency which, the Energy Services and Technology Association pointed out, would offer greater energy savings per building than the domestic sector.[144]

86. The role that a Green Investment Bank could assume here depends in part on the design of the Government's Green Deal initiative, which aims radically to increase the take-up of home energy efficiency improvements. The proposals would establish a framework to enable private firms to offer consumers energy efficiency improvements to their homes, community spaces and businesses at no up-front cost, and to recoup payments through instalments in their energy bills.[145] The Energy Bill, currently in the Lords, includes provisions for the Green Deal, with the first projects starting in autumn 2012.

87. The Government is in discussions with the investment community about the best way of ensuring Green Deal providers can access affordable capital.[146] The Association for the Conservation of Energy told us that energy suppliers' balance sheets will not be able to absorb the full costs of the Green Deal given the potential scale of demand. Banks had indicated that they would be unwilling to provide the finance, initially at least, because Green Deal finance would be tied to a meter-point (not a person) and involve relatively small levels over a long payback period (up to 25 years). In addition, a low interest rate is required to achieve the Green Deal 'golden rule'—the charge for installation of the measures should be exceeded by the value of the fuel bill savings over the lifetime of the charge.[147] The Association for the Conservation of Energy told us that:

> [...] at commercial interest rates it is unlikely that higher-cost measures, beyond cavity wall and loft insulation, will be able to meet the 'golden rule'. If the Green Deal is to deliver 'whole house' packages of the kind that we need to meet our carbon reduction targets, then the [Green Investment Bank] must be enabled to play a significant role in maintaining Green Deal interest rates at the lowest possible level.[148]

141 Ev 101

142 Committee on Climate Change, *Meeting Carbon Budgets — ensuring a low-carbon recovery: 2nd Progress report to Parliament*, June 2010, p 89 & 90.

143 Ev w38

144 Ev w29

145 http://www.decc.gov.uk/assets/decc/legislation/energybill/1010-green-deal-summary-proposals.pdf

146 *Ibid.*

147 Ev w56

148 *Ibid.*

Prashant Vaze from Consumer Focus told us that the potential Green Deal providers he was aware of might not be able to lend at low enough rates.[149]

88. In Germany, KfW as a source of low cost finance has been instrumental in helping deliver 100,000 energy efficiency retrofits every year.[150] KfW provides subsidised loans to commercial banks, which then use this finance to grant loans for energy efficiency to individuals and businesses. The German Government sets the eligibility criteria for particular energy efficiency schemes, which the commercial banks have to follow with their end-customers. A government guarantee reduces the cost of it raising finance, which it passes on to commercial banks. KfW also reduce the rate at which they lend to the commercial banks using scheme-specific subsidies, and allows commercial banks to add only a limited additional rate margin to cover their lending risk and costs. KfW has cleared with the European Commission that such subsidised lending does not contravene the Commission's state aid rules. This loan-based approach to energy efficiency in Germany engenders a more stable efficiency programme environment, in place of a potentially more volatile grants-based system which might only operate for a short period.[151]

89. TransformUK and E3G told us that the Green Deal carries unquantified risks around demand, default rates on loans and the performance of energy efficiency measures in the home. Because of this, they concluded that it was unlikely that banks would provide any finance to the first tranche of Green Deal projects.[152] A number of witnesses suggested therefore that the Green Investment Bank could also help provide the Green Deal with a 'proof of concept'. This would enable private investors to see the concept in practice and evaluate the potential scale of opportunity and risks of investing. It could open the door for greater private sector investment.[153] However, the Business Secretary told us that he had not envisaged the Green Investment Bank being at the heart of the Green Deal, but he was flexible and open-minded and would not rule out such options.[154]

90. **It is not clear how the three components necessary for the Green Deal will be made available: sufficiently low-cost financing for households, individual loans aggregated to a size attractive to large investors, and loan terms sufficiently long enough to satisfy the Green Deal 'golden rule'. The Bank could be an important source of additional capital for the Green Deal and there should be much more joined up thinking between BIS and DECC on the potential role of the Green Investment Bank in this area. The Government should conduct an urgent review to consider additional potential sources of finance for the Green Deal, and should not rule out the opportunity for the Green Investment Bank having a role. The Government should examine what lessons might be learned for the Green Deal from KfW in Germany, which has dealt successfully with similar requirements.**

149 Q 158

150 Ev 120

151 Annex A.

152 Ev 120

153 Ev w62

154 Q 373

A level playing field

91. The Government has stated that the Bank will make investments on a commercial basis. That has implications for its likelihood of 'crowding out' other investors, and whether EU state aid rules are respected.

The need for 'commercial' investments

92. To the extent that any investments by the Bank are not subsidised by the Government, it will need to make a commercial rate of return on such investments, correlated to the risk involved. If it does not, institutional investors will not support it. Philip Wolfe from the Aldersgate Group did not think that he:

> [...] would see the Bank investing in projects for which the returns are so low that it doesn't make a sensible return. I think what we're looking at are projects where the return is a good commercial return, but ones that might not get taken up by traditional commercial banks, because of their view of the perceived political risk, […] lack of familiarity with the technologies or perceived regulatory risk.[155]

93. The Co-operative Group, active in low-carbon finance, told us that a commercial rate of return was achievable:

> We lend at commercial rates. We don't subsidise it […] We go to places that other banks don't go, but not to achieve sub-market returns. It is because we truly have a triple bottom line analysis. It is social, environmental and financial. Other banks don't have that triple bottom line. It doesn't mean it's not economic to do: it is. We make money, but it's about more than that. It is about creating the environment and it's about creating sustainable social benefits.[156]

Indeed, the Co-operative Group told us that there is already demand for commercial low-carbon investments:

> [Renewable energy and clean technology] […] is about 5% of our corporate asset book. We have a work-in-progress schedule in excess of £1 billion […] To be honest, that's without even going out and trying the market. That is just word of mouth from schemes that we've done already. I think there is a huge untapped market. But you are right: it is lack of capital.[157]

'Crowding out'

94. It is important that the Bank does not compete with existing sources of finance ('crowd' these out) or inadvertently reduce private sector investment through its actions. RenewableUK believed that:

155 Q 21

156 Q 153

157 Qq 151, 154

> [...] care should therefore be taken to ensure that any 'green bank' does not compete directly against private banks. Given the better terms that an institution with the Government behind it would be able to offer, this would be unfair competition and result in a reduction of capital put into the market by the non-Government backed banks.[158]

95. However, some witnesses doubted whether the Green Investment Bank would threaten existing finance. Ingrid Holmes from E3G told us that this is a low risk as there is not much investment going on.[159] Green Alliance drew on experience from the European Investment Bank, KfW and other development banks and believed that there need not be crowding out by a development bank, but suggested that it should be clear in legislation that such crowding out would be against the Bank's investment criteria.[160]

96. We conclude that the risk of crowding out should not be significant, given the size of the green funding gap. It might arise, however, from providing finance at a lower rate than commercial banks are willing to offer. The Green Investment Bank would be closer to government and therefore might have a different perception of political and regulatory risk. For instance, Consumer Focus referred to a successful index-linked savings certificate, offered by National Savings and Investments, which was withdrawn in July 2010 because of the crowding out effect this had on less attractive savings products offered by commercial banks. [161]

97. The Green Investment Bank Commission suggested that one way of reducing the risk of crowding out would be to set the Green Investment Bank a clear set of operating principles. It suggests that such operating principles might cover:

- Wherever private sector activity is viable, the private sector, banks and investors should lead and execute deals. In these circumstances, the Green Investment Bank would not take the lead in originating, sponsoring or structuring investments. Rather it would co-invest in opportunities brought to it by the private sector. The Bank would commit the minimum resources required to support these functions.

- The Green Investment Bank would operate only where its action would serve to achieve a result that would not have otherwise been possible. The Bank would participate only where involvement would accelerate market activity and where its absence would leave activity unviable.

- The Green Investment Bank should aim for commercial rates of return from its banking operations. Its banking operations should be self-funding, raising funds from the capital markets and investing commercially with the private sector. Those projects with the largest impact and highest speed to market should be prioritised.[162]

158 Ev 110

159 Q 109

160 Ev 127

161 Ev 101

162 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 14 & 15.

98. The Government could establish mechanisms to monitor whether the Green Investment Bank crowds out existing investors, as this could in time reduce the net impact of the finance made available by the Bank as the funding gap diminishes. The Government could then require the Bank to change its investment priorities if that monitoring revealed crowding out. Adopting the Green Investment Bank Commission's set of operating principles for the Bank would help ensure it does not crowd out private sector investment. We also support a suggestion from Scottish and Southern Energy that the Green Investment Bank should have a clear exit strategy that would encourage it to gradually withdraw its support from an area once the private market has become comfortable with the risks involved.[163]

99. There are clear risks from setting up the Green Investment Bank as a commercial operation, as demonstrated by CDC (formerly the Commonwealth Development Corporation). In October 2010, the Secretary of State for International Development announced the Government's intention to reform CDC radically to increase its development impact. The incentive structures in place meant that CDC was more financially than developmentally focused, and it pursued the greatest return for the lowest risk.[164] He told the International Development Committee recently that DfID had "sometimes […] been too remote a shareholder".[165] We questioned the Business Secretary as to whether the lessons from CDC had been learned and would be borne in mind when designing the Green Investment Bank. He told us that:

> [...] I think the dangers you have described are not relevant in this particular case. [The Bank] will have a very clear mandate to promote environmental projects that would not otherwise be met in the market. Whereas I think the CDC was a rather different case, where they were operating almost entirely as a market institution.[166]

100. We recommend that BIS works closely with DfID to learn lessons from the latter's oversight of CDC and from the International Development Committee's recent report, to develop an appropriate mandate and incentive structure for the Green Investment Bank, to ensure the Bank continues to help the UK meet its carbon and renewables targets and delivers environmental benefits, as well as growing the Bank's financial capital.

State Aid rules

101. Another important consideration for the commerciality of the Green Investment Bank's investments are 'state aid' rules. The European Community bars financial support from a public body—'state aid', in whatever form—which could distort competition and affect trade by favouring certain undertakings or the production of certain goods. However, there are a number of exemptions which enable EU states to provide financial support, mainly services which the market fails to provide properly.[167] The European Commission is responsible for approving proposed 'state aid' exemptions. Where the

163 Ev w35

164 HC Deb, 12 October 2010, col 14–16WS

165 International Development Committee, Fifth Report of Session 2010–11, *The Future of CDC*, HC 607, paragraph 87.

166 Q 360

167 http://www.bis.gov.uk/assets/biscore/consumer-issues/docs/10-951-state-aid-beginners-guide.pdf

Commission finds aid to be illegal, it is under a legal obligation to seek the recovery of the aid from the recipient, plus interest, and competitors may also seek legal action for damages. EDF energy told us that, when deciding on the types of support it provides, the Green Investment Bank should ensure that it acts commercially:

> [...] the [Green Investment Bank] should not look to provide debt finance to projects at the development stage. To do so could be considered to be a subsidy given that commercial lenders are generally not prepared to finance the riskier large scale projects during their early stages. [It] would therefore not be able to demonstrate that it was behaving commercially and may therefore be considered to be providing State Aid.[168]

102. Since 2007, KfW in Germany has had a memorandum of understanding with the European Commission, to allow energy efficiency subsidies from the German Government to be fed through KfW, allowing it to offer lower interest rates than other banks (Annex A). We questioned BIS about the contact the UK Government has had with the European Commission on state aid exemption for the Green Investment Bank. Janice Munday, the responsible director in BIS, told us last month that:

> [...] no, we have not talked directly to the Commission. To have that sort of detailed discussion we would have to have far more detail about the products and the terms on which Green Investment Bank would be investing in the market, and we are not at that stage yet. We are engaging significant external help to help us with the work in preparing the case to go to the Commission. It is a complicated and quite extensive process, so we are gearing up for it, but we have not started.[169]

Getting state aid exemption approval can be a lengthy process. The Business Secretary acknowledged that this could take 18 months to 2 years, but that this would not impact on the Green Investment Bank operating in a limited capacity by investing on equal terms with private investors.[170]

103. **The Government acknowledges that it can take up to two years to get state aid exemption approval. We are therefore surprised that it has not discussed with the European Commission the parameters of the Green Investment Bank's operations, as this could be a restricting factor on what the Bank would be able to do. We recommend that the Government starts negotiations immediately with the European Commission to ensure that required prior approval is secured for the Bank.**

UK or overseas investments

104. The issue of whether the Green Investment Bank invests in the UK or overseas hinges on two key factors: the need to meet domestic emissions and renewables targets, and delivering green growth in the economy.

168 Ev 108

169 Q 347

170 *Ibid.*

105. A Green Investment Bank, following a commercial approach, might consider investing overseas if that offered more financially attractive investment opportunities or more cost-effective routes to reducing carbon emissions than investment in the UK. In Germany, for example, KfW's overseas investments generally achieve about eight times as much emissions reductions per Euro than it does through its domestic lending, reflecting the existing generally high level of energy efficiency within Germany.[171] David Paterson from the National Association of Pension Funds told us that investors have no preference about where in the world they invest in green projects; they are primarily concerned with achieving returns commensurate with risk.[172]

106. There is an imperative, nevertheless, for reducing emissions in the UK itself. The UK has a commitment under the Climate Change Act 2008 to cut carbon emissions by at least 34 % by 2020, and at least 80 % by 2050, compared to a 1990 baseline. The Climate Change Act also included a requirement to publish five-year carbon budgets, starting in 2008, to deliver the reductions required to meet these targets. The first three of these carbon budgets were approved by Parliament in May 2009.

107. The Committee on Climate Change was set up by the Act to provide independent advice on setting these targets. In its December 2010 report, which provided advice on a fourth-period carbon budget, the Committee warned that new policies will be required to ensure that carbon budgets are achieved in the 2020s and to lay the foundations for further reductions in the 2030s and 2040s. It highlighted that:

> [...] progress in reducing emissions during the first budget period has so far primarily reflected the recessionary effect, and it remains essential to achieve the step change in the pace of underlying emissions reductions that we called for in both the October 2009 and June 2010 progress reports. New policies to drive the step change include approaches to energy efficiency improvement in residential and non-residential buildings, roll-out of smart meters, consumer behaviour change in transport, and more widespread use of carbon-efficient practices on farms.[173]

The Committee on Climate Change stated that in the long term the UK will need to achieve emission reductions through domestic action, and not through buying carbon emissions credits from other countries, as the cost of carbon will increase and there will be greater competition from other countries to buy carbon credits:

> [...] at present and for the foreseeable future, there may exist opportunities to buy carbon credits internationally at a price below the marginal cost of emissions reduction in the UK, by mid-century global prices will need to have reached several hundred £s per tonne if climate objectives are to be achieved [...] and some current sellers of emissions credits (e.g. China) are as likely to be buying credits from the UK as vice versa.[174]

171 Annex A

172 Q 132

173 Committee on Climate Change, *The Fourth Carbon Budget: Reducing emissions through the 2020s*, December 2010, p 13.

174 *Ibid.*, p 18.

108. The Government expects green growth to be a major future driver of the economy, as it attempts to build 'a new and more responsible economic model'.[175] The National Infrastructure Plan noted the importance of energy networks and systems, transport, and waste and water management infrastructure as critical for economic growth.[176] However, there is a long way to go. The UK is lagging behind other countries for investment in green infrastructure. According to research by Ernst and Young, the UK is the fifth most attractive country for investment in renewable technologies, behind China, the USA, Germany, and India.[177] If properly designed, some witnesses argued that the Green Investment Bank could 'play a transformational role in building a highly competitive low carbon economy and catalyse a green jobs boom'.[178]

109. The World Development Movement noted that the environmental goods and services sector is predicted to create around 50,000 jobs a year, if the Green Investment Bank delivers the necessary growth.[179] The Government's *Local Growth White Paper* sets out the following national green growth priorities, on which the Government hopes to engage with local enterprise partnerships:

- assisting low carbon, green innovation;
- developing green infrastructure;
- stimulation of supply chains in green markets; and
- bringing together industry in green 'clusters'.

The Government is also conducting a review of what each part of government can do to address the barriers facing specific industry sectors.[180]

110. The Government will bring together all the key elements for delivering the green economy into a single document, called the *Green Economy Roadmap*. Its aims will be to provide business and investors with certainty about the future policy landscape. It is being led by Defra with input from DECC and BIS. Defra's Business Plan envisages the Roadmap being completed by April 2011.

111. Ingrid Holmes from E3G suggested that because the Green Investment Bank will take some time to establish itself, it should prioritise investments that are going to deliver maximum UK benefit.[181] The Bank should also have a role in drawing investment into the UK and there was a clear role for it to represent the UK overseas as well.[182] Philip Wolfe from the Aldersgate Group told us that:

175 HM Government, *The Coalition: our programme for government*, May 2010, p 9.

176 HM Treasury and InfrastructureUK, *National Infrastructure Plan 2010*, October 2010, p 5.

177 http://www.ey.com/Publication/vwLUAssets/Renewable_energy_country_attractiveness_indices_-_Issue_27/$FILE/EY_RECAI_issue_27.pdf; Q126 [Ben Warren]

178 Ev 120

179 Ev w49

180 HM Treasury and the Department for Business, Innovation and Skills, *The path to strong, sustainable and balanced growth*, November 2010.

181 Q 132

182 Q 79 [James Cameron, Climate Change Capital]

> I think [the Bank] will have an important role, bearing in mind that a lot of the other investors who we would like to see investing alongside it are looking at investments around the world and it, therefore, has a role in making the UK look like a more attractive place to be investing in the green economy.[183]

112. **The Government must use the opportunity provided by the 'Green Economy Roadmap' to set out ambitious policies to support green growth, aimed at making the UK a world leader. We urge the Government to develop this Roadmap and the Green Investment Bank in a joined up way, and set out explicitly the supporting role expected of the Bank.**

113. We already have a generously funded DfID overseas aid budget, and in a separate inquiry we are exploring the scope for a larger proportion of the aid budget to be dedicated to climate change and environmental purposes.[184] **The Bank's focus should be on UK, rather than overseas investment, because that will be needed to deliver the UK's carbon targets. Helping the UK meet its carbon targets should be made explicit by linking the Bank's remit to the Climate Change Act.** The Bank could also be given a coordinating role to channel investment into the UK from overseas.

The Green Investment Bank's relationship with existing low carbon focused government bodies

114. The Green Investment Bank Commission reviewed the existing low carbon government landscape and found a disparate collection of institutions and funds, often with similar objectives and little accountability for the delivery of specific goals. The lack of co-ordination and common branding had made it hard for businesses and investors to navigate the bureaucracy.[185] The Commission suggested that rationalising existing bodies and funds[186] would radically improve service delivery, value for money and provide a source of funding for the Green Investment Bank. It concluded that the bodies, with an estimated annual budget of £185 million, and funds worth £2 billion, could be combined within the Bank.

115. However, the Energy Technologies Institute, one of the bodies earmarked by the Commission for rationalisation, told us that it is neither a quango nor a grant giver. It is a partnership currently formed of six major global companies (BP, Shell, e.on, EDF, Rolls-Royce and Caterpillar) with government to pool technical and financial knowledge and financial capability.[187] As such, one of the partners said that the Energy Technologies Institute did not look suitable for merging with other government bodies.[188] Gordon Edge from RenewableUK agreed with the Commission that the government landscape is

183 Q 29

184 http://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/inquiries/the-impact-of-uk-overseas-aid-on-environmental-protection/

185 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 18.

186 The Carbon Trust, Technology Strategy Board, Energy Technologies Institute, International Environmental Transformation Fund, Ofgem Low Carbon Network Fund, Environmental Transformation Fund, Strategic Investment Fund, UK Innovation Investment Fund, and the Marine Renewables Deployment Fund.

187 Q 36

188 Ev 108 [EDF energy]

crowded and confusing, but told us that merging existing bodies will not provide the "game-changing" institution required:

> It's going to squeeze a bit of efficiency out of not having quite so many quangos around. But we're talking about something else entirely here, which is: how do we channel new money into the mass build-out of these technologies? So it is a different institution that we're talking about here, in terms of being able to raise money on the private markets, and then use that for implicitly backed usage.[189]

RenewableUK cautioned that there was a risk of a hiatus in innovation investment if the different funding bodies, with their different staff and funding models, were brought together under one roof.[190] Scottish Power feared that innovation could be stifled as research and development activities might be made to compete for limited funds against projects with stronger and more predicable financial returns.[191] Ofgem told us that some of the essence of the various bodies and funds may be lost if brought together as they each serve slightly different purposes.[192]

116. In light of these risks we asked Bob Wigley, Chairman of the Green Investment Bank Commission, about the rationalisation he proposed. He told us that:

> It is important that the existing plethora of organisations, which has somewhat overlapping objectives, be rationalised over time. Is it fundamental to the creation of a Green Investment Bank? No. I think there are lots of other things the Green Investment Bank is going to do that are, frankly, probably more important.[193]

BIS told us that it was still examining this issue with DECC and reviewing the role of existing low carbon institutions and funds with the aim of improving efficiency and making them easier to navigate.[194]

117. **The rationalisation of current government low carbon institutions and funds within the Green Investment Bank is not crucial to raising funds to capitalise the Bank, but it could be helpful in the longer term. We welcome the Government's review of the institutions and funds involved, and as part of this the Government should examine what lessons might be learnt by the Bank from the Energy Technologies Institute partnership between private and public sectors.**

Conclusions on the remit and oversight of the Bank

118. The Green Investment Bank will have an explicit mandate to tackle the risk that the market cannot. This suggests many and varied areas that a Green Investment Bank could be active in. There are a number of interventions a Bank could make in a wide variety of areas, including equity, loans and risk-reduction products, and we have discussed a

189 Q 15

190 Ev 110

191 Ev 131

192 Q 36

193 Q 78

194 Q 395

number of important considerations associated with these. Witnesses supported the Bank generally being free to decide on the right balance of investments, based on evidence on profitability, risk and the extent to which the investment reflected the green remit given to it.[195] The Green Investment Bank could be an important additional source of capital for the Green Deal. The Green Investment Bank should invest first in the UK, to deliver the UK's legally binding domestic emissions targets. By investing in the UK, the Bank could also be a catalyst for green growth and green jobs and help deliver on the Prime Minister's commitment for this Government to be the 'greenest ever'.

119. Giving the Green Investment Bank the right remit and creating appropriate governance and oversight arrangements will be important for ensuring that taxpayers' money is not put at risk and that the Bank achieves what is expected of it. **If the Bank is established as a corporate body, Parliament must be given a strong role in scrutinising its initial governance and remit. If an arms-length body, Parliament must be allowed also to examine its evolving strategy and operating principles.** KfW in Germany has a supervisory board which includes ministers and parliamentarians. **The Government should consider how Parliament might be represented on an 'advisory council' of the Green Investment Bank. The Bank's remit should include a requirement to consult the Committee on Climate Change and take its recommendations into account.**

120. **The Green Investment Bank, as a centre of expertise, should be given the independence to decide on the projects to support within its given remit. The Government should not interfere in the day-to-day management and individual investment decisions.** Adopting the Green Investment Bank Commission's set of operating principles for the Bank would help ensure it does not crowd out private sector investment.

121. **The Government should set the Green Investment Bank with a clear green investment mandate, to stop the Bank straying into more profitable but less green investments. In doing so, the Government should clearly define what it considers to be 'green investment'. But we caution the Government not to set out the role of the Bank too rigidly, to allow the possibility of the Bank supporting environmental protection schemes in due course where these can be determined to offer a commercial return in the long term.**

195 E.g. Green Alliance (Q 22)

4 Testing the design of the Green Investment Bank

122. The design stage of the Green Investment Bank is crucial to ensure that the Bank is set up in the best possible way to tackle the market failures limiting investment in green infrastructure. The Green Investment Bank Commission suggested setting up a 'shadow' board that would be responsible for laying the groundwork for the new Bank, and that a further period of analysis would be needed where the Government considered the Commission's conclusions.[196]

123. The Government has told us that it is undertaking that design work and is examining evidence that market and institutional failures and constraints can limit the availability of finance needed to deliver the scale and pace of investment required. It is considering different models for the how the Green Investment Bank could operate in future and have as great an impact as possible.[197] Ben Warren from Ernst and Young supported starting the design process with a proper assessment of the market failures:

> I think it's imperative that the Government have a very clear understanding of the market failures that are being addressed and the barriers that are there, and get a proper appreciation from [...] the current investors, whether they be utility companies or infrastructure funds, of what the real barriers are around the breadth of the UK low-carbon economy [...] I'd say first and foremost that the Government need some real clarity on what the barriers are and what the market failures are.[198]

124. BIS's Business plan 2011–2015 sets a target to design the business and operating model of the new Bank by May 2011, and that it will continue to conduct market testing of the new Bank until December 2011, ready for it to become operational in September 2012.

125. The Government has stated that the Green Investment Bank's design will be subject to three tests of 'effectiveness, affordability and transparency'.[199] We questioned Peter Schofield in BIS on the 'effectiveness test', and he explained that:

> [...] the test is whether this is leveraging additional private sector funding, and one of the things we need to avoid is crowding out private sector funding that would already be there. So, getting this right is absolutely crucial to the effectiveness test.[200]

In other areas, there was less clarity.[201]

126. **We recommend that before its announcement in May on the favoured model for the Bank, ideally in this month's Budget, the Government defines precisely its three**

196 Q 73

197 Ev 133; Q 331

198 Q 121

199 Ev 133

200 Q 236

201 Qq 234, 235

tests of effectiveness, affordability and transparency. We also recommend that the full results of these tests are then published when the Government makes its announcement in May for each of the models considered, so that there is an opportunity for the House, potential investors and the public alike to understand the decisions that have been reached.

127. Ben Warren from Ernst and Young told us of the need for a proper assessment of the market's appetite to invest, as well as an assessment of the sorts of instruments that pension funds and other potential investors would like to invest in.[202] The BT Pension Scheme, the largest corporate pension scheme in the UK, cautioned against the Government adopting a 'siloed' approach in the market testing exercise:

> We would encourage an iterative process for designing the [Bank] which includes all significant potential consumers of its products or services rather than one which is created in a silo by Whitehall officials and their advisers and then announced in May 2011.[203]

128. Witnesses have told us, however, that so far the Government's planning for the Green Investment Bank has been opaque. Ingrid Holmes from E3G told us in December:

> I absolutely think the process run inside Government has been incredibly opaque with very ad hoc submissions from the market. There's a tendency to say, "We've consulted with financiers", not recognising that there's a whole ecosystem out there, from venture capitalists to private equity to banks to infrastructure funds to pension funds, all of whom have different needs and different views on this. I think it should be an external facing consultation for the shortest amount of time, but with an attitude of, "Actually, this is what we're thinking of doing", and really concrete ideas to get the debate going and getting views from the market, because I think there are very different views. There are actually different views on what kind of yield institutional investors are looking for from [Green Investment Bank] bonds, for example.[204] [see paragraph 34].

129. The National Association of Pension Funds, a trade association representing pension providers with combined assets of £800 billion, told us also in December:

> [The Government] have been in contact with one or two [of our members]—not many, frankly. But they have had conversations with our largest scheme, which is the BT Pension Scheme [...] But there is more work to be done there […] there's a need to talk to investors, which we'd be happy to facilitate.[205]

130. Investors are many and varied. It is important that the Government engages with a wide cross-section of investors in an open and transparent way to ensure that the Green Investment Bank is set up understanding the needs of investors. **We recommend that the Government, in undertaking the remainder of its market testing work, engages with all**

202 Q 121

203 Ev w75

204 Q 121

205 Q 122

classes of investors and undertakes a thorough and transparent consultation exercise with them.

131. Ben Warren from Ernst and Young detailed the importance of not focusing completely on big investors when designing the Green Investment Bank, because there was a need for engaging with citizens:

> [...] in the UK we see foreign-owned utilities predominant in the sector. We have limited employment opportunities, particularly in the green energy sector, and limited green collar jobs and limited investment opportunities for people as individuals to invest in the green sector […] It's the public that have to pay for this investment through their tax bills or through their energy bills. If we don't get the public engaged, energy policy will continue to stumble along the way that it's stumbled along in the last 10 years. Public engagement is a key theme.[206]

132. **We recommend that the Government conducts a brief public consultation on the proposals to be announced by the Government in May.**

206 Q 128

5 The Green Investment Bank in the Government's wider green landscape

Political and regulatory risk

133. The Green Investment Bank Commission found that political and regulatory risk—the risk of policies and regulations changing—has been a barrier to greater investment in green infrastructure. Since investors cannot control the political and regulatory risk, this translates into a higher cost of capital.[207] Bob Wigley, Chairman of the Commission, told us that:

> History is littered with examples of people investing in projects based on a regulatory regime, only to find 10 or 15 years down the track and maybe two or three Governments later that that regime changes and the economic returns that were promised were, therefore, not achieved. We've seen, recently, Spain unilaterally changing its feed-in tariff and materially, negatively affecting the returns of renewable projects there, with a very loud reaction from the investors as a result.[208]

134. Ofgem's 'Project Discovery' examined whether the current arrangements in Great Britain are adequate for delivering secure and sustainable energy supplies over the next 15 years. It found that any perception of heightened policy and regulatory uncertainty, given the long-term nature of the investments required, may push up the costs of financing them. It concluded that the market's willingness to lend or invest, and the associated cost of funding, will be determined by the perceived risks in the energy sector relative to other sectors and markets. Uncertainty surrounding future carbon prices and subsidy levels, for energy efficiency or renewables for example, were key risk factors facing investors.[209] This means that, as Ingrid Holmes from E3G told us, "you need to provide as much certainty to investors as possible, because that brings down the cost of capital".[210]

135. The evidence we received strongly supported the need for clear and 'long, loud and legal'[211] policy frameworks to tackle political and regulatory risk and provide investors with certainty. Sir Rob Margetts from the Energy Technologies Institute told us that investor confidence was not high at the moment:

> Some of that is perception, some of it is changes that seem to have occurred all too frequently in the last few years in that investment environment. So where policy has been clarified—and we'll say offshore wind is an example […]—then you're seeing investment. So we do need very clear policy, strategy and direction, incentives and regulatory framework to reduce this perception of risk. You have to bear in mind the people that make these major investments are great global companies [...] they have

207 Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, June 2010, p 6.

208 Q 76

209 Ev 104

210 Q 129

211 Aldersgate Group, *Financing the transition: A strategy to deliver carbon targets*, October 2009, p 4; Q 18 [Mr Wolfe, Aldersgate Group]

> plenty of choice as to where they invest in the world, as do the banks that help fund them. We have to be an attractive place and that means we have to have manageable risk.[212]

The Energy Technologies Institute set out some of the difficulties that the Government must overcome in order to provide that effective policy framework:

> The effective articulation of UK energy policy and the associated strategy for meeting the 2020 and 2050 objectives is probably the most critical immediate issue for [the Government] and one where there is currently no agreed consensus. For example, there is general, widespread agreement across government, industry and advisory groups that the future energy system should include new nuclear build, effective deployment of Carbon Capture and Storage and implementation of energy efficiency approaches in buildings together with 'smart' networks and distribution systems. However, there is less agreement on the eventual scale of new nuclear build and there is no proven technology at scale for CCS. There is less agreement about the extremely large commitments required for offshore wind (especially the overall economics and affordability including storage and back-up systems), the viability of significant marine energy deployment and the widespread take-up of all electric cars (as opposed to hybrids).[213]

The Energy Technologies Institute went on to suggest three elements that are crucial to a stable policy and regulatory framework:

- The Government must offer to industry, business and consumers, a coherent and consistent strategy, policy and regulatory framework for low carbon energy system development, deployment and service support.
- Following initial development of policy and strategy, a settled long-term regulatory and incentive structure is required to promote ongoing investment by investors, debt providers, manufacturers and project developers. These groups are all essential to strategy implementation.
- A UK energy strategy must integrate future power, heat and transport needs together with the associated infrastructure issues and must address the necessity for private sector groups to mitigate potential risks (financial, policy, market and technical) ahead of investment.[214]

136. Underlining the importance of a stable policy and regulatory framework, witnesses told us that they see the establishment of a Green Investment Bank as a secondary issue. Gordon Edge from RenewableUK explained that:

212 Q 51

213 Ev 94

214 *Ibid.*

> If you do not get [policy stability] right, you could put as much money as you like into a Bank, it's not going to help. For me, the Government's first role is to ensure the stability and dependability of that policy framework.[215]

Electricity Market Reform and a Carbon Floor Price

137. The Department of Energy and Climate Change launched a consultation in December on its proposals to reform the electricity market in the UK, which aims to:

> [...] strike a balance between the best possible deal for consumers and giving existing players and new entrants in the energy sector the certainty they need to raise investment. Specifically, they are designed to ensure that low-carbon technologies become a more attractive choice for investors, and adequately reward back up capacity to ensure the lights stay on.[216]

The Government's proposals have four main elements:

- <u>Carbon price support</u>: Separately consulted proposals to support the carbon price directly (see below). By strengthening the carbon price for electricity generators, it will increase the cost of fossil fuel generation, making lower-carbon power more attractive.

- <u>Feed-in tariffs:</u> the Government will guarantee greater revenue certainty for low carbon in the form of a top-up payment if the wholesale price is below the feed in tariff, and a potential clawback for consumers if wholesale prices are above the contracted tariff. The Government expects this to control costs for consumers, provide stable returns for investors, and maintain the market incentives to generate when electricity demand is high.

- <u>Capacity payments:</u> additional payments to encourage the construction of reserve plants or demand reduction measures. The Government expects capacity payments will create an adequate safety cushion of capacity as the amount of intermittent and inflexible low-carbon generation increases.

- <u>Emissions Performance Standard:</u> To limit how much carbon any new coal-fired power stations emit to reinforce the existing requirement that no new coal power stations are built without demonstrating Carbon Capture and Storage technology.

The consultation period ends in March 2011 and legislative proposals to implement new electricity market arrangements will be launched in a White Paper, due in 'late spring' 2011.[217]

138. Alongside these reforms, the Treasury and HM Revenue and Customs launched a consultation in December 2010 on proposals to support the price of carbon in the UK.[218]

215 Q 18

216 Department of Energy and Climate Change, *Electricity Market Reform: Consultation document*, Cm 7983, December 2010.

217 *Ibid.*

218 HM Treasury and HM Revenue and Customs, *Carbon price floor: support and certainty for low-carbon investment*, December 2010.

Our predecessor Committee's reports on the EU Emissions Trading Scheme found that the scheme had so far not delivered a stable and effective price of carbon because the allocations of allowances to emit carbon were too generous, and the market price of allowances consequently too low to drive low-carbon investment.[219] The current proposals aim to tackle this, by changing the Climate Change Levy and Fuel Duty to act as a floor price of carbon, supplementing the Scheme and providing greater long term certainty for investors. At present, low-carbon generation technologies are typically more expensive than conventional fossil fuel energy generation, at least in the short term. The Government expects that introducing a floor price of carbon will make generating electricity from fossil fuels more expensive.

139. Rupert Steele from Scottish Power told us that these reforms are fundamental for making the business case for investment in low carbon energy generation. The Green Investment Bank's role alongside these reforms will be to help increase the speed at which industry is able to respond to the investment opportunities driven by the reforms.[220] Paul Spence from EDF energy echoed those views:

> The [electricity] market reform, the early move on putting in place a carbon floor price and then the longer-term move to make sure that we have a market that rewards low carbon available capacity at the scale that we need it is a fundamental, but it is one component. The Bank sits alongside that as a way to make sure that the capital is then available.[221]

140. We would hope that the Bank will be able to provide sources of finance needed to unlock the investment opportunities afforded by the reforms. **The Government should therefore give the Bank a remit to monitor the Electricity Market Reform and Carbon Floor Price proposals, and other low carbon targeted initiatives to come, and to advise the Government on the need for any further policy and regulatory reforms to continue to provide a clear and long term framework for investors.**

141. The Government has not yet estimated the investment that will be facilitated by the Electricity Market Reform project and the Carbon Floor Price initiative, and therefore cannot estimate the residual investment gap that a Green Investment Bank is expected to fill. In designing the Bank, the Government will need to assess the level of investment it expects the Bank to facilitate, on top of what other initiatives can deliver, so as to be able to make any appropriate further contribution to the Green Investment Bank's capitalisation.

A role for the Green Investment Bank to advise on policy

142. RenewableUK worried that government made policy in the electricity sector partly on the basis of perceived needs of the investment community that did not reflect reality.[222]

219 Environmental Audit Committee, Second Report of Session 2006–07, *The EU Emissions Trading Scheme: Lessons for the Future,* HC 70; Environmental Audit Committee, Fourth Report of Session 2009–10, *The role of carbon markets in preventing dangerous climate change,* HC 290.

220 Q 277

221 *Ibid.*

222 Ev 110

James Cameron from Climate Change Capital told us that the UK is not very good at connecting public policy making with investment needs:

> We tend not to understand each other's language and often think […] that we can do things without each other when, in fact, this kind of transformation is not possible without a very close association and alignment of interest between public policy making and private finance.[223]

He suggested that it would be useful to have a Green Investment Bank that was skilled at deploying capital and, therefore, skilled at understanding what works, able to take experiences back into the policy making process.[224] Similarly, Transform UK and E3G wanted the Bank to be able to drive the formulation of 'investment grade' policy by being an adviser to Government.[225] The Aldersgate Group suggested that the Bank could adopt a wider role, as a facilitator to help create a co-ordinated approach to policy and regulation across the energy sector.[226]

143. There were also contrary views, however. Paul Spence from EDF energy was against this policy-coordination role:

> our view [is] […] that it should be for the Government departments setting the policy to take the role in making sure that their policies are joined up and co-ordinated, and the Bank can focus on what it should be focusing on, which is investing in the right opportunities.[227]

144. **Bringing investors closer to policy appears to us to be a fundamental role of a Green Investment Bank. By providing advice to the Government on the risks investors face and the impact on investors of policy decisions, the Bank could provide further help in bringing investment in. The Bank should be given an explicit continuing role to advise the Government on low carbon and green infrastructure policy, from the perspective of current and prospective investors. Also, being outside of government, the Bank could perform an important cross-cutting role by advising government on whether its low carbon and green investment policies are joined up across departments.**

145. For the Bank to adopt this advisory role, it will require (as will the Government) good quality and timely data on investment levels, the impact of new policies or regulations, and any signs of the crowding out of other investment. The Bank could be tasked with collecting that data and reporting them. Such data, along with the Bank's advice, would allow the Government to monitor the impact of policies and regulations and, if needed, amend the Green Investment Bank's remit and operating principles to ensure it maintains its impact.

146. The Green Investment Bank could collect data on the costs and effectiveness of different types of investment. Once the Bank has developed a track record of experience in

223 Q 76

224 *Ibid.*

225 Ev 120

226 Ev 115

227 Q 281

supporting different types of investment, the Government could routinely use that data to shape its energy efficiency schemes.

147. The Green Investment Bank will be just one part of the green economy, and one of many mechanisms to help provide clean and secure energy supplies and help cut emissions. Ministers told us that policy measures are needed alongside a Green Investment Bank to help get private sector investment in green infrastructure flowing. They told us that market failures:

> [...] can be addressed, at least in part, by policy measures, such as reforms to the electricity market; reforms to the climate change levy which provide more certainty and support to the carbon price; changes to the planning consents regime; and so on. In other cases, the [Green Investment Bank] may have a role in supporting these policy interventions. And, together, the policy measures and financial interventions can provide a more efficient and effective package than either is able to do by itself.[228]

148. Transform UK and E3G outlined the importance of the Green Investment Bank being developed in concert with the Government's other reforms:

> To provide the greatest financial leverage and maximise the macro-economic benefits to the UK in terms of growth and jobs, the Bank should not be designed in isolation but in the context of a range of policies (such as electricity market reform, effective renewable subsidies, carbon pricing and skills development) aimed at removing barriers to a low-carbon, resource efficient economy.[229]

149. **To provide the greatest financial leverage and maximise the economic benefits to the UK in terms of growth and jobs, the Bank should not be designed in isolation, but in the context of the range of policies the Government is developing. As work developing the Green Investment Bank continues, there is a role for a small 'set up' team within the Bank to start creating and coordinating the linkages between the Bank's role and other government initiatives.**

150. There are many departments with a role in infrastructure—DECC, BIS, Treasury, DfT, CLG and Defra. Also InfrastructureUK, a unit in the Treasury, is charged with advising Government on long-term infrastructure needs.[230] Vince Cable assured us that the Government is working "as one" when developing the Green Investment Bank:

> [...] we do not see this in terms of different departmental silos and different standpoints. It is an integrated initiative. We are obviously working very closely with the Treasury, because it is public money. We are working very closely with DECC, because we envisage that the main market for de-risking projects, which would be the first stage of the operation of the bank, are predominantly energy projects, things like wind power. But DEFRA are involved because they have an interest in waste and

228 Ev 133

229 Ev 120

230 In October 2010, the Treasury and InfrastructureUK published the National Infrastructure Plan 2010, which set out a new hierarchy for infrastructure investment: prioritising the maintenance and smarter use of assets; followed by targeted action to tackle network stress points and network development; and, finally, delivering transformational, large scale projects that are part of a clear, long term strategy.

> the Department for Transport, because of transport projects. So there is a collective interest in this and we work as a team, there aren't separate visions.[231]

The BT Pension Scheme, which has taken part in stakeholder meetings led by BIS, wanted to see one department take the lead rather than risk having to repeat key messages across all the departments which are stakeholders in the Bank.[232]

151. **We believe that there is a role for a Cabinet Committee or Minister, perhaps in the Cabinet Office, to ensure co-ordination across the relevant departments on initiatives that will impact on the remit of the Green Investment Bank.**

231 Q 362

232 Ev w75

6 Impact of the Green Investment Bank on the deficit

152. So far we have discussed how we would like the Green Investment Bank to be set up, the need for it to operate as a 'bank' rather than a 'fund', and the need for good governance and oversight of its operations. However, we recognise that the Government's priority is to tackle the deficit and that this may to some extent curb what might otherwise be desirable in the set up of the Green Investment Bank. This is because how the Green Investment Bank is likely to be classified in the National Accounts will affect the Government's management of its fiscal objectives. As the Business Secretary told us:

> [...] any raising of finance has to operate within our fiscal constraints, and they are real [...] So there is a constraint in terms of net national debt, which we have to operate within.[233]

153. The National Accounts encompasses the presentation and measurement of the stocks and flows within the economy, including Public Sector Finance statistics. These statistics relate to the activity of the public sector including receipts, expenditures, borrowing and debt, and are used by government when defining fiscal policy objectives:[234]

- Public Sector Net Debt (PSND) measures the cumulative indebtedness of the public sector—central government, local government and public corporations.
- Public Sector Net Borrowing (PSNB)—or 'the deficit'—is the difference between the public sector's income and spending in a financial year.[235]

154. BIS set out the importance of Public Sector Finance statistics within the current fiscal framework and how that would influence the design of the Green Investment Bank:

> Alongside the Fiscal Mandate (to achieve cyclically-adjusted current balance by the end of the rolling five-year forecast period), the Chancellor set out in Budget 2010 a supplementary debt target—to ensure that PSND as a percentage of GDP is falling by 2015–16. As part of meeting these targets, the Spending Review plans entail a reduction in total managed expenditure of over £80 billion in 2014–15. *These are factors in considering the classification of the [Green Investment Bank] and treatment of its functions.*[236] [emphasis added]

155. When the Government establishes a new body, privatises or nationalises an existing one, or enters into a new partnership or joint venture with the private sector, the resultant body must be classified for National Accounts purposes to either the public or private sector. The body's funding from government or other sources, and any assets and liabilities from its investments or operations, will be accounted for according to this classification. A

233 Q 335

234 http://www.statistics.gov.uk/CCI/nugget.asp?ID=55; Ev 143

235 Ev 143

236 *Ibid.*

public sector body will have an impact on Public Sector Finance statistics, and the Fiscal Mandate; a private one will not.

156. The Office for National Statistics (ONS), as the independent national statistics body, decides the treatment in the National Accounts. When deciding, the ONS applies European System of Accounts standards ('ESA95'), guided by a case history of previous classification decisions. The House of Commons Scrutiny Unit provided us with a note detailing some of issues considered by the ONS when deciding National Accounts treatment.[237] They pointed out that there are three main criteria the ONS apply:

- Is it <u>a separate institutional unit</u>—Does it have its own legal form and is it able to lead a separate existence?
- Which of the five <u>institutional sectors within the National Accounts</u> should it be classified to (non-financial corporations, financial corporations, general government, households, or non-profit institutions serving households);
- Is it a public or private sector institution—<u>Who exercises control over it?</u>

157. The amount of government control is the key issue when the ONS makes its decision.[238] The ONS considers a number of factors, including: the appointment of directors, who determines corporate policy, the independence of the Board and sources of funding.[239] The ONS will weigh all the factors and decide whether overall they add up to control.[240] If a body is deemed to be controlled by government (local or central) or a public corporation, then it will be classified as in the public sector. If not, then it will be classified as in the private sector.

158. The attraction of a private sector classification would be that the Green Investment Bank's operations (its borrowing and investments) would have no impact on PSND or PSNB, beyond the Government's initial equity investment. On the other hand, a public sector Bank's operations would have an impact on PSND and PSNB:

- Equity investments or loans made by the Bank would increase PSND because National Accounts rules regard these as illiquid assets and therefore are not netted-off against its borrowing from investors when measuring net debt.
- Any payouts to investors as a result of a Green Investment Bank guarantee would be classified as grants to the private sector which have to be financed by borrowing, and would therefore increase PSNB and PSND.[241]

If a public sector Green Investment Bank were to be given powers to raise its own finance, for example by issuing bonds, this would be more expensive than if funded by the

237 Ev 137

238 HM Treasury, *Class (2010)1 Sector Classification*, March 2010, pages 9–12.

239 Ev 137

240 HM Treasury, *Class (2010)1 Sector Classification*, March 2010, pages 9–12.

241 Ev 143

Government through gilts sales. If the Bank were in the public sector, it would be cheaper to fund the Bank directly by the Government itself raising debt in the capital markets.[242]

159. One area unaffected by the public/private classification question is the use of the proceeds from the sale of government assets to capitalise the Bank. BIS told us that redirecting such sale proceeds would have no impact on PSND or PSNB:

> Sales of government financial assets reduce PSND, and are PSNB neutral. Since government taking an equity stake [in] a private sector [Green Investment Bank] would also be a financial asset, redirecting the funds from asset sales in this way would have no impact; other than to note a lost opportunity to pay down debt. Similarly, if the [Green Investment Bank] was public sector, then the granting of loans or purchase of equity by the [Green Investment Bank] would be a financial transaction giving rise to financial assets, so would similarly net off.[243]

160. **Financing the Green Investment Bank using the proceeds from the sale of government assets, regardless of how the Bank is classified for National Accounts purposes, will not impact adversely on the public sector finances, other than a lost opportunity to pay down government debt. We urge the Government to channel as much of the proceeds from asset sales as possible into the Bank.**

161. A tension exists between any desire for government control and influence over the Bank on the one hand, and the aim of minimising the effects of the Bank on the public sector fiscal position on the other. Greater control will increase the likelihood of the Bank being classified as in the public sector, with the Bank having a bigger impact on public sector finances. Less control will reduce this impact.[244] Chris Hewett from Green Alliance summed up the dilemma:

> Here we come to the heart of the paradox in government thinking. An off-balance sheet institution being hard to control, but and on balance sheet one being impossible to afford. The trade-off politically, is whether the government, and specifically the Treasury, is willing to give away control of the capital investment it has made to a new body established under clear statutory rules and independent governance. If it does not, and wishes to retain control, then there will be a clear limit on how large the balance sheet can get. And a [Green Investment Bank] with a small balance sheet will not be able to make the interventions in the infrastructure market particularly to make much difference to capital flows.[245]

162. We questioned Ministers as to whether the Government is seeking advice and clarity from the ONS on the classification rules, so that these can be properly factored into its consideration of the pros and cons of the different models for the Bank. No such proactive approach is being followed.[246]

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242 Ev 143

243 *Ibid.*

244 *Ibid.*

245 Ev 127

246 Qq 213, 342, 337

163. At first sight the situation is complicated by the UK's more stringent approach to National Accounts classifications than some other countries. Bob Wigley told us that the impact of the Green Investment Bank on the public finances appears to be a particular issue for the UK:

> [...] other countries in Europe [...] frankly, have a less robust and less transparent Government accounting system; the development banks that exist in most other countries don't appear in the Government accounts. And in this country, because we have a more robust and more transparent system, a development bank's borrowings, for example, would be included in definitions of public sector net debt.[247]

BIS told us that while all European countries operate under the European System of Accounts, European development banks (such as KfW) operate under different national fiscal policies. Other European Governments focus on the size of 'general government', rather than the wider public sector debt and borrowing, so the European development banks' borrowing 'score differently' in terms of fiscal control.[248]

164. Two years ago, the Government diverged from its fiscal rules when it excluded the debts of the part-publicly-owned banks. In the 2008 Pre-Budget Report the Government announced that it would 'depart temporarily from the fiscal rules until the global shocks have worked their way through the economy in full' and that 'while the public sector fiscal aggregates continue to be affected by interventions in the financial sector the Government will report on public sector net debt both including and excluding the impact of those interventions. The Government will base its fiscal policy, and measurement of its fiscal rules, on aggregates that exclude that impact'.[249]

165. The Government could now, in theory at least, exclude the Green Investment Bank's borrowing from PSND, as was done for Lloyds Banking Group and the Royal Bank of Scotland, removing the risk that the Green Investment Bank's borrowing would breach the Fiscal Mandate and allow it to raise the scale of finance needed. BIS told us that the treatment of Lloyds and RBS debt was 'justified as a temporary and extraordinary non-discretionary situation'.[250] Since Lloyds and RBS were first excluded from PSND figures the Office for Budget Responsibility (OBR) has been set up to provide independent scrutiny of the Government's management of the public finances, and it would remain to be seen whether the OBR would be willing to accept such a divergence from the essential substance of the debt position.

166. **We are concerned that the Government is not seeking advice from the ONS about the possible National Accounts classification consequences of the options for a Green Investment Bank. The Government should now work proactively with the ONS to ensure that the Bank can be developed in such a way as to maximise its impact on investment levels, whilst minimising its impact on the fiscal position.**

247 Q 66

248 Ev 143

249 HM Treasury, *Pre-budget report 2008*, Cm 7484, November 2008.

250 Ev 143

167. **The Government's primary policy objective is reducing the deficit. The Government expects green growth to be a major future driver of the economy—guided by the National Infrastructure Plan—able to create new jobs and help transform the UK to a low carbon economy** (paragraph 108)**. The 'step change' that this requires means that this is an urgent agenda. If it has not already done so, BIS should raise with the Treasury the scope for a 'temporary and extraordinary' exclusion of a public sector Green Investment Bank from the strictures of the Fiscal Mandate. If, however, the Treasury's deficit reduction strategy prohibits such adjustment, and the Treasury can only support a Green Investment Bank that does not sit on the Government balance sheet, then compromises in the ideal Green Investment Bank set-up may have to be contemplated.**

168. We discussed in Part 3 how the Green Investment Bank might operate and its governance and oversight. **We are not advocating a so closely regulated and supervised body that it is unable to operate commercially and attract private sector investors. If close day-to-day control were to put the Bank on the public sector balance sheet, it would be of limited value if, as a result, it could only operate as a relatively small un-leveraged 'fund'. For us, a red-line is that the Green Investment Bank is a bank, explicitly charged with a specific green investment purpose and backed by government, that is able to lever in the large sums needed to deliver the hundreds of billions of pounds of required green infrastructure.**

Annex A: Note of visit to KfW, Frankfurt, 27 January 2011

The Chair, Sheryll Murray MP and Dr Alan Whitehead MP visited the headquarters of KfW in Frankfurt on 27 January 2011. This note summarises points raised by KfW officials, beyond those already raised in KfW's written evidence to the inquiry.[251]

Members met with the following KfW officials:

- Tatjana Bruns, Vice President Business Policy (Europe)
- Gudrun Gumb, Vice President Business Policy (Europe)
- Dr Jochen Harnisch, Head of Division, Competence Centre—Environment & Climate
- Dr Jan Schumacher, Economist, Economic Research Department

Background

In 2009, KfW had a balance sheet total of €400bn, second only among 'development banks' to the China Development Bank (€465bn), and larger than the European Investment Bank (€362bn).

KfW has subsidiaries responsible for export finance (KfW IPEX Bank, similar to the UK's ECGD) and finance for companies in developing countries (DEG, similar to DfID and CDC in the UK). KfW also has separate divisions focusing on particular sectors (for example, 'KfW Development Bank' which focuses on international aid). Its main activity, however, is support for the German economy through environmental and climate change projects and schemes.

KfW Bankengruppe's business model

KfW Bankengruppe is owned by the Federal Government and the German states, but is not on the public sector balance sheet. Public ownership and an explicit government guarantee supports KfW's 'AAA' credit rating from international rating agencies, enabling it to raise new funds from the capital markets at beneficial rates. It is raising €75bn overall in the current year. It also uses interest received on its loans to the commercial banks, to support further lending. It does not raise finance from private individual investors.

KfW Bankengruppe has no branch network of its own, and does not deal directly with the ultimate borrower for its domestic business (see figure A1). It lends to commercial banks, who in turn lend to households, community groups and small businesses for environmental, climate change and other schemes which meet the previously Government-approved criteria for loans. The commercial banks currently make KfW-financed loans of about €24bn to SMEs; €9bn to larger businesses; €9bn to towns, non-

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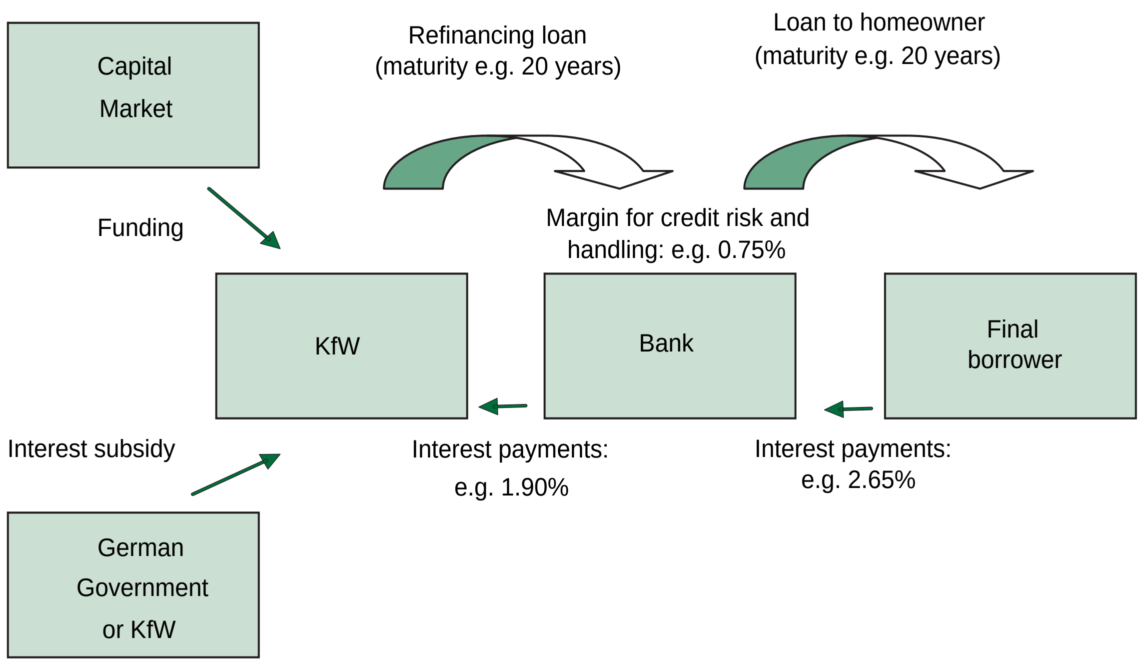
profit organisations and public bodies; and €16bn to private individuals. Since 2001, 630,000 loans have been made for housing efficiency improvement schemes covering 1.8m housing units, both for new builds and renovations of existing housing stock.

Figure A1: KfW's lending business model



Source: KfW

KfW Bankengruppe is able to offer loans to the commercial banks at low rates because of its Government ownership, but these rates may be further reduced by subsidies from the Government for particular environmental schemes, such as home energy efficiency measures (akin potentially to the 'Green Deal' in the UK). In order to ensure that any interest subsidies reach the final borrower, KfW set the commercial banks a limit on the margin they are allowed to charge for covering the risk and handling costs they incur. This maximum margin differs for particular Government schemes and according to the type of final-borrower (householders, SMEs, etc). The commercial banks, rather than KfW, help the final borrower put together the application for a environmental scheme's finance. KfW finance is taken up by mainstream commercial banks, but most is taken by 'promotional banks'—regional banks, 'savings banks' and co-operative banks—which have more developed social or environmental aims.

Schemes which attract KfW's beneficial rates tend to be long-lasting, and with the financial support delivered through *subsidised loans* to be repaid over many years, there is not the greater volatility of *grant-based* support used in other countries, which can sometimes only last for a few years or until the schemes' budget is exhausted. Also, potential beneficiaries in other countries may have to progress their application for a scheme without knowing whether all elements of the required finance (a mixture of loans and grants) will be in place.

The commercial banks, not KfW, decide whether to lend to a particular final borrower, and carry the loan default risk. That means that the commercial banks still have to judge the credit-worthiness of the borrower and assess whether the risk can be borne within the on-lending margin limit imposed by KfW. (KfW bear only the risk of the commercial banks defaulting on their loans from KfW.)

EU state aid rules

Around 2001/2002, the Government gave support to a number of public sector banks, including KfW. The mainstream commercial banks objected to what they saw as uneven treatment and filed a complaint with the European Commission. The Government then negotiated a memorandum of understanding with the Commission, setting out what a public sector-backed bank is allowed to do. The Commission considered that the commercial business of KfW and other public sector banks had to be separated from the government supported business. This resulted in KfW creating KfW IPEX Bank, a separate legal entity licensed as a commercial bank. European state aid rules continue to apply to all KfW's schemes.

The Government and KfW have to take account of EU state aid rules whenever KfW is active in countries where Community law is applicable.

France has had similar discussions with the European Commission regarding state support for loan schemes delivered by commercial banks.

Overseas aid through its KfW Development Bank Division

The KfW Development Bank finances development aid projects overseas, operating on behalf of the German Government. KfW overall lent US$4.6bn through the Development Bank (and DEG). It is one of two vehicles through which the Government delivers its overseas aid budget. It is responsible for inter-government financial cooperation and distributes grants and soft loans (with a proportionately heavier focus on loans than the UK's DfID). GIZ, the other big German agency in this area, is mainly involved in providing technical assistance in developing countries. KfW and GIZ cover a range of sectors, including education, health, economic and environmental projects. About two-thirds of German Government overseas aid, however, is through disbursements directly to multilateral donors (World Bank etc)—a markedly different mix of bilateral/multilateral aid than in the UK.

KfW introduced a 'climate safe' screening assessment for its aid projects nearly 2 years ago, which became mandatory from January 2011. This addresses the environmental/climate change impacts of projects, including the recipient country's commitment to such issues.

KfW are given targets for the emissions reduction impacts of its projects overall—67% reduction in CO_2 through energy projects, 28% through forestry projects, etc. (Such data is used purely to monitor its impact; it is not certified for international carbon offsetting purposes).

KfW generally achieve about 8 times as much CO_2 impact per € overseas than it does through its lending within Germany, reflecting the existing generally high level energy efficiency within Germany.

In 2008, KfW provided 14% (US$2.4bn) of global climate finance, behind only the bank of Japan (36%), and ahead of the World Bank (11%) and Agence Francais de developpement (10%).

KfW's 'sustainability indicator'

KfW developed a 'sustainability indicator' in 2007. The indicator was recast and extended in 2010 and uses a wide range of sub-indicators, some of which are part of the federal government's sustainable development reporting. The aim of the indicator is the yearly progress assessment of sustainable development in Germany. It monitors trends over time in economic, environmental and social aspects of sustainability.

KfW uses its sustainability indicator in order to increase public awareness of the importance of sustainability as a political and economic consideration and as a tool for internal evaluation of the sustainability of its loan schemes.

Conclusions and recommendations

Urgency of action

1. If a Green Investment Bank only became operational in September 2012 investors may put off investment while there is uncertainty about how the Bank will operate. Investment may go abroad or into high carbon projects. A Green Investment Bank operational in late 2012 may not have the time needed to grow and build its balance sheet sufficiently to provide the level of investment support needed to meet 2020 emission reduction and renewable energy targets. The Bank must to be able to start making investments within 12 months. (Paragraph 15)

The advantages of a 'bank'

2. Capitalising the Green Investment Bank with £1 billion, plus unknown and unspecified proceeds from the future sale of government assets, will only be enough to start to lever in the scale of private sector finance required if it is able to operate as a 'bank'. The Government must keep the level of capitalisation under review, and be ready to increase it as soon as the fiscal position allows. (Paragraph 22)

3. The Green Investment Bank needs to be a bank, able to raise its own finance, fill a gap in the market for government-backed bonds, bring in banking expertise, be permanent and independent from government, and have the flexibility to offer a range of interventions. (Paragraph 30)

Raising private finance

4. We expect the Government to allow the Green Investment Bank, as a bank, to issue bonds to institutional investors to raise much of its finance. It is clear that they will need to be backed by a government guarantee, calibrated to make them still attractive while paying out low rates of interest, and also minimising the potential government liability (and the consequences for the fiscal deficit). (Paragraph 35)

5. We welcome the Business Secretary's ambition for the Green Investment Bank to be "a lot more than a fund", being able to lend and borrow. We recommend that Ministers deliver swiftly, and in full, on this ambition. (Paragraph 39)

Governance and oversight

6. If the Government concludes that it does not need to introduce an amendment to the Energy Bill, it should without delay be transparent about what legislative route it intends to take to set up the Green Investment Bank. That would ensure that this can be built into the parliamentary timetable so as to allow for sufficient scrutiny. (Paragraph 43)

7. Once operational, the right skills mix within the Green Investment Bank will be vital for attracting investors, and that will require competitive remuneration. Representation from the third sector on the Green Investment Bank's board could

help ensure a balance between economic, environmental and social issues in the Bank's investment priorities. (Paragraph 49)

8. Monitoring of the Green Investment Bank in its early years will be important to gauge its impact and assess whether it has been designed and set up in the right way. The Government needs to set out clear performance reporting arrangements that should include data on a range of key indicators about its performance in advancing green objectives. (Paragraph 52)

9. If the Green Investment Bank is established as a corporate body, Parliament must be given a strong role in scrutinising its initial governance and remit. If an arms-length body, Parliament must be allowed also to examine its evolving strategy and operating principles. (Paragraph 119)

10. The Government should consider how Parliament might be represented on an 'advisory council' of the Green Investment Bank. The Bank's remit should include a requirement to consult the Committee on Climate Change and take its recommendations into account. (Paragraph 119)

11. The Green Investment Bank, as a centre of expertise, should be given the independence to decide on the projects to support within its given remit. The Government should not interfere in the day-to-day management and individual investment decisions. (Paragraph 120)

12. The Government should set the Green Investment Bank with a clear green investment mandate, to stop the Bank straying into more profitable but less green investments. In doing so, the Government should clearly define what it considers to be 'green investment'. But we caution the Government not to set out the role of the Bank too rigidly, to allow the possibility of the Bank supporting environmental protection schemes in due course where these can be determined to offer a commercial return in the long term. (Paragraph 121)

Nuclear

13. In our judgement there remains some ambiguity about whether, under the terms of the Government's statement, Green Investment Bank support for new nuclear would constitute a subsidy—whether, for example, support would be regarded as market support similar to that made also available to other types of generation. The Government needs to provide greater clarity on what would constitute a subsidy in regards to Green Investment Bank support for new nuclear. (Paragraph 74)

14. It would not be appropriate for the Green Investment Bank to invest in nuclear, where the technology is already established. There is a range of other potential interventions for the Green Investment Bank, where its support will be vital and will make a real difference. (Paragraph 76)

Green ISAs

15. We are disappointed that the Government sees 'green ISAs' and other retail investments as a longer term option—they could provide an important symbolic way

of enabling individuals to contribute to the low carbon transition. The Government should give the Green Investment Bank the power to offer green ISAs once it becomes established, and should consider how it might get green ISAs off to a good start, for example by making the ISA investment limit higher for Green Investment Bank-issued ISAs. (Paragraph 81)

Support for the Green Deal

16. It is not clear how the three components necessary for the Green Deal will be made available: sufficiently low-cost financing for households, individual loans aggregated to a size attractive to large investors, and loan terms sufficiently long enough to satisfy the Green Deal 'golden rule'. The Green Investment Bank could be an important source of additional capital for the Green Deal and there should be much more joined up thinking between BIS and DECC on the potential role of the Bank in this area. The Government should conduct an urgent review to consider additional potential sources of finance for the Green Deal, and should not rule out the opportunity for the Green Investment Bank having a role. The Government should examine what lessons might be learned for the Green Deal from KfW, the state-owned German development bank, which has dealt successfully with similar requirements. (Paragraph 90)

A level playing field

17. The Government acknowledges that it can take up to two years to get state aid exemption approval. We are therefore surprised that it has not discussed with the European Commission the parameters of the Green Investment Bank's operations, as this could be a restricting factor on what the Bank would be able to do. We recommend that the Government starts negotiations immediately with the European Commission to ensure that required prior approval is secured for the Bank. (Paragraph 103)

UK or overseas investments

18. The Government must use the opportunity provided by the 'Green Economy Roadmap' to set out ambitious policies to support green growth, aimed at making the UK a world leader. We urge the Government to develop this Roadmap and the Green Investment Bank in a joined up way, and set out explicitly the supporting role expected of the Bank. (Paragraph 112)

19. The Green Investment Bank's focus should be on UK, rather than overseas investment, because that will be needed to deliver the UK's carbon targets. Helping the UK meet its carbon targets should be made explicit by linking the Bank's remit to the Climate Change Act. (Paragraph 113)

The Green Investment Bank's relationship with existing low carbon focused government bodies

20. The rationalisation of current government low carbon institutions and funds within the Green Investment Bank is not crucial to raising funds to capitalise the Bank, but it could be helpful in the longer term. We welcome the Government's review of the institutions and funds involved, and as part of this the Government should examine what lessons might be learnt by the Bank from the Energy Technologies Institute partnership between private and public sectors. (Paragraph 117)

Testing the design of the Green Investment Bank

21. We recommend that before its announcement in May on the favoured model for the Green Investment Bank, ideally in this month's Budget, the Government defines precisely its three tests of effectiveness, affordability and transparency. We also recommend that the full results of these tests are then published when the Government makes its announcement in May for each of the models considered, so that there is an opportunity for the House, potential investors and the public alike to understand the decisions that have been reached. (Paragraph 126)

22. We recommend that the Government, in undertaking the remainder of its market testing work, engages with all classes of investors and undertakes a thorough and transparent consultation exercise with them. (Paragraph 130)

23. We recommend that the Government conducts a brief public consultation on the proposals to be announced by the Government in May. (Paragraph 132)

The Green Investment Bank in the wider green landscape

24. The Government should give the Green Investment Bank a remit to monitor the Electricity Market Reform and Carbon Floor Price proposals, and other low carbon targeted initiatives to come, and to advise the Government on the need for any further policy and regulatory reforms to continue to provide a clear and long term framework for investors. (Paragraph 140)

25. Bringing investors closer to policy appears to us to be a fundamental role of a Green Investment Bank. By providing advice to the Government on the risks investors face and the impact on investors of policy decisions, the Bank could provide further help in bringing investment in. The Bank should be given an explicit continuing role to advise the Government on low carbon and green infrastructure policy, from the perspective of current and prospective investors. Also, being outside of government, the Bank could perform an important cross-cutting role by advising government on whether its low carbon and green investment policies are joined up across departments. (Paragraph 144)

26. To provide the greatest financial leverage and maximise the economic benefits to the UK in terms of growth and jobs, the Green Investment Bank should not be designed in isolation, but in the context of the range of policies the Government is developing. As work developing the Bank continues, there is a role for a small 'set up' team within the Bank to start creating and coordinating the linkages between the Bank's role and other government initiatives. (Paragraph 149)

27. We believe that there is a role for a Cabinet Committee or Minister, perhaps in the Cabinet Office, to ensure co-ordination across the relevant departments on initiatives that will impact on the remit of the Green Investment Bank. (Paragraph 151)

Impact of the Green Investment Bank on the deficit

28. Financing the Green Investment Bank using the proceeds from the sale of government assets, regardless of how the Bank is classified for National Accounts purposes, will not impact adversely on the public sector finances, other than a lost opportunity to pay down government debt. We urge the Government to channel as much of the proceeds from asset sales as possible into the Bank. (Paragraph 160)

29. We are concerned that the Government is not seeking advice from the Office for National Statistics (ONS) about the possible National Accounts classification consequences of the options for a Green Investment Bank. The Government should now work proactively with the ONS to ensure that the Bank can be developed in such a way as to maximise its impact on investment levels, whilst minimising its impact on the fiscal position. (Paragraph 166)

30. The Government's primary policy objective is reducing the deficit. The Government expects green growth to be a major future driver of the economy—guided by the National Infrastructure Plan—able to create new jobs and help transform the UK to a low carbon economy. The 'step change' that this requires means that this is an urgent agenda. If it has not already done so, BIS should raise with the Treasury the scope for a 'temporary and extraordinary' exclusion of a public sector Green Investment Bank from the strictures of the Fiscal Mandate. If, however, the Treasury's deficit reduction strategy prohibits such adjustment, and the Treasury can only support a Green Investment Bank that does not sit on the Government balance sheet, then compromises in the ideal Green Investment Bank set-up may have to be contemplated. (Paragraph 167)

31. We are not advocating a so closely regulated and supervised body that it is unable to operate commercially and attract private sector investors. If close day-to-day control were to put the Green Investment Bank on the public sector balance sheet, it would be of limited value if, as a result, it could only operate as a relatively small un-leveraged 'fund'. For us, a red-line is that the Green Investment Bank is a bank, explicitly charged with a specific green investment purpose and backed by government, that is able to lever in the large sums needed to deliver the hundreds of billions of pounds of required green infrastructure. (Paragraph 168)

Formal Minutes

Thursday 3 March 2011

Members present:

Joan Walley, in the Chair

Peter Aldous
Neil Carmichael
Zac Goldsmith
Caroline Lucas
Sheryll Murray
Caroline Nokes
Mr Mark Spencer
Dr Alan Whitehead
Simon Wright

Draft Report (*Green Investment Bank*), proposed by the Chair, brought up and read.

Ordered, That the Draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 168 read and agreed to.

Summary and Annex agreed to.

Resolved, That the Report be the Second Report of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

Written evidence was ordered to be reported to the House for printing with the Report, in addition to that ordered to be reported for publishing on 20 and 27 October, 3, 10 and 24 November, 1 December 2010, 12 January and 2 February 2011.

* * * * *

[Adjourned till Wednesday 9 March at 2.30 p.m.

Witnesses

List of printed written evidence

List of additional written evidence

(published in Volume II on the Committee’s website www.parliament.uk/eacom)

List of Reports from the Committee during the current Parliament

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2010–11

First Report	Embedding sustainable development across Government, after the Secretary of State's announcement on the future of the Sustainable Development Commission	HC 504

Oral evidence

Taken before the Environmental Audit Committee

on Wednesday 27 October 2010

Members present:

Joan Walley (Chair)

Peter Aldous	Caroline Lucas
Neil Carmichael	Ian Murray
Martin Caton	Sheryll Murray
Katy Clark	Mr Mark Spencer
Zac Goldsmith	Dr Alan Whitehead
Simon Kirby	Simon Wright
Mark Lazarowicz	

Examination of Witnesses

Witnesses: **Dr Gordon Edge**, Director of Policy, RenewableUK, **Chris Hewett**, Associate, Green Alliance, **Philip Wolfe**, Director, the Aldersgate Group, gave evidence.

Q1 Chair: Thank you very much indeed for coming along and giving evidence towards our Select Committee inquiry. I'm not sure if you have a spokesperson acting on your behalf, so, if it's all right with you, we'll go straight into the questions.

I wanted to start off by looking at how urgently action is needed in respect of a Green Investment Bank, and to try and get some idea from you of what the pressing market failures and the barriers are to getting the investment into the low carbon infrastructure that a Green Investment Bank should tackle. That is our starting point for the inquiry this afternoon. Dr Edge, do you want to start?

Dr Edge: Just so you know, my name is Dr Gordon Edge, from RenewableUK. We're very keen obviously that finance flows quickly into our sectors. Certainly the technologies I represent are onshore wind, offshore wind, wave and tidal. Particularly for offshore wind there is a need to get large amounts of capital into this sector, and we need it reasonably fast. There will be a massive ramp-up, post 2015, but certainly up to that point we will need capital into the market.

Mr Hewett: I'll introduce myself. I'm Chris Hewett. I'm an Associate at Green Alliance. We're an environmental think tank. We've been working with a number of organisations on the Green Investment Bank for the last year and a half.

I suppose, in answer to your question, there is now a growing set of evidence from different places that there are a lot of finance gaps, in terms of the private investment flows we need to deliver low carbon transition. Offshore wind is part of that gap.

There are other issues in terms of the amount of risk, which investors face with other newer technologies: the need to aggregate investment for small scale renewables and energy efficiency. There is a need for a banking function to be able to pull in institutional investment money, which can then be dispersed more widely across smaller investment vehicles. So there are gaps across the spectrum in the low carbon transition.

Chair: Do you want to add to that, Mr Wolfe?

Mr Wolfe: Yes, indeed. I'm Philip Wolfe. Yes, first in terms of the urgency, I think we would share the views of the Commission that this does need to be set up with a strong degree of urgency, because the needs are pressing and the market failures are evident. Those include some of the ones that my colleagues have mentioned. In particular, if one is moving in the energy field towards a more sustainable energy model, you tend to have a far higher number of far smaller investments. What that means is that, instead of investing multiple billions for a single nuclear power station, let's say, you're investing quite often at tens of thousands of pounds for energy efficiency or for small scale or distributed renewables, and that's a very different investment model to what we're used to in the sector.

Q2 Chair: Okay, and to play devil's advocate, could you help the Committee understand why it is that the sources of finance, which are around at the moment, are just not sufficient to deal with the ambitions that arise out of the ideas for the Green Investment Bank?

Dr Edge: I think one of the things about the Green Investment Bank is it came from a position when we had had a major banking crisis. One of the reasons there is not that much money around is that the banks are rebuilding their balance sheets. There is an element of us having to step in to fill that gap. The other thing that is obvious, particularly for offshore wind, is that while at the moment the funding for the development going on is coming from the utilities' balance sheets, they are not infinite. There are a number of things they need to be doing and offshore wind is one of them, and they will come up against a barrier. We do need new money. If you're talking about £3 billion per thousand megawatts of offshore wind, then that money starts to mount up very quickly.

Q3 Chair: Just playing devil's advocate again; why can't we wait for things to get right after the recession for that supply of funding to be there?

Dr Edge: We have targets on carbon and renewables, which we'll have a real problem meeting if we have

a hiatus right now. The other thing a hiatus in investment and build will do for offshore wind is prevent us from building up the demand and develop an industry out of it. That is one of the key benefits of taking a lead in offshore wind. If there is a gap, while we work out where the money comes from, then everybody steps back. If we don't get the investment in the factories here, they'll go elsewhere where there is more certain demand, places like Germany.
Chair: Thank you. Caroline.
Mr Hewett: I wonder if I could just add some figures to amplify that. We spoke to Ernst & Young, who did an independent report in terms of the sort of finance that was required to deliver the targets in terms of the climate change action that the Climate Change Committee are advising. Their estimates were that, in terms of total private investment in the infrastructure, we are looking at £450 billion worth of investment over the next 15 years. That's what we need from the private sector in total.
Their estimate was that the traditional sources of capital, the ones that are available now in the current market—utility balance sheets, bank lending, project finance infrastructure funds—would amount to around about £50 billion to £80 billion under current market conditions.
If you looked at perhaps bringing in some of the pension funds investments—the ones which would be willing to invest in some of the sectors now—again we may be looking at another £30 billion or £40 billion, but there is a massive gap, unless we have something to lever in that. The gap is around £330 billion to £360 billion over that 15-year timescale.
Chair: That is helpful, thank you.
Mr Wolfe: Could I just add one more point, and that is if we do delay now, the natural inclination will be that investment in the short term goes into the established technologies, the known technologies, those technologies that have a lower perceived political risk. That means there is a danger that if we don't have the mechanism to invest in low carbon technologies we will, as a default in the short term, be investing in high carbon technologies.

Q4 Chair: When you say "delay", what do you mean by "delay"? Could you define it?
Mr Wolfe: Yes, I think we would like to see the bank up and being effective, with effect from 2011. So even the timescale that was announced in last week's spending review we would see as being excessively slow.
Chair: Zac, did you wish to come in on that point?

Q5 Zac Goldsmith: Yes. On this issue of the timetable, which you have mentioned twice, because of the announcement that there is to be a Green Investment Bank, do you think that there is a risk that that fact in itself is going to cause investors to hold off making any investments in the hope that maybe there's another big subsidy around the corner? I'm just trying to understand from you how important it is that this timetable is accelerated.
Mr Wolfe: I don't think we see the Green Investment Bank as being another subsidy round the corner. We see an entirely discrete role for the bank that is nothing to do with the incentive mechanisms that are put in place, such as the Renewables Obligation and the feed-in tariffs. We see the bank as being a body that can provide funding against some of these mechanisms that exist. So I wouldn't say it would be delayed for that reason, but I think there is certainly the danger that the announcement, followed by a long hiatus, would stall investments in the sector.
Chair: Caroline.

Q6 Caroline Lucas: On the timing issue: I just wonder if you could be any more explicit—you have all touched on it—about that delay until 2013? What will that mean in concrete terms, in terms of maybe things that you can't fund that could have been funded?
Dr Edge: I think we might struggle a bit on some of the projects that offshore wind would be looking to build in the 2014 to 2016 period. If there is a delay in being able to channel new capital into this sector we may see a slowdown there. That's what I would expect, if there was that kind of delay.
Mr Hewett: The damage is probably more to the medium than to the long term, because the longer it takes to start the bank, the longer it will take to be able to build up the balance sheet and the capital of this institution to the sort of numbers that Ernst & Young are talking about. So, if it's only £1 billion in 2013, we can't see how you're going to be able to get to the 2020 sort of stage. It would have to be a very rapid growth in capital. That's why I think the recommendation, which they came out with and others have supported, is that, over the spending review, we need something of the order of £4 billion to £6 billion, in terms of initial capitalisation for the bank. That gives it a chance to grow into a significant institution and not be another policy that is simply tinkering around the edges.
Mr Wolfe: Just to add some other areas to the ones that Gordon has already mentioned: energy efficiency is a matter of crucial and pressing importance. It is a classic example of a market failure in terms of being able to finance the sector, and that is one we would want to see brought forward earlier rather than later.
Dr Edge: If I might amend what I said a little bit, and also in some ways address Zac Goldsmith's question, the role of the bank should be about channelling new money into this sector. We have existing players, and I don't think they're going to be terribly affected by the Green Bank; I hope not. That would be a rather perverse outcome of the whole debate and I don't see anybody intentionally doing that or even doing it by accident.
But if we had a bank that was only there in 2013, and then took time to get that new capital into this sector, the big ramp-up in offshore wind that we expect and hope for, post 2015, might be inhibited because you simply don't have the quantity of capital there to build it up to 3,000 or 4,000 megawatts a year, which is £10 billion to £12 billion a year of new capital every year. That would be an issue.

Q7 Caroline Lucas: You've spoken in general terms; just to push it a little bit more, are there examples of otherwise viable projects that are stalling now for the lack of investment?

Dr Edge: In offshore winds specifically, what we're seeing might be a problem is if there is any delay in clarity around what happens with the Renewables Obligation, post 2014. That is more of an issue than the funding at the moment.

Q8 Zac Goldsmith: This issue of funding: it's not that there is a lack of money in the banks; it's a lack of access to that money on the part of those who are seeking investment. What is it that is preventing the banks from lending? Is it because they see a greater risk than is the case or is it something else?

Dr Edge: It's not so much the banks we're talking about here—it's institutional investors. Banks are willing to lend into the renewable sector. They are starting to get comfortable with the risk around offshore wind. I mean there is a project in the market right now that would require people to take on construction risk. That has not yet been built but they're looking to finance it. So I think the banks are getting more comfortable with it.

It's about getting the institutional investors, the pension funds, who have very specific risk reward kind of objectives to come in and be comfortable with those kinds of investments. That's a longer term issue.

Q9 Chair: Can I just interject there to ask: if you're talking about the investment fund, is there anyone that you would particularly suggest should come before the Committee to give that point of view?

Dr Edge: I would have to come back to you with some thoughts.

Chair: Okay.

Mr Wolfe: Going back to a point I made earlier on. One of the areas that is having trouble raising funding at the moment is that of small and medium scale investments. The larger funds aren't used to investing at the level of hundreds of thousands or tens of thousands of pounds, and what is needed—and an important role that we see for the bank—is the ability to aggregate, the ability to make a large number of relatively small investments but to present that back to the larger investors as a small number of much larger investments.

Chair: Okay. Caroline.

Q10 Caroline Lucas: My last question was about the scale of investment by Green Investment Bank that would be required to re-drive new jobs and make Britain a world leader, if you like. You talked before about the Ernst & Young figure of £4 billion to £6 billion, in terms of capitalisation; is there anything else you want to say about the issue of the scale of investment by Green Investment Bank that would be needed?

Dr Edge: Looking again at offshore wind specifically, out to 2015 we're anticipating about 1,000 megawatts a year of construction, which is an investment of about £3 billion.

Caroline Lucas: How many, sorry?

Dr Edge: £3 billion a year for that build. Post 2015, we see a ramp-up to maybe 3,000 or 4,000 megawatts a year, in the 2017 timeframe. That would be again about £10 billion or £12 billion of investment per year. So that's the kind of scale of investment we're talking about for offshore wind alone.

Chair: Peter.

Q11 Peter Aldous: Can I just come back to something Mr Wolfe said. My understanding of the Commission's report was perhaps, in the first instance, to go for some of those bigger projects with sizeable investment and then, in due course, come on to the smaller projects where you have to tackle the aggregation issue. You're saying there is a need for those smaller projects right from the beginning, is that so?

Mr Wolfe: That would certainly be my view, yes. The larger projects, in a way, do have sources of funding available to them now, as Gordon suggested. The banks are familiar with that, reasonably comfortable with that, and prepared to put funding behind large scale projects, whereas the smaller scale projects have no access to capital at the moment.

Chair: Alan.

Q12 Dr Whitehead: You mentioned that the Government should ensure that the Green Investment Bank should have a capitalisation of perhaps £4 billion to £6 billion. We have heard from the spending review that there is £1 billion. Bearing in mind that it has also been stated—although not explicitly set out—that there may be some additional proceeds from the sale of Government assets added to that additional £1 billion, is it your view that that £1 billion is, as it were, below the critical level to get the Green Investment Bank going? Or would you scale down your £4 billion to £6 billion initial amount, but nevertheless consider that a bank could get going significantly on the sort of level that we now hear from the comprehensive spending review?

Mr Wolfe: I think certainly £1 billion alone, without being topped up from any additional proceeds, is in danger of being at the level where it can scarcely make enough difference to have the impact that was intended. If it isn't followed, as the Chancellor suggested, by additional, hopefully, billions—in the form of proceeds of asset sales, or potentially proceeds of, for example, auction of allowances under the EU ETS—then, in my personal view, £1 billion alone is too low.

Q13 Dr Whitehead: Assuming the Government did invest an initial amount of £4 billion to £6 billion, that's essentially what you might call "the Government guarantee". You have suggested that on the basis, essentially, of that guarantee then another £100 billion could be leveraged in from all sorts of people, but I presume one would have to go to institutional investors for that additional leverage. That appears to be quite a high level of leverage against the initial investment. How did you arrive at that sort of figure?

Mr Hewett: In a sense, there are two different issues here. One is: what sort of equity stake the Government can find in the spending review period to initially capitalise the bank. The £1 billion is very welcome. We would prefer that that was slated for 2011 to 2012, rather than 2013 to 2014. I think we would like to see the Government more specific about what asset sales they are talking about. If we're talking about High Speed 1, then that could potentially get £1 billion to £2 billion. If that were all applied to the Green Investment Bank that would get some way towards the number we've been advised would make a viable bank. So there is that initial equity.

I think decisions need to be made now about what this bank is going to be, what structure it will be, what remit it will have, and therefore the trajectory it has into the future. So what we see is something akin to the European Investment Bank, or KfW (Kreditanstalt fur Wiederaufbau) in Germany, which is a large state-backed bank, which is an infrastructure development bank. Over time those institutions are able to get the leverage in terms of 1: 10 ratios, but you wouldn't get that from day one.

If it's £2 billion in a fund, which is not an independent bank that can raise Green Bonds, that will make a small dent in the problem but it won't solve the problem. It won't have the potential to solve the problem. If it is £4 billion to £6 billion in an independent bank, which then has the powers to raise its own capital over future years, then we're talking about something that is a game-changer for the low carbon transition.

Q14 Dr Whitehead: KfW, among other things, in terms of its rates, converts the Government backing to better rates for those people who are lending, essentially because of the imprimatur, the Government backing, for that bank. Is that the way in which you might see Government guarantees combined with initial bank funding, combined with other forms of leverage, coming into play as far as the Green Investment Bank in the UK is concerned?

Mr Hewett: In a sense, the way it grows its balance sheet will, in a way, be up to the independent bank. The independence is very important here. It's something that is not seen as—as far as the investment community is concerned—the plaything of politicians, it is something that is making genuinely commercial decisions with taxpayers' money, so the taxpayer has a stake. But the investment committee on that bank makes its own decisions, in the same way that the European Investment Bank does, in the same way that KfW does.

KfW does have a Government guarantee; the European Investment Bank does not have a Government guarantee. There are equity stakes from a number of different European Governments which go into that institution. We, as UK taxpayers have a liability of that equity stake, and other countries around Europe have a similar stake, but we are not liable for the whole balance sheet.

Dr Whitehead: This is the EIB?

Mr Hewett: The EIB, yes. So there are different ways of constructing these development banks. It's that sort of model we think is possible to construct for the GIB in the UK.

Mr Wolfe: I think the KfW precedent is a very good one to look at. It has been very successful in creating some real momentums in the sectors that we're talking about. It's also proved very successful in providing a transition from the market failure mode into a mainstream mode. What you're now seeing is that in a lot of the areas where KfW was the primary finance provider historically—like renewable installations under the feed-in tariffs, for example—those are now moving into the mainstream banking sector, and KfW is progressively financing a lower and lower percentage of that; because it has made it successful it has made it bankable.

Chair: Martin.

Q15 Martin Caton: Thank you, Chair. There are already a number of Government bodies and Government-supported bodies providing finance for research, development, deployment of low carbon technologies. Do you see the Green Investment Bank being a bolt on to these, or are you looking for a completely new model?

Dr Edge: Certainly there are a number of actors, and mainly grant-giving bodies funding innovation, putting them together, which is perhaps one of the functions that might have some benefits for the Green Investment Bank. We certainly said in the past that we think that the innovation landscape is terribly crowded and very confusing, but that's not the game-changing we're talking about. It's going to squeeze a bit of efficiency out of not having quite so many quangos around.

But we're talking about something else entirely here, which is: how do we channel new money into the mass build-out of these technologies? So it is a different institution that we're talking about here, in terms of being able to raise money on the private markets, and then use that for implicitly backed usage, shall we say, that I think gives it the reason for being. If you didn't have some kind of Government backing then it wouldn't have the right impact.

Mr Hewett: Yes, I'd agree with that. I think we are talking about something much more akin to a European Development Bank than just merging a few quangos on the innovation front. There has been a slight confusion of those two issues, and they're both important issues, but you don't necessarily need a bank to solve the innovation funding problem. It could be a subset of the Green Investment Bank. We're open-minded on that.

We are talking about a permanent independent new player in the financial architecture of the country, which is there with a statutory role to lever in finance and facilitate greater product finance into delivering the Climate Change Act targets. The other thing that I think needs to be written into its DNA, as well as the mission to deliver the Climate Change Act targets, is that it is also very clear that it's not about crowding out private capital. We don't want just to displace capital that would have come from the private market anyway. So certainly the Green Investment Bank Commission was strong on this, and others have been as well. Its intervention should be private sector led. So if there's clear evidence that a project is not going ahead because the private sector cannot find sufficient capital for it, then there's a role for the Green Investment Bank to get involved. It shouldn't be leading and forcing investments in that way.

Q16 Zac Goldsmith: Can I just jump in: that makes the job of the Green Investment Bank very difficult, in the sense that if a project is unable to access finance from the normal institution, it suggests that it's not a very attractive investment opportunity. I know not always, but that is the first assumption you have to make. In which case it's going to be harder to raise money from the private sector to fund the Green Investment Bank, or to invest in these kinds of projects via the Green Investment Bank, because you are automatically starting from an economic disadvantage. How are you going to resist the temptation to use the Green Investment Bank to invest in those projects, which are already attractive from a commercial point of view?

Dr Edge: This depends, and comes to some key points about what the bank does. From where I'm sitting there may be some very interesting things a bank institution can do, in terms of buying down specific risks. The income is the same, but what you're doing is reducing the risk side of it, so you make that risk/reward ratio much more attractive and you bring more money in. For instance, if you had insurance-type products that insured against the overrun in costs in building a wind farm offshore, that could make the whole project much more attractive to the investor side, whereas previously it might have trouble raising the money, now it would be able to do so. That is a targeted use of Green Investment Bank money, which then capitalises a great big investment from elsewhere. I think we have to be clear what products this bank is going to offer and target them to maximise the use of the resource.

Mr Hewett: Can I just add to that? There are two things: one is it will have a different view of returns than a private sector bank. So this is something that will be commercially sensitive. It needs to make money but it's not there to pay dividends to shareholders, so it won't be maximising profit in the same way that the commercial banks will be doing. It is able to take a slightly different view of returns and also in terms of the length of returns. The European Investment Bank does co-invest on the grid infrastructure across Europe, because some of the private sector banks don't want to be involved in a project for 25 years; they only want to be involved for five. So there is a role in finance there. The other one is a different understanding of policy risk and political risk. There is some genuine policy risk in the investment equation and there is some perceived risk. The Green Investment Bank will be able to take onboard some of the perceived risk cost, because it will be closer to government and understand the certainty of those policy mechanisms is greater.

Chair: Can you just let Martin finish?

Q17 Martin Caton: To go back to my original question, I have to say I'm still not clear how you see what we call the "innovation funders" relating to the Green Investment Bank. Could you clarify further?

Mr Wolfe: I think we share the view that rationalisation of that would be very helpful. We do not think it is fundamental to the role of the bank that the rationalisation has to happen by merging it into the bank, but we feel that would be an approach that is certainly worth looking at. We don't think the bank should be drawn into doing some of the other activities that some of those quangos are currently doing, for example energy advice activities. We do think that if funding roles are taken from those bodies into the Green Investment Bank—and certainly prima facie that looks to be worth looking at—we wouldn't treat that as a reason for merging, let's say, Carbon Trust and Energy Saving Trust lock, stock and barrel into the GIB because they have other roles about advising householders and businesses that wouldn't logically be part of a banking organisation. So the financial wealth creating aspect, yes; the others we wouldn't see as being logically part of a bank.

Martin Caton: Thank you, that's helpful.

Chair: Peter?

Q18 Peter Aldous: I think at the current time business may seek to avoid risk, unless they are paid a high price for taking it on. What role do you think Government have, both in providing certainty and clarity to investors and to reducing that perception of risk?

Mr Wolfe: First and foremost, a subject we touched on earlier, this is not to replace the Government-backed incentive measures that are out there. Government need to maintain those incentives; they need to ensure that they are long, loud and legal, if you like, and they will be the sorts of measures on which projects are built that the bank could back. The answer to that question is the same as it always was. Those measures need to be clear, they need to be well established, they need to be well founded, they need to be left alone once they're in place and they need to be bankable at that level. They need to be set up in such a way that the perceived political risk is low.

Gordon, I'm sure you are going to add to that.

Dr Edge: Absolutely. For me the Green Investment Bank is a bit of a secondary issue to the whole policy stability piece. If you do not get that right, you could put as much money as you like into a bank, it's not going to help. For me, the Government's first role is to ensure the stability and dependability of that policy framework. Having the bank might help in that because people could look at what the bank does, and it is taking investments on the basis of a policy as it is now—and that policy will continue to exist—and then say, "Well if Government messes with the policy, their own investments will be hit". So it hopefully will increase confidence that the policy framework is there to stay. I think that is one of the key subtle benefits of having this institution.

Mr Hewett: There's two other things the Government could do in terms of the way the bank works and is set up. One is it needs to be independent from the word go. It needs to be clearly a creature in its own right, and not subject to the whims of politics. It needs to be a longer term institution, and it needs to be permanent. So it needs to be something that is in there in statute, has a clear remit, ideally linked specifically to the Climate Change Act. That will give investors greater confidence. The final thing is also having the Green Investment Bank in the policy mix. If it is given a small role to advise government on policy, I think it will bring closer to policy making the views of investors and the impact on investment of certain policy regulation decisions. The investment community has been saying this for decades, long, loud and legal. It doesn't seem to have got through, so maybe we need something a little bit closer to the policy machine that integrates that certainty back into the policy framework so the two work hand-in-hand.

Q19 Peter Aldous: That is very helpful. Moving on, there are a number of initiatives and policies aimed at increasing investment in renewables and low carbon technologies at the moment. Wouldn't we perhaps have been best to have extended or reformed those rather than trying something completely new?
Dr Edge: This is an addition rather than an "either/or". You have the policy and it's about making sure that we unlock all the benefit of having those policies by giving a new channel to new investment.

Q20 Peter Aldous: Are there any dangers associated with adding a new initiative to the mix?
Dr Edge: I don't see too much in the way of danger. Certainly we need to have a conduit, particularly the institutional investors, to be able to come into this market, particularly if you want them quickly. So I don't see why it should be a particularly dangerous adventure.
Chair: Ian, did you want to come in on that point?

Q21 Ian Murray: Yes, I just wanted to follow up on Peter's question, and also what Zac was touching on slightly earlier, because the key to all this would be the spreading of that risk essentially. Obviously the legislative framework and governmental policies are going to play a huge role in creating that stability; of making sure the risk does stay stable. But obviously there has to be a commercial viability here as well and the confidence of that leverage has to come from commercial viability over a longer term. How do you initially assess at the Green Investment Bank level what projects will make it financially viable in order to create that stability and the confidence for levering in the additional funds that are required? Because obviously if the Government do put in £1 billion or £4 billion to £6 billion, as has been suggested, it could potentially disappear rather quickly.
Mr Wolfe: Yes, I don't think we would see the bank investing in projects for which the returns are so low that it doesn't make a sensible return. I think what we're looking at are projects where the return is a good commercial return, but ones that might not get taken up by traditional commercial banks, because of their view of the perceived political risk. It is a way of taking what are good investment propositions, but ones that wouldn't get taken up by the traditional commercial banks because of the lack of familiarity with the technologies or the perceived regulatory risk.
Chair: Moving on to priorities for investment, Simon.

Q22 Simon Wright: There have been lots of ideas floated about the areas that the GIB could invest in. How do you think that in the early days the GIB should prioritise its investments, and do you see it focusing more on the near-term quick wins to help achieve emission targets up to 2020? Or do you see it in its early stages looking more rlonger term and at projects such as CCS and smart grids?
Dr Edge: Do you want to start this one?
Chair: Which of you?
Mr Hewett: From the outset the bank has to be given a remit, which will give it the right to intervene and the framework to intervene in lots of different parts of the low carbon transition. So from networks, the smart grids, the carbon capture pipelines—if we have them—through some of the transport network, potentially, all the way through large energy supply project, like offshore wind, through to smaller scale decentralised energy and energy efficiency. That needs to be part of its long term job. I don't think anyone is advocating that it needs to be doing do all that from the word go, because it would be too steep a learning curve and not correct. In a way, it would be up to the bank to make those commercial judgments about what is the best use of its capital, given its remit to reduce emissions and deliver a return to the taxpayer.
Offshore wind—and I'm sure Gordon will say more—is clearly one of the areas where we need that acceleration of capital quite soon. That's an obvious area to get involved with. I think getting involved at a small level on energy efficiency with an eye to being part of the Green Deal and part of finding large amounts of capital to go into energy efficiency retrofitting would be, for me, the next big area for prioritisation.

Q23 Simon Wright: On the Green Deal, do you feel that it is quite important for the GIB to be involved in that? Or are the Green Deal levels of availability of capital going to be sufficient anyway, irrespective of the GIB?
Mr Hewett: It depends how ambitious your Green Deal is going to be. If we want the Green Deal mechanism to genuinely retrofit a large amount of houses in this country and to improve energy efficiency in a stepped way, we're not going to be doing that in year one or year two. We will want to be heading towards that in years three, four and five. That is when you will need some larger pools of low cost capital to get involved.
The example to look at here is what KfW have done in Germany. Essentially the German retrofitting programme, which has reached an awful lot of homes, could probably not have delivered anywhere near the amount of retrofitting without KfW involvement on the financing. They don't lend directly to the projects; they lend through the banks, but they are the source of the low cost capital that drives a lot of that, so I think it is important but it wouldn't be the first thing they do.
Dr Edge: If I might add to that one. Certainly with the amount of capital that it will have in the first instance, there will have to focus—that's quite clear. But I'd support Chris in saying that it shouldn't be limited to those initial focuses just because that's all we have money for in the first instance. There will be an ongoing job for the bank in the long term to be doing lots of things, but we will need to focus in the shorter term, given the capital that's being put towards particular things that we need in that time. Yes, offshore wind is very prime among those. Maybe we

could start talking about investment in the development of wave and tidal technology—it is another one—if we are having the innovation funding coming into the bank. That's an early stage one that has a longer term payoff, but would need to happen now if we're to get the industrial benefits of that technology in the short term.

Chair: On that point I have—

Mr Wolfe: While we accept that there has to be priorities, it would be dangerous to answer your question with either one or the other. It isn't binary, it isn't one or the other, and it will have to be doing some of both from day one. There will be important enabling investments in things like smart grids and things like heat networks, which will be necessary early on to enable other technologies to come through at the requisite speed later.

Chair: I have Peter, Alan and then Zac, if that's okay.

Q24 Peter Aldous: I think I'm right in saying the Government are putting £1 billion towards the Carbon Capture Project. In your opinion, would that money have been better spent in putting into the Green Investment Bank from the outset?

Dr Edge: I can't answer that one.

Chair: Anybody else want to have a go?

Mr Hewett: No, carbon capture and storage is so strategically important to not just the UK and Europe's battle against climate change, but the world's that it is very important that we get those demonstration projects up and running. Certainly Green Alliance would have preferred that there was a stronger commitment to the full four and not just to the first ones. It may be that the Green Investment Bank becomes the conduit for where that £1 billion is invested.

Q25 Chair: How do you balance the short, medium and long term, in terms of where investment decisions need to be made?

Mr Hewett: Without seeming to duck the question, I think that's partly what the role of the bank is to do—to make those hard-nosed commercial judgments. It needs to be given a remit, through an Act of Parliament, for facilitating and accelerating the investments from the private sector to deliver the infrastructure that is needed to achieve the Climate Change Act targets. Yes, small amounts of money will be needed in some of the new technologies early in order to wrap it up early, and large amounts of capital will be needed in some of the ones that are nearer to market and about to be built. So that will be its job; to work out how you profile those investments.

What it needs to be able to do that job is to be given that remit; it needs to be made independent and permanent so that it can think long term and not just think it's a fund controlled by the Treasury that may disappear in the next spending review. No one would be able to make those judgments if that was its remit.

Mr Wolfe: I think by definition, it's likely to have to lean a little towards the longer term, if only because that is likely to be the area where there is the greatest market failure. Short-term investments are likely to find it easier to get normal mainstream commercial funding, and it's therefore the longer term ones in particular that probably only the GIB will be able to support initially.

Chair: Alan and then Zac and then Neil.

Q26 Dr Whitehead: On the distinction between long term investments and short term requirement, I was interested in Chris's reflections on the Green Deal and the Green Investment Bank. In terms of the Green Deal, the extent to which one can place a charge on the household electricity bill, at a rate that actually means that any serious retrofitting will take place on a property, depends on the interest rate that the company that is investing in that thinks it's going to get back from that charge. A crucial difference might be made in that interest rate between whether it is a Government rate or a market rate. Isn't that the sort of exact point at which the Green Investment Bank could make that difference in the short term, even though those investments themselves are long term? If it doesn't make that difference, would that window be lost as far as that form of investment might be concerned?

Mr Hewett: Without going into the detail of how the returns are coming back and the timescale and all the rest, I think you're right—we definitely need to have some involvement of the Green Investment Bank in the Green Deal. At the moment, we're a little bit unsighted as to when the Green Deal will be ramped up and how that's going to play out, but I think it's important that the Green Investment Bank has a role in finance, so that it can make those judgments when we know what the Green Deal actually is—it's a little bit opaque at the moment.

If I can add one more point on this issue. At the moment we can tell you about the current finance barriers and the current investment problems. If you'd been asking that question five years ago, we'd have been giving you a completely different answer. So that's another reason why the Green Investment Bank and its permanence is important because you will have a financial expertise within, if you like, the public sector, within government circles, who can start to anticipate some of those investment barriers and be a little bit nimble of foot to arrest some of those. So we don't know what the answer is yet. The Green Investment Bank will hopefully give us some of those answers when it's up and running.

Chair: Zac; you wanted to come in.

Q27 Zac Goldsmith: My question has been answered already but I'm going to take this opportunity in any case. A lot of these investments are already cost-effective; energy efficiency is probably the best example. You know you're going to get your money back at some point. The question is how long it will take and that depends on various other factors, but there's not a lot of risk there. The difficulty is this is relatively new and you're looking at something that is relatively long term. Would it not make sense strategically for the bank almost to design itself initially to be attractive to the pension funds, which are hugely resourced but almost to the exclusion of everything else? You have an enormous amount of money there, where there is a demand for long term, low risk, medium term investment, which we all know that green technologies can provide. But because they're new, the assurance that Government can provide would—one would have thought—make it possible for the pension fund managers to put a lot of emphasis on this. Would that not be the most obvious focus for the bank, initially at least?

Mr Wolfe: Absolutely so, yes. We would see the bank as being a second tier bank, one of whose main purposes is to leverage long term funds, particularly from pension funds that have very deep pockets, into this area. Part of the way of doing that will be this aggregation role we talked about earlier on.

Q28 Zac Goldsmith: Realistically, how far could you push that with the pension funds? I don't know what the current post-crunch figures are, but how much investment do you think the bank could attract via the pension funds in this country?

Dr Edge: I believe that infrastructure funds raise about £10 billion a year from the pension funds to invest in infrastructure as it is, so I don't see why we shouldn't be looking at figures of that order to come; whether it's through the investment bank or through other routes. I think one of the things about the bank is that if we had all the time in the world, we could probably do that investment, find vehicles for the investment and the institutional investors to come into the market. They'd get used to the risks; they'd work it out; they'd find the right structures, but we don't have the time. It is because we need to be building this stuff at the pace, certainly according to the timeframes of the institutional investors, of a sprint that we need that aid, that buying down of the risk through a governmental or quasi governmental institution. That's why we need it.

Mr Hewett: The way to engage those pension funds is through fixed income investments. That's why the bank needs the powers to issue Green Bonds, give the institutional investors a vehicle by which to invest in the low carbon economy. At the moment, it's very easy for pension funds to invest in the high carbon economy. They are just listed equities—buy a slug of BP and you're away. It's very hard for those large pools of capital to access the low carbon market at the moment. There's plenty of anecdotal evidence of institutional investors who are interested and are trying to find ways of getting into this market, and harder evidence is gained when you look at all of the climate change awareness: for example the Green Bonds that have been issued by the World Bank, the European Investment Bank and other institutions. They've pretty much all been bought up by pension funds, large pension funds like the California State Pension Fund and the New York State Pension Fund and the European ones. They've all been buying Green Bonds, so I think there is a market out there.

Mr Wolfe: The Ernst & Young report estimated that the managed funds are currently worth £3.4 trillion. In that context, they felt that the £450 billion that was necessary should be achievable.

Chair: Neil, you wanted to come in as well.

Q29 Neil Carmichael: Yes. I apologise for being late, so some of these questions may already have been answered. One of the strengths of the EIB and the EBRD is that they lend credibility to any project. My first question is: how do you think the Green Investment Bank is going to replicate that kind of service here in Britain?

My second question is: mindful that we have big infrastructure issues across Europe, can GIB play a part in helping there? It seems to me that if we're going to be effective about addressing climate change, we need to be in a position where we can specialise; the kind of argument that says wind here and solar in Spain. How do we get that transfer? Can the GIB play its part?

Thirdly, how big does it have to be?

Chair: Three questions there.

Mr Wolfe: I think an important part of your first question, which we haven't touched on, is that, amongst other things, the bank should represent a pool of expertise within the green economy. A lot of the large scale investors that we were talking about, in response to the previous question, don't have specific expertise on the environmental markets. We would expect the bank soon to build up a recognised pool of expertise in this area and, therefore, to be the sort of investors that one would naturally follow because they have an understanding of that market.

In terms of its role outside these shores, in Europe, I'm not sure we had imagined that it would necessarily be investing outside the UK. I think it will have an important role, bearing in mind that a lot of the other investors who we would like to see investing alongside it are looking at investments around the world and it, therefore, has a role in making the UK look like a more attractive place to be investing in the green economy.

Finally, I think, in terms of the quantum, we are inclined to accept the Ernst & Young figure that the initial, if you like, seed funding of the bank needs to be £4 billion to £6 billion over the first spending period.

Dr Edge: If I could address that first question, about credibility, I refer to an earlier answer I gave, which is: having the bank making investments on Government's behalf gives more credibility to policies, which those projects depend on to make a decent return. So it's about giving credibility to the policy framework because the Government have some skin in the game—to use a colloquialism—that they say, "Well, if that goes wrong, then Government lose", therefore, they won't do that.

Mr Hewett: Just to answer on the European point; in a sense, we're playing catch up with the rest of Europe here. The rest of the developed world, apart from the United States, has some form of development bank. In the rest of Europe, most of these banks are already quite big players in the low carbon economy. KfW is the biggest example. The EIB is investing in this market quite strongly. So possibly the GIB could be involved in areas that link our renewable resources to the rest of Europe, perhaps the super grid idea—that's something with which certainly the UK bank could be involved—but we're about catching ourselves up with the rest of Europe on this one.

Chair: Sheryll.

Q30 Sheryll Murray: Thank you. Should the bank be able to invest in projects to protect the natural environment, as well as concentrating on cutting emissions? For such investments, how would you be able to secure an economic return for green benefits?
Mr Hewett: The proposal we have for the Green Investment Bank is that its focus should be the low carbon transition and delivering the Climate Change Act targets. That's a huge job in itself, so we're not proposing that it should be involved in investment in the natural environment; ecosystem services, those sorts of things. I think there's a whole set of different areas of how we get that sort of investment into the natural environment. I don't think it should be the job of the Green Investment Bank because I think the job is big enough.
Potentially, you should probably have some guidelines for making sure that the investments it makes are sustainable and don't take us in the wrong direction on the natural environment, so I think there would have to be some safeguards there. But I wouldn't say we should be getting into the wider environmental issues. I think low carbon is probably a big enough challenge for it.
Dr Edge: I think I would add to that. I think another focus of this is the development of the green economy and it's a bank, it's about developing us economically and, while building up flood defences is a very good thing to do and might save us money in the long term, it's very difficult to see how you get an income stream back to pay for that as an economic investment. But yes, certainly—as Chris says—it's a big enough agenda as it is. I think we should focus on that.

Q31 Chair: Sorry, could I just come in on that? Isn't that just a function of the way in which we measure the economy in that we don't actually put a value on environmental values and gains?
Dr Edge: Yes but how do you generate the income stream to pay it back as an economic investment? It might make economic sense using natural accounting measures, but if you're a bank investing money in that how do you see the investment coming back to you to use for future investments? I think that would be the problem.

Q32 Sheryll Murray: If I can come back to you and just ask: how can a Green Investment Bank ensure that its investment strategy does not have an adverse effect on stocks of natural capital? I'm thinking, in particular, if you're investing in offshore wind farms, for example, we cannot have a coastline that is completely surrounded by offshore wind farms just because it's good to invest in that sort of renewable energy, so the two do go hand in hand.
Dr Edge: What I'd say to that is the development of offshore wind is very heavily regulated and channelled. We are sent to particular zones by Crown Estates and there is no talk of a complete surrounding. It just wouldn't be practical in any case. But it does strike me that if we are going to protect ourselves from climate change, and the impact that would have on the natural world, we will have to have some development in the sea and it is being carefully regulated, so I'm not quite sure what it is that you're fearful of.
Sheryll Murray: But the two do go hand in hand. We should be looking after our natural environment as well.
Dr Edge: I would counter that my members are very responsible developers. They very carefully examine the impacts of any project that they have and work to minimise those impacts and mitigate them where they cannot.
Mr Hewett: I think what you hope is that a bank, such as this, would have a state of the art sustainability policy. That would be something we would expect. You could have a line in the Act of Parliament that would guarantee that there were some safeguards put in place in the policy, so that these questions were looked into in the investment decision process. We're not going to design any particular ones right now, but I think those questions have to be asked; I agree. All I'm saying is that I don't think it should be about proactively investing in the natural environment but it should protect the natural environment at the same time.
Chair: Okay. Mark Lazarowicz.

Q33 Mark Lazarowicz: If I could ask a question. I was waiting until the end of these questions because I was hoping it might have been answered earlier on. It's back to this question of the level of capitalisation of the bank at the start. The figure you have come up with, again and again, has been £4 billion to £6 billion as being what is required at start up. The CSR—as we heard—provides for £1 billion, plus funding from asset sales. In RenewableUK's evidence, you said asset sales would have only provided limited capital in any case. That was what I think you said in your evidence. There has been a suggestion about using the auction receipts for the ETS licences. But again, you will know that, given the number of times people have tried to earmark the auction receipts for different purposes, they would have been spent six times over by now if they had all been met. So, are you concerned about the apparent level of funding? Presumably the CSR will have quite a serious effect on the strategy the bank can follow. £1 billion is a lot of money, but there is a difference between £1 billion and £6 billion, and would that have an effect, for example, on restricting the bank's ability to get involved in big projects and, therefore, mean it would miss some opportunities?
Dr Edge: I think this comes back to the point about targeting activities and products, with a relatively limited amount of money that the £1 billion represents. It may still have a suitable impact over the next few years, so long as it is focused effectively. So choosing the right sectors—offshore wind is obviously a very good one. It is a question of what it does with that money. Does it take strategic equity stakes in the projects? Does it offer insurance products, which could be an extremely good way of using limited amounts of money very effectively? Those are the questions that need to be answered. If they are answered effectively, the amount of money that is being put on the table over this spending review period could be effective over that period. But you

definitely would need to be thinking about what comes after and ramping it up, in order to have the kind of ramp in delivery that we need in the five years after that.

Chair: I think one last question from you, Mr Carmichael.

Q34 Neil Carmichael: Just a short one. How important do you think it is that it's called "a bank" and structured as a bank as opposed to say a fund or something else?

Mr Hewett: Very important.

Mr Wolfe: Fundamentally important.

Mr Hewett: I touched on it in answering other questions, but the difference is that if it's a fund, which is still controlled by Government, by the Treasury, which has a commitment over the spending review period, between now and 2015, the private sector investors will see that finite bit of money and they'll think, "Okay, well, that will help a bit". But they won't see any long term commitment at all and they'll fear that that money will be taken away again in the next spending review. Until there is a commitment from the Treasury that it's not going to happen, that's what the assumption will be.

What we are talking about is setting up an independent institution, which is a bank, which can do what banks do: it can lend money; it can raise money on the private markets; it can create different financial products and intervene, whether it's a co-investor in equity or lends money on a project finance style, or whatever it might be. It can intervene at different parts of the finance chain, and it has an independent board that judges whether those decisions are good value for money for the taxpayer. We also think it should come back to Parliament and be as transparent as possible, as well, within that framework.

So, unless it's a bank, it won't be able to raise the sort of capital that is required to deliver the sort of leverage that is necessary to deliver the private investment that not just Ernst & Young, but plenty of other commentators say is required in the hundreds of billions. So if it's not a bank, it's a missed opportunity. In a sense, this is a big idea for a big problem. Whitehall is very capable of watering down that big idea into a small one, which would completely miss the point.

Mr Wolfe: There is the question of leverage. If it isn't a bank, it's very unlikely it will be able to leverage the sort of 9:1 ratios we were talking about earlier, to attract investment from the pension funds in the way that we described. So it needs to have that independence, it needs to have that remit to be able to leverage the relatively small amounts that Government are able to afford to put into it at this stage.

Q35 Chair: I think we have just reached the end. Did you want to come in, Alan?

Dr Whitehead: No.

Chair: Finally on this; you just mentioned Whitehall and the Treasury and at some stage—either verbally or by written evidence—we will obviously be getting some response, hopefully, from the Treasury. Do you have any words of wisdom or, if not words of wisdom, any areas of perhaps further discussion and conversations that still need to be had with the Treasury that would assist us in looking at the best ways of taking the proposals for the Green Investment Bank further forward?

Mr Hewett: In terms of our understanding of where the debate internally in Government has gone, the critical question is whether it is a fund or a bank. So, in a sense, I refer you to the answer I gave to Mr Carmichael. If we end up with a fund with £1 billion or £2 billion in it, that will be useful but it will be tinkering around the edges, compared with the problem of infrastructure investment that we are facing. So it's partly the money but it's more about the independence, its status as a bank and its ability to raise its own capital and then ramp up its balance sheet. If we don't get that, then it will be a missed opportunity and those decisions are not yet made in Government, so I would urge you to ask those questions of the Treasury if they come before you.

Chair: On that very clear note, thank you very much indeed; it has been most helpful. Thank you.

Examination of Witnesses

Witnesses: **James Wilde,** Director of Insights, Carbon Trust, **Sir Rob Margetts,** Chairman of Energy Technologies Institute and **Stuart Cook,** Senior Partner, Smarter Grids and Governance, Ofgem, gave evidence.

Q36 Chair: Welcome all three of you to our Environmental Audit Select Committee this afternoon. I think you've been in for some—if not all—of the previous session and I think you are just joining us where, perhaps, we just left off. I think for the Committee's purposes, it would be really helpful if you could perhaps just briefly introduce yourselves to us, and tell us what area you're concerned with. In so doing, perhaps you could just briefly comment on—the point we reached just now—that there are Government bodies, and funds, that already provide finance for renewables and for low carbon technologies. In a way, that's why you're here before us. What are the risks of merging existing bodies or what are the opportunities that could come from a Green Investment Bank. To kick us off, Mr Cook.

Mr Cook: Shall I start because I'm at the right-hand side of the table? I'm Stuart Cook. I'm from Ofgem and responsible for network policy, regulatory policies; so responsibility for leading in the policy of the grids and the super grids.

I think your question is a very interesting one. We clearly have, within our control, something that we call the Low Carbon Network Fund. I'll give you a short answer to the question and then I think you will want to come back again.

Chair: I only want a short answer.

Mr Cook: Yes. My short answer to it is that all of the established different funds are serving slightly different purposes. It's not easy, therefore, to combine them together without losing some of the essence of the fund that was originally created. The Low Carbon Network Fund, for example, is designed to facilitate learning and, ironically, we're as much interested in failures as we are in successes, because what we want the industry to do is to discover and learn things that they didn't already know about the application of new technology. That's quite a unique feature of the way in which that fund operates and probably doesn't put it as a suitable bedfellow with some of the other initiatives.

Chair: Thank you. Sir Rob Margetts.

Sir Rob Margetts: Rob Margetts; I'm here as Chairman of the Energy Technologies Institute, of which I was the founding Chairman. Before that, I've chaired the Natural Environment Research Council and I have been much involved in the development of the green economy in other places. I've also just finished 10 years as Chairman of Legal and General, so I can give some perspective on the fund management issues that you were talking about a bit earlier.

Energy Technologies Institute is neither a quango nor a grant provider, or grant giver. It is a partnership currently formed of six major global companies: BP, Shell, e.on, EDF, Rolls-Royce and Caterpillar—we're looking to recruit more—with Government. Its purpose is to develop and demonstrate the next generation of renewable low carbon technologies. It's run on very much commercial grounds and it invests in projects. Today we have about 30 projects underway; £60 million in investment and £120 million in the pipeline, working with 60 other enterprises—of which 11 are universities and 30 are major global corporates—to pool our technical knowledge; pool the financial knowledge, the financial capability. Each of the partners has to commit to £5 million a year for 10 years, so this is serious play in trying to invest in development technologies.

Q37 Chair: What are th**e** Opportunities and risks that might affect you coming from the Green Investment bank proposal?

Sir Rob Margetts: A huge opportunity. We think the capability that exists in ETI can provide very powerful policy advice to the GIB. We have developed an energy systems model for the whole of the UK, through to 2050, which looks to optimise the affordability and the economics of both energy prices and the investment required, and hence which are the building blocks that you have to get in place, the infrastructure. We think that would be an essential tool for the GIB to choose the right projects that are both economic and practical.

Chair: Thank you. Mr Wilde.

Mr Wilde: My name is James Wilde. I'm Director of Insights at the Carbon Trust. Insights looks after the strategy of the organisation, and the mission of the Carbon Trust is to try and help reduce emissions today and develop new low carbon technologies, working with the business and public sector in the UK but also internationally now.

In terms of carbon now, we provide advice to the market. We provide finance as well, in terms of interest-free loans for SMEs. We also set standards for the market, so we have standards for company performance; we have over 400 companies getting that accreditation at the moment. We also have product carbon foot-printing, so 70% of households now have a labelled product in their kitchen at any point in time. That's all around helping companies reduce emissions today, and to date we've helped them save over £2.6 billion over the last 10 years and save over 30 million tonnes of $CO2$.

We also develop new low carbon technologies. We look to open new markets, and we've set up collaboration exercises with key players in key technology areas; we have big demonstration programmes in eight different technology areas. We also set up new businesses that show how new business models can unlock different parts of the low carbon economy.

We look to commercialise new technologies. We have an entrepreneur's fast track programme. We also have research acceleration, where we look for strong capabilities in the UK, bringing research as well as industry together to bring these new ideas to market, with special purpose vehicles that focus people on commercialisation rather than just giving them grants. Finally, we also make venture capital investments in early stage technology companies.

In terms of risks and opportunities linked to the bank, there is a lot of opportunity, I have to say. We could work very closely with the bank around some of the interventions, helping to facilitate the lending of money, for example, energy efficiency; we already provide a loan scheme. Access to money could really make that loan scheme get to the next level of funding. In terms of innovation as well, we see a lot of strategic opportunity to strengthen what we're doing, strategically in the UK around innovation. We could play a delivery partner role for the bank in that space, if the remit extends to innovation.

Q38 Chair: So we have this existing architecture that the three of you represent. Then there are other organisations and bodies as well. The Green Investment Bank: what do you feel the risks could be? Do you think we could lose some of what we currently have in the current arrangements?

Sir Rob Margetts: If I may answer: no, I think it's wholly additive. That is because I see the role, as does ETI, as a financing vehicle for the transition, whereas each of the roles we've described is creating the technologies; in the case of ETI, creating socialisation and the integration of thinking among the would-be suppliers and for yourself in regulation. So my answer is that it would be wholly additive and distinctive.

Chair: Martin Caton.

Q39 Martin Caton: Yes, I think you've all made it very clear that you see a very positive role for the Green Investment Bank of working alongside. Can I ask you if you could talk a little bit more about what sort of projects you see the Green Investment Bank funding? In particular, do you see it focusing on longer term higher risk for potentially higher impact projects, or safer investments in established technologies?

Sir Rob Margetts: I certainly see it entering the former space. We have massive infrastructural developmental needs over very long timescales. This needs a patient, long term investor to enable those sorts of investments to occur; in other words, infrastructure. It doesn't mean that there shouldn't be shorter term projects so that it has a diverse portfolio, which enables it to attract leverage and money from the private markets.

Mr Wilde: There's quite a range of different asset classes that the bank could invest in, and each have quite different market failures, and financing interventions have a role in the solution space, but they're not necessarily sufficient. We also need to make sure that other policy is right. We've analysed two areas in detail: energy efficiency and offshore wind. I can explain a little bit about how we see the bank could play a role for both those spaces, perhaps starting with energy efficiency, because I know in the previous session you spoke about offshore wind a lot. There is a massive opportunity to unlock energy efficiency in the SME part of the market, where the finance barrier is the most acute. There is about £1 billion of capital-related opportunity in that part of that market, across about 50,000 SMEs—50% of that opportunity is building related, 50% of it is related to kit. Finance is one of the barriers.

The other key barrier for SMEs, in introducing energy efficiency, is whether it is cost effective. It pays back. These are all measures that have an IRR over 25%, so they should be doing them anyway. One barrier is that energy is only 1% of their cost base, so strategically, it's not something that they're focusing on, so one needs to create market demand. Secondly, even if they want to do it, they don't necessarily trust the solutions or the providers that are coming to the market, so they need that kind of sense of confidence around accreditation of the kit and the solution. Then they can't access the finance, because they're struggling to get money, and if they do get money, they want to invest it in their core business. So there is an opportunity in this space, but I think one needs to get the policy triggers right. So in this space, it might be minimum standards or maybe creating a new financial incentive that doesn't exist for the SME market. We have the CRC and ETS for larger organisations. One could start to link business rates to display energy certificates to create a much bigger financial incentive. Business rates are about 10% of an SME's cost base. One could then expand our existing loan scheme. We have a mechanism that accredits suppliers to provide kit and also accredits projects and then provides low cost finance through the GIB, potentially providing that finance to commercial lenders, because they already have that lending infrastructure. It's a big opportunity space and, by providing that low cost capital, the Green Investment Bank could help unlock some opportunity.

Mr Cook: Perhaps if I could just answer as well. For me the previous session highlighted the essence of this, which is that, clearly, it is up to the bank to decide where its commercial priorities lie. But I think if you step back from that and look at the overall architecture that we're confronted with, the direction you have to focus on is what are the Government trying to achieve at a policy level, and hence where are the gaps in the architecture that need to be plugged? Those depend very much on what the policy direction is, and the hotspots move, depending upon what the objectives are.

There was some comment earlier—which I listened to with interest—around smart grid technology, and I just wanted to say a little bit about that, because my perspective on smart grid technology is born of quite a lot of research that Ofgem has done. Our sense is that we are at the very early stages of an important journey with smart grid. We don't really understand what the picture needs to look like in the future, so nobody can draw a defined map of the way in which a smart grid will be rolled out across the country; we don't know what technology will work and we don't know what consumers' reaction will be to that technology; we don't know whether it's going to be commercially viable. So, at the moment, our efforts in the Low Carbon Networks Fund are focused on trying to discover that information, which will help to charter a course. So I think it means, in smart grid terms, it's probably a bit too early for us to have a major push on funding at the moment, because we don't know what we'd spend the money on, but I think it's clearly something we need to look at going forward.

Martin Caton: Thank you very much.

Chair: Peter, you wanted to come in on that point.

Q40 Peter Aldous: Yes, just to go back to the point you referred to very passionately about: the role of the Green Investment Bank and the effect of the SMEs. Is the lending framework in place now to be able to do that? Isn't there an aggregation problem to address?

Mr Wilde: It's a good question. We do provide interest free loans to SMEs at the moment, and we've had a massive ramp up in that scheme over the last year, as part of the fiscal stimulus package. So last year, we lent £70 million to about 2,000 SMEs through 800 different suppliers. So there is an aggregation issue, but we already have a mechanism that can start aggregating that demand and provide that type of assurance. We're actively negotiating with commercial banks that have that lending infrastructure. They already have relationships with SMEs and they want to deepen those relationships with SMEs, so we're actively negotiating with a shortlist of commercial banks that could provide that money on a commercial basis to SMEs. But that's going to be at a higher rate. It's not necessarily going to make it quite so compelling as if one could access lower cost capital through the Green Investment Bank, perhaps, to use those commercial banks as a lending infrastructure, Carbon Trust assure the technologies and the suppliers.

What's really nice, what we've learnt with the SME energy efficiency loan scheme, is that those suppliers can act as a real route to market. We did a big marketing push to make sure that we created demand for that £70 million loan scheme. After that initial push, we haven't had to advertise at all because we created a massive latent demand, and the suppliers get out there and make it part of their sales proposition, "We're assured by the Carbon Trust, and you can get an interest free loan for this".

Zac Goldsmith: What's the payback time for that?

Mr Wilde: Four years, so they have to pay it back within four years and it's unsecured as well.

Chair: Sheryll.

Q41 Sheryll Murray: What happens if the Green Investment Bank has to operate on commercial terms, though, because the Green Investment Bank Commission recommended that, I think. So you have just mentioned that you may be able to help SMEs if lending is at a lower rate, but what happens if the Green Investment Bank operates on commercial rates anyway?

Mr Wilde: If it accesses low cost sources of capital, that might help reduce the end cost to the consumer. Another way of potentially lowering the cost—if that's going to be the thing that makes the SME take it up—is using other sources of revenue to cover the default risk, because the default risk is the big issue. It's around about 6% when looking at the cost of lending. One could use CCL revenues to cover that cost and it would be a very small proportion of overall CCL revenues, something like 3%. So there's ways of subsidising the lending further. But fundamentally, these things pay back very quickly, so there are ways of making it commercial.

Chair: Dr Whitehead.

Q42 Dr Whitehead: I'm interested again in the question of leverage. I think you may have heard some of the early discussions on potential for leverage. Firstly, in terms of the level of government underwriting and investment in the Green Investment Bank, do you think that level will be able to produce the sort of leverage we've been talking about? Do you think that there is a lower level of, as it were, Government guarantee, Government initial investment, which will produce the sort of leverage ratios that have been talked about, and how do you think the Green Investment Bank might be best set up, taking all those into account, to maximise the leverage that can be achieved?

Sir Rob Margetts: Shall I comment? Off-balance sheet for Government means that we're into credit risk space. The structure for Government is to own the equity, or to supply the equity and then to leverage that. There is a very big market—and it's a market I'm familiar with—in corporate bonds, particularly very long dated corporate bonds, and that's the attractive feature that the Green Investment Bank can aim for, because that market is currently under-supplied. That's 20-year plus corporate bonds, but they must have a credit rating—if they are in serious play—in pension funds or annuity funds, where we are talking about the flow of billions potentially. They must have a credit rating, in my view, of no less than a single A. So the key issue is: how do you secure that credit rating if the Government are not guaranteeing the debt? It means that you must secure an income flow that looks secure enough to people, or pension funds and annuity funds to invest over the very long term. So that's the big question for me with that type of structure. In the early years, how do you secure that income flow to pay the coupon on the Green Bonds—I will call them—which are long term, long dated corporate, with a credit rating of no less than A? That for me is the big question. As we put in our submission, clearly there are a number of means to provide that but it will probably have to be an additional source of funding, separate from that which is provided for the capital of the bank.

Q43 Dr Whitehead: So perhaps you could tell me a little more about the additional sources of funding. Does that mean additional asset sales? Does that mean a flow of funding over a period? Does it mean draw-off guarantees? Does it mean other forms of implied funding, which would give the sort of credit rating guarantees that you've been mentioning?

Sir Rob Margetts: Yes. If we assume that the bank follows the similar capital structure to that now required for other banks in the regulated environment—in other words, a tier 1 capital approaching 10%—then potentially you have available the other 90% to issue bonds. Now, a single A bond will have a premium over a risk-free rate, so you have to have a means to secure the income stream and not dip into your capital. You have to have the income stream to cover that debt raised through a long dated, single A bond.

I'm not sure what the markets are today, but typically the single A will be between 150 and 300 basis points over the risk-free rate, so you need to see that income. Now, in the long run, one would hope the bank would earn that income from the companies in which it's either invested as an investor or it's lent to. But in the shorter run, that may not be practical, and hence it wouldn't have the credit rating and hence it couldn't raise the money.

Q44 Dr Whitehead: Do you think then that the leverage amounts that have been talked about, £100 billion—from £4 billion to £6 billion initial money on the table—are achievable or is that rather a fanciful notion?

Sir Rob Margetts: I agree with one of the previous contributors, that a 5:1 or a 10:1 ratio is possible within the normal bank environment, providing you can secure that credit rating.

Chair: Thank you. Zac Goldsmith.

Q45 Zac Goldsmith: Thanks. It's an issue you've just touched on—and it's an issue that we discussed with the previous panel—but I would appreciate hearing from each of you your view on this distinction between the bank versus the fund. How important is it, in your view, that whatever is created has the ability to issue bonds, or specifically long term bonds, and what would be the impact or how useful would this vehicle be if it didn't have that ability, if it was effectively a fund?

Mr Cook: I'm not a banker by profession, I'm afraid, so I'm going to struggle a little bit with the technical nature of your question. But I think it seems to me that the more options and more flexibility that the institution has, the more power it will have to effect change. If it is right that having a banking status confers more legitimacy on the organisation and a sense of longevity, that has to be good in terms of raising capital, because the one thing that people look for when they're looking to create opportunities for capital raising is stability.

I think the other thing that's important is that what the bank is seeking to achieve has to resonate with what the Government are trying to achieve, so there's no mismatch between expectations, which for me is almost as much a fundamental issue as the nature of the institution itself.

Sir Rob Margetts: Bank versus fund, more leverage into a bank structure than probably into a straightforward fund structure. The key issue for me is independence, independence of judgment on the investment decisions, a professionally run bank rather than perhaps a subsidiary of the Treasury, bringing the proper market professional skills, the technological skills to make judgments about projects. These are crucial things.

Can I just say, though, that I've always viewed the proposition for Green Investment Bank as the secondary vital element to a clear energy policy, and coherent and consistent regulatory and incentive structures. It's those bits that have to be put in place and then the financing capability follows.

Q46 Zac Goldsmith: Sorry to jump in, but do you believe that if what was created was a fund, as opposed to a bank, with the various abilities and flexibilities you've just described, that fund—assuming the regulatory framework is clear—would provide enough resources for the kind of investment and shift that we're looking for?

Sir Rob Margetts: Where would you raise the money from the fund? Is it purely taxpayer contributed?

Zac Goldsmith: I assume we would be looking at a fund. So far we have heard that there is a commitment to £1 billion, but my understanding of the fund—as much as it is possible to understand it—is that it would not have the ability to raise any additional funds. It might provide matched grants; it might be something on that basis.

Sir Rob Margetts: I think we have to scale up. The Government's resources—sorry, I don't have to tell you—are limited in the short run and we have to scale up. When one is facing whether it's £0.5 trillion of investment requirements, then if this is going to make a significant impact, clearly the opportunity to raise debt is critical to get the leverage. As I've already identified, there is a gap in the market for long dated bonds and there are potentially keen buyers, providing the credit rating is there.

Chair: Mr Spencer.

Q47 Mr Spencer: Stuart, can I ask you about the Low Carbon Networks Fund? You currently allow energy producers basically to invest in new technology, but they pass that cost on to the consumer. How do you work out what they're allowed to pass on and why is that fund linked to the £500 million?

Mr Cook: I'm going to have to give you a little bit of history on my—

Chair: Sorry, can you just speak up a little bit?

Mr Cook: Yes, of course. Maybe I'll move a bit closer.

Chair: Thank you.

Mr Cook: Yes, if I can, I will provide you with a bit of history as to why we created the fund. Now, periodically we look at the regulatory framework that the grids operate under, and when we last looked at it a few years back, we noticed that there was a mild decline in R&D expenditure that the companies were undertaking. So, even in comparison with the innovation department's numbers, they were lagging behind what you'd expect in the industry at the leading edge of change to be investing in. When we looked at it, we felt that one of the reasons was partly at our door, in the sense that we had established a regulatory framework that was grinding costs out of the businesses and trying to improve efficiency, and that's what the regulatory framework was trying to do. So what we sought to do with the Low Carbon Networks Fund was to rebalance that, to create an incentive for people, the industry, to spend money on the R&D, which they should have been spending on but weren't already. We set the fund at £500 million because, on balance, we judged that that was consistent with the benchmarks that other industries show in terms of the level of R&D spend that you see. So effectively, they have an ability to raise an extra £500 million from their customers, collectively, to go towards the R&D spend that they would have been doing if they'd been part of a normal competitive market.

Q48 Mr Spencer: How do you regulate that the technologies that they're going to research are worthwhile? If someone came to you and said, "Oh I want to invest in nuclear fusion" how do you stop—

Mr Cook: We have quite an elaborate governance process around it, so effectively what happens is that every year the companies are allowed to bid competitively into a framework. This year the pot of money is £64 million and we had 11 nominations from the companies who wanted to get access to the fund. We established an expert panel of engineers, consumer representatives, academic economists, who looked at each of the projects in turn against the criteria that we'd set. They've just last week had their last meeting and they're writing the report up at the moment, so I don't know what they've concluded, but they will make a recommendation to me as to what they think the projects are that are worthy of being taken forward. The criteria—as I alluded to right at the start—is about learning, so in a sense what we are interested in is people to try out novel techniques that nobody has tried before, which help us to understand whether the technology or the arrangements around them are effective.

In that sense, bizarrely, we're equally interested in failures if they help us to avoid failures in the future. So it's not guaranteed that every project will be a success. What we're looking to do is make certain that every project creates learning that can be shared by the industry.

Mr Spencer: Am I allowed one more little one?

Chair: You are.

Q49 Mr Spencer: What percentage, then, of the projects that have been funded in that way have been successful? Are we talking 50:50 or—

Mr Cook: I wish I knew the answer to that. It's the first year of the fund's operation so we haven't awarded the first set of money yet, so we don't know what the success rate is.

Mr Spencer: Right, okay.

Chair: Peter Aldous. Sorry, hold on, was it on that point?

Peter Aldous: No, no.

Chair: No, okay. Peter, do go ahead.

Q50 Peter Aldous: Sir Rob Margetts, I was just going to address the question to yourself. Your energy systems model I think aims to pick technologies that offer the lowest technical and financial risk, but may have the greatest impact over the long term. Do you think the GIB should be looking to have a similar model to pick winners?

Sir Rob Margetts: It's not so much about picking winners, because one's looking at a whole system, the energy system, which includes the infrastructure, the grids, the pipelines as well as power plants, as well as consumers, community schemes and so on. So it's the whole system that we look at and the model has been designed to optimise around the total cost of energy in 2020 and 2050. So naturally, it looks at supply chain considerations: how fast can you build nuclear reactors, how many, what's the demand level in the world, for instance, or on carbon capture and storage, what timeline could that be on and the options for how much one rolls it out. So it is a very sophisticated model.

It's undergoing a peer review at the moment and has been extensively trialled already, and potential users within the Government have been impressed with the capabilities. We think that's a vital tool in order to optimise our path, quite crudely. We did it for ourselves, for the major companies and for HMG, our partners in the Energy Technologies Institute, because we wanted to pick the big issues on which technology development had to occur to make a more affordable, a more economic route forward. So we developed it for ourselves, but we will certainly make that available to the GIB or any subsequent developments, because we think it's a vital selection tool.

Q51 Peter Aldous: If the GIB is going to pursue a similar model, one probably needs a clear articulation of energy policy for meeting our 2020 and 2050 targets. Is that policy sufficiently clear at the moment, do you think?

Sir Rob Margetts: I hesitate to suggest this: no is the answer. It's not just a policy. The question is: what are some of the components that will be vital for the future. What is then required is a very clear, consistent and coherent regulatory and incentive structure that will give investor confidence. Investor confidence is not high at the moment. Some of that is perception, some of it is changes that seem to have occurred all too frequently in the last few years in that investment environment. So where policy has been clarified—and we'll say offshore wind is an example that was in the previous witness session—then you're seeing investment. So we do need very clear policy, strategy and direction, incentives and regulatory framework to reduce this perception of risk. You have to bear in mind the people that make these major investments are great global companies. We're talking about the big ones, anyway, and they have plenty of choice as to where they invest in the world, as do the banks that help fund them. We have to be an attractive place and that means we have to have manageable risk.

Q52 Chair: But given that your answer just now was no, where do you feel the key priorities should be in order to have that certainty that will enable you to go on that trajectory of where the investment needs to be?

Sir Rob Margetts: Yes. Well, I think it's for Government to propose an energy—

Chair: Do you have any advice for Government?

Sir Rob Margetts: Yes. The Government are members of our board, several components of Government, and so they've received this advice and of course it is evolving, but we do need to go down a level from the general principle to—

Mr Wilde: Sorry, can I—

Sir Rob Margetts: Yes, please, James.

Mr Wilde: If I could add to this, I would completely concur with the need for a strategy, particularly if one is talking about specifically the world of innovation, and again, I agree with the conclusions of the Committee on Climate Change in this area. They said there was, "A need for a very clear innovation strategy in the UK, highlighting the technologies that we want to either: develop and deploy, deploy or research and then deploy". I think the ETI model is fantastic, as well as all of the other models that exist out there, the DECC's 2050 calculator and there's other models.

What we're excited about at the moment is working with the rest of the Low Carbon Innovation Group. We have set up a co-ordination group where we work in with ETI, TSB, the research councils, DECC and BIS, to start understanding from using all these models, which technologies are absolutely required from the carbon perspective, then layer on top of that: well, which technologies are required from an economic benefit perspective? Where do we have comparative advantage in technologies that we might need, or that we might just develop to export and create significant economic gain out of our IP? Having then whittled down the 50 technology families out there to 20 or so technologies, where the UK could take a leadership position—because if we have limited innovation funding, we need to prioritise where we put that funding, and have a coherent policy and innovation support framework behind the priorities—we will take those 20 technology areas, and then do detailed analysis of the innovation needs of those technologies and where policy can play a role and where innovation can play a role.

So we're very excited about currently doing that kind of analysis, working with the key players in the innovation space to understand what those innovative needs are and then how we can co-ordinate, as a set of delivery bodies, to bring on very different and complementary capabilities to unlocking those key areas. They are the 16-odd technologies that the Committee on Climate Change identified, as well as some others that we've realised we shouldn't put out of the mix straight away. So we're actively working in that space and I think it's very exciting to get that focus.

Chair: Sheryll Murray.

Q53 Sheryll Murray: That leads me quite nicely into my question, Mr Wilde, because I want to refer to the partnerships for renewables between the Carbon Trust and HSBC. What I want to ask you, specifically, looking at the way that they helped to make use of under-utilised land with a partnership with local authorities, or public bodies, is: should the Green Investment Bank purely provide finance or is there a role for it in helping to shape and form projects as well?

Mr Wilde: Yes, very good question. It's something that we've deliberately set up. We have a part of the Carbon Trust that sets up new enterprises. When we do that analysis of the market failures for a particular technology area, we might find, "This should be attractive. What's stopping it happening?" This is a commercial model. If we set up a business from the offset, jointly with the private sector, we can bring in a lot of private sector capital. The moment we're sure it makes commercial sense, we'll exit and then the private sector take it on. PFR is a lovely example that we launched in 2006. We have a leverage ratio on that one of 50:1. So we put in £10 million of seed capital, the plan is to invest £500 million in onshore wind across the public sector estate, where there is less capacity compared to the rest of the UK's land bank. It's a partnership with HSBC where we're developing those opportunities, they're accessing the funds. We've had a great response from the market, the public sector organisations we're talking to: the Forestry Commission, the Environment Agency, British Waterways, the prisons, and we're ahead of target. We're well on track to get that £500 million out there.

We have other fledgling enterprises that we serve on that basis. InSource is one where it's a joint venture with Scottish and Southern, which is all about a waste to energy business. We have invested £3 million and we expect it to be of a similar kind of leverage ratio, stimulating over 10 times as much private sector investment in the near term. We have Low Carbon Workplace as well, which is an exciting new development, which is a joint venture with Threadneedle, which is a big property fund—they're going to raise a £350 million property fund—as well as Stanhope who is a major property developer.

The plan is to develop new low-carbon workplaces, which we will accredit as low-carbon workplaces, and then attract private sector tenants who want to have the reputational gain, as well as the cost reduction, of being in a low-carbon workplace. It's showing that developers can bring new low-carbon refurbishments to the marketplace. If we can do it with those two players, the rest of the market will follow. That is the logic. So absolutely, it is about creating new enterprises and it is a big opportunity space.

Sheryll Murray: I take it from that your answer is yes then, the Green Investment Bank should not purely provide finance but there is a role for it in helping to form projects and invest in them later.

Mr Wilde: Absolutely, and hence it's an opportunity space for us to partner with the Green Investment Bank, because we have a lot of capabilities in looking for these opportunities and then creating those new commercial structures in the private sector.

Chair: On that point, Peter Aldous?

Q54 Peter Aldous: Yes, you speak with great passion again, James, and of course I commend you. You talk about your role in leveraging in money on commercial property investments: Stanhope and Threadneedle. What about building homes and houses, have you had similar success?

Mr Wilde: We tend to work with the business and public sector, so the EST does the equivalent work with the domestic sector. We haven't focused so much on the domestic sector with that kind of business initiative.

Sir Rob Margetts: We have a project in that zone that is one of the priority areas, so I could answer your earlier question. We are invested quite heavily in a number of zones already, but we have a significant buildings programme, and it's all about existing domestic housing. The turnover of housing stock is so low that the 2050 position will have 70% of what we have already today, maybe even more. But the real challenge, we think, is around existing domestic housing. It's not just a technological issue—it's technological if you include the social aspects—it is about the interaction between individuals, often landlords and the user environment, as well as the technology that's installed. We're trying to understand that a bit better because this has not been a great success area in the UK historically, possibly because of not counting social aspects strongly enough within the work that has been done so far. We need a break if we're going to hit the 2050 targets.

Mr Cook: I think, in terms of the Low Carbon Network Fund, it doesn't reach into the housing stock as such, but there are some of the projects in front of us now that we're looking at the way in which the domestic consumers interact with the energy system via smart meters and demand-side management. It is very much on that agenda as well.

Chair: Is this on this point, Zac?

Q55 Zac Goldsmith: Yes, on the point Sir Rob made. Based on the research you have done into domestic homes and energy efficiency, and so on, how promising do you think the plans are for the Green Deal? It is relevant, in the sense that the Green Deal may well end up being a big component—a by component—of the Green Investment Bank, so it's an excuse for raising this question.

Sir Rob Margetts: I think it could be very important. We clearly have not cracked this issue. The incentives have been there. Arguably, most of the technologies are there—not all—we think heat pumps could play a future role.

Zac Goldsmith: What do you think is the main reason people do not, either landlords or users, retrofit?

Sir Rob Margetts: That is what we're trying to uncover so we can solve this, and we are working in conjunction with a major building firm in order to gain their experience. Unquestionably, the social and user habits are crucial in this. They have to be integrated into the solution mode.

Chair: I think Dr Whitehead wants to come in and then we will close with Neil Carmichael.

Q56 Dr Whitehead: Since Zac has mentioned the Green Deal and investment in it, we understand that one of the mechanisms of the Green Deal will be to place a charge on the household bill—the household and not the individual. In your view, does that constitute a form of long-term payment guarantee? If so, does that in itself then cause the likely interest on whatever is the initial investments to go down accordingly along the lines of the long term bonds that you have previously mentioned?

Sir Rob Margetts: It's an interesting thought. I am on notice about it so I had better think about it.

Chair: Neil?

Q57 Neil Carmichael: Thank you. Could I ask Sir Rob, roughly how you would set up one of your PPP deals, so to speak. It was to do with the structures. Then all of you, the question about new technologies versus existing technologies, because how do we ensure that the Green Investment Bank is thinking about new technologies rather than just taking the risk-averse route of investing in existing technologies, because your PPP structure is probably more comfortable with taking a risk?

Sir Rob Margetts: Sorry, what was the PPP?

Neil Carmichael: Public Private Partnerships.

Sir Rob Margetts: All right, so the formation of the Energy Technologies Institute?

Neil Carmichael: Yes, how you structure them basically.

Sir Rob Margetts: Yes, the six companies have been recruited against a prospectus of working together with Government; it's a 12-times leverage on the finance. Potentially we can recruit up to 10. They make a commitment of £5 million a year and we run the process right the way from a board, which has them each represented, a technical committee in which they are all represented—in which we really discuss the fundamental technical issues to be solved—and then programme managements across the zones.

It was not easy to establish. These companies are not used to working together, let alone with Government in a partnership. But I have to say 2½ to 3 years on, the degree of mutuality is extraordinary and the technical collaboration effective. The financial leverage is one thing but the technical leverage is huge from these companies. They bring their strategic capabilities and their technical capabilities, which are complementary in unlocking some of the challenges.

Our aim is to identify what those road blocks are to major cost reduction or major roll out, and to aim our projects very specifically at those road blocks, so that we can demonstrate a solution mode. The big projects we have today include the next stage of offshore wind economics, which, currently, are not good. They need to be dramatically improved and there are some quite fundamental issues that have to be solved there. We have three projects in that zone and we will probably do a big demonstrator. Carbon capture and storage is a vital the building block in all the futures. All futures in our model say, "Carbon capture and storage is a necessary component as is nuclear", and so on.

Q58 Neil Carmichael: My second question is: how do we ensure the Green Investment Bank can do that kind of thing as well, rather than just take the risk-averse option of investing in existing technologies?

Sir Rob Margetts: I think it should use the capabilities of some of the existing developmental innovation networks. They should be available to it to inform its judgments, and those key judgments that it has to make are a risk—

Neil Carmichael: Yes, absolutely.

Sir Rob Margetts:, From ETI's point of view, we will make those capabilities freely available to the GIB to inform its judgments.

Mr Cook: To answer your question, it feels to me that they are two quite different businesses actually. The business of investing in new technology is all about collaborating. It is all about discovering. It is all about maximising learning and maximising the sharing of learning—making mistakes and learning from it—whereas existing technology is all about getting it done quickly, slickly and as efficiently as possible. I suppose the question in my mind is whether these things naturally co-exist in the same organisation, or whether there are different models that help to address the different challenges of both of them.

Chair: I think on that note—did you want to add to this?

Mr Wilde: I was just going to agree with that last point, that innovation and investing as a bank are two quite different activities with different sets of capabilities.

Neil Carmichael: That's what I am driving at here.

Mr Wilde: On the innovation side of it, a lot of it you won't make a market return on at all, because you are investing in public good activities to overcome market failures to innovation. You are not going to make any money out of it. It's a very different activity and different capabilities as well; that is the issue and it is a question of remit.

Sir Rob Margetts: Assessment of technical risk is a key function in the GIB.

Neil Carmichael: Yes, thank you.

Chair: Okay, well I am afraid we must leave it but I think we have covered a lot of ground on quite a technical issue. Thank you again to all three of you for coming before the Committee this afternoon.

Wednesday 24 November 2010

Members present:

Joan Walley (Chair)

Peter Aldous
Neil Carmichael
Zac Goldsmith
Caroline Lucas
Sheryll Murray
Caroline Nokes
Mr Mark Spencer
Dr Alan Whitehead
Simon Wright

Examination of Witnesses

Witnesses: **Bob Wigley**, Chairman of Green Investment Bank Commission, and **James Cameron**, Vice Chairman, Climate Change Capital, gave evidence

Q59 Chair: Well, gentlemen, I thank you both and thank you for your patience for our delayed start this afternoon. It's always a pleasure to have you before the Committee, James, and we very much welcome Bob Wigley as well in terms of the report that you've done. We understand that you've got to leave at 4 pm, I think, Mr Wigley?
Bob Wigley: Sorry?
Chair: I understand you've got to leave at 4 pm, so we've got one eye on that.
Bob Wigley: That's okay.
Chair: And it may be that we do have interruptions through voting in the House this afternoon. So, having got through those preliminaries, can I go straight into the inquiry that we're holding? One of the things that I think came out in evidence that you've given to us and public pronouncements that you've had is that you thought it was really important that the bank should become operational as quickly as possible. I just wonder what you think of the timetable now that we've got it, and what risks you think may or may not be associated with that in terms of actually the timescale in which the bank will become operational?
Bob Wigley: Who are you addressing the question to?
Chair: Addressed to you, please, yes.
Bob Wigley: To me. Well, I think that setting up a Green Investment Bank of the far-reaching nature that we've recommended in our report and the complexity that that will entail was inevitably going to take time. We set a deliberately challenging timetable to provoke action. It is clear that there is both at high ministerial level and among officials a very high degree of focus on getting to a substantive result. From a personal perspective, I think if it means it takes a few extra months but we get something that has a substantive mandate, that has significant resources and that gives the Green Investment Bank a good chance of achieving that mandate, then those extra few months will be worth spending the time on.

Q60 Chair: Thank you. Do you want to add to that, Mr Cameron?
James Cameron: I would. What I'd like to caution against is running an internal process within the civil service to create the ideal institution in two or three years' time. That's definitely not what we're advocating and I am concerned that—because it takes a while to form a view of what the problem is and then time to organise a response to that problem, and then time to construct an institution designed specifically to solve that problem—if you spend too long waiting to get it all exactly right at day one, you're often too late to really intervene decisively to resolve the problem that you started with. So, I'm all for trying to complete a task so that what you're finished with is fit for the purpose, but delay is not helpful and the more time we spend discussing what could be, the less time we're spending channelling capital into the solution. And, in fact, there is a chilling effect on investment flow as people wait in expectation of something coming through called the Green Investment Bank. So, that's the balance to be struck.

Q61 Chair: Given that we now know what the Government's timetable is and it's in front of us, how do you feel that this rule of unintended consequences might apply? Do you think the Government has the timing right? Do you think that investors might be scared off, or do you think that it's just perfect timing? Could it have been done more quickly?
James Cameron: Well, we have such clear political authority for this institution. It really is startling how solid the support is at the very top of the Government. So, there can't be any doubting about the intentions of the political leaders that we have. We've expressed a need for this institution to deal with a current and pressing problem, and we know we have to deploy capital at scale relatively quickly in order to turn down the profile of the emissions for this country over the longer term. So, urgency, political decision-making has made the need clear, so we really have to galvanise action.
Now, having said that, it's not easy to make a really first-class institution exist. And I quite like the reference point of the budget; it's relatively near term and I'm supportive of that. But I sometimes sense that there might be some longstanding historic internal battles that will have to be fully resolved before we are ready. Well, I think the conditions are ready to create this institution as soon as practically possible.

Q62 Caroline Lucas: I'm just interested to know if it's possible to put any kind of amount on this chilling effect. If it's not here for another two years and we don't get the bank until 2012, is it possible to quantify that chilling effect or is it just a sense that you get from your knowledge of the state of the market?

James Cameron: I'm not sure I could quantify it, but it is a sense I get from the state of the market. I sense also that there's an opportunity in the near term for the Green Investment Bank to display its credentials, to show what it's there for, to help convene the necessary interest, to put together the investment packages and to align the interests of public policymakers and institutional investors of the various types we need—the equity providers as well as the debt providers. We've got the conditions now that could display what the Green Investment Bank is for.

Q63 Zac Goldsmith: If the bank isn't operational until September 2012, when does that mean the first investments are likely to be made by the bank?
James Cameron: Well, I don't know whether you've got a view on this and how long it takes to go between—just to say that we are stuck, if that's the right word, with that timetable. We have to be absolutely ready at that point. We need a slate of investments ready. We need a mandate sorted out.

Q64 Zac Goldsmith: Do you think that's possible?
James Cameron: Well, it's certainly possible. It's certainly possible. I personally would feel the need to make those investments much sooner than that, and see the sense in beginning even if the institution needs to evolve over time. I think we can set a very clear long-term vision for the organisation, a mandate that's in the public interest that maintains capital flow over decades, not months. All of that I think you can set in motion really very quickly.
Bob Wigley: If we go back to the previous question, I was just trying to see how helpful we could be to answer your question. The report does identify that in 2009, net new investment in clean technology in the UK was about $12 billion. So, we are certainly not saying that the effect of a delay is to risk the whole $12 billion, but clearly that at least gives you some scope around the potential for the chilling effect, if I can put it that way. Because investors will naturally say, "Well, if a GIB is coming, since we don't know what degree of subsidy it might involve, we'd better wait because otherwise we might invest now and there might have been better terms available later, so we'll wait". That's the risk.
James Cameron: Nicely put.

Q65 Zac Goldsmith: I wanted to ask that since the publication of the report, can you tell us a little bit about the dialogue you've had since then with Ministers and officials?
Bob Wigley: Well, from a personal point of view, mine has been periodic. I've been consulted by representatives of BIS, DECC and HMT at different points. Those consultations are ongoing, and I think it would not be helpful to get into the detail of specific individual private conversations. But there have certainly been periodic consultations on different issues from those three departments.

Q66 Zac Goldsmith: Just to probe, are there any areas particularly where there's been a disagreement between recommendations in the report and the position of the Government? Anything that really stands out?
Bob Wigley: Well, I think what might be helpful is to clear up what is perhaps a misunderstanding, which is that, I think, when you read media reports of what's going on, there is a rather black and white debate portrayed between, for example, a bank and a fund. I think what's happening is an intelligent debate and analysis between a group of people who, as far as I can see, are all committed to creating a substantive Green Investment Bank that has a real impact over time but, on the other hand, safeguarding the savings to the public sector borrowing requirement, public sector net debt, and reduction of the deficit that has just been hard fought for through the Comprehensive Spending Review. And I am certainly of the view that if I were the Chancellor, having just achieved the large and difficult reductions that have been secured—assuming they're delivered—I certainly wouldn't want, without very careful thought, to see a new body be created that put those savings at risk.
So, I think it's important to put the debate that's going on in context. I think everyone at ministerial level involved is basically committed to having a substantive Green Investment Bank or fund or vehicle, whatever you want to call it, that has a real impact over time. Let's not forget, of course, it was the Chancellor who commissioned the Commission; it was his idea in the first place. I don't sense any reduction in commitment on his behalf, for example, to see this project through, but I think it has to be an intelligent debate in the context of making sure that we don't put at risk the fiscal reduction that has been hard fought for.
And maybe another helpful clarification for the Committee would be that in other countries in Europe who, frankly, have a less robust and less transparent Government accounting system, the development banks that exist in most other countries don't appear in the Government accounts. And in this country, because we have a more robust and more transparent system, a development bank's borrowings, for example, would be included in definitions of public sector net debt. So, this is not a trivial issue in the context of the reductions that have just been achieved.

Q67 Zac Goldsmith: Exactly right, which means that there is an unavoidable tension between the requirements of the Chancellor on the one hand and the Green Investment Bank.
Bob Wigley: I think that's a good way of putting it.
Zac Goldsmith: So, ultimately, therefore, it seems like what you're saying is this is a political decision that's going to have to be taken, not so much a commercial one because there's no avoiding the new transparency rules.
Bob Wigley: I personally don't see it as a personal issue between individual Ministers. I think all the Ministers who I've spoken to remain committed to achieving a substantial "green investment something". I think as a team, having secured these reductions, they don't want to put them at risk. So, there is, as I say, an intelligent debate going on about how you achieve both objectives, and it's not easy.

Q68 Chair: Just to press you a little bit more on this intelligent debate that's going on and, perhaps, to refer you back to the Liaison Committee last week where the Prime Minister appeared in front of the Liaison Committee, and in response to a question that I asked about the Green Investment Bank as to whether or not there might be this sort of tension as to how it was going to be resolved between HMRC, Treasury, DECC and so on, my question to him was whether he would be prepared, if necessary, to intervene to try to get the right outcome in terms of all of this. Do you feel that there is an adequate procedure or mechanism for resolving these various tensions that possibly exist, in terms of getting the right outcome in terms of the current fiscal situation that we're in?
Bob Wigley: I do, yes. I think there is a very active dialogue going on between the senior Ministers who are committed to this project, and they are trying hard between them to find a way of achieving all the somewhat mutually incompatible objectives. That's, in a sense, what government is all about, isn't it? This is a particularly tricky set of issues to square, but they are all working constructively on it.

Q69 Chair: What do you think the time frame is by which they have to have resolved what it's going to look like?
Bob Wigley: I couldn't predict that.
James Cameron: It's really hard. I'll just give you my personal experience from the Business Advisory Group to the Prime Minister, where the Chancellor, Deputy Prime Minister and Business Secretary all sit in those meetings. I have no reason to doubt all their collective and individual commitments to make the Green Investment Bank real. But the follow-on conversations after those meetings in corridors and with officials involve some historic battles between Departments of State that don't get resolved very easily without very clear political guidance and, indeed, negotiating from the very top, and officials feeling as if they are working towards an end that they can rationally explain to themselves and their peers. And that sometimes creates excessive caution and delay and overemphasis on process. That's the sort of thing that can only be cleared up with firm political direction.
But I share Bob's view that there is actually a very sensible deal to be done between these departments of state around the fears, the concerns that Treasury has about exposure to more risk. I think it's really a question of taking the commitment to create this institution in the public interest with a long-term objective while managing a serious current deficit problem. We think a lot of the suggestions we've made in the report don't put excessive pressure on the Treasury's capacity to manage debt and where their skills can be drawn upon, and their knowledge of debt markets, which is exceptional, can be drawn upon.

Q70 Caroline Lucas: It was on this point, but it was just a question about whether or not the development banks offer any kind of precedent for trying to resolve the tension that's talked about in terms of even what's on the balance sheet and what isn't. Because isn't it the case that development banks are treated slightly differently?
Bob Wigley: Unfortunately not. Elsewhere in Europe, the development banks do not appear by and large on their Governments' balance sheets in spite of the fact that they're 100%, in general, Government owned and controlled. Because, as I said earlier, we have a more robust and more transparent public accounting approach in this country, a similar development bank, for example, to the CDC in France would appear on the Government balance sheet. So, let's put some numbers around it. Supposing you'd just achieved a reduction in public sector net debt of £80 billion over a period, are you going to want to see a Green Investment Bank be established that in a few years could reduce that reduction by £20 billion? That's a tricky issue, so there is the conundrum.

Q71 Caroline Lucas: Can I just put a little footnote and just say, explain what it is? It doesn't feel like such a good conundrum.
James Cameron: I know. There are all sorts of things that are hard to explain, such as why it's long-term and why feed-in tariffs appear on the Government balance sheet when the Government do not pay a penny for them. There are all sorts of strange aspects of Government balance sheets that are hard to comprehend. But the markets are also quite good at making distinctions—fine distinctions—between an institution that's, if you like, wholly owned by the state and one that is supported by the state. That's reflected in ratings of bond instruments and in the way in which capital can be drawn down. We make contributions to development institutions that aren't drawn down. Very small amounts of capital are actually used but large amounts are pledged. So, in this space, I think there is plenty of room for us to come to a good, solid understanding with those who have duties to look after the public balance sheet—and I know, very serious duties—to find a way of making this happen and for the answer not to be "No".
Chair: I think just for the purposes of our report, I'm not sure how much we've got on the record about this point that you're making about what is on and is not on the balance sheet. Given that that is so important to the debate about the shape, if you've got any further comments that you could let us have in writing, I think we would find that helpful.

Q72 Neil Carmichael: Basically, how would you describe the ideal relationship that the bank should have with the Treasury? Because clearly that's pivotal to this discussion.
Bob Wigley: That's a complicated question and you have to look at the various activities that the bank would be undertaking. On the one hand you have the provision of risk mitigation mechanisms. That's a big theme of our report. We downplayed the idea of subsidy and up-played the idea of risk mitigation because we think that's the best way to facilitate private sector investment, which isn't occurring today. Now, clearly, if the Government are going to provide an insurance product against, for example, construction risk or bad weather in the North sea, then it is going to want to retain control over the decision

about whether to provide that insurance and on what terms, because these instruments could give rise to liabilities that could come back on to the Government balance sheet. So, there are some things that the Treasury will want to retain strong control over.

There are other activities, for example the issuing of green ISAs, which could be done by a joint venture between the Green Investment Bank and a retail fund manager, which the Treasury probably needs very little control or, indeed, possibly even involvement in. So, I think the structure has to accommodate both the ability of the Treasury to directly control some decisions and probably have no involvement in others. I'm sorry that's a rather complicated answer to your question, but the Green Investment Bank by its nature is a complicated beast.

James Cameron: But it's a very good way of explaining the kind of trade-offs that will be necessary to make this real, and that we shouldn't get too hung up on a single bricks and mortar type institution. There are critical relationships here that are necessary to make the idea of the Green Investment Bank flourish. One of those is with Treasury. The Debt Management Office of the Treasury is going to be highly engaged in the provision of debt instruments into the space that we hope the Green Investment Bank will help to create. But others, bondholders of various types, will provide money into the projects, into the plans that we have for offshore wind or energy efficiency or smart grid, which are the three that we chose to highlight. Clearly, lots of other people's money are going to be engaged.

So, maybe another way to think about this is that the Treasury will have to be, in part, an owner of this idea, but the idea will be bigger than the Treasury and will have a long-term vision safeguarded by a board, preferably as independent as is possible to create, given the connection it will have to have with Government, and Treasury no doubt will feature on that as well. The senior Ministers of Government that have responsibility for this idea, who have all displayed their intention to make it real, will clearly define roles for this institution to interact regularly with the Treasury so that they don't find themselves in some way fighting or as an enemy of the institution that's created.

Bob Wigley: That would be counterproductive.

Q73 Peter Aldous: If we can just move on, in your report you recommended that the Green Investment Bank should have the powers to identify market failures and then address them. What we see now is that the Government seem to be doing a lot of this groundwork themselves. They've told us that they are still doing work to identify market failures at this current time. Do you think it's right for them to have adopted that approach?

Bob Wigley: Well, in my foreword to the report I did say at the end that I thought there would have to be a period of further—I think I called it—appropriate analysis. In other words, the Government, in a sense, would need to look at our conclusions and assess itself whether they felt these conclusions were right. I think that's kind of what's been going on for the past few months. My sense is that that period of internal analysis is coming very soon to an end, and that you will see in the next few weeks more external consultation on the basis of the internal analysis that has taken place, and I think that will involve very senior officials, particularly from BIS, consulting with market participants. So, there has been a period; I think it's coming to an end, and I think you're going to see more external involvement very shortly.

Q74 Caroline Lucas: Carrying on the issue of the Government's relationship, they have indicated that they will conduct what they call "market testing" on possible interventions by the investment bank. How do you think they should do that if, indeed, they should do that?

Bob Wigley: One of the things I've suggested—obviously, time will tell whether this occurs or not—is that I would pick the three areas we highlighted in the report as the three things you would do. Those things are the three that you have just mentioned—offshore wind, energy efficiency and the smart grid. I would then go and find five or six people who are experts in those areas. So I would find the person who builds offshore wind farms, the person who finances them and the person who insures them, and I'd basically get those people in a room and I would say, "Okay, we want to ramp up the pace of investment dramatically from where it is today. Please help us understand, in detail, the barriers that are stopping us building six rather than two wind farms in the next three years," and get into really quite a high degree of detail. The reason I think that would be useful if you did it in each of these three areas is that you would then, I think, inform the structural debate that's going on. People have the information in our report, but you can only do so much in a limited three-month commission report. What we now need to do is get very specific on the particular projects that we want to pursue and get down to a level of detail, because I think that will feed back to the structural debate and be very helpful. So, that's what I've recommended.

James Cameron: Work back from the real problems and real transactions. Clearly, over time you would expect the institution to reach into other parts of the economy, to be able to offer solutions to cleantech manufacturing or small and medium-sized enterprises that have the scope to grow and export their technologies. There are lots of things that this institution should ultimately be capable of assisting in, but initially we have to display its value through real problems that need to be resolved through this kind of organisation of interests. They exist, so putting the right people around the table and having institutional capacity to find what it is that needs to be resolved now is the right way to test it.

Q75 Caroline Lucas: With those three examples, do you think it's equally useful, if you like, for the bank to be funding both the big infrastructure ones like the offshore wind and the smart grid? Presumably, energy efficiency is something slightly different, isn't it? Would you envisage it would have a role to, for example, fund the rolling out of an area-based, street-by-street energy efficiency programme? Could it get down to that level of detail?

James Cameron: Well, yes. When we discuss energy efficiency, clearly there are several ways to express the need to dramatically improve the efficiency of the nation's use of whatever fuel inputs we depend upon. That can be broken up into industrial efficiency, residential and office buildings, and lots of work has been done to show how effective it is to control emissions in the use of buildings. But we did have in mind major urban retrofitting projects. Birmingham was an example, where we knew we had good political support for such a plan, and a huge public housing portfolio with serious energy efficiency problems that need to be resolved. We thought that if you construct a plan, at scale, that needs scale funding, and that funding hasn't been forthcoming in recent times—there is money around, but it isn't organised in a way that could cover that kind of transformation over a large area—then that is the sort of project that you could see the Green Investment Bank helping to make good with this combination of some of its own money and its capacity to reach into the commercial markets and find the right way to access debt instruments, because that's part of the skill that we want to concentrate in this institution. To do big transformations, you need large amounts of capital and you can only draw upon large amounts of capital from the very large, liquid, global debt markets. It doesn't come with equity; it doesn't come with public finance. So, half the trick here is, how do you access it? What's the contact point? What do they want to see before they will release this money on terms that they understand? That kind of engagement requires expertise and dedication and an understanding of the many different interests that have to be put together. That's the sort of project enterprise that we think the Green Investment Bank should do. So, large-scale energy efficiency would be right in the slot for it.

Q76 Mr Spencer: It was the previous point, really, in that when you're doing that market testing, if you came across a scenario where, for example, it was apparent that anaerobic digestion units weren't being built because there wasn't confidence in the feed-in tariffs, would you say that your role was to go back to other Government Departments and say, "We've found this and you guys need to make this happen"?
James Cameron: Yes, I think that is part of the role of the bank, but only because once it's built its reputation as a trusted and reliable institution, it would know how to work back from investment needs to policy design. We aren't terribly good at connecting public policy making with investment needs. We tend not to understand each other's language and often think—sometimes we even celebrate this—that we can do things without each other when, in fact, this kind of transformation is not possible without a very close association and alignment of interest between public policy making and private finance. So, yes, I think it would be useful to have an institution that was very skilled at deploying capital and, therefore, very skilled at understanding what works and doesn't work and taking that back into the policy making process so we design policy instruments in such a way as to make it more likely that they get implemented. Because, let's face it, a lot of what we're talking about here is simply better implementation of existing policy commitments. The smart grids may be much earlier on in their development, but all three areas we've picked are all areas where Governments have committed to do something and it's not happening, or not happening fast enough, and this is a way of making that connection good.
Bob Wigley: I think the point you raised, Mark, about ultimately what is political and regulatory risk is a key barrier today to investment in projects. History is littered with examples of people investing in projects based on a regulatory regime, only to find 10 or 15 years down the track and maybe two or three Governments later that that regime changes and the economic returns that were promised were, therefore, not achieved. We've seen, recently, Spain unilaterally changing its feed-in tariff and materially, negatively affecting the returns of renewable projects there, with a very loud reaction from the investors as a result.
So, we did explore this in some detail in our report, and Dieter Helm at Oxford university came up with a mechanism—I think that it is clever—which is the idea that the Green Investment Bank could write a contractual put option to the builders of projects, which basically would say, "If you turn up in five years' time with a completed project that meets the following criteria, we, the Green Investment Bank, hereby contract to buy it from you such that you will receive a return on regulated assets of x%", a bit like a utility. What that does is, assuming that the GIB is owned by the Government, it aligns the cost of changing regulation with the person who has the power to change regulation. Therefore, it should be a put option that should never be exercised, because what it would mean is that if the Government decided to change the feed-in tariff, it might suddenly find these contracts, these puts, were exercised against the bank and, therefore, you have a universality of interest. That is the concept.

Q77 Zac Goldsmith: Presumably, then, by that logic if Spain had a Green Investment Bank on the scale that you're talking about for here, it would never have made the decision—
Bob Wigley: They wouldn't have changed the rules, or—
James Cameron: Well, if they're going to change the rules, which clearly sometimes you have to, you have a rational process for that change that fits with the investors' expectations and the model for their returns. So, you can't promise an investor that the rules will never change, because life changes and it's sometimes absolutely necessary. But retroactive change is death to investment, of which we have lots of examples—it really puts people off. So you have to give them plenty of notice and a process they understand, and we think this institution would be helpful in that regard.

Q78 Neil Carmichael: The "Bank Commission Report" makes a fairly strong case for rationalising structures within the Green Investment Bank. Does that not negate the argument that we need something additional rather than just mopping up what we've already got? Is rationalisation fundamentally

important to the success of the Green Investment Bank?
Bob Wigley: Let me have a go first, and then James.
James Cameron: You go first.
Bob Wigley: First, I think it is important that the existing plethora of organisations, which has somewhat overlapping objectives, be rationalised over time. Is it fundamental to the creation of a Green Investment Bank? No. I think there are lots of other things the Green Investment Bank is going to do that are, frankly, probably more important. But would it nevertheless be helpful to rationalise what is today a very confused space and put everybody under one roof with one clear set of objectives and a hopefully more effective use of funding? Yes. Does that negate the argument for the incremental? No, definitely not. I think in our report we make it very clear that the level of investment today falls way short of what's necessary to achieve our targets, and we absolutely need something incremental and substantive if we are going to meet our legal commitments.
James Cameron: Yes, I'll just simply endorse all that. I emphasise that this has got to be an expert institution, so there will be expertise in some of these existing bodies that can be drawn upon. But it's not the same as the existing institutions. It's an investment house. It's going to be a specialist in investment, encouraging investment by other investors whose language it will have to speak. It has also got a time frame for implementation, and it will transcend annual spending rounds. So, the culture of the organisation should be expert; it should be able to attract very high quality people; and it will be an institution to represent the British public interest for the long term. It will have status and clout in commercial markets, otherwise the other institutions that we need to work with will not give it sufficient respect. So, all those things argue for something new and distinct from that which we have, making good use of expertise that we have in those institutions, and I think it's beholden on all institutions at this particular time to be very careful with their money. If we can reduce some of the cost in delivering the service to the nation of reducing greenhouse gas emissions, then we should.
Bob Wigley: And substantially improve its returns.
James Cameron: And improve its returns, exactly.

Q79 Neil Carmichael: I completely agree that you need the experts—EIB and EBRD are good examples. The question is whether we have access to enough quality advice and experts.
Bob Wigley: All I can tell you is that even before the report was published, but certainly since it was published, I have had hundreds of CVs from investment professionals, bankers, insurance experts, saying, "This is a fascinating and very important project and we'd love to come and work for it. Please can you read our CV and get back to us ASAP." So I don't think there's going to be any lack of—
Neil Carmichael: That's very encouraging.
Bob Wigley: I think it very much hits a theme that a lot of people think is very important, and I think it will be able to secure very good talent at a good price.
James Cameron: This is a big point, and I think it's also the case that this institution is going to have to represent the United Kingdom overseas as well. Its work will be in this country but we are going to have to attract inward investment. We're going to have to work with providers of capital from outside these shores. This is an organisation that should—if it's constituted correctly and if it's got a mandate that meets the kind of criteria that we've set out in our report—attract very good people indeed. It will be something that you'll be proud to be associated with.

Q80 Neil Carmichael: I'm glad to hear that, because that's certainly what I think should happen. I've got one more question, which may lead to another. In this report, I've just noticed the sentence concluding with, "The bank will work as part of overall Government policy". Now, of course, that prompts the question whether policy will be consistent.
James Cameron: What page is it on?
Neil Carmichael: That's on page 9.
James Cameron: Just so I can see the context of it.
Neil Carmichael: I'm not trying to trip you up. I just think it's a really important point, because clearly, Government policy is going to influence and to some extent determine how things go. We all know large investment projects do require some sort of security in terms of forward planning and that, in these sort of fields, is embedded in public policy as well. So, my question, really, is, how sure are you that the Green Investment Bank will find that sort of public policy that is helpful and consistent?
James Cameron: This is, in part, some of the previous questions: trying to find a way of ensuring that the institution plays its part in improving the quality of public policy making on these vital areas. That might involve improving integration between various departments of state so that you don't have a policy that emerges from one Department—for example, DECC—that gets negated by another Department, for example BIS. They're actually working quite well together at the moment, but you get my point.

Q81 Neil Carmichael: I do, because I've been testing that point in this Committee in earlier sessions.
James Cameron: There are some very complex interactions between regulatory regimes that this engages, between regulating the power market, making sure that the grid system is regulated in a way that encourages newcomers to be able to compete fairly with incumbents. These are all quite complicated integrative issues and, over many years, separate Departments of State have fought territorially for control over them. That isn't going to all be magically resolved by a Green Investment Bank, but I think the Green Investment Bank can help explain what is required. If you want this amount of money—the numbers are huge; they're unprecedented in recent history—if you want this money to flow, you need to construct policy in this sort of way and it needs to have this kind of length, and then you increase the chances that you will deliver your policy commitment in the right timeframe. So, yes, we hope that relationship—

Q82 Neil Carmichael: That's quite a different kind of role for, let's say, another bank, which would not necessarily be expecting to influence Government policy.

James Cameron: This is a public institution with public policy objectives. It is not the same as a high street bank or even a specialist investment manager. The culture of the institution will have to be locked on to this objective. The deployment of capital is in the public interest. It's bringing money from the private sector, but for a purpose that has been set through public policy and through the law-making institution.

Chair: I'm very conscious that Mr Wigley—oh, you wanted to come in on this?

Bob Wigley: I wanted to answer that question, yes.

Chair: Can I just check your earliest time of departure?

Bob Wigley: Four o'clock.

Chair: Right, we are going to have to speed up.

Bob Wigley: So, from a personal point of view, I'm not involved sufficiently to be able to say that I'm confident that that will be the outcome, but I'm hopeful it will be the outcome. Because I think if you think about what's going on at the moment in terms of formulating a policy for Green Deal, in terms of drafting a Bill for a new regulation of the power market through to the creation of the Green Investment Bank, it's all happening in parallel. It's being done by the same people, so you would think you have a reasonable degree of expectation that it's going to be joined up. So, that would be my answer to your question. I can't say I'm confident, but I'm certainly hopeful based on what I'm seeing.

Neil Carmichael: Yes. Well, let's hope we can be confident. That's my observation.

Chair: I think one of the roles of this Committee is to see how it can be joined up.

Q83 Caroline Nokes: Thank you. Your report has identified the potential dangers of a funding gap between the early stage in technologies, where R and D funding has finished? How does that conflict with BIS's business plan, where it was focused very much on late stage technologies, and what sort of dangers do you think that that throws up?

James Cameron: Well, ideally this institution would cover a range of investment needs so that it would not merely—that's quite a big "merely"—be about large infrastructure investment of the type that we have discussed most, offshore wind being the paramount example, perhaps, but that it would play its part in facilitating capital flow. I want to stress that word. It may not, in fact, be managing any particular money itself for this purpose, but facilitating capital flow into the areas of the economy where innovation happens. Businesses that have the potential to grow and be financed by the ordinary market in capital that exists could be encouraged to grow again in the public interest, so that we have many technologies, many innovators out there feeling as if Britain is a great place to take those ideas, develop them and make real businesses. Because however grand the infrastructure or design, it's small businesses that have to feed into it, bring their expertise and keep the incumbents on their toes and challenge them to innovate themselves. It's a notoriously difficult place to finance. People lose money making bets that lose. We have a venture capital community here that is good, but it could be bigger and it could be encouraged to be more focused on these vital environmental technologies. So, I do see a role for the institution in that way. I hope that it will have that capacity, but I sense that the bulk of the work is actually going to be done by others outside the institution in specialist funds that could be encouraged, maybe, through fiscal incentives, through the formation of these pools of capital that the Green Investment Bank might promote.

Q84 Zac Goldsmith: Would it be possible to structure the bank in a way that it requires a certain percentage of investment in the very early stage stuff and another percentage perhaps in slightly more long-term projects? Tidal power, for example, is a good one. Otherwise all the pressure from Government will be to invest in the safest possible things where already there may be not enough money, but certainly money available for—

James Cameron: There is that risk and you could put it in a mandate. I still think it's necessary at the early stages of this institution to demonstrate very clearly that the institution works to get things done that you can see, touch and feel. That's what it does.

Bob Wigley: Demonstrate value for money, in other words.

James Cameron: You've really got to demonstrate value for money at the very start, but I do hope the institution retains the capacity and the expertise. And don't forget, that makes it quite a difficult institution to manage, because the kind of people who are really very good at large infrastructure projects and understand the debt market perfectly tend not to be the same people who understand venture capital investment in small companies, where they might have to take an active part in the management after their investment. So, different human beings are involved and managing them both will be a challenge, says he with some experience.

Q85 Caroline Nokes: Without a Green Investment Bank, do you think the early stage technologies could get that funding?

James Cameron: We do have a problem right now. We have some money. We have some good institutions. We have some good experimentation happening at the university level. There are some attractive examples from Imperial and other institutions that have built venture capital organisations alongside them. But rather like the justification for the bank as a whole, for that particular section what we're trying to do is accelerate and to have ways of managing the risk of that acceleration. Individual deals you'll always find, and there are providers of capital and there's good expertise; there are angel investors and early stage investors, we have them. But we're trying to effect a transformation in our economy over a relatively short period of time. We're trying to drive investment. In that context, some help is required. I think a dedicated investment institution rather than a grant-making institution would help.

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Q86 Mr Spencer: Moving on, is that all right, Chair?
Chair: Yes, that's fine.
Mr Spencer: You said these projects must demonstrate value for money. I'm just trying to work out in my own mind how the Green Investment Bank will sit with the commercial banking sector and private investment. I am concerned about how we can stop the Green Investment Bank crowding out the private sector?
Bob Wigley: Well, I think, two answers to that. First of all, if we look back in three or four years' time and we conclude that there was a small element of crowding out by the Green Investment Bank, that would be a fantastic outcome. I don't mean that as a flippant answer, but today the shortfall in investment is so huge that we would really crack the problem if we got to that point. But secondly, and to perhaps be slightly less flippant, the delivery mechanism that we've designed for the bank and its operating principles is always for the bank, when providing funding to projects of whatever form, to do it in partnership with the private sector. So, for example, if we're making a venture capital investment, we do it alongside a panel of venture capital investors. If we're issuing green ISAs, we do it in a joint vehicle with a fund management company. If we're issuing green bonds we do it through a special purpose vehicle that might have an insurance company as one of its shareholders. So, the process of getting you to delivery should ensure that you're always working in partnership with the private sector and that wherever public sector money is at risk there is more private sector money at risk, so that the public in a sense are behind someone who's got their own money on the line, who has done their own due diligence, who has made their own risk assessment and who has more to lose than the public. Those principles we think are very important for the way the bank operates and should ensure that there's no crowding out. In fact, as we say, it's really all about crowding in.
James Cameron: It is all about crowding in.

Q87 Mr Spencer: So, just without trying to get it down to too specific cases: if you've got a project that is being proposed, which the private sector won't wholly fund, you see a role where you might be able to part fund it just to give some pump-priming, to give it a kick over the line?
Bob Wigley: Exactly.
James Cameron: Yes, and to fund different parts of the risk profile of the investment.
Bob Wigley: And it might not be funding, sorry.
James Cameron: Yes, it might not actually be funding.
Bob Wigley: It might be risk mitigation—an insurance product.
James Cameron: It may be something else that just enables it to happen. One of the things we've really got to be clear about, we really do have a capital flow problem right now. This is one of the reasons why I don't want to be coming back here in two years' time and answering your questions about whether there might be a Green Investment Bank because—
Chair: We're always very pleased to have you come back to answer questions.
James Cameron: Yes, that would be lovely, of course, but—
Neil Carmichael: Well, we could talk about the success of it.
James Cameron: The fact is that there's no danger of crowding anything out right now.
Mr Spencer: No, but you do see—
James Cameron: But I do see the issue and people do complain about some of the development banks, in certain circumstances, crowding out private sector investment. But that tends to be in markets that are really very immature or where the institution, perhaps, has lost connection with its true policy objective. This is all about solving a problem. It's really very focused, and because of that it will always look to somebody else to bring the resources to deal with it. It was never going to be the case that this institution would solve this through money on its own balance sheet. It's about encouraging investment to flow.

Q88 Mr Spencer: You see those loans at a commercial rate, but you're not going to be looking for security over assets? Basically, if the private sector is willing to put cash in as well, you'd see that as enough security for the bank to be able to support it?
James Cameron: Well, it depends very much on what sort of project it is, but as an example, if the Green Investment Bank helps put together—I want to re-emphasise this convening, enabling and organising function—an offshore wind deal to get one of the licensed areas to be fully developed, how would it do that? It would do that by finding a way of accessing the debt capital markets. How would it do that? It would do that by taking away some of the risk that they currently won't finance. They'll look for some other equity provider as well. They're not going to cover the whole of the risk themselves. They might get an insurance business to come in and cover some of that risk in the construction phase. But it could be that the Government's involvement through the Green Investment Bank might stop post construction, once the turbines are up and running and once the revenues from generating power into the grid start to flow. At that point they can syndicate their debt, recover, get returns back into the Green Investment Bank and use it to fund something else, maybe move on to the—
Chair: I'm very conscious that Mr Wigley needs to leave at 4 pm, and I'm not going to allow you to be late leaving.
Bob Wigley: Thank you.

Q89 Chair: Just before we carry on with our questioning perhaps to Mr Cameron, I just wonder if there was anything that you feel that you've not had a chance to really put on the record. You've got three minutes before 4 pm. Is there anything that's absolutely important that we should take note of in terms of the risks, the opportunities, the determination that you'd like to say to us now before you go?
Bob Wigley: I think one thing I would say is that before I got involved in this project I really knew very little about the whole area of cleantech investing. Luckily, I was supported by some experts in that area, but through the process of chairing the Commission and writing the report I have become quite passionate

about the need for a green investment institution of some form. I remain personally committed to supporting the Government with whatever they ultimately decide to do, provided it has a substantive mandate, it has sufficient resources to enable it to achieve that mandate and it has a governance structure that gives it a fair chance of achieving its mandate. That's what I'd like to see.

I guess the second point to make is that it is slightly unfortunate that the press at the moment is portraying a sort of picture of dispute that I think is more an intelligent debate, as I tried to say earlier, by, as I see it, a group of senior Ministers who are all committed to making something like I've just described happen but are wrestling with some difficult, mutually incompatible objectives in the process of trying to get to that end.

Chair: I think Mr Aldous has one burning question to ask before you leave.

Q90 Peter Aldous: Yes, I'm jumping a little bit ahead in the script but it is a burning question: is it a fund or is it a bank? That appears to be one of the discussions that is going around. I noticed you've referred to "the institution" at some stages.

Chair: I think we've got one minute for Mr Wigley and then we'll revert to our questioning.

Peter Aldous: How critical is it that the bank should have powers to raise its own funds?

Bob Wigley: The bank versus fund debate, as I tried to explain in an earlier answer, is in a sense to over-simplify the issue. The institution or institutions that come out of this process need to be able to do a number of things. We've identified them in the report. I suppose there are some advantages to a bank structure, which would include the ability to leverage whatever public investment is made many times over. So, for example, by putting, let's say, £4 billion into a bank through the bar ratio, you get that perhaps to £40 billion of ultimate investment. In a fund it's probably more difficult to lever money in that way, so you probably have a lower level of leverage. On the other hand, one has to go back to the public sector accounting issues that I identified at the beginning, and I—having written myself to the Chancellor in advance of the comprehensive spending review supporting him in making significant cuts in the interests of restoring this country's finances to a more healthy place—would not support doing something which put that at risk. So we need to find a way through this that achieves, as I have said, what are somewhat difficult and competing objectives. But those are the issues.

Chair: Mr Wigley, thank you very much indeed. We will resume solo with Mr Cameron, if that is all right, and I think we can move to Sheryll Murray.

James Cameron: May I just add a small word in answer to that question?

Chair: We will come to that in a moment.

James Cameron: I want to come back to that.

Chair: We will come back to that.

Q91 Sheryll Murray: The Green Investment Bank Commission's report says that £55 billion per year is needed to meet our low carbon targets. Is the Government's £1 billion plus the asset sales really enough leverage to bring in that public investment?

James Cameron: On its own it's not sufficient. You would have to find quite a lot from these asset sales to be able to touch that £55 billion target in your first year of operation, but I think I made clear to you already, I am definitely in the "let's get started" camp of this debate. So I would be very happy to take whatever was there to get started, knowing that I could find leverage through good transactions initially from which you can grow your capital base. So the key elements are: get the political support properly grounded so that it is not merely rhetoric; get the leadership of the new institution sorted out that's capable of growing the institution; and get started with some transactions that exemplify what the Green Investment Bank is for. When you have those things done, and you have some money laid out in investments people can see and understand, it's going to be a lot easier to raise more and build that balance sheet up at the time. If this idea was wholly located in the private sector—and I'm an entrepreneur who has built businesses—you don't wait until you've got everything perfectly aligned, you've got everything nicely built and then you show it to the world. You take your idea and you sell it as hard as you can. From total dedication and passion to deliver it, you grow. That, I think, is what we need as an institution. We should not, for example, spend an extra year or so trying to get just that little bit more on the balance sheet with another asset sale, or to get started while we're failing to fund things that need to be funded now. So, short answer to your question—which isn't that short, is it—the £55 billion isn't going to come from that balance sheet, but we're not going to get towards £55 billion unless we get started. So let's take what we've got and build upon it.

Q92 Sheryll Murray: Can I also ask you, if it does lever in private sector funding for infrastructure products, how can it avoid taking all the risks and leaving the profits to the private sector?

James Cameron: That's a really good point. So the answer is to do some transactions, set standards, show how it can be done and then know when to stop and when to withdraw. That's a skill. I can't give you any more, than it's a question of judgment in the leadership of the organisation. So say you did three back-to-back offshore wind deals, all at scale, and the market has seen, "Oh, that's how you do it, I could take that risk", then you're off. The Green Investment Bank can then move to another area and find something else that's harder to do that the commercial sector hasn't done yet. Don't forget the bulk of the investment community, particularly the large institutional investors, are highly conservative followers; they need to be led somewhere by someone whom they trust. So what this institution should be able to do is show where the money should go. Explain clearly, that done this way, there is an opportunity to make the kind of risk-adjusted returns that you are happy with so you can do it now. It's really a question of knowing when to stop.

Sheryll Murray: Thank you.

Q93 Neil Carmichael: Just linked to the questions I was pursuing before, the Government are introducing quite a lot of things in addition to the Green Investment Bank, such as the Green Deal, which you presumably welcome. What I want to know really is, are there any other sort of policy areas which you think need to be adjusted to help the Green Investment Bank? I'm thinking of one straight away, to be perfectly honest, which is a planning system.
James Cameron: Planning, yes.
Neil Carmichael: Because there you are, you've got a lot of people interested in, let's say, energy technology in one form or another, and we can all list plenty of ideas. The business community already has had enough of the planning system, so what kind of changes would you like to see, and are there any other areas which you think need to be addressed while we think about the Green Investment Bank as well?
James Cameron: I know this is on the Government's agenda anyway—to try and simplify and accelerate planning—and clearly there are vital democratic deal-making processes that need to be honoured and respected, so that people feel that they have a say in what happens in their environment and especially in their local environment. It helps to have a plan and know where you're going. I think in this area, the Green Investment Bank should be in service of good plans for the future development of the nation, which turn on dramatically improving our infrastructure and ensuring that we have a system for delivering energy and power that is in balance so that we don't just talk about how much to generate, but also how much demand we can reduce through efficiency. Do we have an intelligent grid that can, in real time, match the two?
So I think we have all the bits there at the moment. The planning process is problematic. We have investee companies that have real trouble because of sometimes quite irrational things—requirements to do things in the wrong order and the wrong sequence that frustrate enormously—and that does need looking at. But I don't think the problem is resolved merely by picking one or two failings in the system. It really starts by having a very authoritative plan for the future development of the nation that you then encourage the private sector to deliver in the public interest.

Q94 Neil Carmichael: So are you saying the Department of Energy and Climate Change, for example, should come up with a plan for infrastructure in energy and so forth in a much wider, more detailed way than we have thus far managed?
James Cameron: It is a whole of Government enterprise, yes.

Q95 Chair: But the issue surely is how all that is synchronised with the imperatives of this, and what the mechanism is for that. I think, in a way, we're looking to see how that might all be co-ordinated and integrated.
James Cameron: Yes, I'm with you absolutely with that. It is a question of integration. There is a tendency in the Green Investment Bank debate to load everybody's aspirations for a better everything—better government, better investment—on to this institution that doesn't exist yet, but I do think it would help to have an institution designed as closely as possible in the way that we have recommended. I think it would exert quite helpful pressure on departments to align their interest more effectively in order to get things done. In order to get finance to move to where—

Q96 Neil Carmichael: Sort of a catalyst really, do you see yourself as?
James Cameron: My experience is that you have to develop a dialogue around problem solving, that is more powerful than the one that is about process. So there is a tendency when things get really difficult, to encourage more process because it puts things out. Investors, of course, get impatient with process, not that they should trump particularly democratic process but it's quite a good tension. It should be a good, creative tension and I think an institution that is designed expressly to sit between the interest of the investors and the interests of the nation, the public of the nation, I think will be a healthy thing for many of these areas.

Q97 Neil Carmichael: So it involves an interface between public policy and that money.
James Cameron: Yes.

Q98 Peter Aldous: I will just come back to the question I asked Mr Wigley. Is it a bank or a fund?
James Cameron: There's a very straightforward political answer—it is a bank. We have committed to create a Green Investment Bank. There is symbolism in the choice of words. Bank versus fund, in political terms, provides only one answer—bank. Bob was giving a charmingly accurate answer, which is, in the real world it doesn't matter that much. It matters certainly on the character of the institution once it becomes real, and there are distinctions between what it means to be a bank and what it means to be a fund. Even there, I think it's quite easy to say that bank does more of what we want to do than a fund. It feels like it's a lesson in linguistics but I fully understand the code here and the answer is bank. But equally I know that there is a lot of negotiating and deal making to be done, and what matters is the mandate, the leadership and the problem solving. If, in the end, this institution is not called "green", "investment" or "bank", I don't much mind as long as it really does help to deliver £55 billion a year into the things that we need to transform our economy. So I don't wish to be glib about this, because I know it matters, and we are squarely in the political debate now, but ultimately the institution has to be a very credible institution in the capital markets and it has to be around for decades. I want to see people who work in this institution proudly displaying their name cards with some nice embossed logo on it that says, "I work for something that's here to last and that's in the national interest".
We might finish up calling it something other than bank or fund, but for the time being the answer is bank.

Q99 Sheryll Murray: Can I just come back to ways of raising that £55 billion investment a year. I think you have already confirmed this, but could you just be clear? Green bonds seem to be a new invention. Should the Green Investment Bank contract out the creating and managing of green bonds to another established and financially savvy investment fund, in your opinion?

James Cameron: First, a couple of things on green bonds. Rather like the Green Investment Bank, there are a half a dozen versions of what one might mean. There are lots of ways in which you could describe a bond as a green bond. We have quite a few examples already, but they're all slightly quirky and different. Some have been issued by the World Bank; some have been issued by the IFC; some have been issued by a Swedish bank; and there is a Japanese version. They are all slightly different. In fact, what Bob and I were guiding you towards is to think that at some stage, we have to create an investment product that looks awfully like every other bond that's out there in order to get access to the really big money. They need something that they understand, that's not too quirky and different, and that's really quite plain. So, it involves finding a way of taking away the risk, so that at a certain point you have something that you can sell into the huge global market. That's the skill that we've all got to learn, and where the money really is. There's really no other part of the financial ecosystem that has sufficient resources to deliver those amounts. The whole game is finding a way there. So—

Sheryll Murray: Can I—

James Cameron: Can I finish off the second part of your question?

Sheryll Murray: Yes.

James Cameron: So, getting your way there might involve more than one route. If the bank is well capitalised, has a good relationship with Treasury—which after all is responsible for very active management of the Government's debt and knows a lot about the bond market—there's every possibility you could work with Treasury to issue a bond that is green because of its purposes. The capital markets would like it, and they would take it up and buy it in large amounts. That would suffice for me. But you could easily work out another route where you work with the EIB or you work with another issuer of bonds that would be quite happy to use that money on your projects.

You might also encourage corporate bonds to be issued. So if you had one of the consortia for offshore wind form itself into a corporate entity, it might be able to raise bonds on its own account, because it would be working close by in government. Some of the risk would be absorbed by the Green Investment Bank, and the markets could get comfortable with the risk associated with that corporate issuance. So there's already three ways in which a bond could be the issued for the purposes that we care about, each of which could be called green, but they involve slightly different routes.

Q100 Sheryll Murray: Can I ask you about the other end now? How important are green ISAs and do you think they're symbolic, or a symbolic way of getting ordinary people on board to buy into the Green Investment Bank?

James Cameron: I really do.

Sheryll Murray: Would they have a particular financial benefit for the Green Investment Bank?

James Cameron: I think this is vitally important. It's often not emphasised by the big financiers, but I think politically and in the national interest, we have to try very hard to get this right. So this is how the argument goes: our savings levels are too low; we've been a nation of debtors for a long time; we have to build up our savings. We need to make those savings work for returns in our economy. We need to make them work in our economy on real assets—real things that you can touch, feel and go to see, not whizzy, clever financial products that people don't understand. Such savings have to produce measurable returns. They need to produce dividends—yields that allow people to plan for their future and feel comfortable. They may be quite modest yields; they may not be racy 30% returns—it certainly won't be that—but they are just that bit more dependable, and people can understand that their money, that they saved, built something in their community that they use. I think that's politically powerful and that it will restore confidence and faith in what investment is really for.

The other thing I like about the ISA idea and why I think it could be, over time, not right away, connected to the bond idea, is that in times of crisis—this is a crisis; it's a very prolonged one and it's not like wartime—we have managed to galvanise the public to raise money very quickly in the national interest, which is what war bonds did. War bonds were taken up in their thousands in relatively small amounts. I think that you could create the conditions in which the public could invest in bonds for these infrastructure projects and provide new capital—not in vast amounts—that currently does not come into these markets. Because the institution that we are hopefully going to create is precisely designed to manage risk on behalf of the Government, it will be doing so on behalf of the public as well. I like that connection. I think it's politically viable and attractive, introducing higher levels of savings and money applied to problem solving in our own country.

Q101 Chair: And in respect to the discussions you've had with Government, do you feel that there's sufficient recognition given to that particular strand of thought?

James Cameron: I'm not sure whether I know; I think so. It seems to have been well received, and I haven't heard too many negative things. But what tends to happen, and it may be inevitable, is that we are drawn towards the big projects. It is rather like the question you asked earlier about early stage investment and small businesses that need capital; there is a tendency to go towards big projects and, in part, Bob and I have been recommending that we do that because there is a need there and one can establish success quite quickly by focusing on a few big things. On the notion of gradually improving the savings of the nation and applying them to investments that deliver emission reductions, a green agenda or something that you can communicate—don't forget, you would take advice from those who would market these products how best to connect with the public at large—it may not be climate change on the top that does that, but if the net result means more money goes into investments that improve the state of the environment here and globally, then that's a big achievement.

Q102 Mr Spencer: Just an example of that would be that if we could convince more people to insulate their loft space, it would reduce the amount of energy needed. That's very small scale, though, isn't it, and individual?
James Cameron: Of course. It's only small scale until it's scaled up, isn't it? The green deal is an attempt to do that. But I know, from my own experience in our own business, that the capital that we can deploy into that marketplace is in businesses that are already of a certain size. So we would make an allocation from our private equity fund of maybe €8 million to €20 million for a company that would deliver that service. What you want also is to be able to have a pool of capital to draw on to make more investments of that type, but also those at a lower rate. Also you want to invest in businesses that are quite risky at quite an early stage. At the other end, you want to invest in the large energy efficiency project. That requires many actors to deliver, which might come more in the form of bond.
Mr Spencer: That is the role of a—sorry.
Chair: I think Sheryll was just going to come in on that point.

Q103 Sheryll Murray: Yes, I was just keen to hear that because I visited Denmark a few years ago now, and a community near Aarhus wanted to build a new harbour wall. What they did was they borrowed the money to put three wind turbines on the new harbour wall. They retained one themselves to repay the loan, and they sold the other two to repay the money for the wall. It is a really good example of how involving ordinary people can work.
Mr Spencer: That's a good example of what a bank would do, but in the sense of people's lofts it's almost a fund activity because there is no convincing Mrs Jones to repay the money that has been invested in her loft.
James Cameron: True, and the investment that I was thinking of when answering your question was an investment from a fund that we have in a company that will deliver that service. But, and I am trying to emphasise this, if you write that individual transaction much more largely, so that you are talking about Birmingham, then you could issue a bond which had a fixed-income return that a saver could invest in and get a tax benefit from the Government for that type of investment. Now, if you wanted to make other investments more of a community nature, again, you could design an instrument specifically for that purpose that would enable a tax benefit to be accrued, perhaps by delivering something that would fit with the big society movement, with an investment made to improve things in your community. But that would require careful design and careful explanation of risks so that it wasn't oversold or missold and all those things that people worry about.
Chair: I think we need to move on to our last two questions.

Q104 Simon Wright: How does the Green Investment Bank strike the balance between maximising a commercial return on the investment, against perhaps less commercial but strongly green outcomes? In effect, how green should the GIB aim to be?
James Cameron: Don't forget its mandate is going to be set by environmental objectives. This is why we need to spend a bit more time talking about the mandate and a bit less time talking about conflicts between Treasury and other Departments. The mandate will have built into it the Government's carbon reduction commitments, the budgetary requirements that the nation now has to report on its carbon, a whole series of Government commitments to deliver renewable energy and energy efficiencies. The institution itself is going to be locked on to those targets. That's what it's there for, so no one should ever doubt its purposes. The commercial returns are largely going to come to those who provided the capital which, on occasion, there will be some public finance in, as we have explained. It may well be a tranche of investment in a project that then gets released to syndication maybe after the wind farms are built and then recycled. So there will be a return that comes from that but it will come from a commercial marketplace that is already engaged.
Because this is a public institution in the public interest, you should see the commercial returns as largely falling to others and the financial returns being recycled in the delivery of the mission of the organisation. So it has to act alongside commercial actors confidently, knowing their language, knowing their interests, but fixed on its mandate which delivers environmental benefit, its long-term objectives and recycling the investment into improving the capital flow to deliver the policy. It is not a commercial bank in that sense at all, or anything like one.

Q105 Chair: I think we have just about reached the end of our time. The final question was, in just one sentence, do you have any advice to Government on how they should test the effectiveness of what it is going to set up?
James Cameron: Just get started with some transactions and find things that need to be done now, and display what can be done. I think you'll find a lot of the anxiety and worry in certain parts of Government, or the fear that is going to increase exposure to risk for the Government, will go away when we start to do things.
Chair: On that note, I am sure there are a lot of people around this table who have some really fine examples. Thank you very much indeed for your time; it has been helpful.

Wednesday 1 December 2010

Members present

Joan Walley (Chair)

Peter Aldous	Sheryll Murray
Neil Carmichael	Caroline Nokes
Katy Clark	Dr Alan Whitehead
Caroline Lucas	Simon Wright

Examination of Witnesses

Witnesses: **David Paterson**, Head of Corporate Governance, National Association of Pension Funds, **Ben Warren**, Partner, Ernst & Young, and **Ingrid Holmes**, Programme Leader—Low Carbon Finance, E3G, gave evidence.

Q106 Chair: I welcome you, especially on such a cold day, for coming in to give evidence before what we think is a really important inquiry. We don't usually give people before our Committee an opportunity to launch into a statement, but if you want to introduce yourselves, perhaps with just a sentence on why you feel this inquiry is important and what you'd like to see come out of it, that might be helpful for us to get the perspective that you have in terms of the starting places that you come from. Mr Paterson?

David Paterson: Thank you, Chair. I'm David Paterson. I'm Head of Corporate Governance at the National Association of Pension Funds. The NAPF is the trade body that represents the interests of company-sponsored pension schemes, and I'm here because we regard the initiative that has been taken with the Green Investment Bank as important to pension schemes, but it's also very important that this Committee understands the objectives pension schemes have for their members and, frankly, some of the limitations around what funds can be expected to do.

Chair: That's very helpful, thank you. Ingrid Holmes?

Ingrid Holmes: Hello. I'm Ingrid Holmes. I'm the Programme Leader at E3G, which is an environmental NGO with a global focus. I'm here because we believe the Green Investment Bank is the key missing part of the architecture framework that will be needed to shift the UK to a low-carbon economy. It will play an analogous role to the Committee on Climate Change as a critical friend to Government in helping to design bankable policy frameworks and deliver the overarching strategy that hopefully will emerge from work by Infrastructure UK and the Treasury.

Chair: Thank you. And last but not least, Mr Warren?

Ben Warren: Thank you. Good afternoon. My name is Ben Warren. I head up Ernst & Young's energy and environmental infrastructure practice, which employs about 70 people here in London, advising clients essentially on raising capital for energy and environmental infrastructure projects. Echoing Ingrid's words about the importance of the Green Investment Bank, I think what we've experienced in the UK is a rather slow uptake of investment in renewable energy. We're certainly lagging behind a lot of our foreign counterparts in relation to a dynamic green economy, and a dynamic and, importantly, sustainable green economy. I think the Green Investment Bank has the potential, really, to leverage a lot more capital into the UK sector. On that point—the point why that is important—we estimate that the UK energy sector is short of about £340 billion between now and 2025. That's a very substantial amount of money. If that money is not invested, we will not decarbonise our energy sector. We will continue to remain very energy-dependent on fossil fuels, which we do not produce indigenously in the UK, and our lights will go out. I think the Green Investment Bank has a very important pivotal role to play in enabling capital to flow.

Q107 Chair: Thank you. I think that leads us straight into our first question. We all have a copy of the Green Investment Bank Commission's report, which sets out various barriers to raising the scale of finance that's actually needed for the green infrastructure. We were wondering if you agree with the Commission's assessment on that and if not whether you have any suggestions of your own as to how, once operational, there could be, if you like, ways of overcoming those barriers to investment?

David Paterson: I think that the Commission is right to identify the problems around barriers to investment. To our mind, the way to resolve those barriers, or to begin to resolve those barriers, is to structure any bonds or other investment offerings to compete directly with the more plain vanilla investment offerings in the marketplace. There is very little premium—I think there's no premium, in fact—for something labelled green. There is a premium for something that carries a strong Government guarantee or Government backing and, in my world at least, there is a significant shortage of long-dated index-linked securities that pension funds can buy and hold to maturity. There is a gap in the market at that end, which, frankly, the Government currently are not filling.

Ingrid Holmes: Yes, I would absolutely agree with the Commission. There are three critical barriers. The first is the scale of the investment that we need to move over a very short time period, something between around £750 billion and £1 trillion over the next 15 years. This is happening just at a time when the markets are constrained and also quite risk-averse, so there are issues about recycling capital investments and issues about how we bring in the institutional investor capital. We need to move this money just at a time when there's lots of risk aversion, as I said, but also we're looking to invest in lots of low-carbon technology, some of which we understand, others which we don't fully understand and which can have quite a high risk perception. Markets traditionally aren't that brilliant at handling a huge amount of risk, so if we want to move at the pace we need to meet our carbon targets, I think there you have your case for targeted public funds to invest alongside the private sector.

The final issue I think is also the aggregation challenge. We traditionally focus on very large investments. There's lots of talk about offshore wind, but actually there's a huge amount of low-carbon acquisition we could do around energy efficiency, community energy—small little projects, very fragmented, high transaction costs. Traditionally, the big market players won't tackle those because they can't make a big enough return. Building on that, it is not a coincidence that if you look at development banks across Europe, there's always a strong focus on the housing sector, energy efficiency, SMEs. I think that encapsulates the big issues. If we don't use a bank, the alternative is to ramp up rewards to investors, which is not only expensive, but it's not going to get us there at the scale we need it to and as quickly as we need it to.

Ben Warren: Finally, to avoid repeating, you asked about what the GIB could be doing operationally in this space. The report talks about the GIB focusing on lowering risk in terms of the investments in the low-carbon sector. We would totally agree with that point of view. I think for far too long Government policies tried to address problems through reward-based mechanisms, whether that be carbon price, renewable obligation certificates or feed-in tariffs. They go some way, but at the end of the day this is about getting risk and reward in the right place. I think the GIB operationally could do a lot around providing risk-based products to reduce the inherent risk in investments and, therefore, enabling more private sector capital to flow than can currently.

Q108 Chair: Just to play devil's advocate, if we are going to get this Green Investment Bank it will be, if you like, policy that has been created by Government. Isn't that in some way interfering with the market? Would there need to be any changes, whether in regulation or in other aspects, that might make, for example, pension investments go in that direction? Do you see what I'm saying? What are the risks of actually doing that and, if the Government change perceptions, what are the corresponding changes that would be needed as well?

Ben Warren: Do you mind if I lead on that?

David Paterson: Yes, do.

Ben Warren: I think, very importantly, the Green Investment Bank shouldn't be competing with current sources of private capital. It shouldn't necessarily be investing alongside sources of private capital or competing for deal flow with those sources of capital, but rather enabling those sources of capital to get into investments. I think the key question here is around the role of the Green Investment Bank. What role does it perform? Does it perform as an investor or does it perform as an institution providing risk mitigation products that enable private sector capital?

Q109 Chair: But I am just wondering in terms of pension funds and so on, won't it perhaps make certain long-term policies that you have slightly irrelevant if it's going to change the whole value that is put on different investments?

David Paterson: I think they go back to the basic premise, which is that any offering from the Green Investment Bank has to stand up to scrutiny against other investment opportunities that are presented to pension funds. I don't think there's a real danger of crowding out, if you like. The risk at the moment, I think, is of the credibility of the Green Investment Bank's offering as a new entity with a slightly unknown—well, at this point completely unknown—track record that investors can come to rely on. Building that track record, building that confidence in the bank and the way in which it goes about its business is a very important part of what the challenge represents.

Ingrid Holmes: I would also make the point that we already interfere in the markets. That's what a renewables obligation certificate is, or a feed-in tariff, or any other kind of incentive. In terms of crowding in or crowding out private sector capital, I don't think we've got a problem at the moment. There isn't that much investment going on, full stop. But I think the way you manage that is through a strong governance structure that sets out where the Green Investment Bank steps in or not. The investment has to be additional and it has to be alongside the private sector. I think there's also a perception that somehow the Green Bank will finance all of energy efficiency, or all offshore wind or all other infrastructure. That's not the case. I think it's more that we want it to invest in the first few gigawatts so that things go from being unproven to proven. CCS is a great example. Once you actually see operational assets, I think the markets take a very different view of whether something is risky or not. There's a great saying, "Investment banks will be first in line to finance your second project". That's what we need the bank for—to go first on those riskier areas.

David Paterson: Chair, could I just add one further observation? I think we have to remember that investors are now international and, therefore, in thinking about the market for Green Investment Bank products we've got to think globally. If I talk about my particular sector, we're not anything like big enough to do what is wanted. On the other hand, if the offerings are structured in the right way, you will bring in Dutch pension funds, the sovereign wealth funds and others. The bank has to have international credibility. It's very important in order to raise the money you want to raise.

Chair: Thank you.

Q110 Dr Whitehead: A number of people have been informing us that green bonds are a particularly good way for institutional investors to invest in Green Bank. Indeed, Ingrid, I believe you wrote a little while ago, "We believe that a series of targeted bonds with their proceeds ring-fenced for investment in tangible green infrastructure could capture investors' attention, whether they are individuals or institutions such as pension funds looking for financial return over many years". Do you think green bonds are one of the key ways of securing investment and, if so, what would they look like? How would they differ from more conventional bonds?

Ingrid Holmes: Shall I do the layman's version and then we can move to the technical? I think when we first started talking about green bonds it was largely the political construct—to just kind of shine a light on the fact that so little money is going into low carbon at the moment, and yet vast volumes of capital are needed, which would be great for these guys if we could get the investment opportunities there.

In terms of what they actually are, they need to be bonds—regular bonds that basically have the proceeds ring-fenced for green projects. Then you need to think about what the pension funds, the insurance companies, look for when you're structuring a green bond, and it is really this plain vanilla thing. Correct me if I'm wrong: an investor will look at who's issuing it, what the rating is, the price, the tenor of it, how long it will be around, and how much liquidity there is. There are different views on these—what's desirable and what's not—but fundamentally those are the factors that you need to be thinking about fulfilling when you're designing your policies that, ultimately, you will fund through the bond markets. I guess I'd say that what you take home from that is this: if you want to access this future green bond market, we need to be thinking now about how we design our policy frameworks to create low-risk investments that can then be securitised or whatever else is needed.

There is also a split. There will be green bonds issued by green institutions. A Green Bank bond will probably be a quasi-Government sort of debt. Then there are the market-based green bonds, and I think that's where you want to get to. That's where the big volumes will ultimately be. But I don't think we're going to get market-based green bonds until the Green Bank starts to get some of these activities going, which means you need to raise your Green Bank green bonds first to kick-start the market.

Q111 Dr Whitehead: It needs to be a proper, fully functioning bank?

Ingrid Holmes: Yes. You need enough money to buy assets and reactivate things like the asset-backed security market that has suffered so badly from sub-prime mortgages, collateralised debt obligation and investors' fingers getting burnt. Once you can kick-start that as an honest broker, I think these markets will take off on their own, but I just don't believe they're going to happen on their own.

Q112 Dr Whitehead: What sort of size would that market be if that were to be successful?

Ingrid Holmes: I think there are different views. We talked to a number of fund managers who said you could start, for example, with Green Bank bonds with a fairly modest issuance of a few billion pounds. The important thing is that you have an ongoing pipeline to deliver this liquidity. Nobody wants a few Green Bank bonds that are stuck on its books if the whole thing goes wrong, which we absolutely hope it won't. It's this commitment to long-term bond issuance that will be important, so you create this liquidity, because all pension funds need to be able to trade those bonds and you can only trade if you've got that volume.

Q113 Dr Whitehead: Allegedly, a member of the Green Investment Bank Commission spoke recently in response to certain people who appear to be opposed to the idea of the Green Investment Bank operating either as a proper fully fledged bank or issuing bonds. He was alleged to have said, "Frankly, if it doesn't—that is, if it doesn't issue Government-backed bonds—there's no point in it existing. If we were only ever going to do one thing, the green bond is the thing we need to do". Would you agree with that statement?

Ingrid Holmes: I guess I would say that if we needed a fund we would have been asking for a fund. We don't need a fund. We've done funds to death. There are lots of different Government funds out there. We need something that is a platform that can provide a variety of tools to back policy and to de-risk so that we can get private capital in. That means you need to be able to do equity; you need to be able to do debt; you need to be able to do securitisation; you need to be able to provide technical assistance. These things can't be provided by a carbon trust-plus—a quango—and it can't be provided by a Treasury-run fund.

I think this issue about whether the GIB issues bonds is probably linked into public balance sheet management and a number of other issues. We have to be taking a long-term view on this. I think we can get to a place where a Green Bank can be off balance sheet and raising its GIB bonds ring-fenced from the public balance sheet, but we're going to need to do some early investment bringing this stuff on balance sheet in the early days to build out to that place where we can have an independent bank. I think some Treasury officials may have some issues around the Green Bank issuing its own debt. I think those are absolutely manageable. There are safeguards you can put in place. Plenty of other countries have done this and I think we have the competency to do it here, too.

Chair: Mr Warren, I think you wanted to come in, and then I'll bring in Sheryll.

Ben Warren: Thank you. Our estimates are that the pension and insurance funds markets, annuity funds with defined benefits, and pension schemes that are mostly likely to want long-term, low risk, low yield investment returns could probably contribute something like £40 billion to £60 billion to the UK low-carbon sector over the next 10 years or so. If the hypothesis is that that's the sort of money we're trying to attract into the UK energy sector and low-carbon sector, then bonds are a very suitable, efficient, convenient way to attract that capital. Green or not green, it doesn't really matter; they're no different from any other bond.

Q114 Sheryll Murray: I just want to go back to the UK's accounting policies, which obviously might prevent the Treasury from allowing the Green Investment Bank to raise its own funds. Do you have any advice for Government on how to set up green bonds so as to minimise their impact on the national accounts?

Ingrid Holmes: I think in the first instance—

Chair: Sorry, I think we were just—

Sheryll Murray: Sorry, I thought this was relevant, bearing in mind that they've just spoken about it.

Chair: That's fine, yes.

Ingrid Holmes: To be clear, if you want to hit mainstream investors, a bank issuing bonds without any track record and without any rating will struggle to get people interested unless you have a Government guarantee in the first instance. I don't think you need to provide a statutory guarantee to the bank so that everything it does is guaranteed, but those first tranches need to be guaranteed. I think you need to see it as a marketing PR kind of splash—that the Government are fully behind this institution and fully committed to the low-carbon agenda. As a track record is built up and the investment team is proven to be savvy and you have assets on your books, you could move to a place where you have an implicit guarantee or no guarantee, and then you don't have any impact on the Government balance sheet. But I think it's a short-term hit for a long-term gain.

The other thing to remember is that this is not like spending on welfare. This is spending on an institution that will then invest in assets, so there is additional value there. I think people understand that, and I think people understand that that is also how you deliver your growth agenda. It's through that investment in assets infrastructure that we deliver growth. I think we need to broaden that debate out from the pure balance sheet impact discussion to what role this plays in delivering growth in the UK under the low-carbon banner.

Ben Warren: As the only accountant on the desk, I think what I would say is that Government accounting in terms of balance sheet treatment is very complex. It's not the bonds or necessarily the instruments or the investments that the bank makes itself that are going to impact Government balance sheet. It's the way the bank is capitalised and what support the Government provide behind that in terms of capital contributions, or in terms of guarantees, that is going to impact its underlying balance sheet treatment. But I would certainly echo the view that, I think, the key question here is: do we want a long-term, secure, decarbonised energy sector with lights on when we want to switch them on, or do we want to minimise HMRC deficit?

David Paterson: One small point from the pension funds perspective: I agree with what Ingrid has been saying, but I want to emphasise that pension funds in the UK are now essentially in a sort of de-risking mode. So they're tending to be selling equities and buying Government bonds or corporate bonds. Therefore, I absolutely support what she said about looking for something that contains with it robust Government support or a guarantee at the outset. Any institution needs that. Over time credibility will be built and over time it can move into a self-sustaining, self-supporting structure.

Q115 Caroline Lucas: I wanted to do one quick follow-up on something that Ingrid said. You were talking about short-term hit in terms of the balance sheet. What does short term mean, roughly speaking, in this context? Because on many of the pieces of evidence we've heard this has been a real sticking point, so it would be nice to probe that a bit more.

Ingrid Holmes: The honest answer is that we don't know. I think some of the longer term estimates are around 10 years, but it could be less than that. It depends on what the bank does. If the bank buys operational assets that it can then refinance quite quickly and prove itself as savvy, you can then go and get your rating and you're away. If you go for early investments in projects that need to go through planning, construction and then an operational phase—which might happen with offshore wind, for example—it could take 10 years to exit that investment. What the bank chooses to prioritise in the early years will be critical to determining how quickly that track record is established and how quickly you can establish an off balance sheet bank, because you've got all your different bits and pieces in place—your track record, your governance structures, your statutes if you're going for that, and equity capitalisation.

David Paterson: I think, frankly, you could take a line from other banks such as the EBRD, which after all faced huge challenges when it started, and yet quite quickly gained real credibility.

Q116 Caroline Lucas: I think those precedents are quite useful, because when we've been talking to Ministers before that has been an issue. The question I actually wanted to raise was on risk, because it has been put to us that green infrastructure investments can be higher risk, and that that has hampered investment. Assuming that that risk can be mitigated, do you think that you're sure that green investments provide enough of a financial return to be attractive to potential investors? Is that a concern in your mind or is it completely clear that it is attractive enough?

Ben Warren: I think, historically, the green infrastructure sector has delivered returns over and above other infrastructure sectors. A large part of the historics in certain sub-sectors of the green centre has been the fact that there's been more risk in those investments, so they have to deliver more return. The challenge here—where the Green Investment Bank can make a very big difference—is to make green investments look much more like other, more vanilla infrastructure investments and thereby attract the big pools of capital that are there. The green investments themselves quite typically are, in essence, guaranteed by Government, or guaranteed indirectly through levies on the rate payer to deliver a return through the various incentives and support mechanisms that are there. The income part of investments is actually very secure for nearly all the green infrastructure.

Ingrid Holmes: I'd echo a lot of that. The bank isn't going to mitigate all risk. You've got to think about this again in the context of what the policy framework is, which will highlight what your rewards are going to be, but should also mitigate as much risk as it possibly can. The bank then comes in to move the investments from being theoretical to practical and deployed. When people talk about these investments as risky, I think you need to separate out what people perceive as being risky—just because it hasn't been done and because the policy frameworks are new—and what actually is risky. Those are two very different things. Again, I think it's the role of the bank to go in as an early investor to deliver proof of concept on some of these new technologies and business models so that it can step back and the private sector steps in. Onshore wind was, once upon a time, risky. It's not risky now.

David Paterson: I think it's important to distinguish between high risk and transparency of risk. To my mind, the important thing is that the risk is transparent and that allows investors to price it properly. It's not knowing what the risk is that's the real problem. People will buy high-risk investments; they have done since time immemorial. They'll carry on doing it, but they want to know exactly what risk they're taking on.

Q117 Chair: Following on from that, could I just ask how people will know if they're buying into something which, because of the carbon issues, is probably not such a good, long-term investment? How will they know what is good and what isn't?

David Paterson: This is the skill of the investor, if you like. You look at the regulatory framework within which you're operating; you look at the potential growth and demand for the particular product, if it's technology that's being developed, and you put a price on it. It's complicated but the market will price it, and the market will price it probably quite efficiently if supplied with sufficient information.

Ben Warren: May I provide an illustration of one of the particular barriers that we face? If we take the carbon capture storage part of the market, which is a big bet being taken by Government in relation to the success of that market and the contribution that carbon capture storage will make to the overall energy mix, a lot of the entities that are out there developing projects at the moment are trying to understand the risk of carbon leakage from sub-sea storage facilities and the environmental impact of that. As is usual in business practice, they go and talk to their insurers and say, "How much does it cost us to cover off this risk?" It's not a thing that's ever been insured before, so the insurance market and the underwriters are not prepared to underwrite that risk without knowing what it is. Why should a utility do the same? And why should the utility's shareholders let its board of directors do the same? So it's taking out those unknowns. Talking about risk products that the bank could successfully provide, it's providing some time of understanding so that that risk is understood in practice, and it can then be priced by the market and the market can then deliver. At the moment, no one knows.

Ingrid Holmes: And if they can't price it, you're not going to do it. There's always the option not to invest.

Q118 Caroline Nokes: Can I move on to time scale? The Government have indicated that they wish the Green Investment Bank to be operational by September 2012, with the first investments happening some time after that. But we took evidence from the Green Investment Bank Commission, who indicated that they thought it would be beneficial to accelerate that time scale and get the thing set up as soon as possible. What are your views on whether institutional investors are ready to start investing now?

David Paterson: It is a complicated question. The climate for this sort of investment is currently better than it has been for a long time, and you can thank BP for that. Because the fact is that suddenly in the past six or nine months, environmental issues and all that goes with it—the whole environmental, social, and governance agenda—has become much more vivid in investors' minds. Therefore, I sympathise with what Bob Wigley was saying the other day, which is that the climate is actually good for us at the moment. Investors' preferences will move on inevitably, but if it can be done sooner then I think that is better. It's got to be done well, though. There's no point in going off in a half-baked way. That doubles the risk, and banks do take time to structure properly.

Q119 Caroline Nokes: Are the funds readily available for investment?

David Paterson: Yes, there are funds available from the pension fund market. There always are, but not on the scale that Ben was suggesting, because that clearly is a huge amount of money for an industry. We have £800 billion within our membership, but £220 billion of that comes from the top 20 members. There's a very long tail of very small funds for whom this, frankly, is not an investment option at present, so you're looking at the big funds who would have money today. In fact, USS have already pledged £300 million to green-type investments. USS is our second largest pension fund.

Q120 Caroline Nokes: Moving on from that, do you think there would be any knock-on effects of a Green Investment Bank channelling institutional investors' finance away from existing investments and into green infrastructure? Does that lead to a risk that funds will potentially be diverted from other environmentally beneficial projects?

David Paterson: I think if we start from the point of view that funds are not heavily invested in the area but funds are finite, then the money will move from other pockets into this one if the terms are right. I would see this as fitting into the low-risk pocket the way things are at the moment, so it's competing really with money that is currently invested in Government bonds and corporate bonds rather than equities. Provided that the terms are right, and particularly as there is a space at the long end of the market, I think they could find that there was actually capacity.

Q121 Peter Aldous: Should the Government be doing any market testing about what a Green Investment Bank would do to provide evidence that it should actually work? If the answer to that is yes, what should that market testing be?

Ben Warren: I would certainly say yes. I think it's imperative that the Government have a very clear understanding of the market failures that are being addressed and the barriers that are there, and get a proper appreciation from what I like to call the people with the live ammunition—the current investors, whether they be utility companies or infrastructure funds—of what the real barriers are around the breadth of the UK low-carbon economy. There are lots of technologies within that, and all those different sub-sectors have their own specific issues. I'd say first and foremost that the Government need some real clarity on what the barriers are and what the market failures are. I think then, secondly, a proper assessment of the market's appetite to invest is needed, as well as an assessment of pension and other annuity funds and other potential investors, and the sorts of instruments that they would like to invest in. Going back to the timing question, I would not, however, advocate a long consultation period to do that. I think it would be quite expedient to get an independent party to undertake that market testing on behalf of Government, that has the breadth of relationships to leverage off but, importantly, is independent. It doesn't have any money to make out of investments.

Ingrid Holmes: Adding to that, I absolutely think the process run inside Government has been incredibly opaque with very ad hoc submissions from the market. There's a tendency to say, "We've consulted with financiers", not recognising that there's a whole ecosystem out there, from venture capitalists to private equity to banks to infrastructure funds to pension funds, all of whom have different needs and different views on this. I think it should be an external facing consultation for the shortest amount of time, but with an attitude of, "Actually, this is what we're thinking of doing", and really concrete ideas to get the debate going and getting views from the market, because I think there are very different views. There are actually different views on what kind of yield institutional investors are looking for from GIB bonds, for example. There are those who are looking for AAA rated, but there are others who may be looking for a lower rating because they actually want a higher yield on it. I think we need to bottom that one out and get some financial conversations going.

Q122 Peter Aldous: Just an extra question for you, Mr Paterson: have the Government been in contact with any of your members to get their views about what a Green Investment Bank should do?

David Paterson: They've been in contact with one or two—not many, frankly. But they have had conversations with our largest scheme, which is the BT pension scheme, who have always been in the vanguard of what I would call responsible investing in the broadest sense. But there is more work to be done there. I think Ingrid and Ben are absolutely right that there's a need to talk to investors, which we'd be happy to facilitate.

Q123 Peter Aldous: When the Green Investment Bank is up and running and it's operational, is there a worry about the Government backseat driving? And do you think that might be helpful or harmful to the bank?

Ingrid Holmes: You have to lock that one down in your mandate and your governance structure. One of the live debates at the moment is whether you need a statute at the bank, and I would say absolutely, yes. I think we need to make this as separate from short-termist political intervention as possible. That's something you'll see replicated across European investment banks who have a clear governance structure that separates Government from the bank, and then you lock it down in law.

Q124 Chair: I would like to go back to what you said, Mr Paterson, about the Government having contacted very few of your members. You mentioned BT. Would you have expected the Government to have contacted more? Would you have expected there to be some kind of mechanism for that dialogue to take place, or is there a dialogue mechanism there? Is that something where perhaps more work needs to be done?

David Paterson: I think more work has to be done. Not unreasonably, the Government started with some of the largest schemes and, bearing in mind the elongated tadpole shape of our industry, that's the way they should go about it. But I think there is a need to talk to more pension funds and more investors, actually—broadly speaking, it's not just pension funds, it's the people who invest for pension funds as well, which are the asset management houses—and to explain what the opportunity is as seen by Government and to explore with these organisations what the risks are.

Q125 Chair: Is that something that you're being proactive on or are you waiting for the Government to be proactive on that?

David Paterson: I'd have to say that we would be waiting for the Government to be proactive in many ways but given our role as a representative body for company-sponsored pension schemes, we would be happy to help if we could in any way.

Q126 Simon Wright: I have some questions about how we can make the UK a world leader in this area. We heard in a previous session the view that it's important for the GIB to work internationally and to draw investment into the UK. Does the UK lose out because investment in green infrastructure is going abroad, and what are the reasons for this? Alongside a Green Investment Bank, what else is needed to keep green investment in the UK?

Ben Warren: The international picture is an interesting one. There are vast amounts of capital being invested in green technology and green infrastructure across the globe. Some numbers for you: there was $113 billion invested globally in clean energy in 2008; $32 billion in the Americas, $60 billion in EMEA, $20 billion in the Far East; and very small amounts dotted around Asia/Pac—or Australia to be more accurate. The UK at that time accounted for $4 billion of that total. I used 2008 numbers because that was before the impact of the financial crisis had really impacted the investment in this space. The financial crisis led to quite ambitious green economic stimulus programmes being launched across the globe, and I think that when we compare what the UK Government are doing compared to other Governments in terms of capital commitment, it's quite staggering. HSBC numbers: they estimate that climate stimulus disbursements for 2010 will total something like $40 billion in China and $20 billion in the US. The UK comes in behind Japan, South Korea, Germany, France, Australia and Canada. In 2009, to give you a comparison, the UK is estimated to have disbursed $390 million of its green economic stimulus package compared to $40 billion in China. For the UK to be a world leader, I think I would suggest that its ambitions need to be slightly higher from where we're seeing them right now.

Ingrid Holmes: I'd reiterate that, and say more generally that I think there's a huge amount of interest in the UK market. It is recognised that we have vast offshore resources. I think there is a lot of international investment in operational energy assets now. But we don't have a catalyst to deliver this investment, and until a bank that can help create solid, bankable policy frameworks is in place and can help manage the risk in the early projects, I just don't think we're going to see capital flow at volume. Just to add to that, we have Infrastructure UK and the Treasury looking at our national infrastructure plan, who have said, "Infrastructure investment is one of the best ways to deliver jobs and growth". We've got a question mark over where our 2.5 million private sector jobs are going to come from to meet the OBR growth forecasts. It just seems like there's a big Green Investment Bank-shaped hole waiting to be filled so we can start to see this money flow.

David Paterson: We, as investors, are indifferent as to where we invest in green technology. We will invest where we think the best opportunities are, and if those turn out to be in the US or China, so be it.

Q127 Simon Wright: What should the Government do to ensure that the GIB is actively able to tap into the international finance markets?

Ben Warren: I think, building on David's comments, that the global capital market is a global market and is competitive. Any market that is looking at itself as a destination for capital has to compete with other global markets, and that's in the context of the UK and the sovereign risk of investing in the UK. Infrastructure is a general asset class, energy is an asset class within that, and low-carbon energy is an asset class within that. If the UK is not as attractive a market to invest in onshore wind power as France is, then the money will go to France first.

David Paterson: But we are a global financial centre so we actually have enormously strong infrastructure when it comes to raising capital, which I think can be put at the disposal of this particular enterprise.

Q128 Simon Wright: Are there any areas of infrastructure investment that should be prioritised now to get the UK ahead globally?

Ben Warren: One of the key challenges for Governments, for policy setters, and for regulators is public engagement in this whole agenda. It's an agenda area that has got a huge amount of press, but at the end of the day the public have always been very disengaged in the UK, around energy particularly. And why is that? I think in the UK we see foreign-owned utilities predominant in the sector. We have limited employment opportunities, particularly in the green energy sector, and limited green collar jobs and limited investment opportunities for people as individuals to invest in the green sector. To reiterate, why is all this important? Because it's the public that have to pay for this investment. It's the public that have to pay for this investment through their tax bills or through their energy bills. If we don't get the public engaged, energy policy will continue to stumble along the way that it's stumbled along in the last 10 years. Public engagement is a key theme, and one of the priorities is areas that are going to deliver real jobs on the ground tomorrow. For me, that is a key priority.

Ingrid Holmes: I think that translates to energy efficiency in the first instance. That's blokes in vans—it's regional, and it's stuff that can happen tomorrow. Money for the green deal is one area and I think you also need to look at strategic investments like smart grid. Once we have smart grid we can start to do lots more interesting things with renewables and transport and heating technologies. The third area, I'd say, is offshore wind, simply because there's such a vast opportunity there, but we need to couple that with innovation policy to deliver a supply chain so we can actually bring real jobs to the UK.

Q129 Neil Carmichael: Well, oddly enough, you have just answered the question I was about to ask. I suppose the real question is what kind of national energy policy you think we need to give the comfort that is necessary to the Green Investment Bank. You've really been referring to that sort of thing throughout your answers.

Ingrid Holmes: Energy market reform is one of the live issues at the moment. I'm not an expert on that, but if you think this is a complicated discussion, that's about 10 times more complicated. One of the things is that you need to provide as much certainty to investors as possible, because that brings down cost of capital. Ideally, it would be good if we could move away from having the renewables lobby pitted against the nuclear lobby pitted against the heat lobby. Can we think about what we want to achieve strategically and then design a market around that? On the energy efficiency side of things, I think we're making progress, but there's still a huge number of risks and a lot more thought that needs to go into that policy, designing it with your end securitisation in mind, and we're certainly not there yet.

Q130 Neil Carmichael: We might need to be more strategic still because, of course, we've got the European dimension, which Ben has touched upon by reference to utilities and so on. How do you see that unfolding? In a European market, where would the Green Investment Bank be placed?

Ingrid Holmes: There's another issue on interconnectors and liberalised EU energy markets. I think the question there, really expanding the remit out, is how we pay for interconnections and how we compensate poorer and richer countries. That is an EU budget debate, and that's a debate that will be happening now in Europe. We then need to think about where the European Investment Bank fits in and the Green Bank fits in, but I could see a role for the European Investment Bank and EU budget funds in

funding that intercountry connection, and the Green Bank focusing on our own infrastructure at home.
Ben Warren: In the UK, energy policy has always been looked at in isolation. If we compare and contrast that to a country like China, where energy policy is looked at absolutely alongside economic policy and absolutely alongside industrial policy, energy policy is put in place to drive local demand that drives local manufacturing that drives, eventually, a global export market. Because energy policy in the UK has been looked at in isolation, we haven't generated the jobs and we haven't got public engagement. I think policy around this whole area needs to be looked at strategically in that sense: how do we set energy policy that delivers jobs, makes it worth while, and puts taxpayers' pounds back into the UK purse?

Q131 Neil Carmichael: Yes, because you wouldn't need to go as far as China to find a better energy strategy than what we have; just across the Channel would probably do the trick. That's the point I'm driving at, really. I think all of you have an interest in seeing that that is—
Ben Warren: If we take a close neighbour, Germany, as an example, their state-owned bank, the KfW, provides investments into projects. It guarantees third-party debt being invested into projects and it provides export guarantees on German kits being exported outside Germany, in particular wind turbines in the UK marketplace. In a financial institution sense, there's a lot being done there to stimulate jobs, stimulate economic growth, and stimulate tax pounds for the purse. I think that's true in the US and many other markets as well.
Neil Carmichael: Yes. Thanks.

Q132 Katy Clark: Continuing to look at the UK's attractiveness as a place to invest, a key aim of the Green Investment Bank seems to be to deliver infrastructure that will reduce emissions. Would large investors have an appetite to invest in the Green Investment Bank if they were supporting projects overseas where it might be that emission reductions were easier to achieve? How do we make sure that we get that investment when we are competing with other markets?
David Paterson: As I said before, the investor world is indifferent, I'm afraid, as to whether it is investing in green projects in the UK or in China. It will invest primarily for risk and return. If the risks are too high, it will not accept an investment in China or the UK; it will look for a reasonable return commensurate with the risk it is taking. We wouldn't, in fact, tend to look at the world through that particular lens, unfortunately. There's obviously a limit to how much money people will invest in what they perceive as politically higher-risk areas of the world, and that makes the UK attractive because it is a very safe place to invest. But the starting point must be to provide an opportunity that is seen to be attractive in competition with other kinds of investment, be they green or otherwise.
Ingrid Holmes: There's a practical issue in that the bank will start small, so I think you need to prioritise quite clearly what your investments are going to be that will deliver maximum UK benefit. That doesn't mean those overseas investments won't come later, but I think perhaps the most practical role that the bank could do is to act as an agent to disperse "fast-start" climate money. This is the successor to funds through carbon markets—actual direct country to country investment that the bank could facilitate through other development banks overseas. *[Interruption.]*

Q133 Chair: There is a Division in the House of Commons. We've just got one quick line of questioning, and before we go and vote we're going to have to ask you, if you wouldn't mind, to write in on this. How do we get the skills that we need for finance into the Green Bank—bonuses, expertise, etc.—combined with the more strategic role that the Green Bank would be taking in terms of the whole infrastructure? We haven't got time now and I suspect that we might have a couple of Divisions, so it's not worth prolonging our session after the vote, but we would be very interested in any comments you'd like to send back to us on that or, indeed, anything else that you feel that we didn't cover in this session before the votes in the House of Commons caught up with us.
Neil Carmichael: And also how to attract the best people to the bank both from the financial world and the green technology world and encourage them to really get going.
Chair: That would be helpful, but I would like to bring the proceedings to a close now. Thank you so much. It really has been helpful. The fact that we're all abandoning you is nothing to do with the quality of the evidence we've heard. Thank you very much indeed.

Wednesday 8 December 2010

Members present:

Joan Walley (Chair)

Peter Aldous	Sheryll Murray
Neil Carmichael	Mr Mark Spencer
Zac Goldsmith	Dr Alan Whitehead
Caroline Lucas	Simon Wright

Examination of Witnesses

Witnesses: **Elliott Mannis**, Trustee, Woodland Trust, **Prashant Vaze**, Chief Economist and Head of Fair Markets, Consumer Focus, and **Richard Wilcox**, Head of Social Banking Unit, the Co-operative Bank, gave evidence.

Q134 Chair: May I give you a really warm welcome on a cold day to the Green Investment Bank inquiry? Thank you all for coming along. We are one down; we had four witnesses but there are three of you. We are looking at the smaller scale issues and aspects of this. I thought it might be helpful, to begin with, to invite each of you to introduce yourselves and give a very short—and I do mean short—introduction on why giving evidence to this inquiry is so important to you in terms of the points that you wish to raise.

Richard Wilcox: Thank you very much and thanks for asking us. My name is Richard Wilcox. I head up the social banking unit within the Co-operative Bank. That deals with any of our customers who have anything to do with social or the environmental aspects. Particularly for today it is renewable energy. We have a team of 20 people financing onshore UK wind, hydro, AD/CHP biomass schemes, typically in the sub-£20 million seam, so at the smaller end of the market but not at the micro end. We have a total lending book of about £400 million and growing. There is very, very strong interest at the moment. We have a work-in-progress schedule that is bulging. My interest in the Green Investment Bank is how you can help to unblock the blockages to allow us and other banks to do more in this sector.

Prashant Vaze: My name is Prashant Vaze. I am the Chief Economist and Head of Fair Markets for Consumer Focus. We are a statutory organisation. We were set up to champion customer interests. We get essential resources from energy customers, postal customers and about a third of our money is unrestricted so it is just for the general customer interest. I am also currently writing a book called "Repowering Communities", which is of some relevance to this inquiry because it is to do with projects in North America and Europe to try to reduce emissions from communities. Consumer Focus has been quite involved with DECC over the last 12 months or so on the Green Deal and the Pay As You Save model before that. We have also been working on fuel poverty issues, as I am sure people here are aware, and doing stuff on affordable warmth and things like this. Earlier this year we did an investigation into the cash ISA market, so we have an interest in other retail savings markets as well.

Q135 Chair: Thank you. I know the Woodland Trust is keen to give a very brief introduction as well.

Elliott Mannis: Thank you. My name is Elliott Mannis. I am a non-executive director of the Woodland Trust. For my day job I am chief executive of a firm called London Bridge Capital, which is a corporate finance adviser to the clean tech and renewable energy sector. We are here today to share a few thoughts around the possibility of the Green Investment Bank investing in woodland creation and similar conservation projects.

Q136 Chair: Thank you very much. Our first question to each of you is how the Government should engage with individuals and communities when designing the Green Investment Bank. It is very easy for there to be a complete priority on the big investors and on the large-scale investments. We are particularly interested in terms of what the design should look like in respect of how it is able to address the needs of citizens and communities.

Richard Wilcox: I absolutely agree. To me it is a two-stage process for the Green Investment Bank. On the one hand there is a real opportunity to seize change in the structural market for renewable energy, but that is going to take a long time and a lot of money to deliver. In the meantime there is an awful lot of short-term quick wins that can be gained at the community end, some of which are non-financial and some of which are advisory and enabling in structure. They can be done pretty quickly. There are others which are financial but not hugely costly. In doing the big structural changes, I think it is really important that the Green Investment Bank doesn't lose sight of the smaller opportunities, particularly at community, SME and the corporate end.

Q137 Chair: In terms of the work that you are doing and the long-term plans that you have, could you perhaps give us some idea of the particular subjects or projects that would be really suited to what could come out of the Green Investment Bank?

Richard Wilcox: Yes. As I said, we are primarily funding energy generation: that is onshore wind, hydro and anaerobic digestion, and then energy efficiency, which can include CHP and district heating schemes. As I said, we have a work-in-progress schedule that is probably in excess of £1 billion for small-scale sub-£20 million projects. The problem is that there is probably only us as a bank, and a couple of smaller social enterprise banks, that are active in that end of the market. It will take us some time to work through that work-in-progress list because they are quite complicated structures to deliver. The essential nature of a £20 million or a £10 million renewable energy scheme is the same as a £50 million or £100 million scheme. It takes the same length of time to deliver. Any relief that the Green Investment Bank can deliver in terms of capital costs or equity for the small-scale community to unblock that would be very beneficial. It is really helping us, and others like us, to lend more.

Q138 Chair: It occurs to me that I should perhaps declare an interest because I have an account with the Co-op Bank. In terms of the specific small-scale projects that you could be working on, do you feel that there is sufficient opportunity to have a dialogue with those designing the Bank now to ensure that when we know what it is going to look like in detail there will have been some real regard to addressing your side of the market?

Richard Wilcox: I think so. We are talking regularly to DECC and engaging with them all the time. As I say, I think there is a real need for it to be hugely beneficial in the large scale, but I don't want everybody just running off to try and do carbon capture and storage, grid infrastructure and all the rest without remembering that there are support mechanisms that could be put in place to help finance the smaller scale schemes as well. DECC seem to be on board with that, and we talk to them regularly.

Q139 Chair: Do either of you want to come in?

Prashant Vaze: We have been very supportive of the whole Green Deal enterprise that the Government are announcing. We are very conscious that there are very substantial calls for capital from large-scale infrastructure needs like power stations and power lines. I think there is an equivalent level of investment needed in the much more domestic and community level stuff. You see figures of £200 billion bandied around. I would guess there are equivalent figures on the domestic and community level for things like district heating systems, which Richard has already mentioned, and some of the high-cost installation measures like solar installations, internal insulation. I think there is a real role there for getting that kind of investment in.

The way we hope Green Deal will develop is that it is not going to be restricted to just the big six energy companies being providers. We hope very much that some of the Green Deal providers that come forward are slightly non-conventional. I was speaking this morning to a social housing provider. I know very well that local government is quite interested in this as well. There might be much smaller players as well who can come in and not necessarily get access to the capital markets in the way that big energy companies might do, and to an extent local government might do too. We are very much hoping that the Green Investment Bank can provide that capability of talking to small Green Deal providers who have aggregated a reasonable amount of projects together. I was talking to one this morning that is responsible for 30,000 homes in the Newcastle area. Often the kind of investment needed is quite substantial in the aggregate, but it does rely on low-cost finance. It is important that the Green Deal can supply that kind of low-cost finance. Essentially it can borrow from the money markets at a cheap rate and it passes on that discount. I hope also it has the kind of skills and in-house knowledge that understands what a good project is and is not too risk averse, in the way that some banks might be otherwise.

Chair: Mark, did you want to come in on that point?

Q140 Mr Spencer: It was really just trying to draw the line between what is small scale and what is large scale. I didn't know if you wanted to have a stab at how you do that. Are we talking sterling or megawatts? Where do you draw the line? What becomes large scale and what is small scale?

Richard Wilcox: We tend to finance primarily above a megawatt at the moment but are looking to come down in scale with the advent of feed-in tariffs, because that has made it much more attractive to do slightly smaller scale. We will come down probably to the 250,000 kilowatt end or 500,000 kilowatts. There is still that microgeneration area which is entirely separate. In my opinion, that is more Green Deal than the Green Investment Bank and I see a difference between the two.

Elliott Mannis: At the risk of complicating matters, can I perhaps suggest a slightly different dimension for looking at things? A lot of the debate so far—not just today but generally—has been focused around the scale of projects and perhaps a perceived risk that a lot of the effort and expenditure that the Green Investment Bank would devote would be focused on large-scale infrastructure to the peril of smaller projects, or perhaps even start-up and technology things. That is a good and worthy debate and one we should focus on. I think there is also a different dimension. One could distinguish between what I describe as the built or the industrial environment, whether that is large scale or smaller scale, and what I would describe as part of the social infrastructure. It is fantastic to look at carbon capture and storage mechanisms or ways to get an efficient grid, but at the same time we all want green social public spaces. Most people would declare an affinity for woodland, and woodland can be both a useful asset from an investment perspective and a very useful way of sequestering carbon. I would suggest that one of the things that ought to be in contemplation on the Green Investment Bank's agenda is how it addresses that additional agenda item; otherwise what we will end up with is lots of technology but not a lot of green space or trees. The solution probably lies in addressing all of those things in the round so that this is still a jolly good place to live.

Q141 Chair: How do you think that that might be written into the criteria at such time as the Green Investment Bank becomes operational and that it could take account of that difference that you've just described?

Elliott Mannis: As a suggestion as to how this might work, one needs to think about how the Green Investment Bank might be funded, because it obviously needs to be capitalised in some way, and then how that money is actually applied and used. One of the things the Green Investment Bank will be thinking about is what are those different sources of capital, what are the applications and how does it match time-wise in terms of assets and liabilities because they need to be in balance otherwise banks end up with a problem.

As a suggestion, one could have investment bonds, be they either corporate investment bonds or ones that members of the public could participate in. You could use a portion of your ISA or you could have a top-up element in your ISA. There are all kinds of things that would quite naturally have an affinity, both with the corporate world and with individuals, where people would want to do this type of thing. To be very clear, people make charitable donations towards woodland today. If one is able to make a practical investment and actually get a rate of return as opposed to just the feel-good factor that comes from a charitable donation, that would be a good thing. Then you could earmark those funds towards particular social outcomes or purposes.

For example, there are in existence today, through other institutions types of investments where you can invest in forestry. One doesn't get a fantastically great rate of return but one does get great stability in terms of the yield of that asset. It tends not to be very volatile. You are pretty much assured of getting your money back because you are investing in land and trees. It isn't like investing in an industrial concern. At the same time you are investing not just in a fantastic social environment but also in the sequestration of carbon. That obviously goes some very substantial way towards meeting both the social and technical objectives that this is all about.

Q142 Chair: What in effect you are suggesting, which was my next question, is that there should be some kind of a mandate in place to have regard within the Green Investment Bank to ethical policies—which is at the forefront of what the Co-op does—and similarly somehow or another to value those values when decisions are being made. How do you think that could most easily be done?

Prashant Vaze: I would phrase that a little bit differently. Returning back to your question about what the appropriate size of the deal is, if you look at some of the examples in America, there have been examples—for instance in Berkeley—where something called PACE, the Property Assessed Clean Energy financing system, has been attempted in a number of cities and localities in California and elsewhere in America. Berkeley had a real problem. I went and interviewed them and they managed to get about 40 or 50 people on board. Basically the transaction costs of dealing with such small sums of finance posed a problem. In the end we are talking about a bank, so a bank has to make projects that are individually viable. Obviously I agree with many of the points that Elliott and Richard are making, but in the end a project has to be viable and wash its face. Some successful schemes in California have included ones in Palm Springs, where I think you are looking at deal sizes of several million dollars. It is important that the project sponsor comes forward with a reasonable aggregation of individual projects; otherwise the transaction costs would be too large.

Q143 Chair: But how would you balance whether or not what was viable and what was working was as important to, if you like, the more excluded or marginalised parts of society or community groups?

Prashant Vaze: That is a very good question and one that we feel is very important. At the moment the Government has a number of policies in place to try to address that. We are very supportive of things like the Energy Company Obligation, which is essentially trying to make sure that certain amounts of energy bill money goes towards the fuel pool. It is very important that the Green Investment Bank has that in-house capability to understand the various Government schemes that are out there, so to make sure that when deals come forward it actually makes full use of those. I am very aware that in Wales, for instance, there are things like Objective 1 money being used for projects as well. The Green Investment Bank should hopefully help the project sponsors to identify particular streams of money and take full advantage of those. It is also important that the Green Investment Bank passes on the cheap cost of finance that it has and isn't prejudiced against particular projects because the credit ratings and credit records of the individual communities are not great. They should look at each project in its own right.

Richard Wilcox: Just coming back to your original question about how you would make it accountable, transparent and ethical, you could always try making it a co-op.

Q144 Peter Aldous: A theme that I picked up from reading the Wigley report is that we have a very steep mountain to climb in terms of being able to meet our renewable energy targets by 2020. For the GIB to make an impact you've got to go for some big projects to start with, in terms of Smart Grid and offshore wind, for instance. From what the three of you have said, I get the impression that you may not agree with that approach.

Richard Wilcox: From my perspective, I agree with it. I think, absolutely, if you want scale that is what you are going to have to do, but to get those things is going to take some time. Why not, in the meantime, do some things that you can do quickly? As I say, don't lose sight of the fact that there are huge opportunities at the smaller end of the commercial scale just by focusing your whole attention on the long-term picture.

Prashant Vaze: I agree with that. It is important that the Green Investment Bank has regard to the profile of spending disbursements and actual income coming in. I do want us to remember that a lot of individually-sized projects in aggregate make up huge amounts of carbon. Only yesterday, the Energy and Climate Change Committee reminded us that something like half of our emissions are from heat, and about 80% of those are from houses and commercial premises. In aggregate those are very large scale.

Richard Wilcox: Also, small scale tends to get local agendas. It tends to create jobs in the community. It is embedded generation whereas the large scales aren't. I think it is important that there is a balance in all this.

Elliott Mannis: At the risk of us being unanimous, absolutely we need to do some very large things to get some quick wins and get some impact. But we need, also, to be very cognisant of the fact that we are talking about the use of public monies. Public monies need to address a whole host of goals, including the environment in which we want to live and all manner and different forms of sequestering carbon in all its different ways. In particular, we would suggest that there need to be some clear objectives in terms of not just how monies are raised but how monies are focused and deployed. I am looking at Appendix 3 in the back of the Commission's report on page 45. It talks about technologies, infrastructure and investments, but it doesn't talk about the non-built environment, the social environment. I think in the mandate to the Green Investment Bank, there must be a very clear statement around the purpose and intent and how funds ought to be deployed because it is our money. It is the antithesis of a bank in the traditional sense, capitalised from private funds. This has to deliver a whole host of goals, and I would suggest they are much broader than just investing in large-scale infrastructure projects.

Q145 Peter Aldous: Just one other supplement, and you have semi-answered this. Wigley doesn't dismiss the smaller schemes but another theme is that he says there is work to do in terms of aggregation to make projects and packages attractive to the market. From the way you are talking you appear to be ahead of the curve on what he's saying in his report.

Prashant Vaze: I am saying that there are opportunities to aggregate projects at different levels. For instance, local government can be a nucleus of that aggregation, and social housing providers can be a nucleus of that aggregation. But it is important there is a clearly identified project sponsor coming forward with a viable business plan. That is obviously the important bit. I completely agree with Elliott that we shouldn't have this entity just to do with narrow carbon or whatever. It should have a greater central purpose. After all, it is being supported by BIS, so I am sure they are not going to be indifferent to creating jobs, economic growth, development and these kinds of things. Obviously we would argue for fuel poverty as well, so it does need to have this wider purpose.

Just to remind us, it is like the KfW. When it was first set up, it was created in order to rebuild Germany after the Second World War. The EBRD was created for issues to do with stimulating market economies in the eastern bloc countries. We must not be too specific about what its purpose and function is because these things develop over time.

Richard Wilcox: I would say that one of the key roles for me for the Green Investment Bank is acting as a facilitator between the banks and the pension funds, to get a common understanding of what is a fundable deal. If we can then aggregate them, then 100 deals at £2 million each becomes a function that the pension funds can invest in. At the moment they are so disparate and siloed that there is no room for the pension funds because they can't understand a £1 million deal; but if they can understand all of them done on standard documentation, with boilerplate facility docs, etc., then it is going to bring in that part of the funding structure, the capital market structure, that isn't there now, which is to my mind absolutely essential to get the scale that we need.

Elliott Mannis: At the risk of digressing from a woodland agenda for one minute, I think what the three of us are suggesting is that the scope of the remit could go further. In particular, with respect to the point about aggregation, one of the things any Green Investment Bank would need to be mindful of is where the technology comes from. It is great to invest in gigantic carbon capture and storage projects or ways of making a Smart Grid, but where does technology come from? Technology tends to come from entrepreneurs and innovators. Just investing in "large-scale stuff", for want of a better term, doesn't breed the next generation of talent. The worry about aggregation that I would have, whether you do it by whatever means, is that there needs to be investment in small-scale technology and innovation because that's where the bright ideas come from. Aggregation doesn't directly address that. When the report talks about market issues or where things can't get done, I will tell you from bitter experience what can't get done at the moment, because it doesn't really exist, is small-scale funding—call it venture capital—for pre-revenue projects: things that are ideas, proven at a lab scale that you need to take to the next level. That's where your next wind turbine, your Smart Grid, your next whatever, is going to come from. The means to finance that doesn't really exist today.

Q146 Zac Goldsmith: On this point, I am a big fan of the Woodland Trust and I agree with what you said about the importance of addressing issues relating to the non-built environment. That is going to be a big part of the focus of the work of this Committee and the things we've discussed since its formation. My concern is that by having too broad a focus for the bank it will try to become all things to all people and might end up becoming nothing to anyone. The purpose of the Green Investment Bank, as I understand it, is to leverage very large sums of money in order to facilitate a rapid shift towards a low-carbon economy. That means grabbing the low-hanging fruit. It means trying to correct market failure in this sector and doing so within a very short period of time. It just seems to me that, if we start focusing also on forest bonds, woodland bonds and these kinds of things, we could find ourselves in a tangle. I am just wondering whether you share any of those concerns.

Elliott Mannis: The concerns definitely resonate—absolutely—and it's been a big subject of discussion in terms of our thinking around this proposition. Our perspective on it goes as follows. I agree about the low-hanging fruit. I agree about getting the big wins. I also think the big lumps of capital that are going to go into the bank are likely to be targeted in that direction. They are likely to come from the larger pension funds and a range of other "usual" sources.

There is also the very unique opportunity, given that nothing like this truly exists today, to capitalise on the public's imagination and create some momentum

where investment products can be offered to the public or offered to corporates on a very targeted basis where you can match the inbound investment capital and what it's directed towards. That might be 0.5% of what the bank does, but it could serve a very good purpose along the way without distracting from the core. It would make sense in terms of delivering a balance of outcomes together with making sure that the large lumps of capital address what truly needs to be done.
Prashant Vaze: I very much agree with your point about low-hanging fruits. If you look at the Ernst & Young report, which is talking about the kind of scale at which it might operate in the near future, in the first few years of its life, we are talking about tens of billions, whereas the challenge is in hundreds of billions. That kind of mismatch between what's available in the short term and what's needed is absolutely clear. So I absolutely love low-hanging fruits. I would argue that quite a lot of these low-hanging opportunities are at the community level, and certainly the kind of stuff that we saw from the Energy and Climate Change Committee yesterday was putting costs at minus £70 per tonne of carbon from high energy efficiency options. Even the kind of district heating, which I think you mentioned, came in at quite a low price relatively. I think it was £10 to £20 per tonne packs. Some insulation is not so good. There are relatively low-hanging fruits here, plus they will deliver quite quickly so it doesn't mean that resources are tied up for many, many years.

Q147 Sheryll Murray: We have heard that there are lots of different types of projects that the Green Investment Bank could or should prioritise. Your evidence suggests that the bank should focus on the medium and community scale projects where investment barriers are more acute. Could you tell me if you think these projects would cut enough CO_2 emissions? I know you've mentioned aggregation.
Prashant Vaze: Yes. As I mentioned earlier on, something like half of our emissions are from heat and about 80% of these are from the heating of buildings and the heating of commercial premises. The quantity of energy that is required for this is very substantial. The issue is then how much of this can be addressed. With certainly some of the deep retrofit type projects, for want of a better word, and we are talking about things like insulation of solid wall homes, there are something like six million of these. Each of these might cost about £10,000. I have seen figures that this kind of intervention could save maybe 30% of emissions from that building. The numbers are there. It is really working out what the barriers are and whether the Green Investment Bank or the project sponsors can bring the deals together in a way that makes it viable. That is where I am hoping that the community level will work. Some of the economies of scale you get are really from an area-based, street-by-street type of approach to energy insulation, especially to external walls, especially some of the kinds of things on windows and heating systems.
Richard Wilcox: I agree. I think it is speed of delivery. A lot of these are ready projects now. It is also about energy mix and the balance of that energy mix within the UK.

Q148 Sheryll Murray: Do you think these investments would provide a worthwhile financial return for the investments?
Richard Wilcox: Yes is the short answer.

Q149 Chair: How?
Richard Wilcox: They would have to focus on the right sort of technologies in the right places. There is no point putting solar panels in Aberdeen. There is no point doing a wind farm in central London. But if you focus on those areas where they have the strongest natural resources the financial returns are there. It is acting as the catalyst to make those happen and widen that market. That is where I think the Green Investment Bank is not taking non-commercial risks or non-commercial returns; it is just acting in a way that others don't to bring in that private sector investment.

Q150 Sheryll Murray: You have just said there is no point in putting solar panels in a house in Aberdeen. How would you justify the different projects in different areas from a national bank?
Richard Wilcox: Because I think they can focus geographically in the areas that best suit the resources there. In Aberdeen we are doing an awful lot of wind turbines: smallish 1 MW and 2 MW schemes that are perfect for that area. In Cornwall, the same. In London maybe it is all about retrofitting public buildings. It is not just energy generation. We shouldn't focus purely on energy generation. Energy efficiency and heat are just as important.

Q151 Zac Goldsmith: Just to clarify, relative to the overall portfolio of the Co-operative Bank, how big is your emphasis on renewable energy and clean technology?
Richard Wilcox: At the moment it is about 5% of our corporate asset book, but, as I said, it has grown. We have a work-in-progress schedule in excess of £1 billion.

Q152 Zac Goldsmith: How does it perform?
Richard Wilcox: It performs well.

Q153 Zac Goldsmith: Can you give us an example? What sort of performance?
Richard Wilcox: We lend at commercial rates. We don't subsidise it. I sound like a Heineken beer commercial. We go to places that other banks don't go but not to achieve sub-market returns. It is because we truly have a triple bottom line analysis. It is social, environmental and financial. Other banks don't have that triple bottom line. It doesn't mean it's not economic to do: it is. We make money, but it's about more than that. It is about creating the environment and it's about creating sustainable social benefits.

Q154 Zac Goldsmith: Can I ask one more question instead of butting in? What has stopped you at a billion? Is it a lack of capital on your part? How much demand could you feed if you were an unlimited bank?

Richard Wilcox: To be honest, that's without even going out and trying the market. That is just word of mouth from schemes that we've done already. I think there is a huge untapped market. But you are right: it is lack of capital. It is not just our lack of capital but lack of capital from the community groups. That is another area where we would really like to think we could focus on providing some pre-development capital for community groups. To get to planning is going to cost £200,000 or £250,000. That is a difficult sum of money for community groups to raise. That is pure risk money. There is nowhere for them to go to get that money. We can come in after they've got planning because we're a commercial bank, but before that stage there is nowhere for them to go. To me that is a perfect role for GIB because it is addressing a market failure that other people aren't there, and it's really acting as a catalyst to the market.

Prashant Vaze: I was going to answer your question of "Will there be money?" I think our answer is probably a bit more guarded. Yes, it could, in a way. We are just collating some work at the moment which hopefully we will be publishing this month, or maybe next, which is looking at the Green Deal and seeing whether households will save money at the range of interest rates we think are likely and the cost of measures that we think are likely. It is very, very conditional on interest rates, especially for some of the external insulation measures. It does matter how the Green Deal is structured, what the interest rate is that is available and that is where the Green Investment Bank comes in.

In terms of some of the microgeneration options, the way the Government have designed the feed-in tariff—and hopefully the renewable heat incentive, when it's tariffs are announced—is that they are intended to generate returns of something like 6% to 8%, so that should be reasonably satisfactory. The devil is in the detail. We have been looking at quite a few numbers for things like external wall insulation costs, and it varies from £5,000 up to £14,000. I think I mention some of the high end costs in there. Those kinds of high extreme costs will not make very attractive returns. Costs needs to come down, so that's why you need innovation in delivery.

Elliott Mannis: I want to put a woodland perspective on these things. Will woodland generate a return? The answer is simply, yes, it should. For me it delivers one other particular outcome which relates very closely to this notion of a triple bottom line, which is that it gets community engagement and involvement. It is one thing delegating to large industrials the task of addressing CO_2. What it takes on an inter-generational basis is a change in the mindset, which means everybody needs to be engaged, which is why you get children to plant trees and why everybody ought to go for a walk in the woods. If you can make a bit of money at the same time, that's a good thing to have achieved. So you could risk carbon sequestration; you've got public involvement; you've got nice places to be. There is a chance to achieve all of these things if the Green Investment Bank targets the uses of its capital in a broader sense.

Q155 Sheryll Murray: How could the Green Investment Bank optimise the mix of small and large-scale investments?

Richard Wilcox: That's a good question. As I say, I think it's all about the balance. Small scales aren't going to achieve it on their own and large scales aren't going to achieve the community benefits on their own. It's a mixture. We estimate that there are between 10 and 20 jobs created per megawatt of energy.

Q156 Sheryll Murray: Do you have any ideas on what mix you would have?

Richard Wilcox: No. I think that is probably for others to answer. I'm not an expert on energy mix.

Prashant Vaze: I'm not a banker, but it needs to have regard to financing some pre-construction stages of a project. There are different phases to a project. I think the Bank should also have a mix of different phases, projects are quite high risk pre-construction so find it quite hard to attract capital. As you were saying, it is appropriate they have some of those, and maybe they sell those projects on once they are completed. We think that some of the lowest hanging fruits are in community energy efficiency and energy. The main role of the Bank is to develop that kind of expertise so that it is the expert on making that assessment and making that judgment call.

Q157 Dr Whitehead: We have touched on the barriers that prevent the take-up of energy efficiency arrangements on a large scale, and in particular, Mr Vaze, you have mentioned the issue of the capital-intensive nature of a lot of energy efficiency programmes and indeed alternative energy programmes. Do you see the role of the Green Investment Bank as essentially being that securitiser of income and the lender of long term so that it would have a particular role in getting over those barriers in energy efficiency?

Prashant Vaze: I think so, but I'm not sure if I understood your question correctly. Taking the situation where a project sponsor comes forward, say a local authority or a social housing provider so they have the retail contacts with the actual houses where energy efficiencies will take place, I would expect them to make a request for finances and the Green Investment Bank would then essentially aggregate those loans and then present that to the money markets. That is where pension funds come in. Because you've got this aggregation it is pooling the risk and therefore if an individual project is not quite performing aggregation will smear that out. That's another role I would want to see.

Richard Wilcox: I agree with that, but over and above that there is the opportunity for GIB to take first loss or equity pieces in securitised structures so that, when we do aggregate, although the pension funds will want to minimise their risk—and the way they can do that is if GIB can come in and take what they call a first loss of the equities in these structures—that will lower the overall credit risk and then attract more of the long-term institutional market.

Prashant Vaze: I think that is a very important point actually. If you look at banks like KfW, they do effectively have the Federal Government or the State

Government acting as lender of last resort. A number of the international institutions like this either have that or have a lot of paid-in capital, so I would totally support that, although I suspect the Treasury might not have quite that view.

Elliott Mannis: I think there is a very unique opportunity for the Green Investment Bank to do exactly what you've described, which is to take that very long-term or almost inter-generational view. Some of the projects that might be difficult to finance, or something like woodland, have very significant upfront investment costs in order to put trees in the ground or to do other things. These projects do generate returns but they are in the medium to long term. It takes a long time for a tree to grow, as we all know, but with patience it pays off. I think there is a role for the Green Investment Bank, given its broader perspective, and it's use of public monies, to invest in just those types of infrastructure and to create the financial model where it would not otherwise exist.

Q158 Dr Whitehead: The Green Deal, to some extent, works on that assumption, which is that the capital costs will be defrayed against the bill to the household for energy supplies and therefore will vault over the forward capital problem by bringing in the income over a period of time into that bill for the household and not just the householder. But in terms of the funding of that, that appears to be likely to emerge, the companies involved in that would expect perhaps 8% or 9% return. Certainly there is some work that I've seen being done, by Climate Change Capital, for example, which suggests that that radically depresses the amount of work you can get done. How might a Green Investment Bank get over that particular problem? As we have mentioned, it is not a question of lending at giveaway rates but there are other features, I guess, of how a Green Investment Bank might work, including the question of the way it might be backed and resourced, that would deal with some of those issues.

Prashant Vaze: I think, as you say and as the evidence we are going to be publishing later this month demonstrates, the viability of individual measures is very, very interest rate dependent. Anything that reduces interest rates from those you suggest down to 5% makes a really, really big difference. If the UK Government are prepared to underwrite those kinds of debts, then they can lend at 4.5% or 5%. Those are the kind of rates the UK Government can lend at, so that is what is there to play for. I was talking to people at KfW and they lend out at 2.75% at the moment because the Government are not just the lender of last resort; they are actually giving a subsidy which they pass on as a reduction in the interest rate. I absolutely agree that it is important that we focus on how you get the Bank to access capital at the lowest cost. The sort of potential Green Deal providers we are seeing might not be able to lend at even 7% or 8% because their own creditworthiness is not worthy of that. So there is a real issue. If you want the market to bring in novel Green Deal providers, it is important that they don't have to present to the money markets their creditworthiness because that will hold it back or prevent them from re-entering that market.

Q159 Dr Whitehead: Would it be overstating it to say that perhaps the Green Deal may have quite a substantial need for the Green Investment Bank to get off the ground, as opposed to some of the ways in which finance is at present being looked at?

Prashant Vaze: We have spoken to DECC on this on a number of occasions. I don't think we've got great clarity about exactly how the finances are going to be priced. I have heard figures of 8% and 9% as well. That is quite a high rate and it is going to hold things back. I think it is important to try to do things which will reduce that rate, and also bring in, I would hope, the lower cost Green Deal providers and not just the established energy companies who have a certain rate of return that they require for their shareholders.

Q160 Dr Whitehead: Again, I think this little, shall we say, lack of clarity is, yes, exactly what this entails, but the Energy Company Obligation following on from Green Deal, certainly looks as if it could approach a number of the areas in energy efficiency in hard-to-treat properties, for example, where an even larger amount of upfront capital is required and the returns are even less certain. Would a Green Investment Bank have a particular interest in that, or do you think that the way the figures might work as far as that is concerned would put it beyond the level of commercial lending altogether, assuming you had a real bank which was involved in that?

Prashant Vaze: Just to take that question in parts, the Energy Company Obligation as far as I understand it is going to be used for subsidising measures of the fuel poor, not yet defined, and also for measures in hard-to-treat homes. It is the right things it is being targeted at. The challenge there is getting enough money into that through that mechanism. It is also why the ECO is going to be funded through energy bills on everybody else. We have worries about it pushing up the costs for everybody else if it is done at the scale that is necessary. If we are talking about figures of £50 billion or £60 billion in insulation measures and district heating measures, there is no way that could be funded from fuel costs through an ECO. The money isn't there. That is why you cannot get away from the fact that you need to have low interest rates as well. Yes, we need to support the ECO and target it well on people who are in genuine need and the vulnerable need. Hopefully it will address the issues in the hard to-treat homes as well, but ultimately that is going to get paid for by other energy customers in the way it is being presented to us.

Q161 Neil Carmichael: Before I start, I am going to tell everybody to take note of my entry in the Register of Members' Interests, because I have interests in renewable energy. While you have been talking I've been reflecting on the energy systems that we have at the moment—coal, nuclear and mostly oil. I can't think of one that hasn't had significant Government involvement in this development in the last century or so. In America, there are tax credits and all the rest for oil, and the building of the Hoover dam. You can see the drift I'm heading in. Certainly in this country, there is the nationalisation of coal, the creation of the Central Electricity Generating Board, the development

of nuclear weapons and the consequences for the nuclear industry. I want to ask a general question: given that background and given the criticism of renewable energy, "Oh, it has to be subsidised," are we doing enough to propel the market?
Chair: Would any of you like to answer? Don't feel you have to.
Prashant Vaze: I will answer very, very briefly. There are a number of problems that renewable energy faces, of which capital availability is just one. As people around this table very well know, planning permission is a big bugbear. I personally think the energy market, full stop, is a big issue. I hope that DECC will address this in the electricity market reform. I am sure people here are very familiar with the way that the electricity market often handicaps less reliable, smaller scale systems already. There are many things that renewables need Government to get right. The way that the feed-in tariff and renewable heat incentive are brought in will, I hope, address quite a few of the financial things, but all number of things still need to be done on things like biomass, supply side issues and air quality issues. There is no single bullet for renewables, I am afraid.
Richard Wilcox: I would absolutely be opposed to it. I think feed-in tariffs and RHI, help, and Prashant mentioned planning. I think planning is a major thing, so if you can help on anything planning would be one thing that the Government could do.

Q162 Neil Carmichael: I often get the feeling that there is possibly more to do. If you compare the development of electricity in Germany and Britain at the beginning of the last century, twice as many German households had access to electricity than we did in Britain. That was just round about the end of the first world war. If you look at the drivers behind that, you can see that it was the behaviour of Government that was doing the trick in Germany and not enabling the same speed of development in this country. Given that historical background and existing systems of generation and distribution and all the rest, it strikes me sometimes that what we are doing is relatively small scale. I am trying to put my next set of questions into that context.
Chair: Please answer that, and then maybe we need to move on to the set of questions.
Elliott Mannis: I will see if I can answer this in a very concise way. I think your point is a very good one. I think there is a very important role for Government in providing economic stimulus towards areas that need to be moved forward. Quite often markets don't do it on their own. If one thinks in terms of investment in renewable technology in the broader sense, quite frankly people won't invest if it doesn't provide what they deem to be an adequate rate of return. It's got to compete against the broad range of all the other asset classes that are out there. People don't do it from the goodness of their heart because every pension fund needs to make a good return. There is a very important stimulus role be it through subsidies or just pointing money in places where it doesn't otherwise reach. One of the things—this is a digressionary point, for which I will apologise slightly in advance—

Q163 Chair: I really want us to just focus, if we can, on whatever is in the bigger picture but relating to the Green Investment Bank.
Elliott Mannis: There is an important role for Government to provide the stimulus towards places it needs to be.

Q164 Neil Carmichael: The question then is: is the Green Investment Bank the right kind of mechanism to do exactly that? What other obstacles do you think are there which we need to smash down to bring about the outcomes that this is all aimed for?
Richard Wilcox: Very quickly, yes, I agree that the Green Investment Bank is the right thing. It is all about building market share and access to funding, in my opinion. The funding is there: it just may not be in the right places. There is a big role that you can do to actually stimulate that big sea change in the capital markets to get that. Funding is very important. The Green Investment Bank to me is critical in that. What other things? I will let the experts talk about that, but planning and grid connection are two major issues for me.
Prashant Vaze: I will echo Richard's point about the necessity of the Green Investment Bank. There is a huge quantity of investment needed. An institution that is intelligent in terms of appraisal of projects, that's got access to low-cost capital and that has this role of aggregation is absolutely crucial. I have been researching the history of American and European systems quite a lot for this book, so I am happy to talk to you at some later stage about this.
Chair: But not now; please not now.
Prashant Vaze: There is quite a lot of difference in systems in other countries.

Q165 Neil Carmichael: Yes, but they all boil down to the same thing, don't they? That's the interesting point.
Prashant Vaze: In the US most of the rural electrification took place as a result of the New Deal. It was a very, very deliberate act on the part of—Government
Neil Carmichael: Exactly.
Prashant Vaze: In Denmark, as people like Dr Whitehead will know, the Heat Supply Law has been instrumental in creating regulations which essentially creates a forcible demand for heat. All of these things are different in different countries. The feed-in tariff, when Germany first operated it 20 years ago, was very deliberately to break the oligopoly of the big energy companies there because of the fear Government had of what used to be a public sector company and became privatised in the 1950s. So there are very, very different systems in different countries.
I don't want to go too much into the history of different countries, but in terms of barriers I have already mentioned that the electricity market is a big issue. I think we will be presenting evidence in different fora on that, so you will get an opportunity to hear our views on that. We know about the issues to do with technologies being at different stages. For instance, a feed-in tariff is of no use at all to wave technology. It is not there yet. You need different types of support for different levels of technological

maturity. I have nothing to add on planning. This is not a Consumer Focus view, but there is a role for more regulation, especially on some of the demand side of things. A certain proportion of people will respond to the stimuli of economic type; other people won't. If it is an important and genuinely low-cost solution, I think regulation with the appropriate phasing and nudges is likely to be effective.

Elliott Mannis: I agree that potentially the Green Investment Bank could be just the right thing, but it depends very much on what objectives or remit it is given. If it is given a very narrow remit in one sense, it will deliver to that purpose. If it is given a broader remit, then it will deliver to that. It boils down to the specification. I think with regard to stimulus, incentives or subsidies, one needs to look at both carrots and sticks. One of the issues that could be for contemplation, for example, is if we think about our extractive industries—whether they are oil and gas or mining or variously others. When we think about paying the price of a litre of diesel at the pump, does that really put a price on carbon or the impact on biodiversity or a host of other things? I would argue at a high level that one needs to think about how you incentivise the right things to be done and how one properly puts a social price on extractive industries and other things that are not necessarily delivering to the wider objective. We only price things today that we can definitely put a pound sign against. What we can't price or what we don't have the tools to price yet, because it is emerging, is the value of biodiversity or the value of other things that are arguably destroyed by other means. Both tools, together with a very clear remit to the Green Investment Bank, could deliver precisely what we want if it is well crafted.

Q166 Chair: Can I ask Mr Mannis as well, for the record, in terms of the Green Investment Bank funding green investments such as tree planting, if it is a question of having to find that financial return in the Bank, how would you account for that?

Elliott Mannis: There are several points in this. If I have misunderstood the question, please help me. Do I believe that woodland creation—an investment in woodland—would deliver a pure financial return? Yes, I do. I believe that return is modest: i.e. in the range of probably 2% to 3% per annum. How would that be accounted for? The return is generated in the long run over a portfolio of assets. If one invested immediately in woodland today, it is not likely to generate a great return in the early years because young trees need to grow and emerge, but as they do there is the opportunity to take benefit from that woodland through harvesting it, as one would with any other agricultural crop. Over a 30, 40, 50-year term one will see cash returns and delivery of a running yield as one would with any other asset class. I don't know if that answers the question for you.

Q167 Mr Spencer: Just on that point, as a nation how strategically bright would that be, given the pressure on land, in terms of our food security and our energy security? How strategically right would that be to take an enormous amount of land out of food and energy production and put it into woodland?

Elliott Mannis: I think there are several parts of this. First of all, I will qualify my answer by saying I am not an agricultural expert. On what I do know, first of all, the UK has, by comparison to its European peers, one of the lowest rates of woodland as a function of the extension of farming and intensive agricultural use over time. If one looks at where one can expand, I think you can see that one could easily expand the area of woodland cover by putting it in places where there isn't natural agricultural production. You could think of hilly areas in Wales or in Scotland, etcetera, that aren't necessarily the most productive hectare of land so it wouldn't infringe. Therefore you could have the benefit of the carbon sequestration and all the other biodiversity and social benefits without having to put pressure on peak arable farmland. There is more than enough land to achieve both goals that I would sacrifice.

Q168 Zac Goldsmith: Just very quickly on that point. I am going to sound like a philistine now and I apologise in advance. The point about the Green Investment Bank is to trade this shift to a low-carbon economy. If it were to invest in woodland related projects, it would be on the basis of its contribution to carbon reduction. That is the only way you can justify the Green Investment Bank, as we all understand it at the moment. I know you would like a broader remit, but that is within the context of most people's understanding in the Bank. If that was the rationale, the Green Investment Bank would get a much better return for its investment by investing in woodland-related schemes in other countries, not this country, where land is less expensive, where labour is less expensive and so on. If you are only looking at this in terms of carbon, which I think the Green Investment Bank will do, the way I see it, it is very unlikely the Green Investment Bank would ever find itself investing in these kinds of schemes. I am not suggesting they are not important, but it is hard for me to understand how the Green Investment Bank is the vehicle that you would look to to deliver that kind of funding. Maybe there are other sources of funding—I'm not sure where—but it is hard to understand and hard to imagine how the Green Investment Bank would be the vehicle that you are looking for.

Elliott Mannis: Can I provide a different point of view? It is ultimately not for me to judge; I am not setting the remit for the Bank. I imagine it in two ways. First of all, I think the Green Investment Bank will quite naturally look at a hierarchy or a list of competing projects. It will look at the aggregate amount that can be saved, and then on the margin of what is the cost per tonne of CO_2 saved it will see where woodland features in that list. We would argue—we would say this, wouldn't we?—that the price of saving a tonne of carbon invested in woodland is competitive against a range of other alternates, but that judgment needs to be—

Q169 Zac Goldsmith: Even in this country?

Elliott Mannis: Even in this country. There is a secondary point above and beyond just the broad mix, which will depend on the remit given to the Bank, and

I will make it retail investors. Let's say retail investors are allowed to participate and are able to determine how their monies are utilised, and I will use examples of either a green ISA or a woodland bond, Say I wanted to invest £100 in a woodland bond and I target that money, and the Green Investment Bank has that product, then that money would go directly to the purpose. I agree it wouldn't necessarily have featured in their hierarchy. It is doing it because I want it to. Therefore the Green Investment Bank is not just for tackling the carbon problem: it is serving a broader social purpose at the same time. That is why I think it comes back to what people want that Bank to be and what purpose it is going to serve. Is it just about carbon reduction or is it about getting the population involved in targeting money towards purposes it wants to be seen achieved at the same time?

Q170 Zac Goldsmith: I have a final question. If what you said is true, and I think it is—I have resonance with it—do you need the Green Investment Bank in order to facilitate those investments? If the demand is there, if you were to create the financial opportunities for people to invest in, why do you then need the Green Investment Bank?

Elliott Mannis: I think there is an opportunity that the Green Investment Bank provides by the nature of its scale and the momentum it will necessarily have, where it can address not just woodland—I am here arguing that point today—but you could make the point about community scale projects or a whole host of different things where, in and of themselves, it is quite difficult for them to attract sufficient attention. We make the case, for example, about wanting to double woodland cover over the next 50 years. Numerous organisations have lauded that as being a great and worthy thing to do. If we are going to create public momentum around objectives like that, it does need a means of packaging the investment and making it available to the general population. An individual organisation like the Woodland Trust would struggle to do that on its own account, but if it is able to work in co-operation with the Green Investment Bank or the Co-op Bank or some other body that has the broad reach and the ability to use financial instruments—the Woodland Trust is not a bank—then there is ability to create something that we don't have today in terms of momentum, targeted investment, greater public involvement and carbon reduction at the same time.

Chair: We can see all kinds of partnerships coming out of our evidence session this afternoon.

Q171 Neil Carmichael: On that point, are you sure you are going to get the return from investment in woodland, which would be necessary to make the Green Investment Bank grow itself? That is one of the objectives of the £1 billion put in as seed funding for other investments to plough back into the Green Investment Bank so that it becomes bigger and bigger. Would it not be easier to just turn your attention to, for example, the Forestry Commission or whatever? They are currently giving out grants to plant trees effectively free of charge, when you extrapolate it out.

Elliott Mannis: There are a number of different aspects here. One of the things the Woodland Trust espouses is the restoration of planted ancient woodland sites and the planting of native broadleaf trees. When the Forestry Commission was created, it was about creating a strategic stock of woodland and that was principally through conifers. Again, one gets back to objectives and how one wants to see money utilised. I am in danger of repeating a point I made previously, so I apologise. Woodland creation does deliver a modest return. It is exemplified by numerous financial instruments you can see through other institutions today. It is going to deliver probably modest single-digit returns over the long term and great stability at the same time. We make the point simply: do we think this is the only thing an individual, a Green Investment Bank or anybody should invest in? Absolutely not. But is it one of a number of things one could and should do? Absolutely, yes. More importantly, what it does provide is that social environment to complement the built-in infrastructure environment so that there is a balance in broad society terms.

Q172 Caroline Lucas: I wanted to come back to the community scale. I have a question primarily for Richard Wilcox. In your evidence you suggested that the Bank had an "enabling role" that encourages communities to come forward with their own energy solutions. For example, in Brighton we have the Brighton Energy Co-op of which I am a member. In Oxfordshire they have something similar. These things are, as you know, springing up all over the country. I wondered how, in particular, you see the Green Investment Bank going about providing that "enabling role" to those community-based energy initiatives, whether or not it is primarily a financial thing or whether it is also all of the kind of business advice and hand-holding, because these are usually people that don't necessarily have any experience in this at all. They just have a great deal of commitment and willingness to try to make it happen.

Richard Wilcox: I am glad you have made that point because I absolutely agree. Just by way of example, we funded a community scheme on Tiree, which is one of the Hebridean Islands, which was about a megawatt of installed onshore wind. It was the first community scheme that was funded commercially and also with the lottery. It took four years to get through all the planning and environmental matters, but at the end of that the people who did it were the UK's expert on delivering small community schemes. They got inundated with calls from every community group wanting to talk to them. Bless them, they did that, but it just shows that there is a real lack of somewhere to go for community groups to get sound, impartial advice as to how to deliver these schemes. For me, it's a really crucial role for the Green Investment Bank and something that doesn't cost too much money either. We are not talking hundreds of millions of pounds to set up an advice centre for community groups. It is really important, so I absolutely agree with you.

Prashant Vaze: Can I just endorse that and say that there are probably two or three specific things it can do. If you think about the kind of challenges that face community groups trying to bring their projects

forward, one is lack of knowledge or understanding of the electricity markets. At the moment there are only one or two companies who will enter into long-term contracts with smallish scale providers. It is important that an institution has that kind of knowledge of how the system works and they can quickly direct people to the one or two suppliers that will buy their electricity. The second thing, as you mentioned earlier, is the contracts sort of stuff. Often in very, very small deals, there is the cost of getting the legals sorted out, the cost of making sure you are getting a correct deal from your point of view, that the risk has been correctly allocated and all those kind of things. It is very boring and very tedious, but unfortunately somebody has to do it and quite a lot depends on that. It would be helpful if the Green Investment Bank had that kind of in-house team skilled at structuring these kinds of contracts, to make sure that if it is a wind-based project it is not unduly jeopardised because of the nature of wind projects.
Richard Wilcox: I was involved in the early stages of the PFI market. That was very similar in the sense that one school project would get done in Bolton and another school project would get done in Rochdale, and they wouldn't talk to each other. There would be different funders and different structures. It was taking ages to get these things done. Then the Treasury task force came in, and PFUK, PPP and all sorts of different organisations came in. What came out of that was standard documentation and a clear understanding of exactly how these schemes work; and the market took off from that. It enabled what was four years to get to financial close to come down to 12 months to get to financial close.

Q173 Caroline Lucas: Can I just check out that you don't see any tension between the different scales that it sounds as if we envisage this bank operating at? On the one hand Zac was talking earlier about the low-hanging fruit, the big buck that needs to be done very quickly, versus something that sounds a lot more like hand-holding at a very local level with maybe 30 people who don't know one end of a balance sheet from another necessarily. I am speaking for myself rather than being rude about them, but people who are starting without any experience necessarily at all.
Richard Wilcox: That is why I say I think the Green Investment Bank is a two-stage process. It absolutely is about the large scale, but that is capital market people looking at structural changes in the economy. That is going to take 10 years. Outside that there are an awful lot of things that they can do, such as the advice; such as bringing the banks and the pension funds together; such as the issue about aggregation. All these things which are non-capital intensive can still get done, but they require people with expertise.

Q174 Caroline Lucas: Are you confident that Treasury and others recognise the potential for this smaller scale stuff as well as the big scale stuff?
Richard Wilcox: I can't speak for Treasury.

Q175 Peter Aldous: I think all three of you have given some very good examples of what can be done in a community at the micro level. How is the Green Investment Bank going to engage with those communities? I am assuming that we are not going to have the Green Investment Bank popping up in the High street with a branch, as it were. How do you envisage that problem being tackled?
Richard Wilcox: I hope not too, but I do think there is a requirement for regional representation or sub-national, or however many people you are going to do. Going back to the point I made before about different energy needs in different areas, it is important that you have people in north-east Scotland who understand those local needs, and people in the south-west of England and in Wales. All the different areas will have different needs, and you can't control that from London, Edinburgh or anywhere else. Yes, control in one central place but regional representation absolutely.
Prashant Vaze: I would possibly take a different view. You can have all different types of projects out there. Often a small wind project is a small wind project; a hydro project is a hydro project. I do wonder whether we do need regional representation. It would certainly significantly increase the costs. If you look at examples in other countries, again I talk about GfK. I think that was pretty much Frankfurt based. As regards the EBRD, my understanding is that they work quite closely with the retail banks in countries they lend to. In a way it has a slightly different function and is trying to develop that from the skilled capability in those countries. I am not sure I agree there is a necessity of having regional representation. Certainly it would push up the costs. With regard to the way it would interact, if it is a competent bank it would be looking at the admin costs in doing the different deals and work out for itself if it is a sensible cut-off. I don't know what that number is. I suspect it is not at an individual house level. I hope it is not £10 million either. It is somewhere in between. I think that could possibly make sense, but it is really for the bank to assess that, minimise the administrative costs and get the genuine participation of communities.
Elliott Mannis: I will give a slightly different take on that. I think there are two or possibly three distinct points for the bank. If you think of capitalising the bank and where that money is going to come from, that can be done in quite a compact and concise fashion. I am not a banker; I am not an expert. But I would imagine getting the money from Treasury, getting the money from pensions and other institutions, can be done fairly easily and centrally. I can imagine, to the extent the bank wants to engage with the greater public, that could be done in an online fashion. If one wanted to buy a woodland bond or a green bond or whatever it is, that is easily facilitated in the same way as one does other similar online instruments now. That is one side of the balance sheet of the bank. The other piece is about the distribution and the application of capital. It is a personal view, but like a lot of institutions it needs a mind of management in one central place. I am suspicious that that would be London, but it does need to have people who are accessible where they need to be. I think the example of having offices in Scotland and Wales, or where particular areas of excellence or activity are focused, would make eminent sense, but one needs to

think about how the capital is going to be deployed. It is hard to answer the question without knowing precisely what it is that is going to be done and what the remit is.

Q176 Peter Aldous: Would it be a stand-alone office, do you think, or a Government office for that particular region or—I don't know—in one of the High Street banks, which, after all, we do own?
Elliott Mannis: Personally I think it needs to be a stand-alone institution, but however that is physically deployed it needs to be done in a cost-efficient fashion. I think there are perils if it was seen to be associated too closely with any other institution, be it a High Street bank or Government, for that matter. It should be charged and given a remit to do something on its own two feet, and should be seen to be independent as such.

Q177 Zac Goldsmith: I wanted to ask Richard, as I understand it, the EBRD has quite a strict cap around the 30% mark, but I may be wrong, on how much of a project they can invest in; so they necessarily need to have partners. The reason they do that is to avoid having to have a local presence throughout Europe. It means that they can rely on the due diligence of the partners that they are working with. As I understand it, most of the people you have spoken to seem to suggest that that is the kind of model that the Green Investment Bank will also pursue. It wouldn't want to be the sole investor. If that is the case, would you still believe there would be a need for that regional or local presence?
Richard Wilcox: Yes, but I am not talking about a huge presence in the regions. I think it is important that there be some representation. I am not talking about replicating teams in different parts of the country, but I think, especially when you are talking about community groups, unfortunately there is a bit of hand-holding needed. Yes, they can access online; yes, they can talk to a central team, wherever it is; but I do think to go out and see the local conditions is important. I do tend to disagree with Prashad. A wind deal is not a wind deal; a hydro deal is not a hydro deal. They have shared common characteristics, but they are different wherever they are. Have a central point of excellence but with some regional representation.
Prashant Vaze: I think this does get at the nub of "What is it there for?" If you see it as primarily a bank—which is essentially to do things like contract with the money markets, a Treasury function, do risk profiling—for that kind of stuff I don't think you would want it to have regional representation. Bear in mind that the EBRD is based in London. The last time I looked it's not anywhere near its field of operation. It is possible to do these things remotely. I think the EIB is established in Luxembourg, so again it is quite normal for these kinds of operations to take place in a centralised fashion.
You mentioned whether it has a retail presence in terms of getting in savings. In our submission we suggested NS&I might be a mechanism for doing this. That already has an internet presence and it also uses the Post Office networks. In a way it is the most distributed banking network out there already, but that is quite a separate function to the disbursement function.
Chair: I think we wanted to move on to what other things need to be rationalised. I am going to bring in Neil Carmichael on that.

Q178 Neil Carmichael: I have been looking at micro hydro schemes and so forth because I do think that is quite an interesting area. It is certainly the sort of thing in which two of you would be interested. One of the obstructions is the attitude sometimes of the Environment Agency, for example, not least because they are worrying about fish, water flow and so forth. That is one of the obstructions that I see generally which don't help renewable energy. You can see straightaway that there is a conflict within the world of the environment because, clearly, damaging rivers and fish prospects is not constructive either. How do you see that argument and discussion unfolding?
Richard Wilcox: Hydro schemes do have to balance the environmental aspects, but I do agree that sometimes the Environmental Agency could be seen to be going over the top slightly. We funded a scheme where they had to push a fish ladder in at enormous cost and, six months in, nobody has seen a fish. Nobody had seen a fish downstream before that either, but they had to do it. It's balance. Absolutely it shouldn't damage the environment, but I think sometimes people lose perspective and go completely over the top.
Prashant Vaze: I agree with the point you are making. I am not sure if it is an issue for the Green Investment Bank to necessarily be concerned with. In the end there is a project sponsor, and the project sponsor is responsible for securing the kind of permissions and authorisations for this. I completely agree with you. I have looked at a number of micro hydro schemes that seemed interesting. I was just staggered at the amount of cost and bureaucracy it takes for really very, very small projects of a few tens of kilowatts. It is quite outrageous, but that is not a problem for the bank. It is a problem for our planning system and interaction between agencies.

Q179 Neil Carmichael: Are there any areas of infrastructure development or specific priorities that the Green Investment Bank should be working towards? If you are going to have a list of priorities, what would they be essentially?
Chair: Mr Wilcox? Perhaps you could include in that as well, if you are going to try and get the small-scale community-led initiatives off the ground, what Government could do to assist not just on the finances but the other bits that need to be all lined up to get that coming forward.
Richard Wilcox: There are three key things for me. I know this is the boring bank bit, but enabling standard documentation, so really encouraging the banks to get together, maybe through the BBA, to standardise documentation. That will reduce costs enormously. Part of the big problem, as you recognise, is that, if you do each separate facility on new documentation, a new set of lawyers come in and reinvent the wheel every five minutes, it adds huge cost to the project.

The economics of the community deals are difficult to do. As I say, it is a bit of a boring technical point but it would be hugely beneficial: standard documentation and a central advice point, going back to Caroline Lucas's point, so somewhere the community can go to talk about how these things get done.

There is the other bit about facilitating it—the holistic approach between the banks and the pension funds—so that we end up, hopefully, with a position where the banks are funding short-term development risk, which is what we should be doing, and the pension funds are taking the long-term income, which is what they want to do. But we have never managed to get together on a holistic basis so far. Even within the PFI market, we never quite managed that, but if GIB can play a part as a catalyst to make that happen that will have quite a beneficial impact.

Prashant Vaze: I agree with those points, but if you don't mind I will answer that question in terms of the technologies because that is another way of interpreting it. The kind of analysis I've seen suggests that some of the lowest hanging fruit—and I think that's the way the thing should be targeted—is on the energy efficiency side of things. I think some of the community level microgeneration schemes are quite attractive as well. There is a particular problem with some of the community level microgeneration, especially on the heat side if they need heat networks. I think that is very, very hard to get funding for at the moment. I know your colleague from Southampton is very aware of that. That is particularly where there are market failure problems and huge capital outlay is necessary.

I am not close enough, or at least my organisation is not close enough, to know about the electricity investment to have a view on that. My sense is that conventional banking is already pretty good at financing big wind farms, but if they tell you otherwise I'm sure they know better. I would have thought some of the Green Deal behind-the-scenes work for instance on boilerplate wording for unconventional Green Deal providers is very important and financing some of the new heat networks, since they aren't currently regulated.

Q180 Neil Carmichael: Do you see the Green Investment Bank dealing with the smaller-scale things more than the larger-scale things, from what you have just said about the success of the larger corporations getting funding anyway for their schemes?

Prashant Vaze: I think it needs to have a balance on its portfolio. I think it does need to do innovative stuff. There are other market failings other than the aggregation issue we've been talking about. I know some of the earlier stage technologies like carbon capture and storage do have genuine challenges. They are quite hard to balance. I personally don't think it should be solely in community energy or anything like that, but I think it should certainly be for the Bank to make those decisions with an eye to bringing on technologies and also delivering carbon.

Q181 Neil Carmichael: Most people who are in favour of the Green Investment Bank make two or three points. One is that you have to have the expertise in a Green Investment Bank. One or two of you have alluded to that by reference, for example, to the EIB and EBRD, which actually has the same sort of functions and capacities. Secondly, there is the creation of a secure market so investors look around and say, "Actually it's worth investing in this because people will be buying the output"—security of market, essentially. A third area is the need to upscale or improve research and development. You have also, to some extent, touched upon that because at the end of the day there are certain sectors that we just don't have in this country now.

Earlier this week we were talking about—in a completely different venue and subject area—where is the electronic sector if we are going to start having electric cars and so forth? Does the Green Investment Bank have a role to play there? You can apply the same logic to the technologies that you're talking about. Do you agree with that, and do you think that the Green Investment Bank looks as though it's going to be able to do those three things?

Richard Wilcox: I will comment on a couple of those. Skills shortages I absolutely agree with. There is a real need for specialist bankers, lawyers and engineers. There are not enough of them in the sector; so I agree with that. There is the issue about raising funds. Going back to the small scale—and I know I keep talking about aggregation—if you do that, then it's proof of concept so that when you go to the point at which the Green Investment Bank is looking to raise public bonds there is a track record there of having done them, albeit smaller. But at least there is a track record there, and the more track record you've got, the lower the cost of funds. It goes back to this point about not waiting 10 years for carbon capture and storage or tidal or whatever to be commercially fundable. There are lots of things you can do in the meantime.

Prashant Vaze: On the skills, I absolutely agree. I used to work in central Government and it's always been a frustration that people move around, and as soon as you have a group of people who actually know what they're talking about they seem to move job. I think something with a bit more permanence and a genuine career structure in an institution basically that has that kind of skill is very desirable.

The second point I want to rephrase a little bit. Rather than the size, I think there are some technologies or some kinds of interventions that don't have a very spectacular return but are quite low risk. Things like solar installation might be one of those. It is important that at least in the early stages somebody makes those kinds of investments early on. The venture capitalist is never going to come in because the rate of return is just not there. You are not going to get people on "Dragon's Den" saying, "Let's go for this one." I think it's important that somebody needs to look a bit more strategically and say, "This is a big carbon opportunity; no great risk; no great return; we need to develop this."

I have forgotten what the third point you made was; I am sorry.

Q182 Neil Carmichael: A secure market; market security, basically. It is putting that platform down where investors think, "Look, I can go into this market because there is going to be something there for my customers."

Prashant Vaze: Yes. I had a very, very depressing meeting once with Goldman Sachs, where it was telling us to "all pile into biofuels". I thought, "I can't believe you are so naive to think that's a good idea. This was four years ago," but that's what it was telling its investors. It is important that somebody does have that kind of credibility, not just with the market—which is important because they needed to refinance it every time they issued bonds—but also with the community who care about the outcomes. My slight fear is that some of the standard banks are much more interested in the bottom line and much less interested in the outcome. In a way the Green Investment Bank can straddle that and have knowledge of the markets, make sure that these are viable projects in their own right but also think about the outcomes too.

Q183 Mr Spencer: It doesn't matter whatever project you come forward with, at some point you meet a planner—the planning department. I just wondered whether you thought the Green Investment Bank had a role in advising the planning system. I know Government is looking to reform that. Should the Green Investment Bank be helping to assist that reform of the planning system?

Richard Wilcox: Anybody who could help—that would be gratefully received. Yes, I do, because it is a major blockage. It can take an awful lot of money and an awful lot of time to get schemes through. When they are smaller schemes, that has a disproportionate effect on the marginal cost of those schemes. Maybe there is something there about saying that you assume a positive response for smaller-scale community schemes, or where you can see community benefit there is a useful position to support them. There may be something that could be done there.

Prashant Vaze: I agree with the sentiments but I'm not entirely sure what the Green Investment Bank could do. I can think of many, many projects—waste incineration plants—where there is a lot of heavy duty capital behind it, so it is not lack of capital that is the issue; it's the planner. I don't really know what you had in mind, but anything that can unblock it would be a good idea.

Q184 Mr Spencer: It is whether the Green Investment Bank, I suppose, had a role in shaping the Government legislation as it moves forward, in changing the planning system into the new planning system we're going to end up with, or do you just carry on as you are and not get involved in that process?

Richard Wilcox: Just picking up Mr Goldsmith's point before, there is a danger that it becomes all things to all men and we are looking to the Green Investment Bank to solve every possible problem that we have. I think there is a link between planning and renewable energy generation because it's clearly a problem, but whether that's the role of GIB or whether it's the role of Government to support GIB in that is perhaps a moot point.

Prashant Vaze: I think the announcement that Chris Huhne made a few months ago was basically saying that local government can retain or keep the first few years of business rates. Having that kind of direct financial incentive for local governments to give planning permission is probably more important than anything that some planner in a nice suit in London can do; I don't know.

Mr Spencer: Am I allowed to digress, Chair, like everyone else?

Chair: I think the Committee will forgive you if it is a short digression.

Q185 Mr Spencer: One of you made a comment, I think, in response to one of Neil's questions that you wouldn't allow something that damaged the environment. The one that came to mind immediately for me was the Severn barrier, and whether that benefits the environment all comes down to interpretation, doesn't it, and how difficult those debates become? That is more of a comment than a question.

Elliott Mannis: It probably is. I'm not sure the Green Investment Bank does have a locus in the planning system, but I think the inevitable balancing that needs to be done through the planning process is that people want to deliver a net good through the various projects that the Green Investment Bank will be facilitating or enabling. Inevitably, there are environmental and other issues that need to be balanced in the equation. One is going to have to take a view in the round. Putting up a wind project could be a great thing to do, and if it was to tear up hectares of woodland at the same time there might be a good debate round this little table. The planning system is there for a reason and I think it needs to weigh up those various interests.

Q186 Neil Carmichael: Do you think local government, local authorities, should be given the green light to invest more in small-scale energy and energy efficiency? Of course, they have prudential borrowing powers under the 2000 Local Government Act and they may well want to develop those through the Green Investment Bank.

Richard Wilcox: A very quick answer: yes. Picking up Prashant's comment before, there is a big role for the public sector and local authority generally in terms of heat and energy efficiency. The more you can get the public sector brought into that, the better. Whether that is direct investment or whether that's supporting as a keystone user in some district heating schemes or combined heat and power boilers retrofitting into public sector buildings, there's a huge part for the public sector to play.

Prashant Vaze: My answer is yes as well, but with a proviso. I have talked to a number of local authorities about why they don't make greater use of prudential borrowing in order to do the kind of stuff we all care about. The answer that we typically get back is that they, too, are under quite a lot of capital pressures and they have to prioritise where they spend their scarce capital too. In the end they have to justify it to their principal finance officer. Local authorities, in common with some of the social housing providers, tend to prioritise capital spend on things that they absolutely must do, and it is hard to get those through as well. A social housing provider will first do things like decent homes, and then probably do stuff like addressing the kind of people that are currently unhoused in that area. Each of these will have quite good rates of return on them as well in terms of their function. I think local government is in the same position.

Chair: I want to focus our attention on the final aspects of maximising the beneficial impacts of the Green Investment Bank. If we could return to that, it would be helpful.

Neil Carmichael: My question, alas, was a digression. I sometimes do that, to be honest. I think this Committee has noticed that.

Chair: I think we are learning.

Q187 Neil Carmichael: You've already mentioned the question that it's not just investment and return for investment but the impact it has on the environment and on the people around the environment—the communities and so forth. I have one last question to you all. If we expect the Green Investment Bank to measure such things and effectively put that as a part of the investment, how do we expect them to measure it and how do we expect them to deliver the outcomes that they then actively create for themselves?

Elliott Mannis: There is probably a piece that is outwith the Green Investment Bank in terms of direction. It probably needs to come from Government overall, but it seems to me that in the broader remit that needs to be delivered there is a series of outcomes. Those might be around woodland, they might be around renewable energy sources, but there is this once-in-a-lifetime opportunity for a step change in how we want to see things done in the UK and how we want it to be. It seems to me that it's almost impossible to deliver a remit to the Green Investment Bank without having some policy directive at the same time in terms of broad outcomes, because the Green Investment Bank is an implementation tool. It is an instrument of policy but it's not policy itself. The interweaving of those two things is very important. One could do something as simple as saying, "We're not going to have any cars other than hydrogen or fuel cell or electric cars by 2025." You can deliver those hierarchical top-down objectives and then it is down to the Bank and a bunch of others as to how they get that done.

In terms of weighing up the balance and how you measure it, I go back to my point before about extractive industries. There are tools to account for things in a broader social context other than the way we just do traditional accounting today. I think one of the things a Green Investment Bank can very usefully look at is how one prices projects in the round, not just using the accounting and financial instruments we have today but how you value biodiversity in that broader community and social interest. There are tools to do so and I think the Green Investment Bank, in my view, ought to encompass that broader objective.

Prashant Vaze: Earlier in my career I used to work in developing green national accounts" and I also worked in DEFRA on ecosystem services. I am very, very sensitive to the points you are making, but we are trying to create a bank here. I do slightly worry that you are trying to get too much out of it. At the moment the Government has already set incentives through things like the feed-in tariff and renewable heat incentives to adjust prices to exactly that, to get a better alignment between the returns a banker might make and the broader kind of concerns that we have. I think you are right: we need to specify a list of things that the Green Investment Bank is concerned about. In the end, if it is a bank, it needs to make sure it's viable and got credibility with the markets out there. It is going to fail that if it is diverted too much with other things. Obviously it should be cognisant, aware and make use of all the incentives out there, including structural funds, including capital subsidies, which might help on the forestry side of things. It should do all that, but if you spend too much time trying to micro manage it, it's losing its way a little bit. That's my feeling.

Q188 Neil Carmichael: Surely the alternative view would be for a community to come up with a project, tick all the boxes—like, for example, community involvement and looking after the environment—and the Green Investment Bank coming along and saying, "Yes, that looks a good project." It is a bit like a glorified 106 arrangement with planning permission, for instance. That would be a good way of achieving the same things without the bank itself having to measure and, as you say, effectively depart from or even basically being a bank.

Richard Wilcox: At the end of the day it is a bank. It shouldn't go too far away from that model, but it doesn't mean that it can't have a balanced approach. I am bound to say this, but we are a mutual organisation. We are a co-operative bank. We are about financial sustainability but we operate to a balanced scorecard. That means we are more than just that. There is no reason why the Green Investment Bank can't do the same. It is just important that you get the mandate right at the outset and then you have very transparent and clear guidelines.

Chair: Finally, one last question from Dr Whitehead.

Q189 Dr Whitehead: This is perhaps a rather naive question. The fact that it is a bank, it will be a bank and it therefore will have to take decisions in order to ensure its own survival—and it will be an independent bank and therefore it will not be directed in the sense that, say, an investment fund or a grant-making body might be—would mean that you may well have a number of proposals which will come before it which will be good investments but not very green. Then there will be other proposals that are pretty green but are not very good investments. Is there a case that the bank may say to itself, "Well, in order to aggregate out our own investment portfolio so that we survive as a bank, we'll have some pretty un-green things that we will put our money into, and then we will be able to help the much more green things on the back of the not very green things that we put the money into in the first place", and thereby carry out its remit? Is that a conceivable model that you would see going forward for the Bank?

Richard Wilcox: Just because it is a bank doesn't mean you can't trust it entirely. The two things don't have to go hand-in-hand. Seriously though, I think it's just all about getting the mandate right at the outset and then monitoring it. There always will be those tensions, but that's down to whoever manages the Bank to manage those tensions.

Prashant Vaze: If you get the mandate right at the outset, as Richard suggests, with things like social equity, concern about rural areas—you get those kinds of things right and I think those are important—that should be the main way the controls exist. If you are trying to get money off retail investors, which is something we suggest in our submission, I think it is important that we don't divert too far away from what a retail investor would expect a bank to invest in. We did a report—this one here—called "Green Expectations", and there is a confusion that people have about what the term "Green" means. If you are expecting consumers to put money into this in any way or form, you do need to be very, very specific about what kind of things will be invested into. So controversial ones like carbon capture and storage or potentially nuclear might jar against people's expectations.

Chair: I am afraid there we must leave it. The aim of this session was to try and see what evidence we could get that would help us to make sure that when there is a Green Investment Bank it can actually reach out and be valued by people right the way across the UK and not just looking at the big investment decisions. Thank you very much indeed. I know there has been a lot of detailed evidence, but thank you very much indeed for your contribution.

Wednesday 12 January 2011

Members present:

Joan Walley (Chair)

Neil Carmichael
Martin Caton
Zac Goldsmith
Simon Kirby
Caroline Lucas
Ian Murray
Sheryll Murray
Caroline Nokes
Mr Mark Spencer

Examination of Witnesses

Witnesses: **Justine Greening MP**, Economic Secretary, HM Treasury, and **Peter Schofield**, Director, Enterprise and Growth Unit, HM Treasury, gave evidence.

Q190 Chair: What I would like to do is, Minister, welcome you to our Environmental Audit Select Committee. I think it's your first appearance before the Committee so we're very pleased that you're here to set us off on our Green Investment Bank report, which we are currently doing. We understand that first of all you'd just like to make a brief statement on behalf of the Treasury, so in welcoming you and your officer, Peter Schofield, we would be very happy to have an opening statement from you if that's what you wish to do.

Justine Greening: It's a very short one—thank you, Chair. First, if I can introduce Peter Schofield. He's the Director of Enterprise and Growth at the Treasury, and clearly the Green Investment Bank probably has important aspects of both in it. So, I thought it was helpful to have Peter along today.

Obviously, we as a Government very much welcome this inquiry because you are almost certainly aware that we've pledged that we want to be the greenest Government in history. We've talked about increasing the proportion of our tax base that comes from an environmental tax, and so that's the macro picture, if you like. But within that, we've got the challenge about the range of policy measures we then take to start delivering on our aspirations around reducing emissions, the tax base, for example. Within that the Green Investment Bank is clearly a key aspect of that policy.

So, there are clearly a number of different roles that the bank could fulfil, and I'm sure that's one of the reasons why you want to have this inquiry: to start yourselves to look at some of the challenges around having a Green Investment Bank that does the right thing, does it effectively and does it affordably as well.

From our perspective we see that the primary focus of the Green Bank is going to be to help finance Britain's green infrastructure. I'm sure you're aware of the funding gap that we have over, particularly, the next 10 years to make sure we get the necessary investment in green infrastructure. But I think it's also worth just briefly mentioning that if we do this well it will have broader beneficial effects for our economy. There's a clear interest for our country in continuing to press to see more growth in demand for green technologies and, of course, Governments across the world are looking at how they can reduce their emissions too. That creates opportunity for business.

So if we can be at the forefront of that investment, at the forefront of that technology development, it's clearly in our interest and therefore we want to make sure that policies, particularly like the Green Investment Bank, put us in a position to be able to do that. So it's not just about the environment, although that is clearly the thing that's driven us to start to develop our policy around the Green Investment Bank. We think there's a broader imperative around the economy.

I'm looking forward to the questions that you've got over the coming hour and a half, I guess.

Q191 Chair: That's really helpful. We do want this to be an inquiry that is going to be able to take this whole agenda further forward. I think, because we have got a lot of ground to cover in our questions this afternoon, we'd appreciate short responses. I think in the first instance we'd like just to have some idea of how much you are personally involved in this; how much the Treasury has been involved with all the negotiations that are going on with BIS and so on in developing the context of the Green Investment Bank; just to get some idea from you of how many civil servants are involved in this and whether or not there's any difference of opinion between the civil servants; and how this has been taken forward by the Treasury and what the mechanism is for your interacting with the Business Department as well.

Justine Greening: There are quite a number of questions there. In terms of my involvement, you can imagine we've had a ministerial group of new Ministers in the Coalition Government leading this. It's been a cross-departmental group. I think it's fair to say that the three Departments that have been most heavily involved have been, clearly, BIS, who lead this policy development and are, at the moment, leading the work to develop the potential models for the Green Investment Bank; but of course, because of the state of the finances the Treasury has a clear interest in ensuring that we get something that's affordable and we think is effective and value for money; and, of course, DECC. So those are the three Departments that perhaps will be more involved, but not only those. Clearly, there are other Departments interested—for example, DEFRA and Transport.

Q192 Chair: How many civil servants from the Treasury have been involved in taking the proposals forward?
Justine Greening: I think it's probably better to ask Peter that. But what I would say is I've not had a concern that we haven't had enough. So this has been one of our priorities within Treasury. We've put an awful lot of effort into working alongside BIS and to making sure that we play our role in it. In terms of the specific numbers, it's probably better for Peter to answer that. As you can imagine, I sit in meetings with more senior ones. It's less clear to me how many underneath those within the organisation work on the policy.
Peter Schofield: Well, Chair, very much at an official level, the sort of structure across the Government mirrors the structure that the Minister has described at ministerial level, so there's a group chaired by BIS, which the Treasury are represented on. Within the Treasury I lead the work at director level. I'm supported by the expertise in Infrastructure UK, which is part of the Treasury, and brings with it expertise on project finance and corporate finance. That's particularly helping with BIS on the market study and the market work—trying to understand what models might be effective in terms of delivering the objectives that the Minister has described. There are two individuals in Infrastructure UK who are working on this. I wouldn't say they're working on this full time, but they are working on it.
I'm also supported by people from the environment, energy and agriculture team within the Treasury, though again, there are probably two or three people who support me on that side as well.

Q193 Chair: I just think from the point of view of our inquiry it would be—perhaps it might be helpful to you, I don't know, as much as to us, if you could just squash some of the debate that there was in the media: that there's a difference of opinion between the Treasury and the Business Department, and that there's no question whatsoever of officials in the Treasury having a different view from officials anywhere else.
Justine Greening: I think any time you're developing a policy there's clearly a number of different ways in which the Green Investment Bank could operate. You have to look at what its role and remit can be, what its relationship with Government should be, what it should get involved in and what it shouldn't get involved in. I think that that is an inevitable discussion process that takes place. But I can honestly say I think all the Departments have worked together incredibly closely on this as we try to work out the answers to some of those questions, and of course BIS are now working through the practicalities of some of the options we have around the different models and the market-testing that needs to happen. As Peter said, Treasury can be particularly helpful in that aspect of it because of course, our natural links with the City and with the investment community mean that we can probably provide some good advice about what models we think will work within the market that we want to leverage in private capital from.

Q194 Chair: So there's no difference of opinion between yourselves and BIS on that?
Justine Greening: I don't think it's—no, not particularly. We're at the stage of trying to work up a distinct policy. As you'll know, our plan is to bring forward the proposal within the spring, probably around May this year, about what the specific model will be. So of course, to get to that point you inevitably have to talk about a range of different options, so we're going through what I see, having spent a long time in business, as a pretty natural process of having a discussion about what those options are and then trying to work out which we think the best ones may be over time.

Q195 Chair: Just moving on very quickly, once the Green Investment Bank is up and running what kind of day-to-day role will the Treasury have or not have?
Justine Greening: That very much depends on the final business model because in a sense it depends on whether we—first of all, we definitely want it to operate at arm's length. We want it to have private sector expertise coming in to understand the investment decisions. However, there are particular models that could mean it has a closer relationship with Government purely because, for example, the organisation is close enough to Government that it ends up being within our public finances, in which case it has one relationship. If it has a relationship where the way in which its operations are dealt with is sufficiently independent that it's outside of public finances, then it has a more independent role and obviously Treasury is less involved purely because there's less of a direct public finance impact on it.
I think it's fair also to point out that the most important thing is not the model but what the Green Investment Bank is ultimately able to deliver. So that's the ultimate test for us: what's the effectiveness of it in terms of tackling some of the market failures around risk and around making sure we get more private investment in, and to what extent can the Green Investment Bank start to unlock some of that private investment and leverage it into the technologies and the infrastructure that we need to see it coming into over the next decade?

Q196 Chair: But won't its effectiveness depend on the model that's adopted?
Justine Greening: Absolutely, and I think there's clearly an intrinsic link between the two, but what I'm saying is that ultimately, what I want is to make sure that I get something that's most effective and the model that delivers that is the one that we want to go for. Of course, beneath that are two other tests that we've got, not just effectiveness. One is affordability, so we've got a clear imperative to sort out public finances. We have to make sure that we deliver that over the coming years. But also then transparency, so that people understand what the role of the Green Investment Bank is and what its relationship is with Government; and then if there are liabilities, how much they are and, if you like, whether they are accounted for within the Government public finances or whether they are something external to that.

Q197 Neil Carmichael: Can I just clarify, Justine? To what extent do you agree with those who say that the Green Investment Bank needs to be properly independent from the Treasury?

Justine Greening: I think we do want to see it working independently. I think that's something that we've always been pretty clear about from the beginning. It needs to be operating independently. It needs to have private sector expertise, so I don't think that's particularly been an issue. I think the key thing, as I've said, is ensuring that whatever that relationship is, it's appropriate to the model that we've got, and that ultimately, that model is effective in leveraging in the private finance that we need to invest in low carbon technology.

Q198 Neil Carmichael: This line of questioning is designed, I think, to tease out the risk of the Treasury interfering too much in the Green Investment Bank, or at least starting to count what the Green Investment Bank might have as liabilities as part of public finance. So that's what I think Joan is heading for and it's certainly what I'm interested in.

Justine Greening: Okay. I think in a sense, you're right, in that a different kind of model will mean Treasury naturally has a different relationship, in the sense that if it's the model that sees the Green Investment Bank's liabilities, for example, and assets as part of public finances, then necessarily it has a closer relationship with Treasury because it's our job to make sure we manage public finances. We've got to tackle the deficit. We've got to start tackling our huge levels of debt. If it's a model that is more arm's length from the Government and is not therefore within the public finances, at that stage clearly there's a different relationship to Treasury.

What I do want to say, though, is I don't know whether members are more used to the Treasury of the days gone by, which was very interfering. Clearly for us as a Government, and for myself as a Treasury Minister now, and then as somebody who spent 15 years as an accountant in industry working with organisations on budgets, I think the intention is that we have a constructive role, but at the same time we want to make sure that we play our fundamental role of ensuring that we can tackle our public finances. That's our job. We've gone through the spending review and I think it's worth pointing out that, in spite of probably what had to be the most challenging spending review that any Government could probably have had to approach, we did find money to capitalise the Green Investment Bank and we have said that we want to see more money go in from asset sales over the coming months. So I think in spite of an incredibly tough financial position that we find ourselves in as an incoming Government, we do want to support it and Treasury wants to support the Green Investment Bank.

Q199 Neil Carmichael: There's another debate going along, which is basically, should it be a bank or a fund? What's your thought on that, and how far have you got in terms of defining that?

Justine Greening: I think I come back to my earlier comments. I'm less hung up on the semantics and more interested in whether the ultimate model that we end up with will deliver what we need, which is to start plugging this big investment gap we have between what's currently been invested in low carbon technology and infrastructure, and what we need. I know that members of the Committee will be aware that there's a varying range of estimates about what the gap could be. I think Infrastructure UK within the Treasury have said it could be around £100 billion. Of course, Ernst and Young have said it could be significantly higher. That's what we need the Green Investment Bank to play its role in doing.

I'm less hung up, if you like, on the word than whether we ultimately end up with a model that can do it. I think it's fair to say that the FSA would say, for example, a bank is something that takes retail deposits, and I know there's been debate about whether it should be able to borrow. So everybody has got their own definition of what a bank is. What matters is whether the model we have delivers effectively in helping us close the investment gap that we want to close to get the investment into low carbon technology and green infrastructure.

Q200 Neil Carmichael: What about the degree of guarantee for investors that the Government might provide? Have you got any thoughts on that and how far would you wish to go down that route?

Justine Greening: I think that's obviously one of the considerations that BIS are looking at as they develop all these models, and this comes back to your earlier question about the relationship that Treasury might have with the bank. Clearly, if you had a scenario where there were guarantees, then that obviously means there's a public liability potential and we'd need to understand it. In fact, one of the issues was, can it borrow? Clearly, that might mean there'd be some questions about what happens if interest rates change.

Those are precisely the questions that BIS now looks at to sort out what's the best way in which we can structure the Green Investment Bank to make sure that it delivers in the way that we want it to on getting more investment.

Chair: Just on that point, Caroline.

Q201 Caroline Lucas: Sorry, you moved on from the issue of bank versus fund more quickly than I thought you were going to, but I just wondered, you yourself have spoken about this huge gap and Ernst and Young are saying it could be up to £450 billion at the top end. If it were a fund, how could a fund leverage the kind of private capital that we're going to need on that kind of level? I can't see how a fund could do that. How would a fund be able to borrow and be able to have bonds and do all of the things, have all the tools necessary to leverage that amount of capital?

Justine Greening: You're asking the sorts of questions that—within BIS, we're trying to work through some of those challenges. I think it's fair to say the Green Investment Bank isn't the only way we can try and encourage more investment in these technologies. So you'll know very well that we've just released the Electricity Market Reform. Within Treasury, just before Christmas, earlier in December, we issued the consultation on putting in place a carbon price floor. There's also the Green Deal. So if you like, there are supply side issues and policies that we're now consulting on that we think could create a better investment environment alongside the Green Investment Bank, and then there's almost a pull factor on the demand side for Green Deal. I think you have to see the Green Investment Bank in the context of all of that. Do we want to make sure that it is something that has a substantial and significant ability to pull in and leverage in, critically, private sector finance into some of these key projects? Absolutely.

I think the other questions are, for example, you could have that finance coming in at the institution level—the Green Investment Bank level. You could clearly have that finance coming in at the investment opportunity level of a particular project, and those are the questions that we've got to work through—your point that there are a number of different aspects of how the Green Investment Bank could operate—so that we've reached a conclusion on all of those and that as a whole, it can operate successfully.

Q202 Zac Goldsmith: Just very briefly on that point. I welcome everything that you've just said, Justine. I think it would be a mistake to see the Green Investment Bank in isolation from all the other levers and policies. But on this distinction between bank and fund, I think it's right to say, of all the people who have given us evidence here in this inquiry, there is complete unanimity that the bank needs to be able to issue bonds and it should be a bank not a fund. More than that, at a ministerial level, all the way up to the Prime Minister, I think it is also correct to say that there is a consensus on this issue—more compelling than I can think of, at least, than on any other undeclared or undecided policy. We've heard some very bullish statements from Chris Huhne and the Prime Minister, and so on. What I'm finding hard to understand, being new to politics, is where is this uncertainty coming from? Where are the newspaper articles? There have been a number of newspaper articles in the last few days saying that it's going to be a fund not a bank, it's not going to be able to issue bonds, and it's just very hard to understand why that should be the case, given the consensus both outside of Government and at a ministerial level.

Justine Greening: First of all, it's very difficult for me to comment on newspaper articles written by a journalist who clearly just needs to sell papers at the end of the day.

Q203 Chair: You could set the record straight once and for all.

Justine Greening: I think it's just symptomatic of the fact that there are different options around how we can set up a Green Investment Bank. We wouldn't be doing the right thing if you don't have a proper look at each of them and understand the pros and cons. We've got to get this right and, critically, we've got to get it right first time. I think that's the other reason why we want to make sure we go through a period in the early part of this year and later on of market testing, because it's not just what—we might have our particular view as a Government about what we think can be successful, but ultimately it has to work for the investment community, and so your questions about size and capacity are absolutely the ones that we're looking at. But the secondary question is then, well, having reached a conclusion on that, is it something that the investment community is going to say, "Well, this is a vehicle we can use to put money into these technologies in a way that we otherwise wouldn't have done".

Clearly, I think it's fair to say that there would be part of the investment gap that we've got that's closed purely by the fact that there are good commercial opportunities, and therefore the Green Investment Bank shouldn't be crowding out those. But what we want to do is crowd in money into those projects where there are perhaps market failure issues around risk that are causing people to stand back when we think that instead, with help from the Green Investment Bank, they can come in and invest.

Q204 Caroline Lucas: That being the case, would it not be clear that a bank would be much better placed to play that role than a fund? I can't understand beyond the fact that, as we know, if it's a fund it means that there are fewer problems when it comes to what it looks like on the Government's books in terms of adding to the deficit and so forth. But that apart for a moment, if you're looking at what is going to be most helpful in those cases where commercial banks aren't going, what possible reason could there be to go for a fund rather than a bank?

Justine Greening: In a sense you're pre-empting where BIS are going to get to and the work that they're doing looking at the potential different models, so I've no doubt that Vince Cable will also be able to answer that.

Q205 Chair: Sorry, I think what we want to get at, which is at the crux of all the evidence that we've had, is what's the Treasury's slant on all of this and whether or not there's a steer of one kind or another from the Treasury? Because it'd be much more typical, I think, for the Treasury to let go than perhaps it might be for other Departments to do that.

Justine Greening: Coming back to the three tests that I said at the beginning—that we want to make sure the Green Investment Bank we end up with as a model is effective, and is affordable and transparent in terms of its role, its relationship with Government and its liabilities; but I think the affordability question is important. It would be great if we could just say, "Setting that aside"—it's a bit like a company managing director saying, "Setting aside the fact that technically, we nearly had the receivers come in". You can't quite do that, so we have to find a way through all of these different challenges because of course, we've got to have something that's sustainable and we won't be able to do that if we don't have public finances that are sustainable.

Q206 Caroline Lucas: Can I come back to that? I think that's at the crux of it because when I said "set it aside" I meant set it aside for the purposes of this argument, not set it aside permanently because obviously it can't be set aside; but doesn't that come back to exactly what kind of model one has in mind in terms of what's going to kick-start the economy and so forth? If you were to invest, having it on the books, with a proper Green Investment Bank that could lever in the sort of money that we're talking about, the knock-on impact in terms of what that would do for the green economy would pay you back in spades. So it's to do with a short-term economic equation now and, yes, it will show up on the books in a negative way, if you like, as a deficit in the very short term; but if you were to believe in the fact that when you invest in green energy, for example, that brings back money into the economy and saves us money—there's a longer term economic equation there that again points towards a bank, not a fund.

Justine Greening: I think we do have to find a way to strike an appropriate balance. There's no doubt about that. What you're highlighting quite rightly is there are different models we could have and clearly, different people have different views about the pros and cons of those models. That's precisely why we need to go through the process that BIS is leading right now to say, "Well, you know, what are the trade-offs?" I think ultimately we need something that can tick all of those three boxes I've talked about, that can be effective, that can be affordable and at the same time is also transparent for investment.

Chair: Is your question on this point, Ian, because I'm conscious we have to make some progress?

Q207 Ian Murray: Yes, it's on this very point. Given the answers that you've articulated from BIS and the process it's going through, what's the Treasury's view of what the Treasury would prefer?

Justine Greening: I don't want to get too repetitive, but I think BIS is leading the work, and we are working with them, and we will look at all these options through the lens of these three criteria about the bank being effective, affordable and transparent.

Chair: Okay, we've got those three, I think.

Q208 Neil Carmichael: Yes, we've got that one. So, options open, then. Have your officials been giving you some advice on the way in which the Green Investment Bank would avoid being accounted in national accounts?

Justine Greening: The ONS effectively sets the accounting standards, if you like, that determine how our public finances are reported. It's probably worth noting that, in terms of debt, which of course clearly is a huge issue for our country right now—also across Europe, but obviously particularly for Britain—our definition of public sector net debt is broader than other countries'. One of the questions that's come up in relation to the Green Investment Bank has been, well, other countries have a quite narrow, or narrower, definition of debt. They look at basically local government and national Government debt added together.

Q209 Neil Carmichael: But in terms of our definition?

Justine Greening: In terms of our definition, it's far broader. We think that's better because it means that it is more transparent and it's more credible. Critically, it's what we've used in terms of the way in which we talked about our fiscal mandate of tackling debt.

Q210 Neil Carmichael: So have your officials come up with a structure that would avoid a Green Investment Bank being looped in with national accounts?

Justine Greening: It depends on the model, effectively.

Q211 Neil Carmichael: I know that, but have they come up with a description of any model that would achieve that objective?

Justine Greening: I can see Peter's chomping at the bit here.

Peter Schofield: I wonder if I may help the Committee. As the Minister said, the decision as to whether any entity is scored into the public sector or the private sector is one taken by the Office for National Statistics. They operate independently and follow European and international guidance, but critically, what they look at is the degree of control and within that the degree of financial exposure that might fall to a Government.

You can create plenty of entities. Entities clearly operate across the economy that are in the private sector, but those are the critical elements that would be looked at by the ONS as a Green Investment Bank is created, as to whether it should be scored in the public sector or whether it should be scored in the private sector.

Q212 Chair: So you say it's the ONS's decision?

Peter Schofield: It's the ONS's decision as to whether a body should be classified to the public sector or to the private sector, that's right.

Q213 Zac Goldsmith: Would the ONS also be able to provide advice as to how you might be able to create a bank in such a way that it doesn't have the impact we're concerned about? They don't just passively respond to presentation—

Peter Schofield: I mean, the ONS operate independently.

Chair: Surely the Treasury has some view on it. Sheryll.

Q214 Sheryll Murray: Could I just ask you, have you been given any specific examples of a body that you could introduce that would, first, have an effect on the national debt and, secondly, would not? Have you got any examples that you could give to me—that is, if you had a fund, it wouldn't impact on the national debt; if you had a bank that was operating in this way, it would? Could you give me some examples of what you think would constitute both of those areas?

Peter Schofield: I can give you examples on either side of the boundary. Your question may well be about the grey area in the middle which, of course, for obvious reasons is much more difficult. Clearly, if an entity is created by the private sector where there is no element of financial exposure to the Government, and where the Government have no element of control, then I would imagine—unless there is some other element of a contractual relationship with Government—that that would be classified by the ONS to the private sector.

Where there's a body that is created by Government in some form where the Government have a degree of control over the operation of that body, where the Government are providing the finance, then the ONS will, I imagine, classify that to the public sector.

So those are the two—it goes back to the criteria that I was describing in answer to the earlier question. When you look at those criteria, they are what the ONS would be considering in making their judgment.

Q215 Chair: We have spent a lot of time on this area but I think it's the concern of all members of the Committee that it's the grey area in the middle. It's that which everything then depends upon, and whether or not that then relates to legislation that may need to be introduced and the speed at which that legislation gets introduced. How is that going to be resolved, that grey area in the middle? How, Minister, is the appraisal that you talked about—looking at the different options to achieve those three objectives of transparency and so on—going to be resolved? What mechanism have you got for resolving that because people want to know what the actual model will be?

Zac Goldsmith: And when.

Chair: And when, yes, exactly.

Zac Goldsmith: It would be useful for our report.

Justine Greening: Quite right, and we talked in the spending review about being clear about what the model would be in spring 2011. I think we're sort of expecting, hopefully, to be talking more details around May time.

Q216 Chair: Does that mean there's going to be a piece of legislation and it's going to be in the BIS business plan?

Justine Greening: I guess, whatever the model is, we would need to see to what extent it needed legislation to enable it. But perhaps if I can give you the overall timeline, that probably would help. What we're aiming for is for the BIS-led piece of work looking at the different models and the market-testing around that to take place this year, but to be able to give some more details about what we expect the model to be around May time. Of course, there are some logistical operational issues around back office, literally making sure a Green Investment Bank as an organisation can function. That's another thing that we need to look at over the course of 2011.

I think the intention is to see it up and running in 2012 and, I think, what we'd like to be doing is to start reporting on its operations—what it's lending, what sort of investments it's making—in the following year, 2013. So I hope that helps to set out some of the milestones that we've got going forward for the Green Investment Bank.

Chair: I think we need to move on now to perhaps other aspects of all of this. Caroline Lucas.

Q217 Caroline Lucas: Thank you. Could you confirm whether the Government are planning to use the Green Investment Bank to fund new nuclear?

Justine Greening: As you know, one of the coalition agreement aspects was that there wouldn't be a subsidy for nuclear, and it is very clear-cut in the guidelines that DECC has issued that there won't be a levy, there won't be direct payment or market support for electricity that's supplied or capacity provided by private sector new nuclear operators. So I think it's very important to be clear-cut about that.

Q218 Caroline Lucas: But it's sort of not quite that clear-cut, is it, because I was looking on the BIS website and I noticed that they were seeking tenders for consultancy work specifically for consultants to look at financial models for each sub-sector of the Green Investment Bank, and one of those six sub-sectors is indeed new nuclear? If the Treasury provides a guarantee for investors' capital invested in the bank, then that could help the bank keep its cost of capital lower than it would otherwise be. In other words, that is an implicit subsidy. So on the one hand, in the BIS tender it's clearly saying new nuclear; on the other hand, if that were to be funded by the Green Investment Bank, that could be seen, I think, as a subsidy.

Justine Greening: You've got two things. One is a fact, which is the fact is the DECC guidelines are very clear that there will not be subsidy. And then what you're talking about is the potential for a potential green model to potentially then—and I think that is, to my mind, a leap too far. So we've been very clear-cut in the coalition agreement. We've been very clear-cut by issuing DECC guidelines. That's what our Government have said and have issued.

Q219 Caroline Lucas: Would you agree that it would be a subsidy? Were the Green Investment Bank to fund new nuclear—were it to be a bank and to fund new nuclear—is that a subsidy?

Justine Greening: I don't think it's fair for me to jump the gun and say what the Green Investment Bank will or won't be investing in. What I can assure you is that we're going to stick to the guidelines that DECC has issued.

Q220 Caroline Lucas: But it doesn't make sense. I'm sorry, but with respect, Minister, it's clear in the tender that new nuclear is being proposed to be funded by the Green Investment Bank. It's also clear that if it is a bank, then that means there will be some degree of Government support to it—ergo, some kind of subsidy. So how are those two things compatible?

Justine Greening: It's very hard for me to go further than what I've already said, which is—the problem with your question is that it has one important word in it, which is "if". My answer is an absolute fact, which is, we have the DECC guidelines that are very clear-cut about what they say we will not be doing, which is, there won't be the subsidy for nuclear. So it's very difficult for me, and I don't think it appropriate for me, to comment on an "if" question when we've already been very, very, very clear as a Government in issuing the guidelines about our position in relation to Government support for nuclear.

Q221 Caroline Lucas: I guess I can only say, to conclude, that it looks to me that if in the tender document people are being asked to do models on new nuclear, that presumably means the Treasury has already decided—or someone has already decided—it's going to be a fund, not a bank, because if it were a bank they wouldn't be able to do that because it would be a subsidy. That's the conclusion I draw from what you've said.
Justine Greening: Obviously, you can draw any conclusion you like.

Q222 Chair: But would the Treasury have any other views on what is or isn't a subsidy, or how you might define a subsidy that would perhaps get included even in the Green Book, which would then determine strategic investment decisions elsewhere?
Justine Greening: Clearly, over the years various Governments have provided various subsidies for various industries for various reasons, but now—

Q223 Chair: But this Coalition Government have said, no subsidies.
Justine Greening: What I was about to say is we've been very, very clear about our position in relation to subsidies and nuclear, and I don't think I can really go beyond that because, in a sense, it's so clear-cut—it's difficult for me to elaborate further when it's very, very clear cut—which is that there won't be. So I think I would direct you to the DECC guidelines, and I think they're absolutely clear about what the Government policy is in relation to nuclear.

Q224 Sheryll Murray: If the Green Investment Bank—or indeed the Green Investment Fund—were making a loan at commercial rates, or across the board at maybe lower commercial rates than somewhere else, and it was being repaid, surely that's not a subsidy anyway, is it?
Justine Greening: I guess the key thing with the DECC guidelines is that any Government policy-related decisions would have to be seen to comply with those guidelines. So it's very difficult to say, we could end up with this hypothetical potential investment deal on the table in several years' time. That's something that we will work our way towards—what the Green Investment Bank model ends up being—but what I can tell you is, if you like, the context in which any Government-related decisions will be taken, and the context will very clearly be the DECC guidelines.

Q225 Zac Goldsmith: Minister, are those guidelines the legal guidelines? If favourable conditions were offered by the Green Investment Bank which were defined materially as subsidies, could that therefore be challenged against the guidelines that DECC has produced?
Justine Greening: That's probably a better question to direct at a Government lawyer, in a sense. It's like any Government policy—there's a sort of legal basis within which it stands. I think I can probably be no clearer with the Committee than I have been. I think we've been crystal clear about our position as a Coalition Government in relation to nuclear and its not having subsidy. I think that that's something we intend to stick to, so I don't think there's any question mark over whether that's something that we'll stick to or not.

Q226 Chair: Minister, I do want us to move on from this, but to round this set of questions off, could the Treasury set some kind of a condition that would subsequently influence what may or may not be considered as a subsidy, in the interests of bringing together the whole commitment of the Coalition Government in terms of green investment?
Justine Greening: Whatever the Green Investment Bank model ends up being, it clearly will be something that has been established by the Government and therefore has to fit in with the broader Government approach that we've got and the DECC guidelines, which have already been set out. That's clearly the Department that leads on energy and climate change, and it's clearly the Department that is setting out these guidelines in relation to nuclear. I don't know whether the Committee is particularly concerned about that—whether those guidelines are just there for show. They're not. They're there because we have made a commitment in that area, and they matter. And I think they should be taken seriously because that's certainly the Government's intention.

Q227 Mr Spencer: Just a little question, Chair, while we're speculating, which we seem to be doing a lot of. The fuel of choice for electricity generation on Earth is still coal. I just wondered whether you saw carbon capture as something the Green Investment Bank should be looking to invest in. If we can position UK electricity generation carbon capture at the forefront of global industry, we could build quite a big industry and an income for the United Kingdom.
Justine Greening: It's a fair point to mention carbon capture and storage, because as a Government we've said we want to go ahead with the four projects to look at how we can develop that technology. At the spending review we committed £1 billion to the first pilot project, and we talked about, in the Budget coming up, looking at how we can fund the rest of those carbon capture and storage projects. I think we agree that they are incredibly important. And therefore, again, in spite of the huge financial challenges that we faced as an incoming Government in both the emergency Budget and the spending review, we thought it was important to continue to push ahead with these projects.
As you point out, there are many reasons why we wanted to push ahead with those, but certainly there are two main ones. First, we are determined to reduce our emissions and meet our targets. Certainly, on the Conservative side, it was our proposal to have a Climate Change Act in the first place. Secondly, clearly there are real commercial opportunities for us in terms of technology and know-how if we can go through this project and hopefully be successful. So I think it's something that, as a Government, we've been trying to get on the front foot on from the word go, and to commit some resources to that and to look at how we can commit further resources and make

sure we've got the funding in place to do the remaining pilots.

Q228 Caroline Nokes: We learnt in the spending review that the Green Investment Bank is to be capitalised with £1 billion of Government funding, and from the future sale of assets. Two questions based on that: first, is that £1 billion enough and, secondly, do you have a time frame for the amount and a timeline for those asset sales?
Justine Greening: In terms of the question, is the £1 billion enough, I've got probably go back to this constant challenge that we have in Government—but particularly, you're sort of in the crosshairs within Treasury of trying to make sure we've got our investment of funding where we want it and where we think the public wants it, and we're meeting our various priorities, including the Green Investment Bank, while at the same time making sure that all the numbers as a whole add up to something that means we can tackle the financial deficit and start to be in a position to tackle some of our debt.
So we felt the £1 billion was substantial, but we recognise that it would be good if we could have the potential to have further capitalisation go against the Green Investment Bank over the coming years. So there will be an asset sale programme that we are now commencing. Clearly, when funds become available in part it depends on how fast we sell the assets, making sure that we get good value for money for the taxpayer. But I think it's very positive that we are identifying some additional capitalisation that's come in.
Again, let's not forget that we very much hope, and the whole point of the Green Investment Bank is, that whatever that seed capital, if you like, from Government, it can leverage in a huge amount more from the private sector.

Q229 Caroline Nokes: So have you any idea what you might get from the proceeds of asset sales, and when?
Justine Greening: It's probably not wise for me to give a figure or a timeline at this point.

Q230 Caroline Nokes: How did you determine that £1 billion was a sufficient down-payment?
Justine Greening: We looked at the various challenges we had and what we thought would be a substantial amount that we could use to capitalise the Green Investment Bank, knowing that we would hopefully be able to complement it with some funding from asset sales, but also understanding that the Green Investment Bank sits alongside other policy measures that we were bringing forward around electricity market reform, Green Deal, carbon price floor support, to also create a climate where we were going to get alongside the Green Investment Bank further investment from the private sector into closing our investment gap.
So I felt it important, and I think the Government felt it important, that we didn't just have one thing that we're relying on to close that gap. So, the Green Investment Bank is a key aspect of closing the gap, but it's not the only one. I think that over time, obviously, we will take a keen interest to make sure that the model we bring forward is successful, but also that we do indeed close the investment gap, and that's obviously a challenge for any Government. But we're hoping that the suite of policies that we've got will give us the best possible chance of making sure that, depending on the different reasons why we might not get the investment we want—it's not always a financing issue, so you have to bear in mind that the Green Investment Bank can probably tackle some of the problems where the question is, we can't get finance. Some of the other issues are around R&D and they're of a different sort of problem to get financing into. So the Green Investment Bank is part of the solution and we think that the initial capitalisation is a good start. We think it's critical to get the model right so that we can get the maximum possible leverage into the Green Investment Bank of private sector capital, too.

Q231 Martin Caton: Minister, several times this afternoon you've repeated the Government's intention that the design of the Green Investment Bank will be subject to the tests of effectiveness, affordability and transparency. Can you tell us more about how you will measure these three objectives in assessing the final design?
Justine Greening: Yes. In terms of effectiveness, clearly I suppose at its most basic we've got the assessed gap between what we are currently seeing investing in the low carbon technology and infrastructure versus what we need, and we want to make sure the Green Investment Bank can play a substantial role in closing that gap. So that will be one of the ways in which we can measure its effectiveness. I think some of the other ways in which you'd look at how effective it was—

Q232 Martin Caton: So it passes the effectiveness test as long as it's better than what we've had in the past?
Justine Greening: Well, clearly we haven't had a Green Investment Bank in the past.

Q233 Martin Caton: No, you were talking about low carbon technologies.
Justine Greening: Yes. So, what's important is that it does fulfil its role, which is ultimately to leverage in private sector investment alongside this public sector capitalisation that we're going to put into it. That's the other reason why taking the time to get the model right is critical and taking the time to do market testing is critical. Because if it's going to be successful, we want to make sure it is able to leverage in substantial private capital and that's the clear intention. So that's on the effectiveness side of measurement. And I think part of how you would have to look at its success does in part depend on how it's ultimately set up.

Q234 Martin Caton: What has come across crystal clear this afternoon is that you're not very far forward, or you're at least not prepared to say how far forward you are, with the design of the Green Investment Bank. What you've been very clear about is you've

got these three tests, but you seem just as vague on those tests and you're now saying we've got to get the Green Investment Bank set up before we know how to test it.
Justine Greening: I don't think that's true. I think I'm just stating the obvious, which is that you can only know how you would measure something once you know exactly what it is you're talking about, and I think that's simply a statement of fact. Are we right to look at a range of different models and work out which ones will tick the necessary boxes that the Government and the taxpayer and the investment community need ticked? Absolutely. Will, once we've reached the end of that process, we be very keen to go out and talk to the public about what it is and how it can develop over the coming months? Yes. But the main thing for us is making sure that we get to the right point in the right model, and I think that's the most important point.

Q235 Martin Caton: But the way the Government, and you this afternoon several times, have said you're going to do that is by testing it—testing the final design against these three tests. You've now said that you actually need the final design before you can know how to test it.
Justine Greening: I think that's probably not the right way to characterise what I've said. I think—
Martin Caton: Well, somebody is writing it down.
Justine Greening: I've simply said that there will be different criteria by which we would want to evaluate different models, and that clearly there will be different aspects of those criteria that weigh in importance depending on what model you have. For example, I've talked about affordability. Some models would weigh more heavily perhaps on the public finances than others, so in that case affordability has a slightly heavier mix in terms of consideration, and I think that's just a statement of fact. And in terms of clarity, I think it's just symptomatic of the fact that you're doing an inquiry, in a sense, at the right time, because obviously we're still working through our thinking about the right model and, of course, that inevitably means that when you do your inquiry you're going to get Ministers coming to it before they've got to the end. I guess the alternative is that I could have come and given evidence after we'd worked out what the model was, and then I could have been crystal clear on the model and everything; but then for you as a Committee, we wouldn't have the benefit of your thoughts to feed into that consideration before we'd taken our final decision. So I do understand, in a sense, the frustration on that.

Q236 Martin Caton: In the spirit of transparency, will you be publishing the results of these three tests before you launch the bank?
Justine Greening: Well, we've said that we want to come back with more details of the design in May, so absolutely there will be an ability to see, if you like, what the Green Investment Bank will do, what its role is vis-à-vis Government, what its remit is, some of the issues you've talked about around how it will be set up. All of that is precisely why we want to talk about more details when we've got through this initial process in May-time.
Peter Schofield: I can add a bit more on effectiveness if that would be helpful to the Committee, because one of the issues at the moment is that we are still in the process of the market study and market engagement. Very much as the Minister said, on key effectiveness the test is whether this is leveraging additional private sector funding, and one of the things we need to avoid is crowding out private sector funding that would already be there. So, getting this right is absolutely crucial to the effectiveness test and I'm sure we'll be able to say more about how the model has performed against that test in May, at the end of this market investigation process, when we've been able to gauge what's already out there and where the gaps actually are at the moment.
Martin Caton: Thank you.
Chair: Thank you. In my haste to make progress I overlooked a further question that we've got from Simon Kirby—I do apologise—on the scale of the challenge. Over to you, Simon.

Q237 Simon Kirby: That's okay, Chair. I appreciate, Minister, that the final model has yet to be decided, but given the financial mess that you've inherited, how do you ensure the bank stays green? Surely the temptation will be there at some stage in the future to use the money for less green projects.
Justine Greening: Well, I think ultimately it will have to operate within a framework and we've been very clear-cut about why we wanted to set up a Green Investment Bank. I think we will make sure that the safeguards are in place to ensure that the way in which it's investing is in the sorts of technologies, in relation to green investment and low carbon technology, that was intended. I think the other reason for that is actually, in terms of leveraging in private capital, clearly there needs to be some sort of certainty for investors that if they are transacting with the Green Investment Bank or through the Green Investment Bank, that's what they're doing and they're not investing in something that they're not expecting to. So, yes, I think that's a fair question but I think we'll be making sure that there aren't any problems in that area.

Q238 Simon Kirby: It depends on the model, I appreciate that. Do you think it's likely to be a Cabinet Committee that has an ongoing involvement in direction, or whether you'll have a robust framework if you have a more arm's length arrangement?
Justine Greening: I think there are some questions about the corporate governance of the Green Investment Bank and to what extent you should set it a framework and then allow it to operate independently, or to what extent there's a closer relationship with Government. Part of it comes down to this earlier discussion we had about the fact that there are different sorts of models and they maybe have different sorts of relationships. So, I think the organisational outcomes you might get—you mentioned a committee—would be dependent on what model you ended up with.
Simon Kirby: Thank you.

Q239 Ian Murray: Minister, the projections are that £250 million of the £1 billion capitalisation is to come from the fossil fuel levy. Are we at a stage now where the Treasury really has to sort that mess out, and could the argument with the Scottish Government be preventing the Green Investment Bank from sticking to the timescales that you outlined earlier?
Justine Greening: Obviously, you know the background, which is that we've clearly said that £250 million of Green Investment Bank funding can be there for funding into Scottish renewables, low carbon technology. My understanding at the moment is that offer hasn't been taken up by the Scottish Government, but it's still there and we're still ready to continue to make that offer going forward. So really, the ball is in the Scottish Government's court, and let's hope we get some constructive discussion with them over the coming weeks, and maybe coming months.

Q240 Ian Murray: Perhaps you should write to the Scottish Government again on 6 May; that might help. Will that mean that the Green Investment Bank resources will be restricted to spend in Scotland, then, in terms of that particular package of funds?
Justine Greening: I think we have said that the desire was that we would provide Scotland with that £250 million guaranteed funding.

Q241 Sheryll Murray: The Coalition Agreement states that the Government would create green financial projects for individuals to invest in. Now, I know you've not said whether you'll have a bank or a fund, but would the Government be looking at providing green ISAs, and if so, how important are these? If the bank itself worked out that it didn't need them because it had attracted investment from larger companies, would the Government intervene to insist that they provide green ISAs?
Justine Greening: Well, it's a really interesting point because it sort of gets to this grey area between where Government should be making things happen and where the market can make things happen. And, of course, with our limited funding we want to make sure that every single pound has the maximum effect, particularly around climate change, in reducing emissions. That's what we have to try and be as clear-cut on as possible.
In relation to green ISAs, obviously there are a number of banks and companies already providing green ISAs and I think we're looking at potentially what maybe a Green Investment Bank could do to promote those. And, of course, I suppose theoretically there's also the potential for some of those companies to say, "Well, actually, we do a green ISA as a private bank and part of our investment potentially could be with the Green Investment Bank". So I think there are a number of relationships that we could have in that area and I think you're right to flag them up. To me, what it shows is there could be an exciting future, and I think it shows some of the scope for the Green Investment Bank in terms of making sure we get a very strong relationship with those private institutions that are already interested in this area and able to work. Again, that's why we want to ensure we take the time to make sure we've got the right model and do the market testing, to make sure that we're not going suddenly to be operating in a parallel universe—that actually, we can make sure we fit in with the market that's already there, leveraging in investment for these sorts of projects that we want to see investment go into as well.

Q242 Sheryll Murray: Would you consider additional tax breaks for green ISAs to make them more attractive than ordinary ISAs?
Justine Greening: Well, I think those sorts of tax matters are obviously something for the Chancellor.

Q243 Sheryll Murray: Is it something that you perhaps think could be considered?
Justine Greening: I can't pre-empt the Budget. It wouldn't be right for me to do that.

Q244 Sheryll Murray: But is this under consideration?
Justine Greening: We make all announcements in relations to tax at Budget time. It's a matter for the Chancellor, irrespective of what the area is.

Q245 Chair: But is that something that is actually under consideration?
Justine Greening: As I say, it wouldn't be right for me to pre-empt in any way any announcement.

Q246 Chair: No, we're not asking you to pre-empt, but—
Justine Greening: Well, but even saying what we are or are not considering on any area, in a sense, starts to give a sense that we may or may not do something in an area. It wouldn't be right for me to do that, for a whole host of reasons. Ultimately, what's in the Budget on Budget Day in March is a matter for the Chancellor. He goes through a process of considering his options and then reaches a conclusion, which at that stage gets made public.
Chair: That's fine. Caroline Lucas.

Q247 Caroline Lucas: You spoke earlier about the fact that the Green Investment Bank would be working alongside a whole range of other tools; for example, the Green Deal. I wondered if you could say any more about what the relationship between the two might be. For example, I was interested in the German bank example where the KFW subsidises the interest rates, essentially, for the energy efficiency roll-out in Germany, which is the equivalent of their Green Deal, if you like. Do you think there could be a role for the Green Investment Bank in doing something similar with the interest rates for the Green Deal?
Justine Greening: Certainly, at this stage the relationship is clearly, on the one hand, we all want to make sure that there's a supply side investment going into these markets, and the Green Investment Bank is part of ensuring that investment goes in for product technology infrastructure development. On the other hand, we also want to make sure that people want it, so it's a sort of push-pull relationship, really, a symbiotic relationship.

You mentioned KFW and I think that is an interesting example. Arguably, it's slightly different because, of course, it was set up in I think the 1940s and since then it's had a huge amount of time to grow. In fact, if you look at some of the other, not necessarily similar banks that are focused on climate change and green technology—most of them aren't per se—but a number of other state banks, a lot of them have been set up in some cases in the 1800s, and they've got quite a long heritage compared with the Green Investment Bank.

So, on your question about whether we will see some subsidies, those are really matters for BIS—their consideration about the model and, ultimately, the relationship the Green Investment Bank has with Government and to what extent Government are directing it; to what extent it's far more at arm's length and actually, it takes its own decisions about whether it will invest in some technologies that could end up being part of a Green Deal in the future. So I think it's no doubt something that Vince Cable, for example—I think you're seeing him on 2 February—can potentially comment on as well.

Chair: I think we need to move on. Neil Carmichael.

Neil Carmichael: Yes, I was just wondering—

Justine Greening: Actually, can I just say that I think the point I do want to make is we want to see things joined up. So, they do have to operate as a whole and we don't want to see them conflicting with one another. I think that's an important point to make.

Q248 Neil Carmichael: Are you expecting the Green Investment Bank to be subject to the banking levy?

Justine Greening: Well, in terms of how it fits in with banking regulation generally, that will depend on the model.

Neil Carmichael: I thought that would be your answer.

Justine Greening: It is the answer, I'm afraid—the right answer, if you see what I mean. It does depend.

Q249 Neil Carmichael: It is the right answer, yes; but the thrust of this Committee has been to tease out, what model? So far—

Chair: I don't think we're going to get any further on that at this stage. Let's move on to environmental taxes.

Justine Greening: I've explained the innate conundrum, if you like, for the Committee and myself as a Minister.

Neil Carmichael: Which we're very impressed with, make no mistake, but we're going to persist—

Chair: Can we move on to environmental taxes if we've made as much progress as we can there. Mark Spencer.

Q250 Mr Spencer: Can I just ask about the general portfolio of the taxation system? At the moment, we're committed to increasing the proportion of tax that's coming from an environmental angle. Can you give us a feel as to what level the current percentage of those taxes is today and the percentage you would like them to get to, and what time scale are we talking about?

Justine Greening: I think what we do need to do is in a sense agree what our baseline is. So, for example, there are taxes that wouldn't per se be classed as environmental tax but ultimately many people would see as having a direct environmental impact; for example, fuel duty. So I think we want to go through a process of understanding, if you like, what our Government assessment is of what the current proportion is. What we said in the Coalition Agreement is we want to see that grow and, in fact, over the coming month I am holding a series of workshops in Treasury where I am getting together a range of stakeholders, not just the environmental groups but also business groups and other stakeholders, to talk about how we can make sure we do this. So, I will be asking them to look at our tax base in relation to people at home, what progress we can make there, what progress we can make at work, and I think there's a sense that we need to join up, if you like, the range of DECC policies in this area already and then how they relate to perhaps some Treasury policies that we've got; and then, of course, transport is another key issue.

But I am quite keen, actually, to have this discussion. If you're me, as a Minister, one day you will have some of the environmental groups in to talk to you about why it's so important that we take particular steps and particular taxes, and they put their ideas. The next day you've got perhaps industry groups with a completely different perspective. What I want to do is get us round a table together and say, "Well, all of those viewpoints are absolutely valid but somehow we need to strike a balance". And what I need to agree with them is where we think those balances should be struck that can then give us a sense of direction about where the areas are where we think we can make some real progress, and that we can get general buy-in to greening our tax base more than it has been in the past. So in a sense, what I want to have is quite a logical process towards understanding what our opportunities are, but also to do that in a way that we understand what the pros and cons are of doing so, so that we don't jump into something without understanding what the consequences are.

Can I make one other point?

Chair: Briefly.

Justine Greening: Well, the other thing that strikes me about this area in particular is that it's tended to be looked at from the perspective of individual taxes, and then we wonder why—whether you're a company or whether you're a household—you then get hit with a plethora of different initiatives on different areas. Some of them are tax. They don't make sense to you as a whole, and we wonder why they don't have as big an impact on changing behaviour as they might do. What I want to do is look at things from the perspective of the public and the company, back to the tax, not the other way round; that's the key difference that I want to have in these workshops that I'm holding over the next few weeks.

Q251 Mr Spencer: But how important is the tool of making certain investments tax deductible? Is that a tool that you're looking at as well?

Justine Greening: In all of this, I've got to go back to the fact that we're tackling a huge fiscal deficit, and that inevitably constrains us financially. But within that, there are tax incentives. There are different taxes that are intended in changing behaviour. The key is to be very clear-cut about which ones are effective and which ones are not, and to be clear about, if we are able to have £1 less or £1 more in that area to change behaviour, what decision would we then take? Which are the tools that we think do and don't work, and to what effectiveness? I think we need to be far more robust about that than perhaps we have been in the past.

Q252 Zac Goldsmith: Just on this issue of green taxation, I think one of the reasons why green taxes have been unpopular and are for ever being slammed by the press as well is that they haven't historically in this country, with the exception of the landfill tax originally, been transparent and they have probably been stealth taxes, not environmental taxes, if you really analyse them. So the question is, is there a greater appetite within this Government to hypothecate those taxes? I know there's been a huge reluctance on the part of the previous Administrations to do that, but if you can see that you're taxing one thing in order to encourage another and you can see the direct link, it removes the possibility of the Government being seen to be using environmental concerns as a means of raising revenue.
Justine Greening: I think it's probably wrong to say that we want to see more hypothecation, but what we do want to see is green taxes and an approach to environmental tax—and, indeed, the environment more generally—that works and that actually does change behaviour. An approach that works with the grain of what people want to do instead of perhaps what they felt like it's been in the past, where they've been penalised for behaviour that they can't change—that in many cases they would love to change but perhaps for various reasons just can't—and financially may be constrained to do it. So I think we've just got to be clear that we've got to work with people more, and also—this is probably more one for DECC than for Treasury—in the areas where people don't buy into why they should change, clearly that's then an issue where really you've got to win the argument about why behaviour needs to change in the first place. I think that we've got to bring people with us, and they've felt a little bit left behind in all of this. And as you say, Zac, they haven't felt trust. Often they've felt that things have been wrapped up as green tax but, in fact, it's just been about getting money. So I think part of it is about rebuilding trust and I think you only do that by perhaps having a more thoughtful, genuine and successful approach. But that will take time and I should also say it's complex as well.
Chair: I think we want to turn to a specific tax. Caroline.

Q253 Caroline Lucas: The Government say their looking at changing the aviation tax system, which is an area that the previous Environmental Audit Committee looked at. How would you like to see aviation taxed, and when might we be able to expect a new system to be in place?
Justine Greening: Well, the debate around passenger duty effectiveness and the role of aviation in terms of the environment are arguments that lots of people are very familiar with, and of course, you'll be extremely familiar with them. In terms of aviation and air passenger duty, we've been very clear that we do want to look at reforming APD. I've met up with an awful lot of stakeholders in relation to this over recent months. Any changes that we do make to it will be subject to consultation. We have felt that in the past, big changes to taxes have been made without really consulting the sectors and the individuals they're going to affect. We don't want to do that, so any major change would be subject to consultation, and clearly those sorts of statements would be happening at Budget time rather than in advance. I think it's also fair to say, as you know, that the other key aspect of aviation and environment will be the fact that aviation may become part of the emissions trading scheme in 2012. That clearly will be an extra element of environmental consideration in relation to that industry that has not been there before, and which can potentially have a behavioural change for the industry.

Q254 Caroline Lucas: Potentially. The ETS apart, though, do you imagine it might be changes that would affect freight? At the moment you've been talking about the air passenger duty. Are there proposals to look at how you'd include freight under any new system other than the ETS?
Justine Greening: Yes, I think one of the options clearly that's been discussed is a per plane duty. Of course, one of the questions around that is that at the moment, air passenger duty is what it says it is—it's air passenger duty, it's not freight—whereas per plane clearly gives you an option of having freight in. So there are a number of different considerations around that as an issue, and they're ones that obviously we'll work our way through. I come back to my comments to Mark earlier. What we need to do is make sure that when we're making changes, we fully understand how they're going to impact on industries and individuals in jobs, and that's why we're very clear-cut that if there are going to be major changes, they've got to be consulted on.

Q255 Martin Caton: The Government have announced that they will reform the climate change levy to deliver a floor price for carbon. How quickly will you be able to make the higher tax bite, given that new low carbon infrastructure requires a lead-in time to produce?
Justine Greening: Well, the consultation was launched in December and what that talked about was a steady rise, bringing in a floor and then seeing that floor rise, precisely, Martin, so that those longer-term decisions on investments can be made. So, in other words, those highly capital-intensive utility companies can understand exactly what the carbon price will be going forward in a particular year, and they can make their investment decisions accordingly. So, hopefully, that should start to bring some certainty to investment decisions, and people have a better understanding of

their revenue streams, which means they're best placed to invest.

In terms of timelines, we've done the consultation now; our intention is to bring forward some legislation in the Budget in 2011. So, clearly, this is something we want to be in the position to get on with, but alongside that there's this long-term trajectory, which is a key part of it that we want to set out for business.

Q256 Martin Caton: Some people had expressed concern that by introducing a floor price, we might end up shifting investment to our European Union partners who haven't got a floor price. How are the Government going to tackle that?

Justine Greening: Well, clearly we've done a consultation to make sure that we get it right. As you can imagine, in advance of that I've spent an awful lot of time talking with the industry and different stakeholders, including environmental groups, about the pros and cons of a carbon price floor. Certainly, my personal view is that the certainty that it brings creates a better investment environment for utility companies, and I think that alone is something that they very, very much welcome. The initial reaction to the consultation has been very positive, although we'll wait to see over the coming weeks ultimately what everybody says.

Q257 Martin Caton: Do you think there's any danger that our big utility companies, which are mostly foreign owned now, will actually start to produce energy abroad and import into the UK to avoid the higher climate change levy?

Justine Greening: Let's see what their consultation responses say, but my sense is no. I think that the secondary issue you raise, which I'm sure is one that's really of interest to your Committee, is around energy security. I think that's a very important and fair point to bring out, and of course, some of the electricity market reform that is encouraging investment ultimately in renewables will have this benefit of helping that challenge around energy security.

Q258 Martin Caton: I have to say those were devil's advocate questions, but can I ask how will revenue from the additional tax be used?

Justine Greening: Well, I think we've just had the question about hypothecation and it's probably impossible at this point for me to say specifically what that would be used on. Clearly, reducing the deficit is our key issue, but as you've seen with the spending review, we've invested across the board in public services, not just environment. So, I think the answer is, hopefully, effectively.

Q259 Mr Spencer: Climate change policy involves a whole web of different obligations and taxes all aimed at cutting carbon, and clearly some of those reforms are going to almost culminate, I suppose, in a climate tax. Now, will you use the opportunity basically to simplify the taxation system?

Justine Greening: To answer your question directly, I think we do need to look at the complexity of the overall myriad of policy measures that were left in place in order to tackle climate change and reduce emissions. There's no doubt that, whether you were a business in particular or an individual, an awful lot of different policy initiatives were going on that I think people in industry found difficult to manage collectively, and as individuals and households they couldn't really get a grip on exactly which ones were meant to do what.

I think in relation to tax there is a need for simplicity, as much as because we don't like having complexity in the tax system. That's just generally not a good thing. We want to see simpler tax overall. But also I think if you're going to change behaviour, then simplicity is probably the best way in which you can do that and not have unintended consequences.

Q260 Mr Spencer: I suppose, depending on which sector of industry you're in—we've heard about aviation—those sorts of taxes will impact on you differently. Have BIS made any representations to the Treasury on what impact some of these measures might have on different sectors?

Justine Greening: Can you be more specific when you say "some of these measures"?

Mr Spencer: Well, whatever taxation you're looking at will obviously affect different industries in a different manner. I just wonder if BIS are saying to the Treasury, "If you do this, this will dramatically affect this sector of industry", where we're actually looking at those sort of measures in that detail.

Justine Greening: A couple of things on that. First, we're aiming, as I've said, to bring forward tax policy in a more thoughtful, considered way. That means making sure that there's more consultation, more time for stakeholders affected, including industry sectors when that's the case, to respond. Secondly, the way in which we work across Government is, certainly in my experience, absolutely joined up. So, Treasury does not operate in a silo where we simply do a big tax in a particular area and there's no discussion. For example, if you're looking at transport, clearly it's absolutely important for us to work alongside other Departments, including BIS as you specifically mentioned, to make sure that we achieve the aims that we want to as a Government.

Q261 Mr Spencer: Yes. However, what about other Government Departments? To give you a specific example, if you were looking at changing taxation to agriculture, would DEFRA make comments to you on the impact that would have on food prices?

Justine Greening: Well, I nearly smiled because actually what I've found is a lot of Government Departments are very proactive about saying what they think needs to happen in terms of tax incentives and fiscal measures to Treasury. So, in my experience, there's absolutely no reticence in that discussion and debate that goes on between Treasury and the different Departments.

I think the key thing is that we can have our debate in Government but we need to make sure that we always give external stakeholders the chance to say, "Well, hang on a minute, this is going in the wrong direction", or "Actually, this is exactly what we want". That is precisely why we've brought forward this tax-making policy proposal, which is to say that we've got to have more consultation, and people have also got to be able to see draft clauses of legislation for Finance Bills. We published just before Christmas the Finance Bill that we're bringing forward. So, I think there's a sense that we want to get things right first time. I've already done a couple of SIs where we're correcting drafting errors, and I don't think we want to be in that position as a Government ourselves.

Q262 Chair: It just so happens that on this whole area of environmental taxes—we talked specifically about the climate change levy, and then we just had questions from Martin and Mark about specific business and how that relates to the Business Department—I have a constituency interest in respect of intensive uses of energy in the ceramics industry. I think that that very clearly illustrates how, somehow or another, there needs to be an alignment of European taxes to make sure that there's no double-counting when UK taxes come to apply, linked to the climate change levy. I'm just wondering, in respect of the stakeholder meetings that you talked about in the Treasury, which involve business and different sectors, and those intensive users of energy who see themselves at risk from carbon leakage, whether or not it is your intention to reconcile some of these irreconcilable issues as they stand at the present.
Justine Greening: That's the challenge.
Chair: It is a challenge.
Justine Greening: You're right, it is a challenge, and actually my personal view is I don't think we're going to get over it unless I get people with different views—the circles I'm trying to square—in a room together so that we can start to have a more structured conversation about how we do this.

Q263 Chair: Sure. It would be wrong of me to use my position as a Select Committee Chair, but I do make the general point that there is an issue here relating to intensive uses of energy, particularly the ceramics industry, if I may.
Finally—we did say we'd try and finish by just after 4 pm, and we're almost there now—this is our second inquiry and we published our first report just on Monday of this week about embedding sustainable development. I just wondered if you'd had a chance to look at our report, because I think that we clearly defined the so-called Green Book in the Treasury as an area where in future there needs to be a lot more joined-up thinking on green environmental issues. We just wondered if you had any immediate reaction, prior to any perhaps formal response that Government may wish to be making on this, to that first report.
Justine Greening: Well, I think this is an issue that is really important and I think for us as Treasury we will continue to look at making sure that the Green Book supports—

Q264 Chair: Sorry, you say "continue". I think that one of our criticisms from previous reports that this Committee has done has been that the so-called Green Book has been perhaps in name and nothing in deed at all. It's a bit of an anomaly that it should be called the Green Book, because in the past it's had nothing to do with informing other investment decisions on green issues.
Justine Greening: Well, that may have been the case in the past, but certainly we want to work with the Social Impact Task Force to make sure that we can see the Green Book support the sorts of issues that you've raised in this report that you first did around sustainability. I think it's not just about the Green Book. My sense is it's a way of working across Government that we need to have, and certainly for myself I feel very passionately about all of those environmental issues we've been talking about today. So, on a personal level as well as a ministerial level, I'll certainly be doing my best to play my role to make sure that those discussions that you've highlighted as needing to happen do happen.

Q265 Chair: Well, we look forward to that. Can I say, finally, thank you very much indeed. You've been very generous with your time and I think it's been very helpful to have this whole impact in terms of the Green Investment Bank, so thank you very much indeed for coming along, and to Mr Schofield.
Justine Greening: Thank you, and I'll look forward to your report.
Chair: Thank you.

Wednesday 19 January 2011

Members present:

Joan Walley (Chair)

Peter Aldous
Neil Carmichael
Martin Caton
Katy Clark
Zac Goldsmith
Ian Murray
Sheryll Murray
Caroline Nokes
Mr Mark Spencer
Dr Alan Whitehead
Simon Wright

Examination of Witnesses

Witnesses: **Jonny Mulligan**, Chief Executive, Environmental Industries Commission, **Rupert Steele OBE**, Director of Regulation, ScottishPower, **Penny Shepherd MBE**, Chief Executive, UK Sustainable Investment and Finance Association, and **Paul Spence**, Director of Strategy and Regulation, EDF Energy, gave evidence.

Q266 Chair: I think you all have your papers in front of you. I would like to give you a warm welcome to our session this afternoon of the Environmental Audit Select Committee. We realise that there are four of you from different strands, if you like—different organisations. My first question in welcoming you all here today and thanking you for giving up your time is simply to give each of you the opportunity to say what you feel are the main barriers towards getting the green investment that we need; perhaps give us some flavour of whether or not you feel that the utility companies are constrained by their balance sheets; and set out what you would like the Green Bank, or however it's going to be, to get organised and what you think the biggest challenges are—just by way of introduction. My colleagues will then home in on specific aspects. Mr Mulligan, would you like to go first?
Jonny Mulligan: Yes. I would like to say thank you very much for inviting me here today. I am Jonny Mulligan from the EIC. We represent 264 companies in the environmental technologies sector. In terms of barriers, I suppose, put in simple terms, it is access to finance for starter projects and getting money in. The Green Investment Bank, from our side, would provide those small pockets of finance. Whether you are doing land remediation or water work or energy efficiency, it would start off projects like that, because it then sends a signal to larger investors that that project is worth getting. So starting the finance is the first point.

Q267 Chair: And what would you say are the barriers to low carbon industries? We just want to have a sense of what you feel are the biggest barriers to the low carbon industries for investment.
Jonny Mulligan: Well, it is purely—let me think about this.

Q268 Chair: The barriers that you are looking for the Green Investment Bank to overcome. What do you think the bottom line should be, in terms of the organisations that you represent, in how the Green Investment Bank, when it is set up, goes about doing its business?
Jonny Mulligan: I think where we would like it to be is to go where other finance won't go at the moment. One of our companies, MGT Power, is a biomass company up in Tyneside and Teesside. They found it quite hard to raise finance for biomass. They have done it via bond markets at the moment but you would hope in a case like that that the Green Investment Bank would start the process so they could then move on to more institutional funders. That is one worked example that we'd have. You can go further out. There are examples of some land projects or waste projects, which are small scale, that big institutions won't look at the moment.

Q269 Chair: It may well be that there are other witnesses who want it to be only for the big players, the big boys as it were. This is your chance to say why it should be important for other smaller enterprises.
Jonny Mulligan: Quite simply, if you do it in finance terms, if you have £1 billion on the table you could spend £1 billion on energy efficiency today, which would save you £3 billion in energy spend, which could go back into the economy. I think it is great that we have that £1 billion. I think we have to really think where we put the money. I think with the other submissions there are merits in them. For my part, because we are the Environmental Industries Commission, we would like you to focus on energy efficiency first—buildings, land, waste—which we don't always get finance for.

Q270 Chair: Thank you. Mr Steele?
Rupert Steele: I am Rupert Steele, Director of Regulation at ScottishPower. We are an integrated utility with interests in distribution, supply and generation. We are a very large renewables generator and looking at nuclear as well. From our point of view, I think it is important to look where the gaps are. There are a large number of instruments, either in place already or in the pipeline, that are putting together in place the various parts of the jigsaw that are needed to get to a low carbon energy economy. For example, the absolute sine qua non is to make sure that the projects are viable, so the EMR process that the Government is currently going through should create a framework in which renewable and nuclear and CCS projects in the future can be viable. Without that, you can't make a start.
For renewables, obviously there is an issue about making sure that there is a grid connection available

and there is work in hand through Connect and Manage to do that. You need to make sure that the transmission charges are appropriate in Scotland and so forth. Where we think there is particularly an issue is probably around construction risk for these major projects. Fundamentally, the finance community is not very interested in project financing projects where the technology is novel enough that somebody isn't going to give you a guarantee. In those kinds of projects, the risk around the construction basically has to be taken by the utilities.

Chair: Could you just speak up a little bit, because I think the acoustics are a little bit difficult in here?

Rupert Steele: Sorry. I will speak up. The risk around those kinds of things has to be taken by the utilities themselves. Obviously, in the current financial climate, utilities, like all companies, have to be aware of how much capital they are spending. With the big hump of investment that is to come through, we think that construction finance is the area where there is a gap and where the Green Investment Bank can play a valuable role in delivering the decarbonisation.

Q271 Chair: Thank you. Ms Shepherd?

Penny Shepherd: Hello, my name is Penny Shepherd. I am the Chief Executive of the UK Sustainable Investment and Finance Association. We are the membership network for those involved with sustainable and responsible financial services. We have about 250 members of whom about 60 are major financial institutions, particularly investors but also including some banking institutions. We also include other parts of the supply chain including NGOs, so we sometimes describe our membership as running from Barclays to WWF.

We exist to support the UK finance sector to be a leader in advancing sustainable development through financial services, so we exist for sustainable development and for the success of the UK finance sector in advancing that agenda. Basically, we see a need for a rapid transition to a low carbon, resource-efficient economy, not only for the economic health of the UK but also so that investors have opportunities into which they can continue to invest to protect and grow their wealth. It makes sense for the savings of the nation as well as the jobs of the nation that we make that transition. That is what we want the Green Investment Bank to support.

Q272 Chair: What I am interested in as well is what the current barriers are to your members' being able to create this investment.

Penny Shepherd: One barrier at the moment, is clearly the regulatory framework. A regulatory framework that creates profitable opportunities for investment is the first requirement, and clearly we recognise that, within the UK, the Government is taking measures in that direction. The question then arises as to the barriers once you have an effective regulatory investment in place. As far as we can see, barriers remain: barriers around scale, barriers around speed of decision making within financial institutions, barriers around knowledge and around understanding risk, and barriers around mitigating risk. One of those risks is regulatory risk because, as we know from around the world, even when regulatory frameworks are put in place, things sometimes happen to the incentives that were not appreciated at the beginning.

Q273 Chair: I am assuming that some of your members, and indeed of all the organisations giving evidence now, are looking to invest in other European countries as well. Do you feel that there may be more certainty, in terms of regulation in other European countries, that could be disadvantageous in terms of long-term investment planning strategies here in the UK?

Penny Shepherd: Our members invest globally. You are right that it is not specifically in the UK, but it is very much not specifically in Europe either. I don't feel I can answer that question at that level of detail. What is certainly so is that investments will flow to where they can achieve the most attractive risk-adjusted return.

Q274 Chair: I think Mr Mulligan wanted to come in on that point.

Jonny Mulligan: I just want to add one thing on barriers. I suppose a lot of the time we talk about policy as a barrier. From our point of view we would say that a lot of the policy framework at the moment is working quite well. I suppose the most successful in our sector would be something like the landfill tax in1996. Things like FITs will work well—brilliantly if we just stay steady on it—and CRC. Those are all good, but if that policy framework starts being tampered with, or if we don't have a long view on the policy framework, that would be a barrier.

Q275 Zac Goldsmith: I was just going to ask Penny Shepherd, are there specific examples of where you think there needs to be more regulatory clarity?

Penny Shepherd: I am very much here to talk about the Green Investment Bank and I certainly would not claim detailed competence in those areas. The classic example of, a problem area recently has been in relation to FITs and Spain, for example, where once you have trust, if that trust is then destroyed you have a much harder job rebuilding it.

Q276 Chair: Thank you. Mr Spence, your opportunity.

Paul Spence: Thank you. I'm Paul Spence. I'm Director of Strategy and Regulation for EDF Energy. We are the largest generator and supplier of electricity in the UK today and we are an investor in energy efficiency in high-efficiency gas generation, in renewables and in new nuclear.

To answer your question about the need and the barriers, the Committee on Climate Change has made it very clear that we need to decarbonise the UK's economy and the electricity sector has a vital role to play as an early mover in providing a route to decarbonise heat and transport, and therefore we have to move urgently to decarbonise the electricity sector by 2030. On Ofgem's numbers, that means an investment of somewhere in the region of £200 billion in the electricity sector, a large portion of that in new generating capacity as our existing capacity comes to the end of its life.

In the context of the scale of the need, the clarity of the market framework for the electricity sector and the role and rules around planning are clearly three dimensions of making sure that we are able to invest in the right projects. The role that we see the Green Investment Bank playing is to unlock other potential sources of financing for those investments and for those projects by being focused on the UK as a market and by being an expert in the UK regulations and the regulatory regime; and, by investing on commercial terms, to provide confidence to other people who might invest as well and therefore unlock the scale of capital that we think will be needed.

Q277 Katy Clark: I was going to ask specifically about the energy markets and, in particular, energy market reform. You'll be aware that the Government has announced plans for reforming the energy market and, in particular, introducing a floor price for carbon to increase the attractiveness of low carbon technologies to investors. How important do you think the Green Investment Bank will be in this sector alongside these reforms?

Rupert Steele: I think that the reforms themselves are fundamental. If the business case is not there to make the investments in the relevant low carbon generation, the Green Investment Bank cannot create that business case. That has to be done through the market framework. What the Green Investment Bank can do is help increase the speed with which the industry is able to respond to the opportunities that are created by the EMR. I would say that the fundamental element of the EMR will be the feed-in tariff, essentially for new generation, because that will define, to a large extent, the commercial case and allow those projects to proceed if it is set at an appropriate level. Strangely enough, the feed-in tariff will actually cancel out the impact of the carbon floor price, so the fundamental thing is the feed-in tariff.

Paul Spence: If I can pick up Mr Steele's comments, clearly we have argued for electricity market reform and for a floor on the price of carbon for a long time now. Fundamentally, if we believe that we want to decarbonise energy generation, we have to put a value on that decarbonisation to make the right opportunities for investors. Then the role of the Green Investment Bank is, as Rupert said, to make sure that there is capital available to pursue and take advantage of those opportunities. So the market reform, the early move on putting in place a carbon floor price and then the longer-term move to make sure that we have a market that rewards low carbon available capacity at the scale that we need it is fundamental, but it is one component. The Bank sits alongside that as a way to make sure that the capital is then available.

Q278 Katy Clark: With the current level of the feed-in tariff and with these market reforms, do you think that if we did not have the Green Investment Bank we would get the kind of investment we need to get these initiatives going?

Paul Spence: My fear would be that we don't get the investment we need focussed on the UK at the pace that we need it in the UK.

Rupert Steele: The other thing to say is that the Government has not yet defined what the level of the various feed-in tariffs will be under the EMR. We await that conversation with them with great interest.

Jonny Mulligan: Just on the Green Investment Bank being tied into the big energy picture, I think when Bob Wigley did his original report the focus was energy efficiency, smart grids, renewables. I think we should stick to that because when we look at the energy market as a whole we are looking at a European market. We are looking at a lot bigger figures. We are looking at a lot bigger problems. We need more joined up strategy. If we talk in terms of carbon, we would talk Europe-wide. We have a lot of energy players that are big European and global companies. I think the Wigley report was looking quite narrow to have speed and impact now. So if we have £1 billion now, we should really focus on what we can do now. Maybe we need to decouple the Green Investment Bank and the energy market reform a bit and take them in two sides.

Q279 Dr Whitehead: I am interested to hear the view that the feed-in tariff—by which I assume we are talking about the contract for difference mechanism in EMR—might well effectively trump the carbon floor price because of its operation but the contract for difference is not exactly a fixed FIT, in as much as it enables or incentivises companies to try and sell at above the market in order to get the addition from the contract for difference. In your view, does it also trump what advantage might be obtained from the Government rates, as it were, that one might gain from the Green Investment Bank for investment and how do you think those mechanisms might work in together?

Rupert Steele: I don't think that there is an incompatibility between the Government's feed-in tariff and CFD proposals on the one hand and the Green Investment Bank on the other. The feed-in tariffs and contracts for difference will, as I understand, it create a marketplace for renewable, nuclear and CCS electricity that we will be able to sell into. If we can do better than the annual average, or whatever the average period is, then we will make a bit more money. If we do less well, if our energy management system is not as good as our competitors', we'll make a bit less. That all seems fine and I think that the financial support around getting through the investment cycle that the Green Investment Bank could provide would simply enable all of us to do more of it quicker. I think that is a rather different interaction than the interaction with the carbon floor price, which is simply that if the effect of the carbon floor price is to increase the price of electricity but then the CFD substitutes the CFD price for the market price, then that effectively cancels the carbon floor out once the CFD is in place.

Penny Shepherd: What I would add is that in looking at the range of interventions that the Green Investment Bank might make, you do need to look through the lens of any investors in the Bank itself. So if the Bank, for example, plans to issue bonds to leverage up the resources that it has available to that, then what sorts of interventions it makes need to be compatible with a business model that gives investors confidence that they will receive the projected returns on those bonds. I think that will be a message from me throughout: that if the Green Investment Bank is seeking institutional investment into itself, then its business model needs to be compatible with those types of investment.

Q280 Dr Whitehead: If it is the case that a carbon floor price is effectively trumped by a contract for difference and the proposals for the carbon floor price appear to be based on an upstream taxation model for energy-producing companies, that effectively suggests that a carbon floor price under that sort of basis is a tax. Do you or would you favour some sort of recycling of such a tax into a resource for the Green Investment Bank based on the argument of the contract for difference trumping the carbon price in any event?

Rupert Steele: I think we would be quite interested in looking at that option. We are a bit concerned that if the carbon floor price is not going to be bringing forward a lot of extra investment because of the fact that it is trumped by the CFD, then there is a bit of a concern that the impact on consumers in terms of higher electricity prices may not justify a very high level of that tax, so I think we would argue for caution in setting the level. Although I recognise that there are people from the Treasury who might turn a slight shade of white if I were to suggest anything that might involve hypothecating anything, it might be a good idea to think about spending some of those proceeds to put a bit more money in the Green Bank; because £1 billion is not going to go very far in £200 billion, to be honest.

Paul Spence: Can I take issue very slightly with Mr Steele? I'm not sure I agree with him about the impact and interaction between the carbon floor price and the contract for difference. By definition, a difference is a difference against the price, so if the carbon floor moves the two together, then that is potentially an important contribution. I think the other observation I would make is that the carbon floor price can be introduced much earlier than the longer-term reforms to the electricity market, and while it can start low and move up over time, it is something that can give investors in low carbon confidence that we are serious about decarbonising the UK in the near term and bring forward investment.

Chair: I am always conscious, when we have four different witnesses, it is sometimes very difficult to get a balanced view. I would say to each of you that if you wish to provide us with further written evidence we would very pleased to receive it, but I think we do need to move on now.

Q281 Sheryll Murray: Alongside the energy market, the Government has announced a number of initiatives to cut CO2 emissions and also to help fund green infrastructure, such as the Green Deal, carbon capture and storage competition and funding for upgrading port facilities. Should the Green Investment Bank be given the co-ordinating role for these initiatives?

Paul Spence: I think our view would be that it should be for the Government departments setting the policy to take the role in making sure that their policies are joined up and co-ordinated, and the Bank can focus on what it should be focusing on, which is investing in the right opportunities.

Q282 Sheryll Murray: Is there a need for a single voice guiding Government on green infrastructure investment?

Jonny Mulligan: Just to take a small step back, one thing I've noticed—because I've read a lot of statements that have been given to you—is we need to try to work towards a definition of what we're saying is green, because there have been a lot of various descriptions. If we take Wigley to start off with—energy, smart grids and renewables—and then we move into CTS, nuclear and all the way down there, every technology has a merit. It's all going to provide solutions in some way or another. But I think for the Green Investment Bank, if we are going to go down the route of green ISAs and getting money from consumers, we really have to think about getting this clear.

So if I'm a consumer going to put £400 a month into the Green Investment Bank, maybe I want to make sure that it is going to energy efficiency, so I think, at some stage, we can't have the Green Investment Bank catching everything. If we're going to have an infrastructure bank, great; a nuclear bank, great; a CTS bank, great. But I would be concerned that, going from Wigley's report and recommendations, we are moving into this very big "catching everything". So maybe we need to step back, just to see what definition we've got around that.

Q283 Zac Goldsmith: Could I just jump in on that? I am assuming that the context in which you are providing your answers is a belief that this is going to be a £1 billion fund. It seems that way from what you are saying. But if instead this thing is a bank that is able to achieve bonds and potentially stimulate much greater levels of investment, presumably the answer you have just given would be different, you'd have much broader range of investment targets and so on?

Jonny Mulligan: No, I would actually be coming at this saying it is a bank, not a fund. A fund, for me, would be a big chunk of money going into—

Q284 Zac Goldsmith: You keep talking about £1 billion. If this thing is a bank, if it's able to issue bonds and if it's able to raise a lot of capital, presumably that would allow it to broaden its investment, its scope.

Jonny Mulligan: It would do, but I think we need to set out, with very clear direction-setting, what we mean this is. For me, it's energy efficiency and looking after resources. We only have £1 billion. We know energy efficiency would work. There are other debates to be had further down the line on other technologies that are more expansive.

Sheryll Murray: I think I've completed my questions.

Q285 Chair: Did you want to come in, Ms Shepherd?

Penny Shepherd: Can I just add to that? One fundamental question is: is the Green Investment Bank a long-term institution to support the transition to a low carbon resource-efficient economy or is a short-term project? If it is a short-term project, then the questions around "should it do A or should it do B?" are really important. If, however, it is an institution, then in its remit it needs to be given quite a broad scope but, within that, what is very important from an investor's perspective is that it then has the freedom to select simple things to do first—that it isn't asked to address every possible opportunity originally—because it needs to build up the trust of investors by being successful in its early years, so if it can do a narrow range of functions to start with and then add others as it develops competence, it is liable to be the greatest possible asset to the UK.

Q286 Sheryll Murray: I think what I was trying to ask you was: do you think it should investing in smaller projects to help the consumers, such as the Green Deal, where people would perhaps adapt their homes to reduce their energy consumption, among other things?
Penny Shepherd: I think, in principle, it should have the freedom to do that but, looking through an investor lens, it needs to look at the range of possible opportunities and say which of these opportunities will deliver the greatest financial return, build the greatest trust for investors and have the greatest impact on the low carbon transition, and prioritise among those to start with. I wouldn't wish to say, "Yes, it should do A or B," but it should look through that lens and decide A or B, not everything, initially.
Rupert Steele: If I could just come back on some of this. I think we do need to look for where the gaps are, because that is where I think the Green Investment Bank should be focusing.

Q287 Neil Carmichael: Can I just ask who do you think should be looking for where the gaps are: the Green Investment Bank or the Government?
Rupert Steele: The Government initially, in setting their remit, and then within whatever remit they set, the Green Investment Bank, focusing more narrowly, I think.

Q288 Chair: To go back to what Mr Spence was saying—that it was up to the individual Government departments to agree what that should be—presumably what you are saying is the important thing is that it is between now and when the details of it are made known that we have time to influence it. So what we are trying to do is identify what absolutely needs to be addressed at this formative stage of the Green Investment Bank.
Rupert Steele: I think that was the point I was trying to make. What I was thinking was that, for example, the Green Deal has been structured by the Government so as to enable financiers to come in and provide the finance for energy efficiency on a commercial basis; they should be able to provide that finance at a low interest rate and then the utilities will collect the payments. If that system works, there should be a tick in that box without the need to trouble the Green Bank hugely, although there is an issue around default risk that we might like to look at.
Obviously there is a huge CERT programme, billions of pounds per year being spent on energy efficiency and a mechanism for funding that. That doesn't mean to say that there isn't more that we could do but there are mechanisms in place. I think we should be looking for the areas where there are not mechanisms in place or where we know that there is a problem with the mechanisms. It's perhaps not the most exciting thing but it's getting the big ticket items: offshore wind, grid enhancements, possibly nuclear, marine renewables and CCS. Those are the big ticket items that are going to move the numbers on the dial by a huge amount and where there is a big gap at the moment.

Q289 Sheryll Murray: Could I ask you all a question? A short answer will suffice. Is there a need for a single voice guiding Government on green infrastructure investments?
Jonny Mulligan: I would say yes. I think we need one single voice, joined-up thinking, getting the departments really focused all together and getting Treasury behind the financing of this. So, yes, that would be very good.
Rupert Steele: I would think that guiding and prioritising that is fundamentally DECC's job. We have a Secretary of State to lead the decarbonisation effort and—

Q290 Chair: You would not see that as being a role for the Green Investment Bank?
Rupert Steele: I think the Secretary of State is the person who should do it.

Q291 Chair: And you would choose the DECC Secretary of State rather than BIS or Treasury?
Rupert Steele: For decarbonisation, yes.

Q292 Neil Carmichael: Apart from the obvious financial aspects and viability, what do you think should be guiding the Green Investment Bank in deciding between large or small-scale schemes in the world of energy?
Paul Spence: We would expect that the Bank would be set up with a number of clear principles about the scope of what it should do, making sure that is done on commercial terms, the sectors that it is working to and, within that, the risk profile that it is willing to take. Then it can assess individual projects against that and construct its own portfolio within those clear and publicly understood guidelines. We would expect the consultation and design work during this phase to identify those, consult on those, set those up and then they become the guiding principles for the operation of the Bank.
Neil Carmichael: Anyone else want to say something?
Penny Shepherd: I have nothing on that.
Rupert Steele: I think Paul has expressed it very well.
Jonny Mulligan: I think, from our end, the Green Investment Bank is about reconciling the markets with the environment. It's about creating that confidence and looking for the opportunities where we can make

the transition to low carbon and where we can look after resources. So it's a commercial bank with a twist.

Q293 Neil Carmichael: Mr Spence, you mentioned before, quite rightly, the importance of Government to set the policy and allow the Green Investment Bank to operate with a relatively free hand, but do any of you think that Government should also be setting targets? That is different to policy.
Chair: In relation to the Green Investment Bank, not in relation to the Climate Change Committee.
Paul Spence: If that means that the Bank is then forced to compromise on its commercial principles in service of the targets I would be concerned because, as Ms Shepherd said, you start to worry about whether it is then giving other investors the confidence either to invest alongside or invest in it.

Q294 Neil Carmichael: So, in summary, you would say that it has to be an independent structure, some distance from Government?
Paul Spence: Yes.
Neil Carmichael: You are all nodding to that? You're all saying "yes".
Paul Spence: Yes.
Penny Shepherd: Yes.
Rupert Steele: Yes.
Jonny Mulligan: Yes.

Q295 Neil Carmichael: Good. Last but not least, nearly all of you focused on energy but do you think the Green Investment Bank should be looking at other issues in connection with the environment?
Penny Shepherd: I think there are several dimensions to that question. One is: over what time scale? Because, if you look at the issue of the UK's transition to a sustainable economy, part of that is a transition to a low carbon economy, but part of that is a transition to a resource-efficient economy in a much broader sense. Issues like biodiversity, for example, are rapidly rising up the agenda, and it wouldn't be surprising if the Green Investment Bank was asked to address issues like biodiversity in the future. From where I sit, it would seem foolish to create an institution to address one issue and then have to rebuild institutional capital as other issues came up the agenda. That's one dimension.
The second dimension is: to what degree should investments made in the Green Investment Bank address a broader range of issues initially? The third dimension is: if it was decided that the Green Investment Bank was predominantly focusing on low carbon initially, to what degree should it take account of a broader range of issues in its investment strategies? I certainly think there is an argument there that, even if it is decided that it addresses low carbon, society will expect a certain performance of it on other social and environmental issues. So a simplistic way of looking at that is to say that, if it is discovered that the Green Investment Bank has invested in an energy project with various unfortunate labour practices in its supply chain, that is liable to be something that society would have expected the Green Investment Bank to have considered before it was making its investment.

Q296 Neil Carmichael: You are obviously applying fairly high, rightly so, ethical standards for the performance of the Green Investment Bank.
Penny Shepherd: I am saying this is an institution that needs to be trusted by society and, therefore, it needs to look at what sort of standards it should be taking for its investment. Now, in that respect, it has common interests with other reputable banks and it shouldn't need to reinvent the wheel for itself.

Q297 Neil Carmichael: Taking that metaphor slightly forward; you wouldn't be surprised, therefore, if it went into transport, for example; say, electrification of railway lines or whatever?
Penny Shepherd: I wouldn't be surprised if it invested in electrification of railway lines. I do think there are some debates to be had: where are the barriers where something stops becoming a low carbon investment? The classic example that people quote is: if you upgrade the road network so that there are less traffic jams and cars run more efficiently, is that a green investment? Some people anticipate that some people will seek to make the case that it is, if as a result they can attract investment more easily.

Q298 Neil Carmichael: You are moving into judgement territory there, because someone else could equally say, "Look, great, the road system is so that electric cars can perform better", then obviously that is a different focus.
Penny Shepherd: People may well say that. But the underlying issue is that we are already seeing, for example, civil society groups and investors coming together to set standards in that sort of area, and certainly the Green Investment Bank should be aware of the debates on standards that are going on. It should have an objective, I would suggest, of operating to high industry standards and participating in the debate around what those standards should be.

Q299 Neil Carmichael: Can I just ask about those two things, what you said and what Mr Spence was saying before—about independence from the Government, getting on with the investment because it is the right thing and all the factors I asked you about before? You're talking more about how the Green Investment Bank needs to be looking at certain parameters of activity and so forth. Who is going to monitor the performance of the Green Investment Bank in your world, as opposed to Mr Spence's world?
Penny Shepherd: That is a very interesting question. Any bank has internal functions to monitor its performance. The finance sector generally needs a strong civil society around it to monitor its performance and some would argue that that civil society monitoring should be strengthened. I think there is a legitimate question about what sort of oversight the Green Investment Bank itself should have. I think there are some interesting models out there. What seems to me as one interesting model that you might look at is the model of what's happened with the London Olympics, where you have a "Commission for a Sustainable London 2012".

Q300 Neil Carmichael: I am going to be told off for asking another question but I'm going to ask it. Could you both, quickly and briefly, describe the kind of models that you envisage being the appropriate ones? Because last we heard, the Treasury was considering all models but wouldn't tell us which one was being focused on. I would like to hear from you the type of model you envisage for the Green Investment Bank.

Paul Spence: I'm slightly struggling to see that there's a huge difference between myself and Ms Shepherd because my model would be an independent bank with some clear governing principles, and I would then expect it to have a governance arrangement that included reporting to the public and to its funder against those principles and confirming that it had kept within the boundaries that had been set for it. That's a relatively normal framework for the private sector as well as public-private partnerships.

Jonny Mulligan: I think the original idea behind the Green Investment Bank was that it would go around aggregating projects. It would take the projects that larger funders wouldn't do. I think, from our side, we would definitely go to transport. We'd also like to see brownfield sites be used for social housing, water being cleaned up, local community groups getting feed-in tariffs from solar panels. All of that could be within our vision of Green Investment Bank.

Q301 Mr Spencer: I'm confused a little bit because we talked about the Green Investment Bank being a commercial bank, in effect, and funding projects that had a direct revenue stream and then you seem to have all drifted off into talking about schemes. I can't seem to understand how they have that revenue stream to pay that capital back. So something like improving a road network, I don't understand where that revenue stream would come from unless you are talking about investing in private roads that charge a toll fee to drive on them.

Jonny Mulligan: Roads isn't my strong area but if you take transport and you say, "We want to improve air quality; so we want to remove X amount of diesel particles from air", you are then going to have a set of companies that put in diesel filters. The diesel filter company will need some finance to get going to address that market. So the diesel filter company should be able to go to the Green Investment Bank saying, "We are cleaning up air in this market. There you go". If you talk about land remediation, where the opportunities are, the Green Investment Bank should be open to companies in that sector. Road transport, I am afraid I can't comment.

Rupert Steele: I think you put your finger on an important point there. There are, as far as I can see it, two broad models of the Green Investment Bank. One is where, if you like, it is dispensing money, with not a particularly strong hope of a return for things that are deemed to be socially or environmentally desirable. One could envisage, for example, insurance products insuring against construction cost risk or things like that. Obviously the capital would be whittled down over time, but that kind of bank wouldn't be able to raise funds from investors because it wouldn't be making a profit. Or you could have a bank that is lending, essentially profitably, to projects that have a return on commercial principles. Some people, I think, have muddled the two up. I don't think you can have a bank that lends less profitably than you need it to, to make a commercial return, and expect people to invest in it.

Q302 Mr Spencer: That's fundamentally the question, isn't it: who makes the decision as to which of those investments is the right investment?

Penny Shepherd: Perhaps I could just clarify my example; I was talking about profitable investment opportunities. Taking roads as an example, I was talking about PFI-type investments in roads. I was not talking about public spending.

Q303 Sheryll Murray: So were you envisaging the Green Investment Bank as being a proper bank or a fund?

Penny Shepherd: As a proper bank.

Q304 Zac Goldsmith: Would you all agree with that last one? It sounds like you all very much believe this should be a bank as opposed to a fund, as a way of having it regulated?

Paul Spence: I think we should have a bank.

Rupert Steele: I think I would be prepared to look at both models because if it's a bank and has to be profitable, that may restrict it from providing support to certain kinds of project because, by definition, we are looking for things that the private sector by itself will not support, and that is where I have a slight question. I don't have a firm view either way. I would like to really have more—

Chair: That comes back to our original question, which was: where are the barriers that would make the private sector unable to support the investment that is needed on the green environmental issues? Anyway, go on.

Q305 Zac Goldsmith: Before I ask the question I wanted to ask, I would love to hear from you also, Mr Spence.

Paul Spence: I am less bothered about the semantics than I am about the reality. What I envisage is equity investment in projects by the Bank and focus on—

Q306 Zac Goldsmith: But do you think a £1 billion fund would generate enough—

Paul Spence: If it's able to be credible and convince other of its credibility, either to invest through it or alongside it, so it can multiply that way.

Q307 Zac Goldsmith: Can I just come back to my question? We've had lots of evidence specifically in relation to the Green Investment Bank. I think it was Chris Huhne who said, "We expect the Bank to have an explicit mandate to tackle risk that the market currently cannot adequately finance". If it wasn't him, it was Vince Cable. My question is: where do you think the balance should lie between investment in established, safer projects and technologies that are more likely to provide a certain return and less tried, perhaps riskier initiatives that could be much more transformative in terms of environmental impact?

Where do you think that balance should lie? How should they resolve that conflict?
Penny Shepherd: On one hand, I think there is general agreement that the Green Investment Bank should only invest when that stimulates the market. It should not invest if the private sector alone will make the investments satisfactorily without it. So its role is about speeding up investments and the like: building confidence, building scale and so on. But the other dimension is that if it invests in a way where it makes too high a level of losses and it doesn't have a way of replenishing its equity, then it is not going to attract investments and it is not going to have a long-term systemic impact because, it won't be there to have this. And the danger is that if it doesn't get its risk management right, it may damage confidence in investing in low carbon solutions in a way that goes beyond the positive impact it's had.
Jonny Mulligan: Maybe I am a lot more optimistic, but we just launched NECA Finance Group, which is looking at this area. With low carbon and managing resources, there are a lot of opportunities. Big institution banks won't go to it yet for the risk, so where we see the Green Investment Bank is starting the process. I think we have a lot of clever people who know what to invest in and I've got confidence in a lot of people we have in the UK to do that. So I think we should be more positive and forward-looking on what we can do.

Q308 Zac Goldsmith: One question for all of you again; a brief answer will do. Within the context of, broadly speaking, what people might regard to be green investments, are there any areas that you regard to be no-go for the Green Investment Bank? I suspect I know what your answer is going to be.
Jonny Mulligan: Let's say, every technology has its merits. Obviously, coming from the EIC, we have a different approach to it. I think we must start with the basics and move with what we know. We must go through energy efficiency and resource management. Energy efficiency is so untapped. It could be the golden goose that keeps on giving. I have given the figures for what stacks up. Then we have to go renewables. We do have problems with fossil fuels and the cost and everything like that. So I'm not ruling anything out but I think we have to go through all technologies as we go along.
Rupert Steele: For my part, I come back to this question of where the gaps are and keeping the focus on what is going to be difficult to fund on the low carbon transition. That, I think, pushes you towards the major projects on renewables: CCS and nuclear.
Penny Shepherd: This is the nuclear question, isn't it?
Chair: I think we will be coming on to that later.
Penny Shepherd: You are coming on to the nuclear question later? In that case I will answer that later.
Paul Spence: I think I would echo Mr Steele's answer; the big technologies that make a difference.

Q309 Peter Aldous: Britain does lag behind in terms of green infrastructure and production of renewable energy. In your views, what other barriers are there that we need to overcome to get greater green investment?
Paul Spence: I think we have argued for a clearer planning system that allows us to set out a national need and then take decisions on specific local projects against that national need and then the local impacts. We've seen progress on that with the changes that the previous Government have made and with the changes that are coming, provided those are enacted.

Q310 Peter Aldous: You're happy with what is in the Localism Bill at the present time?
Paul Spence: I'd like to see it all in place.
Rupert Steele: I would like to add to this, perhaps. We think that there are a number of barriers that are holding back renewables. Clearly, we have an existing subsidy regime: the Renewables Obligation. That works. That is not a barrier. There is a bit of uncertainty about what EMR will look like and that needs to be resolved very quickly to make sure that doesn't become a barrier, but we are optimistic about that. Planning is important, not just for the renewable projects themselves but for the grid-wires to connect them. We're still sorting out the final details of the Beauly-Denny line, which has been holding up renewables in the north of Scotland for some time. Related to that, there is the issue of grid charging. We commissioned a study recently that showed that an amount of renewables equal to the total installed in 2006 could be freed up additionally if we went to a uniform level of charging rather than the higher charges in Scotland. There is a whole raft of technical issues as we move forward in terms of integrating the renewable power into the grid. So all those things, I think, we need to work on.
Jonny Mulligan: I would just say for a lot of these issues a lot of thinking has been done. Successive Governments have given good direction. I think we just have to focus on moving on and delivering.

Q311 Peter Aldous: Going back to the Green Investment Bank, should it consider overseas investments if that may cut more emissions than the equivalent investments in the UK?
Rupert Steele: Hoping that I don't contravene any EU law in answering, I would say definitely not. We have an issue about wanting domestic action in the UK to get ourselves on the path to a low carbon economy. I think the Green Investment Bank should be supporting that.
Paul Spence: I absolutely echo that.
Penny Shepherd: I think a decision needs to be made on the purpose of the Green Investment Bank. If the purpose of the Green Investment Bank is to support the low carbon transition in the UK, clearly it should not invest overseas. The Government also has agendas around supporting emissions reductions in developing countries—for example through the Capital Markets Climate Initiative—and it is possible that it makes sense for the Green Investment Bank to have additional responsibilities related to that agenda. But those are two separate priorities.
Jonny Mulligan: The Green Investment Bank should be focused on the UK.
Chair: This is the stage where we are going to move to nuclear.

Q312 Dr Whitehead: Mr Steele, your company is part of a consortium looking at Sellafield. Mr Spence, your company has ambitions to build eight nuclear power stations.
Paul Spence: Four.
Dr Whitehead: Sorry, four. Low carbon technology: I imagine you would want to access the Green Investment Bank to assist with that programme.
Rupert Steele: From our point of view, we wouldn't rule it out. The area I have mentioned before is construction risk. Clearly, the sums of money involved around construction risk in the nuclear industry are such that £1 billion might not go very far and I think that if the Bank was going to play a realistic part in investing in nuclear it would need more substantial funding than the £1 billion. But we think that it could play a valuable role as an investor in that sector, along with the others that I have mentioned.
Paul Spence: I think, from our perspective, we have said that our aim is to build, as I said, four reactors at two sites: two at Hinkley Point and two at Sizewell. We already have Centrica as a 20% co-investor in that project with an option to take a similar stake in the stations as they are built. But, both for ourselves and as we look more broadly at the UK sector, it is very clear from the work of DECC and of the Committee on Climate Change that if we are going to meet our objective to decarbonise, we need nuclear to play a significant role. For that to happen, the investments are very large and we need to find some creative ways to obtain that financing and I wouldn't rule out the Green Investment Bank having a role to play in that.

Q313 Dr Whitehead: Yes. I am sorry; I confused the eight you are running at the moment with the four that you are intending to build. Of the eight that you are running at the moment, presumably you will benefit substantially from existing long-term contracts being considerably uprated as a result of a contract for difference. Is that an investment vehicle?
Paul Spence: I hadn't understood that the contract for difference would apply for the existing stations that are running. I had understood that was for new investment in new capacity.

Q314 Dr Whitehead: So they would be excluded from CFD deals and will continue to run, for the present?
Paul Spence: They would be running under the existing market, as they do at the moment.

Q315 Dr Whitehead: Even when the new market comes in?
Paul Spence: As I understand the way that the CFD is designed to run against it, yes.
Jonny Mulligan: I just think, about nuclear, a lot of things are said about the energy gap and energy security. I think what we need to be looking at is diversification, localism and energy efficiency first. I think we have a very big European energy market with some very big European players. We have an interconnector. So I think you need to have a look at a European approach as to where we make these big investments in Europe and is it a European fund that needs to fund those sorts of projects. If it's a Green Investment Bank in the UK, let's go for diversity and energy efficiency first. Let's work on those big problems and see if we can bin that in as we go along.

Q316 Dr Whitehead: One of the issues that certainly was raised by this Committee when we spoke to the Treasury Minister last week was the issue of the extent to which the statements relating to investment in nuclear required there to be no public subsidy for nuclear investments. Would you see that an ambition to obtain some funding for nuclear development from the Green Investment Bank might be regarded as some form of public subsidy, were it to be a bank? It may not be the case were it to be a fund, but were it to be a bank.
Paul Spence: I think it's possible that there will be those who level that accusation but we are very clear that if the Bank operates as we have advocated, which is on commercial principles, investing alongside utilities, then that is not a subsidy and, therefore, the argument can be easily rebutted.
Rupert Steele: Yes, we would not be investing in a nuclear power plant if we did not consider it to be a profitable opportunity and if the Bank were investing alongside us on pari passu terms, then presumably it would be because they considered it to be a profitable opportunity, too.

Q317 Dr Whitehead: One question for everybody. Do you think that, were it explicitly to be stated that new nuclear investments, whether or not it might be regarded as a subsidy, were to be potentially included within the Green Investment Bank's portfolio, that might, shall we say, deter other potential investors from investing in what they might see as a more narrow definition of what a green bank might look like?
Paul Spence: I don't think we would expect it to deter investors. We're expecting, as Mr Steele said, that our project will be a good investment and, therefore, a good investment for the Bank to make. Polling tells us that there is growing support for nuclear to play a substantial role in a balanced energy mix and, just to pick up Mr Mulligan's point, alongside action on energy efficiency and building renewables as well, in an energy picture for the future. On those terms, we wouldn't expect it to have a material effect of deterring investors.
Penny Shepherd: From an investor perspective, I think you need to look at the motivations and interests of large, institutional investors on the one hand and also, which we haven't talked about yet, the potential for the Green Investment Bank to attract investment from private individuals. Institutional investors, will look at the overall risk-adjusted return that they can get from the Green Investment Bank and will, therefore, take a view on the risks associated with nuclear as part of that mix.
Certainly, to endorse a point that Rupert Steele made back at the beginning, there is a concern about construction risk across the range of technologies. So that is one factor. If you look at the private investors, the position is more mixed in that there are some private investors who will be more than happy to invest in nuclear; whereas for others, if the Green

Investment Bank is investing in nuclear, that will put it outside the sphere of opportunities they are interested in. It seems to me that in that environment the Green Investment Bank might wish to look seriously at being able to offer hypothecated investments that are, for want of a better phrase, nuclear-free. But I think that's probably the way the debate would go.

Q318 Dr Whitehead: Within the overall investment portfolio?
Penny Shepherd: Yes. So if the Green Investment Bank was offering particularly bond investment opportunities to the general public, it might wish to offer both mixed bond opportunities and also bond opportunities that didn't include nuclear.
Jonny Mulligan: I think the answer to your question would be "yes" and that's why we have to be very careful about this "green". I think if we are going to go to consumers and go for green ISAs and stuff like that, we have to be very clear what we're investing in. I think consumers these days are quite savvy and want to have a clear line of where the money is going. So I think we could be missing a trick if we broaden out too much.
Penny Shepherd: I think the key thing there is transparency and, within that, it is fair to say there are a range of issues on which private investors would generally agree as to what was desirable. There are a small number of issues on which there are significant divergences of opinion. I think it is fair to say that nuclear is one of those small number of issues on which there are two camps.

Q319 Sheryll Murray: Mr Steele, can I just take you back for a minute to when you first answered that question? You referred again to £1 billion. I just want to be clear. Do you envisage this as just being a £1 billion pot that would be distributed by Grant Aid?
Rupert Steele: No, not necessarily. There are two factors relevant to that. One is the extent to which the Government is successful in adding to the capital base of the Green Investment Bank through asset sales, and we've made it clear that we would encourage them to do that and to do that generously. I recognise that they may feel there are one or two other calls on the money, but they have said that they will be looking to supplement it with asset sales and I think it's important to encourage the Government to do that.
The second point comes down to whether the Bank is modelled in a way where people will be able to invest in it or whether it will be using its money to catalyse other investments. So if the Bank is investing on a pari passu basis with utilities in projects then, in principle, people will be happy to buy its bonds because they will effectively be buying into the projects that utilities are running and into the utilities' experience and expertise.
The other way you could structure it is that the Bank would essentially be writing deliberately loss-making products that would, themselves, catalyse other people to invest. So, for example, the Bank might take construction risk on an offshore wind farm up to a certain amount of money and that would then enable the proprietor of the wind farm to go out and get commercial finance for the balance of the project. But in that model the Bank would find it rather difficult to sell its bonds to people because the business would be fundamentally loss-making. So that's a different structure. I'm not quite clear that the Government has a view as to which structure they want to do. In our view, both are potentially viable and we wait to see their considered proposals.

Q320 Zac Goldsmith: Just very quickly for Mr Spence: EDF has consistently said that nuclear doesn't require any subsidy, that it is competitive and requires no real Government support. I think you also said that if investment had flowed to nuclear via the Green Investment Bank, that would not constitute a subsidy. If that is the case, why would EDF need the investment of the Green Investment Bank? Secondly, could the use of Green Investment Bank resources be justified in a sector that will exhaust the funds because of the scale of it? We are talking enormous sums of money in a sector that you believe is already perfectly competitive and in no need of Government support of any sort. There are two parts to the question, if you could answer them both.
Paul Spence: To pick up your first part, yes; we have consistently said and I have consistently said that we believe nuclear is viable, is a good investment without subsidy, providing we see the changes that the Government is proposing in terms of the market reform. That's the basis that we, and Centrica as our co-investor, are working on at the moment. The four reactors that I've talked about would constitute an investment in the order of £20 billion. That's a substantial investment, even for a company the size of ours, and if the UK needs us to go beyond that and have the other utilities and potentially us go further as we go beyond 2025 and invest in more new nuclear projects, then at some point our funding capacity will be exhausted. So I wouldn't rule out, at this point, the option for the Green Investment Bank to invest some of its capital alongside us.

Q321 Zac Goldsmith: To make a meaningful difference, the Green Investment Bank would have to commit a huge proportion at whatever scale it is. If it is a £1 billion fund or if it is issuing £10 billion worth of bonds, it still would have to commit a substantial proportion of its funds in order to make a difference and that, in turn, would take funds away from the other projects that are much riskier and really do need the kind of support that we're talking about.
Paul Spence: I think it depends on your model of how the leverage of the Bank works. If by knowing the UK regulation, understanding the projects and understanding the market framework, the Bank can send a signal to other sources of funding, other investors, that this is good project to invest in, their impact isn't what they put in; it is the multiplication of that by providing confidence for other investors, and that then doesn't use up the funding.

Q322 Zac Goldsmith: I have always been sceptical. I believe nuclear power cannot exist without subsidies in one form or another. That's my view and I think a lot of people would share that view. It strikes me that if it is as attractive an investment opportunity as EDF has constantly maintained, why would you need to come to the Green Investment Bank and not to investors within the private sector?

Paul Spence: All I am saying at this stage is don't rule out, from the options available to the Bank, nuclear as an option.

Jonny Mulligan: I just think that's a key concern of ours: exhausting the fund and exhausting the resource. I think we've got a great opportunity here if we really just pick the technologies right. I don't want to be boring you all but go with energy efficiency and let's move along; then we will find our way. In time, nuclear might be a great option, further down the line.

Q323 Chair: So are you saying that timing and sequential timing are relevant to this issue?

Jonny Mulligan: Pace and race; there are a lot of opportunities now that need small parts of funding that will make the Green Investment Bank work.

Q324 Simon Wright: I think that Zac sort of made the point that I wanted to make: simply that Mr Steele said earlier the Bank needs to focus on where the gaps are and, given that we are talking about a long-established industry that has been around for decades and we've got this market reform coming through, the access to finance must surely be there without the Green Investment Bank.

Rupert Steele: The only question that you have to bear in mind on that position is simply the quantum. We are talking about an investment programme of £200 billion-ish sterling between now and 2020. You have a number of very substantial utility companies, most of which are part of international groups, but they have to allocate their capital. These days, people have to allocate capital with a degree of caution and they have to allocate capital competitively, looking at all the worldwide opportunities they have. £200 billion is a lot of money to find.

Q325 Peter Aldous: Part of the role of the Bank is to leverage in other funds. Are there potential funds out there who are looking exclusively for green investment? And if nuclear was put into the mix, it might undermine the whole integrity of the Green Investment Bank.

Penny Shepherd: I think I have answered that question already.

Q326 Martin Caton: Ms Shepherd, your organisation is all about sustainable investments. Can you define sustainable investments for us?

Penny Shepherd: Sustainable investments are investments that look at the wider impact of the investments on society and the environment when seeking financial returns. So the important point is that they take account of social and/or environmental criteria in addition to conventional financial criteria, which may be for financial reasons or to achieve non-financial objectives as well. The important thing to say about sustainable investment is that it's a philosophy or an approach. It's not a specific set of rules or prohibitions. It's a lens through which you look at investments.

Q327 Martin Caton: I think you gave us quite a good example of the danger of not having some sort of criteria when you mentioned that some people might argue that investment in a road programme was a green investment or a sustainable investment.

Penny Shepherd: I would agree that it makes sense for the Green Investment Bank to have a means of scrutinising its investments from that wider perspective. The sort of common standards that are now being looked at are likely to be an important part of that.

Q328 Martin Caton: Forgive me if I am putting words into your mouth, but you would like to see the Green Investment Bank have something more of a tighter definition of what it would be liable to invest in?

Penny Shepherd: As I said before, it is a philosophy or technique. It's not a set of rules or prohibitions. So I would like the Green Investment Bank to have a robust process for evaluating the broader social and environmental risks and the broader social and environmental benefits associated with the investments that it's making. That is very different from having an exclusion list, if you like. The general direction of sustainable investments now is very much towards the positive.

Q329 Martin Caton: Are you aware of any international principles or guidelines about what is sustainable investment that the Green Investment Bank could look to?

Penny Shepherd: There are a number of initiatives that it could look to. One is an initiative called the Climate Bonds Initiative, which has recently started work seeking to develop standards for climate bonds. A second area is the much longer-established Equator Principles, which look at social and environmental criteria in project finance, and I think there is certainly a question about how investments made by the Green Investment Bank relate to the Equator Principles criteria. Although, having said that, the Equator Principles criteria are particularly focused on markets outside the UK. A third initiative to look at is the UN-backed Principles for Responsible Investment, which are a set of principles that long-term responsible investors sign up to, including working with others to advance responsible investment practice. So there's a range of opportunities for co-operation.

Q330 Neil Carmichael: Ms Shepherd, your organisation has done some research on investors' interest in investing in the green sector. I was wondering how you could capitalise on that interest and also encourage new investors to get involved in this and deliver that promise.

Penny Shepherd: Yes. Our research is specifically about private investors rather than large, institutional investors.

Neil Carmichael: Yes, I gathered that.

Penny Shepherd: If you look at the history of fair trade, which is the easiest analogy, some people will remember that 20 years ago you could only get fair trade coffee in the back of the church hall and every time you took a sip, you knew you were doing good because it tasted so disgusting. Now you can find it everywhere. It's a huge market and part of what makes it a huge market is that they good products, which then have a social and environmental impact. Similarly, there is a potential for the UK public to be saving and investing in a way that makes them money and makes a difference for society as well. In opinion polls when we say to those of the general public that have investments, "Do you want to make money and make a difference", nearly half of them say, "No, we just want to make money". But just over half of them say, "No, we want to make money and make a difference; so long as we can do both at the same time". It seems to us that that is a huge opportunity for the Green Investment Bank to attract in investments from the general public and, as part of that, therefore, help to rebuild trust in savings and investment and address the savings crisis as well as the low carbon crisis.

Chair: I think, on that optimistic note, I know it's not easy to have four separate witnesses giving evidence, so thank you very much indeed for your patience. We hope that we can make a difference with our report and that it will come out in a timely fashion. Thank you very much indeed.

Wednesday 2 February 2011

Members present:

Joan Walley (Chair)

Peter Aldous
Neil Carmichael
Martin Caton
Katy Clark
Zac Goldsmith
Simon Kirby
Ian Murray
Sheryll Murray
Dr Alan Whitehead
Simon Wright

Examination of Witnesses

Witnesses: **Rt Hon Dr Vince Cable MP**, Secretary of State, Department for Business, Innovation and Skills, and **Janice Munday**, Director, Advanced Manufacturing and Services, Department for Business, Innovation and Skills, gave evidence.

Q331 Chair: May I begin our Select Committee sitting this afternoon, Secretary of State, by thanking you very much for being able to come here to give evidence this afternoon? We have tried very hard indeed to be able to accommodate the business in the House, and we are grateful to you for rearranging the time to fit with that, in order that we are not going to be delayed in terms of producing our final report. We are very much aware of the timetable that we have, and so we are happy to be able to accommodate you. I know that you have requested the opportunity to make a statement at the start. Even though we have a lot of questions, I think it might just be useful if you did that. Obviously there are lot of people who are saying that they want to bank on a Green Investment Bank. There is a lot of media speculation whether or not Oliver Letwin is going to mediate between BIS and between the Treasury, and we are very conscious that we had a session just two weeks ago, when our Treasury Minister came along—and that was recorded in *Private Eye*—and I think there was a sense that there was still a lot of unanswered questions. So we very much hope that your introductory statement will perhaps shed a little bit more light on the general direction in which the Green Investment Bank is going, which will enable us to come out with the best possible report that we can do. So the floor is yours.

Dr Cable: Thank you, Chair, and thank you for fitting me in. I doubt that I will be able to answer the questions you have just put to me directly. But I just want to echo the sentiment I expressed when I wrote to you, back at the outset of your inquiry in November. We very much welcome your Committee's input into the design of the financing remit. We want to work with you, and we want to work with the private sector and the other stakeholders to get this absolutely right. As Secretary of State in BIS, my ambition is to keep this momentum going, to develop and deliver a GIB that is effective and transparent and affordable—those are our key criteria—and I am sure your inquiry will help us with that. The underlying objective is we want to make sure this Government is the greenest Government there has been. Of course, this is one of many undertakings, and the Green Investment Bank is there to support economic growth, on the one hand, but also to make a significant contribution to environment and carbon reduction. What has happened since the Budget: we have had an intensive programme of work, trying to develop the mandate. I want to stress—and this partly reflects your introductory remarks—that we are still in the design and testing stage. There are a lot of decisions that still have to be made. We are keeping a lot of options open, so I am not going to be able to give you unequivocal answers to a lot of questions. That is not a wish to be unhelpful—let alone evasive—but it simply reflects the stage of the work that we are at.

Broadly, we are in this intensive investigative phase and we want to work quickly. There will be a statement in the Budget and in May, hopefully, we will come forward with a concrete business operating model, which comes out of the testing and work that has taken place. Even when that happens, the long-term path for the GIB will still be open to a lot of further consideration. We have issues around state aid; that is possibly a long and testing process. But our objective from the outset is to create an enduring institution; we want it to grow and we want to target long-term infrastructure finances. I want to make it clear that we see this as being more than a fund; that is a slightly false dichotomy, I think, between a fund and a bank. What we want to do is to deliver a range of financial products into the market and reinvest the proceeds.

Finally, I would like to thank everybody who has been involved in this debate on the Green Investment Bank. There have been a variety of views and it has been extremely helpful to us in this formative stage. Thank you.

Q332 Chair: Thank you for that. If I could pick up on a couple of things: the timing and you just mentioned the Budget. I think the most important thing for our Committee is to have a set of recommendations that will be part of the design process. If we are serious about pre-legislative scrutiny, we would like to have a set of proposals and recommendations that could feed into that before any final decision was made. So it is with that in mind that we want to get this report completed very quickly. We have a series of very specific questions that—even if you are not going to have the answers now—we want to know what Treasury and BIS thinking is on all of these; and perhaps, where there are conflicts, what opportunities there are for those to be resolved.

I noticed in the debate that was taking place in the Chamber earlier, the question of nuclear was raised. One of the issues that came up in our previous evidence sessions is whether or not the Government would consider that nuclear should be deserving of subsidy in respect of whatever arrangement the Green Investment Bank takes. Would you consider nuclear to be within the remit of the Green Investment Bank?
Dr Cable: We do not rule out nuclear, but I think it is fair to say it doesn't totally fit the kind of profile we envisage, certainly in the early stage. But we certainly do not rule it out. What we do will operate within the framework that Chris Huhne, as the Secretary of State for Energy and Climate Change, has set out, namely that we do not envisage nuclear power being a subsidised industry beyond the action that is available to all players in the power industry. So that is the framework within which we have to operate.

Q333 Chair: If you did not rule out nuclear, and if there were support for nuclear, it would be at rates that would be better and more generous, so wouldn't that amount to subsidy?
Dr Cable: As I say, the commitment the coalition have is not to subsidise nuclear power, and not to give it subsidies over and above those available to all other players in the industry. I guess that would act as a quite serious constraint on its operating within the Green Investment Bank. There is no subsidy in terms of the Green Investment Bank. As we will go on to discuss in your questioning, it will operate where there has been a market failure; for example, to adequately appreciate risk in the construction and operating stage. If there was a pure market transaction it would happen anyway, but we certainly do not envisage subsidy, and I think that would preclude any subsidy to the nuclear power industries.
Chair: Perhaps we might return to that.

Q334 Zac Goldsmith: Thank you for your time. You touched on this briefly in your introduction, but since the very start there has been a huge amount of speculation over the extent to which this bank will be a bank able to raise its own finance, as opposed to a fund. It would be very useful if we could hear a bit of elaboration from you on that point.
Dr Cable: We do think it is a false dichotomy. We certainly envisage it being a lot more than a fund. Certainly the analysis that has been done so far suggests that there is certainly a scope for—and a need for—borrowing over and above any injection from the Government in our additional allocation and in asset sales. Banks perform a variety of functions: they lend, they borrow, and this institution would do the same and it would certainly merit the label of a Green Investment Bank.

Q335 Zac Goldsmith: I suppose, regardless of whether it is called a bank or a fund, the question is whether or not you believe it is crucial that whatever is created is able to raise its own finance, perhaps by issuing bonds and so on. In your view, is that a key component of what the—
Dr Cable: That is what the analysis suggests there is a demand for and which the Green Investment Bank could serve. Of course any raising of finance has to operate within our fiscal constraints, and they are real and we can discuss them in more detail. So there is a constraint in terms of net national debt, which we have to operate within. But the premise you start from is that this is a substantial institution able to raise its own funding in a variety of ways. That is how we envisage it.

Q336 Zac Goldsmith: Chris Huhne was reported to have said—I am going to quote him—that the Green Investment Bank might have to start as a fund and then morph into a bank once, "fiscal credibility is completely re-established". It would be useful to know where that thinking has gone since those comments were reported to have been made.
Dr Cable: There is an immediate net debt objective that the Government has, a key fiscal target, together with deficit reduction, for 2014–2015, and we have to operate within that. We don't know what the fiscal position will be subsequently. I think we probably both assume it will be a lot better than it is now, and this will give a great deal more scope for institutions of this kind. We think of this in a long-term sense. It will have to start on a modest scale, partly because it has to establish its track record and its credibility; partly because it is operating within borrowing constraints. But over the long term it could well develop into a very substantial institution, performing the roles you describe.

Q337 Zac Goldsmith: Two very brief questions. One of them is: has your department actively consulted with the ONS, the Office for National Statistics, seeking advice on how to structure this bank so that it does not have to appear on the public books or as part of the public sector?
Dr Cable: I think there is a common ground across Government that we are not trying to find a way of avoiding identifying public liabilities. If there are public liabilities—whether it is borrowing, guarantees or anything else—they have to be shown. I said we had three criteria, one of which is transparency, and that has to be transparency in relation to public accounts. But as part of the assessment process, certainly the Treasury, who act as a direct point of contact here working with the ONS, have been clarifying what our limitations are.

Q338 Chair: Sorry, can I just come in? Can I just check, is it a matter then for Treasury, or has the BIS department been actively discussing this with ONS?
Dr Cable: There is no separate departmental interest. There is a Government view and Government has to operate within ONS guidelines, so it is not a departmental issue.
Janice Munday: Might it help if I explained how we are organising the projects on the creation of the Green Investment Bank. We are working in a genuinely cross-departmental way. The project is led out of BIS, but includes people from the Treasury, from DECC, from DEFRA, Department for Transport, CLG; all helping to do the work on assessing the Green Investment Bank. So the question about did

BIS or the Treasury ask the question is slightly artificial. The project asked the question.

Q339 Chair: Who is in the driving seat?
Janice Munday: BIS.
Dr Cable: Yes, we are the lead department, but it is a team effort across Government.

Q340 Zac Goldsmith: One final question. We have had advice that suggested that were a failed, or a failing, or a Government-owned bank to be converted into a Green Investment Bank that in itself would allow the Government to avoid putting the new liabilities incurred onto the public books. I accept your previous answer, but it would be interesting to know whether that is correct or whether or not that has been considered.
Dr Cable: Of course the two existing semi-state-owned banks are already on Government accounts, so I guess that is a point you are making. But I think it would be a very convoluted way of creating the institution to take banks that certainly do not have this function, and certainly don't have this responsibility for projects of a very specific environmentally focused kind. I think it would be putting the cart before the horse to work with an institution that has no relevance to our basic objective, simply in order to devise a way of getting round public spending requirements.

Q341 Chair: Before we leave this set of questions, may I just be clear about the issue that relates to what does and does not count as public sector spending? Is that the basis of some of the discussions you have been having with ONS?
Dr Cable: There are two basic public finance issues: there is the initial departmental expenditure contribution, the £1 billion, and there will be asset sales, which will gear that up. If the bank borrows and loses money, then there is a direct revenue loss that has to be counted in public finances, and the borrowing itself—or it could be a guarantee—counts against public sector liabilities. We want to be very clear that that is transparent and on the books.

Q342 Chair: But it is a judgment made by ONS, in line with European remits, isn't it? Presumably you would be looking to establish what would be the most favourable, in terms of how to get the injection of funding that is needed into the green investments that we need to be taking.
Dr Cable: Yes, but I spent a lot of time in the last Parliament—I was our economic spokesman—fighting to make the ONS independent of political pressures. The ONS is there to make independent statistical judgments and as Government we have to respect them.

Q343 Ian Murray: I just wanted to follow up, if I may, Secretary of State, on Zac Goldsmith's questioning about RBS and Lloyds. I appreciate that perhaps you can't turn one of those banks into a Green Investment Bank, but has there been any discussions with senior management about trying to change some of their investment profiles to best support the green industries, at least up until the Green Investment Bank comes on-stream?
Dr Cable: I think the simple answer is, no. As you know, the semi-state-owned banks have a very specific remit, which is to maximise shareholder values so that eventually they can realise good value for the taxpayer. In addition to that, the Chancellor and I are talking to them about improving their net lending and other commitments. To the best of my knowledge, we have not talked to them about this set of commitments.

Q344 Dr Whitehead: In your investigations into the Green Investment Bank investment structure and how it can work, what work have you been doing looking at the various international models that are used to run and organise green investment banks elsewhere in the world; if you are doing work, are there any particular models that have caught your eye?
Dr Cable: The group that Janice Munday is leading has obviously looked at other institutions and seen what lessons we can learn. It is often said that we could probably learn from the experience of the German KfW and the other development banks in Europe. But they do start from a different position in that, to my knowledge, they don't have an explicitly environmental objective. Many of them were started a long time ago, and many of them—KfW, for example—were concerned with channelling large amounts of fairly low-risk capital into infrastructure, which is a rather different mandate from the way we see this institution developing. But certainly, we are looking at them and if there are productive lessons we will learn them. I don't know whether you wanted to add to that?
Janice Munday: There are a number of different models and some of them, for example, are there largely to lend money to local authorities and do not lend in the general market. Others are acting as channels for EIB loans. What it seems is that they are all pretty risk averse, but then if they are using EIB money that would be consistent with EIB's lending policy. Most of them are not doing green in any sense of the word, so we are looking at the examples, but there is nothing that is as compelling as you were asking about and as you were inviting us to comment on.

Q345 Dr Whitehead: We did indeed visit KfW last week as a Committee, and talked to them about a number of their programmes and operating methods. In particular, they put much more emphasis—and have done since 2000—on loans, among other things, for home energy efficiency. Those are based, among other things, on the bank underwriting elements of the interest rate for the loan, through absorbing subsidies from Government into the bank's loan structure rather than the grant arrangements that we have historically had in this country. Have you looked at that particular model of doing things, as far as green and energy efficiency loans are concerned, and would that particular model resonate with other things the department is doing on this matter?
Dr Cable: I think what you are describing is very close to what DECC is trying to achieve through the

Green Deal, the home energy efficiency. Chris Huhne and his team have developed a model for doing that, essentially using the utilities rather than the banks. Certainly, we are very happy to look at that, but I don't think we would see a close overlap between the Green Deal and the Green Investment Bank. They have rather different objectives but, yes, we are all ears and interested to learn.

Q346 Dr Whitehead: Do you think the remit of a Green Investment Bank—indeed, as is the case with a number of similar green development banks abroad—might have freedom to invest in green projects overseas, rather than just in the UK or would you consider that a Green Investment Bank ought to be limited to UK-only investments?
Dr Cable: It is certainly envisaged as being a UK-based institution, lending and investing in British projects. Maybe at some point in the future there will be a good argument advanced for doing overseas work, but that certainly isn't what we envisage. We are not going to rule that kind of option out, but that certainly isn't how we envisage it. We envisage investing in the UK.

Q347 Dr Whitehead: Finally, the KfW themselves have had considerable dealings with the EU, in particular the memorandum of understanding in 2007 relating to what would be regarded by the EU as loans that would clearly not infringe state-aid concerns and regulations. Have you had any discussions with the EU about the extent to which putting Government capital into a Green Investment Bank would fall foul of state aid regulations, and whether such a memorandum could indeed make a clearer path ahead for the Green Investment Bank in the UK?
Dr Cable: We do judge that we will have to go through the state aid process. Janice will say whether contacts have so far been made and, if so, what. But the reason is this: that these are projects that are not fully market based, otherwise the Green Investment Bank wouldn't exist. It is to deal with the market failure, and our understanding is that that would come within the state aid rules and we would have to get clearance for its activities. That does not stop the Green Investment Bank getting off the ground. The state aid process, as you know from ministerial history, is a long and quite complicated one. I think it can take 18 months to two years. But in the meantime, the Green Investment Bank can invest on a pari passu basis with private investors. So we could make a start but, if it was to operate on a significantly larger scale, it would require state aid clearance. I don't know whether we have talked directly to the Commission?
Janice Munday: No, we have not talked directly to the Commission. To have that sort of detailed discussion we would have to have far more detail about the products and the terms on which Green Investment Bank would be investing in the market, and we are not at that stage yet. We are engaging significant external help to help us with the work in preparing the case to go to the Commission. It is a complicated and quite extensive process, so we are gearing up for it, but we have not started.
Chair: On that point—

Q348 Dr Whitehead: Sorry to interrupt, but could I just clarify therefore that, at the point where you consider that you will be ready to do this, the idea of perhaps a memorandum, which is similar to that which KfW already has, would be on the agenda for that discussion with the EU?
Dr Cable: If it facilitates it, speeds it up and clarifies it that may well be a good idea. I had not heard it before, but we must reflect on it.
Chair: On that point, Sheryll Murray.

Q349 Sheryll Murray: I would have thought that the commitment of £1 billion of public money would have meant the first thing you would do would be to go to the European Commission, because you have to get prior approval before making any loans or any grants using public funds. I think it was very clear from the Shetland fish quota case a few years ago, where the UK fell foul of state aid rules, that this would have happened. I find it very strange that you haven't. Could you explain your understanding of when you would approach the European Commission for state aid approval?
Dr Cable: As I said in my previous answers, my understanding is that it is not an absolute prohibition. The Green Investment Bank could do pari passu investments. But when we have a very clear operating business model, which is what we hope to have roughly in May, we will have a clear picture of the design of the institution and we will be in a better position to talk to the Commission. I think rather than just going there in a very open-ended manner, it is a question of timing. Is that how we envisage it?
Janice Munday: Yes.

Q350 Sheryll Murray: So you don't think you need to get prior approval to invest public money in projects, and you don't have to get prior approval under the state aid rules?
Dr Cable: There are obviously limitations, as I have described, but there is not an absolute fatwa on all Government investment. There are conditions under which it can happen.

Q351 Zac Goldsmith: I have a very quick question. The big question for most people looking at this issue is the scale of this thing you are creating, and how big a contribution it will make to shifting towards a low-carbon economy. It seems to me that the dates we have had are quite confusing. Often we hear that we are going to be hearing about the structure of the bank sometime in May, but presumably the scale part of it, the size of this thing, is going to become clear in the Budget in mid-March. Can you confirm that? Because if it is, then obviously that will change the timing of our own report and submission to you.
Dr Cable: I think the May statement of the operating model is key to all this, because it will describe a roll-out of the proposal. Essentially, the timetable is this—and I think you will have already had that—that we aim to produce the operating financial model in May. By the end of the year recruitment of the start-up staff for next year will have taken place. We would envisage investments being made for the first group of investments. We are scheduled to commit the existing

Government allocation in 2013–2014. The bank will build up in scale, and it could well be in the long term—after this Parliament—that we are talking about a very substantial institution. I have read a lot of the public commentary on this and it is often "big bank versus small bank" and I don't think that is the issue. It is an evolutionary process and what is important is that it gets off the ground; it makes good investments; and builds credibility. When that happens it will spread and grow and, in the long term, I think it would be a very major institution indeed.

Working back the other way, we know that there is enormous demand for infrastructure investment in energy, for example. A lot of this will be dealt with through the private market by creating a regulatory asset base for investors. It will not need the Green Investment Bank, but quite a lot of it will.

Q352 Zac Goldsmith: So no significant decision will be taken between now and the Budget announcement by the Chancellor? That is not a significant—

Dr Cable: No. We are still going through the examination and feasibility process.

Q353 Chair: You see, our difficulty is not being party to those discussions that are going on inside Government; not knowing where the design stage—the whole fund/bank, whatever it is going to be—is at. We want to contribute to that aspect of pre-legislative scrutiny to make sure that the wheels do not come off; that you are not in a position, perhaps in May, whereby the due process, whatever that might be, has not been done on the state aid rules, or other aspects that would be important as to the discussions, which might be of a very sensitive nature, with the ONS for example. I take what you say about it being independent, but how are you going to put out the feelers so that what you come forward with your prototype design that that is then consistent with the various ticks that you have to cross? That is what we are having difficulty understanding.

Dr Cable: I do understand your question. On the state aid rules, as I have explained, we are clear about the criteria that have to be met. I do not think there is any danger of the wheels coming off there, although it is going to be a difficult process when it happens. I am not clear that there is a blockage of information. We have a team working cross-departmental; we want to engage. Is there anything you want to add?

Janice Munday: I would say that, since October, there has been an extensive programme of engagement with key people, drilling down into the issues. So there has been a lot of testing and stress testing of the ideas.

Q354 Chair: But you can't share with us what those are?

Janice Munday: You asked us questions about what the ONS is saying. I have told you we have talked to the ONS; we have talked to investment bankers; we have talked to green groups; we have talked to energy companies, so we have done a lot of discussions about where they are coming from, what they are looking for.

Chair: Okay.

Q355 Ian Murray: Before I start my questioning on the setting up of the Green Investment Bank, it would be wrong of me not to say that it should be set up in Edinburgh. I am sure that is not going to be a unanimous decision of this Committee, or indeed in the final report, but I thought I would just ask in any case.

We have already heard that the Treasury, BIS, DEFRA, DECC, even the Transport department are involved in the discussions about this, but which department will lead the monitoring and scoping of the Green Investment Bank when it is up and running properly?

Dr Cable: We will.

Q356 Ian Murray: There will be no pressure from the Treasury to deliver financial returns.

Dr Cable: There will be quite reasonable pressure from the Treasury to make sure that there is value for money and that there is proper financial discipline. That is the way the Treasury operates whenever public money is involved, but that is entirely right.

Q357 Ian Murray: We heard a few weeks ago that there could be an issue with regards to the energy market reform and carbon floor price, and where that fits in the Green Investment Bank. Is there a danger that those could overtake the goals of what the Green Investment Bank has been set up to achieve?

Dr Cable: I am not the person to ask detailed questions about the energy market reforms, but they are designed to achieve a framework within which energy utilities will invest. They will invest in the right way and with a proper account of carbon usage. But that is a parallel. It is not a competitive process in relation to what we are doing.

Q358 Ian Murray: Moving on to the time scales that have been spoken about already, we are looking at some time at the end of 2012 to be fully operational. In the meantime, how is the Government looking at the co-ordination and development of green policies while the Green Investment Bank is coming on-stream?

Dr Cable: There is a process across Government where we are looking at green projects as a whole. I think it is called the Green Taskforce. There are about six or seven different policies through the infrastructure plan, through the energy market reforms, and of course the Green Investment Bank is part of that. There is a co-ordination process in Government, and we will be setting out in a formal way how these different activities link together. I don't know whether we have a timetable for that?

Janice Munday: No, but it is perhaps worth mentioning that there is separate work going on in discussions with a number of wind manufacturers about bringing their manufacture to the UK, so those processes are all going on separately from this work.

Q359 Ian Murray: Is there any scope for the Green Investment Bank investing in EU regional aid policies, particularly with regards to some of the environmental aspects?

Dr Cable: Are you talking about co-financing?

Ian Murray: Yes, contributing to the regional aid in terms of environmental policies and environmental projects.
Dr Cable: I don't see why not. If the European Union can help gear up projects and meet the other criteria of the Green Investment Bank, I would have thought that was very sensible. We are trying to get as much funding, private and other forms, as possible.
Chair: On that point I think, Neil, do you have a question?
Neil Carmichael: No, not really, but on another point.
Chair: Carry on then, Ian.

Q360 Ian Murray: Finally, in terms of the capitalisation. There have been a lot of discussions in this Committee about the £1 billion seed capitalisation and—comparatively to some of the studies that have been done—how small that may be. That then has a danger of pushing the policies and projects that the Green Investment Bank supports to be high return in terms of financial return, rather than high return in terms of what it is trying to achieve, and there has been some reforming of the Commonwealth Development Corporation, because they were slipping into that particular problem. I wonder whether there are there are any mechanisms to stop that from happening, and what your thoughts are to make sure that it is going to achieve its goals without just looking for pure financial return? I suppose the nuclear question at the start is one of those key aspects of it.
Dr Cable: Yes, I think the £1 billion is a very large amount of money, but it is small in relation to the way that this institution will eventually operate. It will be augmented by assets sales in terms of equity and—as I said in response to Zac Goldsmith earlier on—there would be borrowing, too, to make it a much more substantial body. As I said in my introductory statement, it is not simply a small fund that will be confined in that way, and I think the dangers you have described are not relevant in this particular case. It will have a very clear mandate to promote environmental projects that would not otherwise be met in the market. Whereas I think the CDC was a rather different case, where they were operating almost entirely as a market institution.

Q361 Neil Carmichael: I would just like to know whether the three departments are coalescing around one model at the moment, or do you have several models and are they representing the interests of each of the three departments?
Dr Cable: It is not departmental. There are different models that have been put to us as different ways of operating: there was the very narrow fund; there is the wider banking type institution. Some people have advocated a purely private fund that could be topped up with some Government money, and we are looking at all of those. These are not departmental things. The task force is looking at them all on their merits, and we want to maintain maximum flexibility. Then, to anticipate the question that might follow on, what we are thinking about at the moment is a model that is a public sector institution, but it could evolve or it could spin out into a private institution in due course, operating on a big scale. That is one of the models that have been put to us. As I say, it does not have departmental ownership. It is just one of the ideas out there and we want to keep that option alive.

Q362 Neil Carmichael: But you would be the lead department, both in terms of preparing it and after its launch, so what accountability or links do you envisage for the Department for Business, Innovation and Skills with the Green Investment Bank?
Dr Cable: I may have missed the subtleties of your question, but we do not see this in terms of different departmental silos and different standpoints. It is an integrated initiative. We are obviously working very closely with the Treasury, because it is public money. We are working very closely with DECC, because we envisage that the main market for de-risking projects, which would be the first stage of the operation of the bank, are predominantly energy projects, things like wind power. But DEFRA are involved because they have an interest in waste and the Department for Transport, because of transport projects. So there is a collective interest in this and we work as a team, there aren't separate visions.

Q363 Neil Carmichael: What I am driving at is if the Treasury had more influence than, for example, your department especially, Department of Energy and Climate Change, then it might be seen more as a fund if the Treasury were influencing it, rather than a bank, which I think DECC would prefer, and you would be somewhere in the middle.
Dr Cable: I think we have passed that stage of the argument. As I said, there are different models, but as for the idea of a narrow fund, we have passed that point. We are talking about something more substantial, which will have a borrowing role and could legitimately be called a bank.

Q364 Neil Carmichael: So that is the direction of travel from now on?
Dr Cable: That is the direction of travel, yes.
Neil Carmichael: Good. One last question—
Chair: Hold on, because I think Katy is going to go on to legislation if that is okay.

Q365 Katy Clark: Yes. At the time of the Queen's speech, the Government indicated that the Energy Bill might have provisions to create a Green Investment Bank, but as yet, there is nothing in the Bill. Do you have a view as to whether legislation is going to be required to create a bank?
Dr Cable: It may well be. Again, Janice can probably talk about the legal dimension of this. But we don't envisage this being a problem and we would move very quickly once we have identified a legal need to establish the basis. I don't think we see any problem with that interfering with the timetable that I have sketched out.
Janice Munday: There are other legislative opportunities and we have a list of those. The likeliest form is probably a public corporation. But the question of how much that would need to be done in statute, and how much could be done by secondary legislation, is not yet determined, so that is one of

the areas that is actively under review as we do the planning work.

Q366 Katy Clark: You have already mentioned the Green State Development Bank, KfW, and I understand it was created with legislation. There is an argument that, even if legislation is not required, it might solidify the existence of a Green Investment Bank if it was created by legislation; that it could not go in a cull of the quangos or at the whim of a particular Government, it would be more entrenched. Is that something that you have given any consideration to?
Dr Cable: It is a good point, and it does tip the balance somewhat in that direction. As I think Janice has explained, there are a lot of legislative opportunities. We do not see that as being a problem but I think the point you make is a valuable one.

Q367 Katy Clark: On the legal point, is it the case that legislation would be needed to provide the Green Investment Bank with a state guarantee? Is that something that you have taken advice on?
Dr Cable: I don't know the answer to that.
Janice Munday: I am not quite sure where the idea of a state guarantee came from. The mechanism, the functions and the way it is going to operate, is still something that is under discussion. Guarantees, which the state stands behind, is one of the options but we have to find spending cover for that. So that is what we are looking at.
Chair: Sheryll, on that point.

Q368 Sheryll Murray: That guarantee came from KfW. It is the way they are set up. I don't know whether you have spoken to KfW and asked how they were set up and how they operate. Perhaps you could tell us if you have had any discussions with them?
Janice Munday: We have talked to KfW. We have gone into quite a lot of detail about its operating model. The evidence we have is that if we built one on the model of the KfW, it would be scored as part of the PSND, which is not the case in Germany.

Q369 Peter Aldous: I am just keen to look at definitions for a minute. How are you going to define what I would call the green remit for the Green Investment Bank, and what is your definition of "green" in the Green Investment Bank?
Dr Cable: We are talking about projects that serve an environmental purpose—your Committees, above all, define what that means—which would not happen if the investment were purely left to private sector activities, so that is what the mission is about. It is helping to realise those.

Q370 Peter Aldous: Can I just come back to something you talked about before, the nuclear option, as such, because when I first read the *Wigley Report*, I did not pick up nuclear in that? I am interested as to when and why nuclear has come into the whole debate.
Dr Cable: I do not know how, when and why it has come into the debate. Obviously, it is a zero carbon energy option and no doubt, since we have made it fairly clear that one of the primary purposes of the bank is to fund low carbon investment, I am sure people made the obvious connection. But I have explained that there is a difficulty in the rather tough view that the Government has taken on subsidy for nuclear.

Q371 Peter Aldous: As the bank moves forward and looking at the remits, will the bank's remit prevent it from being used to fund what I might describe as less green schemes later on? Assuming a success, will you be able to look again at the definition, do you think?
Dr Cable: We are not trying to make it less green, that is rather self-defeating. No, there are—

Q372 Chair: Sorry to interrupt, but isn't it about sequential investment, and what are your priorities to frontload what it is going to be doing, which relates to Peter Aldous' question?
Dr Cable: The first priority for which the analysis we have conducted suggests there is a real need, there is a gap in the market, are high-risk projects that have an important environmental aim—wind projects would be a good example of that—that are not going to happen on the scale that they should without the investment of an institution of this kind. There is no doubt that in the future the institution could develop in a different way. There is a vast unmet demand at the moment for infrastructure more widely and more or less green, and that infrastructure is of a different kind from, let us say, wind farms. There will be an issue about how you deal with the liquidity problems of those big projects. A lot of them will happen through the market; they will happen because the right kinds of incentives have been given for the regulation. There may be some liquidity support. So far the evidence that has emerged from the analysis is very mixed on that, as to whether there is a need for an intervention of that kind. But we think it is possible.

Q373 Martin Caton: Can we consider the bank's early investment priorities once it is established? I think it was last week—but certainly very recently—we took evidence from both power companies and companies involved in other forms of low-carbon technology, and, understandably, each made the case for going down the path that they are in involved in. But the Green Investment Bank Commission seems to have come down on the side of the alternative technologies, particularly in terms of early investment in energy efficiency, both in the commercial sector and in the residential sector. Do you agree with that approach?
Dr Cable: As I said, I think, it was Alan Whitehead who asked me about energy efficiency/energy saving projects, and DECC and the Secretary of State at that department have developed the Green Deal to create a particular set of incentives in order to achieve those ends. We had not envisaged the Green Investment Bank being at the heart of that work. As I say, I am trying to be as flexible and open-minded as possible and not to rule out options. I am not quite sure how your proposal would work, but if you are talking about a bundle of projects that could be—

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Q374 Martin Caton: It is not my proposal. It is the Commission's proposal and it does fit in. You mentioned what Dr Whitehead said. Just on a superficial look at it, it seems very like the KfW approach, but you talk about—
Dr Cable: As I say, we are not ruling that out but it was not one of the first sets of ideas.
Martin Caton: Can I just pursue that? The Government, in talking about the Green Deal, has said that energy saving packages must meet the golden rule; in other words, that the charge should be exceeded by the value of the fuel bill savings over the lifetime of the charge. That seems to me to require a low interest rate to get people to do that. Again, the obvious provider of low interest money seems to me to be the Green Investment Bank. So when you say there is no overlap between the Green Deal and the Green Investment Bank, I am just suggesting that there is a very strong case that perhaps there should be.
Dr Cable: We will have a look at the argument. I remember reading the Wigley material, but I had not realised the emphasis they had placed on that particular idea. We are certainly happy to go back and have a look at it. What was the analysis of the group, Janice?
Janice Munday: Can I perhaps mention energy efficiency for business, which is one where we have done the analysis? What we found is that there is an unmet demand for energy efficiency in business, and there appears to be some market failure that is preventing the take-up of those relatively easy techniques. In terms of looking at the use of public money, the question is whether the Green Investment Bank would be the right instrument to tackle that problem, or whether in fact there are other instruments that would be better and more effective in using it. I think that is the same thing on the Green Deal: what is the right instrument for it? So that is the work we are doing at the moment.

Q375 Martin Caton: But you are not ruling out a role for the Green Investment Bank?
Dr Cable: No, we are not ruling it out and the work is being done.

Q376 Chair: This relates to the very start of our evidence session this afternoon when we were looking at what the design of it might be. Clearly, if we have the Energy Bill going through Parliament, we have the Green Deal and we have the money that is going to be committed towards energy efficiency in households, which is one of the biggest areas where investment is needed to meet the carbon emissions target, surely, if the Government were being cross-cutting, the opportunities for investment from the Green Deal would be looking at the amount of money that is needed to complete that work on a phased basis to meet the carbon emission reductions. What would it take for you to look at it seriously? Presumably it would require more than a recommendation from this Committee, because there is a lot of groundwork that needs to be done between now and May.
Dr Cable: I think, as Janice has just explained, the group is looking at that option in terms of energy saving in business. We will pursue it and, no doubt, DECC could put this forward as one of their priorities. The priorities that we had identified, where there is the clearest market failure, are in more substantial projects in the construction and operating phase and that is where we have identified the biggest gap. But we are not closing off this option either.

Q377 Dr Whitehead: Could I press you a little on this, because the process that is underway at the moment towards the Green Deal is in the Energy Bill. Therefore, the Green Deal will have a certain time scale within which it will come into operation. As things stand at the moment, the sole source of funding for homes under the Green Deal—and the aim is to go for something like 20 million homes, including hard-to-treat homes—is B&Q and Marks & Spencer, and companies that may invest in the Green Deal on the basis of the golden rule that Martin Caton has mentioned. If those investments are undertaken at commercial rates, which those companies will undoubtedly want to undertake, the high likelihood is that very little insulation, and certainly no proactive energy efficiency work, may result. It will not result to very much.
The energy companies' obligation that has been suggested has no form as yet. Indeed, such an obligation could be tucked very well into some form of low loan arrangement, and perhaps a KfW-style Government subsidy underwriting, in a Green Investment Bank. But if that is not done at an early stage then it may well be the case that the Green Deal will be dead in the water before anything rides to its rescue. Do you not think—on the basis of that analysis—that there should be an urgent investigation as to the extent to which a Green Investment Bank might dovetail in with that process and get going early, rather than when it is perhaps too late?
Dr Cable: Well, the point has not been put to us in the way that you have: the anxiety and the urgency of that problem. I am very happy to talk to Chris Huhne about that and it is one of the ways in which your Committee has been very helpful in surfacing these things. I am very happy to talk to him about it and the officials in their work will go back and have a look at it. Maybe we have underestimated the urgency and importance of an intervention that could be made here.
Chair: I am sure we will be very interested to have any response from you at the stage when those discussions have taken place; the first chance for it to feed back into our report.

Q378 Simon Kirby: Secretary of State, as one of the two Brighton MPs, it will not surprise you that I am very interested in all things green and, in particular, the Green Investment Bank. I feel obliged to ask you to give serious consideration to locating it in Brighton if that is at all possible. However, that having been said, I would like to ask you what I might call the "banking question". The Government has a programme of banking reforms to stop banks getting into another financial crisis by taking too many risks. However, you would expect the Green Investment Bank to go places where perhaps the normal commercial sector would not go. So does that mean

that you would see the Green Investment Bank operating within the same governance and the same regulatory framework as the other banks?
Dr Cable: Of course it will operate on a commercial basis. But you are quite right that if it were to take the form of a formal bank—and it could well do—there would be an argument for having it regulated as a bank through the FSA with the same sets of capital requirements as other banking institutions. We certainly envisage that as something that may well be desirable.

Q379 Simon Kirby: If I may press you on that point: Sir John Vickers, the Chairman of the Independent Commission on Banking, in a speech last week, raised the prospect of separating areas of risk so a bank's investment arm could perhaps be allowed to fail. Does that mean that the Green Investment Bank could be allowed to fail?
Dr Cable: If it was a Government institution, then, by definition, it would not. If it was a purely private bank at some stage in the future, or if it were to spin off as a private bank, then certainly that would be the definition of a private bank, would it not? I think the exercise that Sir John Vickers and the Commission are concerned with is a rather different one. It is concerned with these very, very large global banks—of which we have three major ones in the UK and others slightly lesser scale—which are so enormous in their scope that they can destabilise the whole economy. The Commission is looking at how to make them safe. That is a very different kind of exercise from the risks that would be associated with an institution of the kind we are talking about.
Simon Kirby: Okay, thank you.

Q380 Ian Murray: I should like to press you on risk versus return, which also relates to Simon's question. Yesterday, the Business, Innovation and Skills Select Committee heard from the aerospace security and defence industry, being a world leader in the products and services that they deliver. Part of that success is down to significant risky research and development funding that was ploughed into the sector 20 to 25 years ago. If we want to be a world leader in carbon-reduction technologies and green technologies, there is a real need for the Green Investment Bank—I see in my own mind—to plough significant sums of money into the riskiest research and development in order that we see some of those significant returns, probably somewhere over the horizon. Is that something the Green Investment Bank is going to be able to do on the basis of the responses to Simon with regards to risk and return and the banking code?
Dr Cable: I may have misunderstood your question. I do not think it is intended to invest directly in R&D facilities. A lot of this happens in any event. As you know, the big car companies are doing a lot of low-carbon investment and they have the R&D to support it. Jaguar and Land Rover do a lot of that, Nissan and the rest of them. Where there is a clear market failure and there is a public good involved, the Government are putting in money, as we are continuing to do. I don't think that we envisage the Green Investment Bank funding research and development facilities of that kind.

Q381 Ian Murray: But research and development will go some way with many major companies, like Pelamis, which is based in Edinburgh and is developing the wave worm. It has had to receive quite a significant amount of public subsidy to be able to do that. In future it could perhaps go to the Green Investment Bank for additional funding where the market would not allow it to draw that funding.
Dr Cable: It could well generate a project that the Green Investment Bank could support, if it is a good, viable project. That is the kind of high-risk project that we would be looking at. I do not know the details of that company.

Q382 Ian Murray: But not all of that kind of technology is going to be commercially viable at the stage where they need the financing to be able to take it forward. That is the issue.
Dr Cable: Yes. There is a whole gradation of developments from the R&D through innovation, prototypes and then the commercial side of it and British institutions and the Scottish Executive can support the preparatory stages. I think where the Green Investment Bank would come in is when there is a proper commercial launch of the wave project that you envisage.

Q383 Neil Carmichael: Thank you, Secretary of State. You may have answered these questions already because I was a little bit late, but I want to quickly ask three: one, are you going to consider joint venture arrangements for the Green Investment Bank to get involved with or to have the capacity to go down that track? Second, what about equity investments; for example, would you countenance that for a large project? Thirdly, to what extent have you been looking at the EIB and EBRD in terms of their experience? Of course, they have a big skills base. That is the rationale behind the kind of investments that they make.
Dr Cable: We did have a question earlier on about European development banks and the lessons that could be learned and the team have been talking to them. I think we have been over that territory.
Neil Carmichael: Okay, thank you. The first two questions then.
Dr Cable: Certainly in terms of equity investment and loan and guarantee insurance, there are a variety of possible products and all are within range.
Neil Carmichael: So you would be happy for them to—
Dr Cable: The whole purpose of this is to co-finance projects, whether they are structured as joint ventures is a more technical financial question. I do not see a fundamental problem with that.
Neil Carmichael: Excellent.

Q384 Zac Goldsmith: Quickly on that point: is it conceivable that the bank would ever be the sole investor or would it all be about co-investment?
Dr Cable: I think it is unlikely because the whole purpose is to gear the institution up and maximise;

again, we are not ruling these things out but I think it would be self-defeating if it was the sole investor.

Q385 Simon Wright: In your joint letter from October, signed by yourself, Justine Greening and Chris Huhne, you stated that the Government was conducting detailed product design and market testing of the Green Investment Bank's interventions and that you were speaking to market about its design. We have touched on a bit of that today, but I wonder if you could elaborate on that process and what this market testing involves.

Dr Cable: Janice has been leading the conversations with all the stakeholders and all the investigative work—maybe you could just give us a more ample list of people we have been talking to.

Janice Munday: Yes. I went through the list of the departments that were involved. We have found it immensely useful to be able to draw on the services of Infrastructure UK and the Shareholder Executive, who have a great deal of banking experience. So we have had some very deep and very open and honest discussions with quite a lot of the banking community, which has been enormously helpful in understanding how the market is working here and where market interventions might work.

We have done a lot of talking with bankers, with investment bankers, with people who are designing products, with insurance companies who are interested—once there has been the initial investment—in possibly taking it, selling it on and packaging it further down the line. We have talked to the utility companies about what their plans are, what is hampering their investments, what would be needed to do there. We have talked to green groups about the scale of the market, what their ambitions are and what they have seen. We have had enormously wide discussions, some of which have gone into great detail, which has helped us to think about product design, and some have been wider discussions that are helping us in looking at the strategic angle. We have had discussions according to both elements and rather a lot of them.

Q386 Simon Wright: That process has led to some clear, consistent conclusions as far as you are concerned?

Janice Munday: We certainly have conclusions. As the Secretary of State has said, there are various things stopping significant investment in wind generation. A lot of that is about the early stage risk, both in construction and in early operation. We have heard about different issues around different areas. Energy efficiency take-up in business is a different issue because that is not a risk; it is about not seeing the value of it. So, depending on what priorities the Government might set for its Green Investment Bank, there are different products that you might use in different market places. But that is the work we have been doing. What we will now be doing is going much more into the design of, "Well, if that is what your problem is, what would you use? Would you use insurance products? Would you use equity products? When would you use debt?" That means actually understanding and fully testing that. So that is where we are.

Q387 Simon Wright: Some of our witnesses have quite simply suggested that you set something up as quickly as possible, get it going and then it will evolve to meet the ongoing needs as time goes on. What would be the problem with doing that?

Dr Cable: We are not setting it up immediately because you have to have due diligence and you have to have proper feasibility studies, which is what we are doing. Certainly we do want to see this operating quickly. That is why we are talking about staff being appointed by the end of the year and investments beginning to take place next year. There are frictions we can't just assume away, like the need for state aid, and this is going to take time. Yes, we want it to start, prove itself within a realistic timeframe and it can then evolve and grow from there.

Q388 Sheryll Murray: We have already mentioned state aid a few times, but given you acknowledge that it is going to take a long time, I find it difficult to understand why you have not approached the Commission already. Is there any reason why you are holding back from making an approach to the European Commission?

Dr Cable: Not beyond wanting to give them a more precise picture of what the operating model would be. That is the only reason.

Q389 Sheryll Murray: Because you need prior approval from the Commission before you can invest that money, unless it is de minimis or unless you are lending at commercial rates, wouldn't it be best to make an initial approach and inquiry to find out exactly what you can and can't do within or without state aid rules?

Dr Cable: Obviously those conversations have been had at official level. I suspect they would not be terribly interested in having a completely open-ended inquiry. They all want more clarity about what this bank will look like and we are trying to get to a point where there is a specific proposition to put to them.

Chair: I am going to move us on. Peter Aldous.

Q390 Peter Aldous: Thank you, madam Chairman. We have touched on the first part of my question quite a lot, but one of the key roles, as I see it, of the GIB will be leveraging in by private sector funds.

Dr Cable: Yes, that is how we see it.

Q391 Peter Aldous: Yes. What work have you done, what consultations have you done with private sector investors to ensure that the format of the GIB does ensure we maximise that potential?

Dr Cable: That is the purpose of the conversation the team have been having with people in the project finance industry and in the utilities, who are the kind of people who will need this kind of gearing finance.

Q392 Peter Aldous: Can I then just come on to green ISAs? Are they on the agenda? Because it strikes me that is a way to leverage in a significant amount of funds and it is also an opportunity for the public to take part in the future.

Dr Cable: Yes. Again, I think that is a longer term proposition. Certainly we are not envisaging retail finance as a first stage but, as I think in response to several of your questions, I have suggested an evolutionary approach. Of course retail finance and green ISAs are quite an attractive concept, and in the longer term I can envisage this being part of the mix.

Peter Aldous: All right. Thank you.

Chair: On that point, Simon?

Q393 Simon Wright: Yes, and, apologies, we keep coming back to the nuclear issue. In terms of green ISAs being quite attractive, I am sure that you also recognise that there is a policy debate about whether or not nuclear is green, but there is also a public perception issue about whether nuclear is green. If we are to look at the Green Investment Bank by way of selling those products to the broader public, do you see that there is going to be a strong deterrent if, in fact, there is a chance that that will be used to invest in nuclear industry?

Dr Cable: I think we have a double hypothetical question here: there might at some point in the future be retail sales of green ISAs and there might at some stage in the future be nuclear, and what happens if they come together? No, I think we are setting out our position on nuclear. The Secretary of State for Energy and Climate Change has already done that for you—and he is a much better person to do that than I am—and spoken about this being an industry that we now see as part of the low-carbon story, providing it doesn't enjoy public subsidy. But I take your point about the marketability of green ISAs and some people would probably have ethical or other practical problems.

Q394 Chair: Let us move on to the issue of research, and funds for low-carbon research. The Green Investment Bank Commission recommended that the Green Investment Bank could take over responsibility for administering some of those funds. Is that something that you anticipate will be done and is there a timetable for that?

Dr Cable: Well, we hadn't actually. We can go back and have a look at that but we are supporting research in institutions like Narec, which have enjoyed support from my department and we will continue to support them on their merits. We had not envisaged this being structural reorganisation. Of course, it depends what kind of bank it is and how detached it is from Government. If it is a commercial operation, albeit with a green mandate, it is not totally clear that that is the best vehicle for allocating research funding, which currently is decided by the Technology Strategy Board. They are arm's length from Government but they set priorities and we have no reason to be dissatisfied with that structure at present.

Q395 Chair: But given the role of the Green Investment Bank Commission and the recommendations that it came up with, presumably you have some kind of mechanism for going through the various recommendations and looking to see which ones are going to be taken up and developed and incorporated into this new Green Investment Bank?

Dr Cable: Yes, and this is what the team will be doing.

Janice Munday: If I could help the Committee on this point. The Green Investment Bank Commission did make a point about the picture on the research and development money. It probably was not as simple or as clear as it might be. There is a separate strand of work going on, between the Secretary of State and Chris Huhne at DECC, to look at this picture and to see whether it could be simplified. So the question of whether that, resulting, would then come into the bank will have to wait until that work is finished, but I think it was pretty clear to Ministers that that work needed to be done first.

Q396 Chair: We would not want some kind of limbo land, would we, whereby the future of that funding was not clear as to where it was going to be in the future, which I suppose could lead to delays in applications going through and that funding being available?

Dr Cable: I do not think there is a limbo. At the moment a lot of low-carbon research is funded through the TSB, I think quite a high percentage of its research approvals. It works very well, but we will try to make sure that there is a properly joined-up approach to answering your question.

Q397 Chair: If I could just move on; we are almost at the end, but the whole point of this Committee is to be cross-cutting and to look at one area of policy and how it affects different departments. We are very mindful of the fact that the *Green Economy Roadmap* is going to be published soon and that obviously DEFRA has a role in that. Given what you were saying earlier on about the lack of connectivity between the Green Investment Bank and BIS and the growth agenda, and given what is going forward in the Energy Bill and the investments going into households under the golden rule, and so on, what is the joined-up work that is being done with DEFRA to make sure that BIS is able to exploit the importance of investing now in the whole green economy?

Dr Cable: I don't think there is a lack of joined-up thinking or working. I mean, I meet frequently with all the relevant Ministers and officials meet even more frequently. I can't explain the point that two of you raised earlier, Martin Caton and Alan Whitehead, about the Green Deal and the link with the Green Investment Bank. We will certainly pursue that. But as a method of working, there is a lot of very effective cross-departmental working and interaction between Ministers; so there is no danger of that not happening.

Q398 Chair: Just to link up again with public awareness as well, the Carbon Trust has said that most UK business leaders do not see a business requirement to become more sustainable. I just wonder what you are doing to change that perception that many business have and, I suppose, how that connects to the earlier debate about the growth agenda?

Dr Cable: I think that is a surprising thing for the Carbon Trust to say. I spend a lot of time with British businesses, big and small, and I am pleasantly surprised by the extent to which sustainable environmental thinking now permeates their long-term planning. To take two examples: one is the car industry, which hitherto one did not normally see as a bastion of environmentalism. All the big car companies are now committed to a low-carbon agenda. New product ranges are coming through to meet that market demand and, in my experience, senior executives of the industry are very environmentally minded and focused on a low- carbon agenda, which is where the industry is heading.

If I take another case, which is steel: I met Tata representatives in India a couple of weeks ago. Steel is a very energy-intensive industry but the advances that have been made in energy saving in the steel industry have been remarkable, and they are very conscious of the fact that if they are going to flourish as an industry they have to get on top of the environmental low-carbon agenda. So I do not accept the premise behind the Carbon Trust question.

Chair: I am very tempted to discuss the issue that you have raised relating to low carbon leakage, which is of particular concern to ceramics manufacturers in my constituency as well, but I shall desist from that as this is not the time and place to raise that.

But I think, Simon Wright, you wanted to come in on skills agenda?

Q399 Simon Wright: Yes. In March of last year the then Government launched a consultation—*Meeting the Low Carbon Skills Challenge*—and industry is still warning of a green skills gap. Who is in charge of identifying and addressing the skills gap? Are there sector skills councils or is the UK Commission for Employment and Skills being encouraged to do this work, or is it something that Government itself is dealing with?

Dr Cable: My department has overall responsibility for that, both for the skills strategy in general and, within it, for the low carbon aspects of it. But the institutions you mentioned, namely UK CES, which as you know, is an arm's length body—Government supported but private sector led—is absolutely key, working with the Sector Skills Council, and we are in regular contact with them. It is a creative relationship. But in terms of where the buck stops, my department is responsible for skills and the skills strategy, including the low carbon part of that.

Q400 Simon Wright: It was identified in the consultation that low-carbon businesses can be quite poor at articulating their skills needs. Are you confident that progress is being made on that point, working with industry?

Dr Cable: Well, I haven't heard that criticism. I will certainly speak to the head of UK CES and ask if that is, indeed, a constraint it has identified. I haven't heard it put that way before.

Q401 Simon Wright: What is being done to prioritise the provision of the skills that are needed? I am hoping in my constituency that we will have a university technical college in energy and issues, but what is your department doing to make sure that that is a priority?

Dr Cable: I think the key priority is that it has to be demand led, rather than us prescribing that X-thousand apprenticeships should occur in certain fields. It has to be demand led. It has to come up through the companies. In fact, the proper channel would be through the Sector Skills Council identifying that need and then coming to us to discuss how we can support it.

Simon Wright: Thank you.

Q402 Chair: I think we have just about reached the end, but I am very conscious that there are very many organisations as per the advertisement, which I am sure you have seen in today's *Guardian*, all wanting to have a Green Investment Bank that will release the funding of the huge scale that is needed: £4 billion. I am just wondering whether or not you would you like to make a final statement, because even now I don't think we are very clear which vehicle BIS is steering towards when the announcement is made. I just wondered if there is anything you wanted to say to give reassurance to the fact that that money for investment will be available when the final decision is made.

Dr Cable: I saw that advertisement. I saw it as an encouragement. We also have ambition. We realise the scale of the environmental task that we have—the low-carbon agenda. The Green Investment Bank will have an important part in that, but it has to be done in a methodical way. We have to go through this proper appraisal process. We have to operate within Government financing constraints. But, that said, we want this to be an ambitious body that will have a variety of financial products, that can borrow, that can properly be described as a bank and whose long-term prospects are every bit as ambitious as are conveyed in that advertisement.

Q403 Chair: It's just that the headline is: "Oliver Letwin could break the deadlock over the Green Investment Bank". I am still not quite clear what exactly that deadlock is. Is there anything that this Committee could do to assist in that?

Dr Cable: I don't think there is a deadlock.

Chair: You don't think there is, okay.

Dr Cable: There is a process, it is a good process and it is getting to an end result. I speak frequently to Oliver Letwin and I don't think he seems himself as breaking any deadlock. We are making good progress.

Chair: On behalf of the Committee, thank you very much for coming along. We very much hope that our recommendations will assist BIS in getting this up and running.

Dr Cable: Thank you.

Chair: Thank you very much indeed.

Written evidence

Written evidence submitted by the Co-operative Group

The Co-operative Group

The Co-operative Group is owned by more than five million consumers and is the UK's fifth largest food retailer following the acquisition of the Somerfield supermarket chain in March 2009 and operates one of the largest and most diversified financial mutual businesses comprising The Co-operative Bank, The Co-operative Insurance and Britannia. We are also a leading provider of travel, pharmacy services and funerals. Our annual turnover is £14 billion, and we employ more than 120,000 staff, operate over 5,000 retail trading outlets and handle more than 20 million weekly transactions.

We have widely-recognised leading environmental and energy initiatives. 99% of the electricity for our trading outlets is sourced from good quality renewables, through wind and water-power. We have provided £2 million in grants to install photovoltaic systems in schools across the UK. The CIS Tower in Manchester became Europe's largest vertical solar array when it was clad in energy generating solar panels in 2005. In 2003 The Co-operative Insurance (CIS) became the first institutional property investor to transfer all contracts for its £2 billion investment property portfolio to green electricity. In 2006 the Coldham Wind Farm was launched as a joint venture between The Co-operative Group and Scottish Power and supplies approximately 4% of The Co-operative Group's energy requirements (equivalent to 9,000 homes). The windfarm is now set to expand with local community backing. The Co-operative Enterprise Hub is a grant giving and education initiative that allows for new co-operatives to be set up to deliver on energy, environmental and community priorities. One example is Energy4All, which via funding from The Co-operative Group has set up further community energy projects, each owned by members of a local co-operative.

Renewables are also central to The Co-operative Financial Services' commercial strategy, from asset finance to institutional investments renewables. The Co-operative Bank has committed more than £400 million to be invested in renewable energy and low carbon energy technologies including combined heat and power (CHP) plants and district heating schemes. We have financed several hydro schemes including one serving our food store in New Mills; we are currently in the process of funding several anaerobic digestion and biomass projects; and we are also entering the microgeneration and energy efficiency sectors.

Summary

- The Co-operative Group welcomes this opportunity to respond to the Environment Audit Committee inquiry into the Green Investment Bank.
- The Co-operative Group supports the creation of a Green Investment Bank in the UK that focuses on targeted support in existing markets and that does not compete with providers in a way that would harm business.
- There is not enough green investment in the UK but there are also many other delivery challenges including connections and planning delays.
- A Green Investment Bank could help establish a "pre-development equity fund" to help overcome the early barriers for renewable schemes.
- A Green Investment Bank's focus should not be too narrow and could deliver on large infrastructure projects as well as community-scale energy.
- There is a role for a Green Investment Bank in helping to deliver on other government priorities such as the Green Deal but that this should not detract from the wide range of projects that can be supported with little risk to public finances.
- A Green Investment Bank should not be set-up for the express purpose of merging a variety of existing grant and loan schemes. It would need a clear governance structure, defined aims and the ability to make sensible investment decisions in agreed priority areas with government in order to both be effective and to deliver certainty for the markets.

Inquiry Response

The significance of any barriers or "market failures" requiring the establishment of a Green Investment Bank, and any risks of not getting this done quickly

1. The Co-operative Group supports the creation of a Green Investment Bank in the UK that focuses on targeted support in existing markets and that does not compete with providers in a way that would harm business

2. Clearly there is not enough lending to the renewable sector in the UK and a Green Investment Bank will help to create a more positive environment for banks to increase their lending, where applicable, backed by government guarantees.

3. Many of the delays in terms of delivery are not necessarily financial, with planning decisions often taking many years for large schemes and the length of time and complexity of connecting to the grid being other

reasons why we do not see the level of delivery in the UK that we perhaps could. As part of the government's Localism agenda, there is a strong case for streamlined planning, particularly for community-owned and led renewable schemes.

4. The risk of not getting on top of these challenges is simple—that the UK will miss its targets, will not tackle energy security issues and allow competitor economies to grow in green industries, further disadvantaging the UK despite some of its natural advantages in terms of potential renewable energy generation.

The objectives and roles the Green Investment Bank should assume, the areas it should operate (and not operate) in, and how its lending and investment decisions should balance green benefits against financial risks

5. A Green Investment Bank should not seek to provide direct lending to schemes in a way that competes with existing lenders as this would have the consequence of creating an uneven market.

6. A Green Investment Bank's primary role should be to intervene where the market either cannot current operate (such as with emerging renewable technologies) or in areas where the financing risk is currently too high (such as with schemes that are stuck at feasibility stage and cannot progress to a point where a bank would provide debt financing).

7. Its role should be one of support to business and lenders through "de-risking" funds that can act as a guarantee to lower the risk to lenders. This will enable more lending to flow into renewable schemes that at present without creating a huge draw on public finances. One way to achieve this would be a "pre development equity fund".

8. The Co-operative Group believes that there is a strong case for a Green Investment Bank to stimulate delivery in the small and community-scale renewable sector. At present there are a high number of schemes, with community or small business backing, that are in the pipeline, working hard on their feasibility studies—be that testing wind speeds or in examining connection costs. Small-scale schemes have high up-front costs that represent a risk for lenders meaning that a complex range of early funding has to be found even before banks will examine the scheme. A Green Investment Bank should be playing the role of an institution that can lend to viable schemes and help to cover the risk with established lenders that will enable schemes to come forward. Given the UK's challenging renewable targets, it is imperative that the Green Investment Bank looks to having an "enabling" role that encourages communities to come forward with their own energy solutions. A pre-development equity fund would help to achieve this.

9. The Co-operative Group believes that a Green Investment Bank should not focus on a very narrow set of areas or technologies, such as purely on off-shore wind. It is right that there are a mix of schemes supported through a Green Investment Bank, including both large and community-scale projects.

The Green Investment Bank's investment priorities, and whether and how the bank should support and foster areas where the UK has emerging green technology strengths

10. The Co-operative Group believes that a Green Investment Bank can deliver both quick wins in terms of unlocking community renewable schemes, alongside encouraging more sustainable capital markets to support the UK's future major energy investments.

11. One priority for a Green Investment Bank should be the sub- £20 million renewables sector. Government support for small-scale renewables through mechanisms such as Feed-in tariffs remain very important for those schemes that are being delivered. Communities that can take control of their own energy solutions are likely to make further in-roads into other vital areas such as energy efficiency and retro-fitting. Alongside funding support, there is an important role for a Green Investment Bank to facilitate advice and support for communities wishing to deliver a decentralised energy scheme.

12. A Green Investment Bank should support priorities both in energy generation, but also in energy efficiency, such as de-risking schemes that deliver renewable heat. Such schemes can have added benefits in terms of reducing fuel poverty. The Co-operative Bank has worked in partnership with local authorities to make better use of heat in social housing and believes that this is a model that can be rolled out across the UK. Therefore The Co-operative Group believes that local authorities, the public sector and partner organisations should be able to access funding through a Green Investment Bank.

13. A Green Investment Bank could help to deliver the government's stated priorities for the Green Deal. Energy efficiency is vitally important for the UK as through generation alone the UK will struggle to meet its targets. However, as with off-shore wind, a Green Investment Bank should not be pulled into a narrow focus—by enabling a range of renewable schemes, there will be many positive knock-on effects such as educating and enabling communities, the public sector, schools and small business to make further improvements as to how they use and save energy.

The funding and governance structures required to create an effective and accountable body, including the role of "green bonds"

14. How a Green Investment Bank is structured from the outset will determine its role in the market and the level of initial investor confidence. As such The Co-operative Group believes that should the initial set-up of a Green Investment Bank purely exist from a culmination of current funds and grants from across government, this would do little to re-assure the markets that it has a serious role to play in delivering green investment.

15. A Green Investment Bank should look to have a streamlined structure, covering market engagement, specific government backed funds and an advice and support function. The Co-operative Group believes that it would gain greater credibility to be set-up apart from government but that government must play a role in its governance in some way in order to ensure that its remit does not end up too narrow. It should though be free to make investment decisions that are focused both on the UK's renewable targets and on interventions where the market has stalled such as in the public sector or within communities.

12 October 2010

Written evidence submitted by the Energy Technologies Institute

Summary

1. Over the next 40 years the UK energy system will require investment of "hundreds of billions" of pounds to ensure delivery of climate change targets whilst sustaining security and affordability. Private sector investment in the UK will be essential at a time when there will be increasing global opportunities and constrained public and bank finance.

2. The critical area the GIB should seek to address is to enable the financing of widespread roll-out of major infrastructure re-development and new build. Much of this currently has considerable policy related risk and uncertainty attached. The primary requirement is the provision of debt (and in some situations equity) to enable these major private sector investments. In turn, the GIB could attract funding by the issuance of long term bonds ("green bonds"), a market for which exists primarily driven by major insurance companies and pension funds.

3. Creating an effective investment environment will require HMG to establish clear and consistent policy and regulatory frameworks to obviate perceived political and regulatory risk which is currently seen to be high. Critically:

(a) The Government must offer to industry, business and consumers, a coherent and consistent strategy, policy and regulatory framework for low carbon energy system development, deployment and service support.

(b) Following initial development of policy and strategy, a settled long term regulatory and incentive structure is required to promote ongoing investment by investors, debt providers, manufacturers and project developers. These groups are all essential to strategy implementation.

(c) A UK energy strategy must integrate future power, heat and transport needs together with the associated infrastructure issues and must address the necessity for private sector groups to mitigate potential risks (financial, policy, market and technical) ahead of investment.

4. In the light of its long-term investment plans, the GIB should be able to advise HMG on perceived risks for major investors including engineering and technology related issues.

5. Sharing new technology development risk is already handled effectively through groups such as the ETI which leverages public sector support with private sector funding, knowledge, skills and capabilities. This is acknowledged as a unique operation and provides an independent platform for the provision of underpinning strategic, technological and analytical capabilities. This is already made available to HMG in support of UK energy strategy, policy development and implementation.

Context

1. The renewal of the UK energy system as part of a future low carbon economy is a major challenge. Achieving the 2020 and 2050 goals for reducing greenhouse gas emissions whilst sustaining energy security and affordability will require investment not just in low carbon power generation plant, but also in transmission and distribution infrastructure (including better heat distribution), in measures and technologies to reduce demand (critically involving retrofit of the UK housing stock with improved insulation, improved efficiency appliances and energy management systems) and in lower carbon transport systems fuelled by biofuels, electricity and potentially hydrogen in addition to fossil derived fuels.

2. Delivering the 2020 and 2050 energy targets at affordable investment levels will require this energy system to be more optimised than today with greater integration across power, heat and transport systems. This integration, the associated technical complexity and the challenges of engaging consumers effectively to reduce energy demand will bring new challenges in systems interdependency. The associated risks—both in deployment and in operation—will require new financial, policy and technical tools for effective management

and to ensure effective industrial and private sector engagement. The proposed Green Investment Bank could form a critical part of this toolkit.

3. The ETI is already part of this toolkit making targeted commercial investments rather than grant awards. It is a formally constituted Limited Liability Partnership of major global companies and the UK Government. Each industrial partner is committed to contribute £5 million per year into the ETI with matching support from HMG. To ensure effective deployment of this fund for all investors the ETI fully leverages and mobilises the strategic, technological and implementation capabilities of its industrial partners who frequently bid to lead, manage or participate in its chosen projects.

4. The ETI identifies key engineering and technology barriers associated with achieving the 2020 and 2050 goals and then establishes projects to demonstrate potential solutions to these challenges. This approach forms a key part of demonstrating the industrial capabilities needed to meet the UK's future needs, incentivising industry by informing them of the potential business opportunities and creating the embryonic supply-chain and skills to deliver solutions for the UK.

5. By delivering the focused and integrated capabilities of these companies and their supply-chains together with creating access to engineering and technology capabilities from Universities, SME's and large corporates from across the UK and around the world, the ETI can potentially be a great asset and contributor to the successful development and operation of a GIB.

Market Failures Necessitating Formation of a GIB

6. There are two critical market failures:

(a) There is a lack of a coherent and consistent strategy and policy framework for UK low carbon energy system development, deployment and service support. This deters major companies from investing in the UK as a priority.

(b) There are presently limited effective means for the provision of long-term credit for major private sector companies to invest in large long-term infrastructural projects.

7. Creating an effective investment structure will require HMG to establish clear strategy and regulatory frameworks to obviate potential political and regulatory risk which is currently seen to be high.

8. In addition, following initial development of policy and strategy, a settled long term regulatory and incentive structure is required to promote ongoing investment by financiers, manufacturers and project developers. These groups are all essential to strategy implementation.

9. It is critical that the Government can offer to industry, business, and to consumers, a coherent and consistent strategy, policy and regulatory framework for low carbon energy system development, deployment and service support. This must integrate future power, heat and transport needs together with the associated infrastructure issues and must address the need of the private sector groups to reduce potential risks (financial, policy, market and technical).

10. Government has a critical role to play in both establishing and deploying this strategy. The many arms of government involved in the low carbon energy area (DECC, BIS, DEFRA, DfT etc.) has led to a range of policy and funding initiatives and has possibly led to a lack of clarity, loss of industry confidence and ineffective activity. There is a critical need for a consistent, considered policy framework and the availability of appropriate funding to support associated private sector investment and implementation.

11. The ETI supports strong coordination and management of policy and funding to direct and support the advance into the low carbon economy. The ETI operates in the areas of technology development and demonstration and, together with the Technology Strategy Board and the Carbon Trust, was instrumental in forming the Low Carbon Innovation Group in 2008 to aid coordination of public sector funds in these areas. This group has recently expanded to include Research Council and Central Government groups and could work valuably with the GIB to ensure the perceived risks of long-term investors are addressed effectively.

12. Major industrial suppliers and sources of finance will be presented with a range of global opportunities as more countries seek to implement low carbon energy systems and approaches such as carbon capture and storage and new nuclear build. Both industrial investors and sources of finance will seek those markets that offer the most assured returns for their investors and stakeholders. Consequently it is important that the UK proceeds quickly in establishing and communicating a coherent and consistent strategy for low carbon energy system development, deployment, service support and how this could be financed.

Objectives of the GIB

13. In establishing the objectives of the GIB four considerations appear to be key precursors:

(a) Understanding the nature of relevant risks—in strategy, policy and regulation, markets and execution.

(b) Developing or engaging effectively world class capabilities in technical strategy and analysis, market and financial analysis and legal and financial execution.

(c) Establishing funding for the Bank and the establishment of products and associated methods and processes.

(d) Identifying the boundaries and key interfaces of the space it should operate in.

Combined together, (a) and (b)—understanding relevant risks and then having a team which can establish a strategy which addresses these risks—represent the most significant and immediate challenge. With this in place it is possible to address (c) and (d) effectively and to then create a clear proposal on the operation of a GIB. It is important that these four areas are all fully addressed if a coherent and viable proposal is to be developed over coming months.

14. The critical area the GIB should seek to address is equity and credit provision to enable financing of the widespread roll-out of major infrastructure re-development and new build. In the broad context of the development of a future UK energy system this is the largest investment challenge. This includes power stations, electricity and gas transmission and distribution infrastructure, smart meters, building efficiency retrofits and potential new infrastructure such as CO_2 pipelines, hydrogen plant, new gas and heat stores and major offshore wind and marine energy deployments. Total investment cost is generally agreed to be "hundreds of billions of pounds", much of which currently has considerable policy related risk and uncertainty attached.

15. The Government must offer to industry, business and consumers, a coherent and consistent strategy, policy and regulatory framework for low carbon energy system development, deployment and service support. This is essential to reduce strategic and policy risk on the enormous investments required for the UK to a level acceptable to attract major investors.

16. Following initial development of policy and strategy, a settled long term regulatory and incentive structure is required to promote ongoing investment. The GIB should address the provision of financing facilities (eg equity and debt) and can advise HMG on policy (eg planning, tariffs) and risk management for private sector investors. Other investment risks will be more familiar to potential investors.

Investment Priorities for the GIB

17. The effective articulation of UK energy policy and the associated strategy for meeting the 2020 and 2050 objectives is probably the most critical immediate issue for HMG and one where there is currently no agreed consensus. For example, there is general, widespread agreement across government, industry and advisory groups that the future energy system should include new nuclear build, effective deployment of Carbon Capture and Storage (CCS) and implementation of energy efficiency approaches in buildings together with "smart" networks and distribution systems. However, there is less agreement on the eventual scale of new nuclear build and there is no proven technology at scale for CCS. There is less agreement about the extremely large commitments required for offshore wind (especially the overall economics and affordability including storage and back-up systems), the viability of significant marine energy deployment and the widespread take-up of all electric cars (as opposed to hybrids).

18. It is critical in developing UK strategy and in ensuring widespread engagement and support that there is a robust underpinning knowledge base and that this is used and articulated effectively. This is an area that the ETI has addressed effectively in developing its public-private partnership investment strategy in the areas of engineering and technology development and demonstration. This knowledge base has been collected into the partnership's "Energy System Modelling Environment", a strategic modelling approach to options for the UK 2050 energy system which is operated as a complement to an in-house team of technical specialists. This, coupled with the strong industrial engagement of the ETI could provide material support to HMG in its development of policy and the GIB in its funding decisions.

19. The ETI's UK energy systems modelling environment has recently been assessed alongside other tools available to HMG and shown to provide a unique viewpoint and associated value for presenting system level choices, uncertainties and eventual economics, together with analysis of the required supply chains.

Funding and Governance Structures

20. To enable effective formation of investment priorities and governance systems the Bank will need to have access to world class capabilities in analysing and understanding relevant risks—strategic, technological, political, regulatory and the more usual market and execution issues. This will ensure the benefits of agglomeration and, diversification of risk to provide the appropriate products with the attendant terms for credit or co-investment (equity). The ETI is in a position to provide robust and independent advice or supply some of the associated strategic and technological analytical capability as an existing partnership of government with major global energy and supply chain companies with deep knowledge of the technological, investment and strategic issues involved.

21. Ensuring access to appropriately robust and independent knowledge is likely to be a key governance challenge for an independent GIB. Ensuring a balance of views is taken and ensuring these have been adequately challenged will require strong internal management and effective working relationships with key partners. We would expect the ETI to be able to offer a strong support function to the GIB.

22. There are many issues in creating an effective investment fund however one of the most critical is that in order to secure significant or substantial funds (eg In the form of bonds) from institutions such as annuity or pension funds, it will be essential to have an investment grade rating—probably no lower than a “single A”. This rating may also be sufficient to attract funds from overseas investors and, thus, not oversupply the UK corporate bond market (it could also divert UK funds back to the UK). These institutions place emphasis on long dated bonds of an infrastructural nature with secure income streams. To secure this rating, it will be necessary to have one of the following characteristics:

(a) A hypothecated income stream to the Bank, eg taxpayer sourced, carbon tax, consumption tax, etc.

(b) Implicit or explicit government backing for the equity component or equivalent.

(c) Thick equity slice.

Clearly, model (a) has great attractions in the present environment and it should be possible to identify the nature and scale of this flow and its sourcing.

23. Whilst retail investment (eg ISAs) in the debt or equity could be envisaged in the longer term, delaying introduction of this until such time as the Bank is established and proven would be prudent.

15 October 2010

Supplementary written evidence submitted by the Energy Technologies Institute

Thank you for the opportunity to present to you as a witness at the Committee on 26 October 2010. Following the meeting there are three points we felt it was worth writing to you about.

1. *The GIB should be structured as a “bank” rather than as a “fund” to enable leverage of significant funding from the private sector*

The critical area the GIB should seek to address is to enable the financing of widespread roll-out of major infrastructure re-development and new build. Much of this currently has considerable policy related risk and uncertainty attached but is critical to achieving the UK 2020 energy targets.

The primary requirement is the provision of debt (and in some situations equity) to enable these major private sector investments. In turn, the GIB should be able to attract funding by the issuance of long term bonds (“green bonds”), a market for which exists primarily driven by major insurance companies and pension funds.

Creating private sector investor confidence will also require communication of a consistent, coherent and long-term UK energy strategy coupled with a settled long term regulatory and incentive structure.

On this basis it should be possible for the GIB to generate up to 90% of its financing from the private sector giving an ongoing GIB capability of “tens of billions” pounds to support a total long-term infrastructure development programme of “hundreds of billions” pounds.

It is unlikely that a “fund” structure could ever reach this scale of investment and hence could not address the critical issue of financing the widespread roll-out of major infrastructure.

2. *Leveraging public sector funds effectively without creating a potential liability for HMG means the GIB must be structured as an independent body*

Investment decisions, whether in the form of credit or equity, should be taken on a sound commercial basis and free from political intervention. These decisions need to have full regard for the investment risks—political, regulatory, technical, market and execution

Assuming the GIB can be structured as an independent body it is important that it can issue bonds carrying an investment grade rating—probably no lower than a single “A”. This is necessary in order to secure significant or substantial funds (e.g. In the form of bonds) from institutions such as annuity or pension funds. This rating may also be sufficient to attract funds from overseas investors and, thus, not oversupply the UK corporate bond market (it could also divert UK funds back to the UK). These institutions place emphasis on long dated bonds of an infrastructural nature with secure income streams. To secure this rating, the bank, in turn, will require an ongoing secure income stream and sufficient capital.

3. *Establishing an effectived investment strategy for the GIB can be enabled by using the ETI energy system modelling work and ETI Strategy Development team*

Developing UK strategy and ensuring widespread engagement and support will require a robust underpinning knowledge base and that this is used and articulated effectively. ETI has collected such a knowledge base in the partnership’s “Energy System Modelling Environment”, a strategic modelling approach to options for the UK 2050 energy system which is operated as a complement to an in-house team of technical specialists. This, coupled with the strong industrial engagement of the ETI could provide material support to HMG in its development of policy and to the GIB in its funding decisions.

The ETI's UK energy systems modelling environment has recently been assessed alongside other tools available to HMG and shown to provide a unique viewpoint and associated value for presenting system level choices, uncertainties and eventual economics, together with analysis of the required supply chains.

Ensuring access to appropriately robust and independent knowledge is likely to be a key governance challenge for an independent GIB. Ensuring a balance of views is taken and ensuring these have been adequately challenged will require strong internal management and effective working relationships with key partners. We would expect the ETI to be able to offer a strong support function to the GIB.

As you suggested it would be valuable for the ETI to present to the Environmental Audit Committee members the current findings and strategic issues arising from our analysis. If you would like to suggest some options for when we could do this we will arrange the appropriate attendees.

If you have any other questions or concerns please contact either of us.

18 November 2010

Written evidence submitted by the Woodland Trust

The Woodland Trust welcomes the opportunity to respond to this consultation. The Trust is the UK's leading woodland conservation charity. We have three aims: to enable the creation of more native woods and places rich in trees; to protect native woods, trees and their wildlife for the future; to inspire everyone to enjoy and value woods and trees. We own over a 1,000 sites and have more than 300,000 members and supporters.

Summary

— Significant barriers exist that prevent the creation of new native woods and the planting of trees. Investing in woodland creation and tree planting is a key component to achieving a low carbon society as trees and woods remove carbon from the atmosphere whilst enabling wildlife and people to adapt to the effects of climate change. The Green Investment Bank (GIB) should therefore be pivotal in alleviating the barriers facing those who wish to invest in woodland creation.

— The Woodland Trust believes that there are compelling economic, environmental and social reasons for funding woodland creation. Creating new woods and planting trees is not a luxury but essential if the UK is to tackle challenges such as climate change mitigation and adaptation, wildlife loss, improving public health—both physical and mental—and shaping places where people want to live, work and spend their leisure time.

— There are a number of investment vehicles the GIB could use to fund woodland creation and these include green bonds, green ISAs and a green investment debt fund. By creating these structures the GIB can provide the long term stability and framework needed in order to direct finance into environmental projects.

The significance of any barriers or "market failures" requiring the establishment of a Green Investment Bank, and any risks of not getting this done quickly

1. The Woodland Trust believes that there should be at least twice as much native tree and woodland cover in the UK because trees and woods bring so many benefits to society—these include carbon abatement, supporting productive agriculture, enhancing landscape amenity and improving water quality. Regrettably significant barriers exist for those organisations and individuals who may be considering investing in woodland creation as evidenced by the fact that for all the images of a green and pleasant land the UK is one of the least wooded countries in Europe and planting rates with broadleaved species have halved in England in the last six years. The nature of the investment—often high capital costs that are repaid in the longer term with a low rate of return—can dissuade investors as can the risk of land devaluation and the initial cost of establishing and maintaining the trees. Sometimes the beneficiaries of the expenditure are not always those delivering the upfront investment—for example a private company planting trees may find that the most significant health savings are made by the NHS rather than inside their own organisation. Moreover, the complex nature of the current support mechanisms can act as a disincentive for investors and those prepared to plant trees on their own estate. It is necessary to ensure that the private sector is rewarded when their tree planting delivers on public policy.

2. Moving forward the establishment of a GIB could be crucial in fashioning the mechanisms that provide the long term security and framework within which the barriers to woodland creation can be removed or mitigated. In their report, the Green Investment Bank Commission noted that the GIB should operate in partnership with the private sector (rather than acting in competition), invest in projects that cannot be funded by commercial banks but have environmental significance, and act only when intervention can accelerate market interest in green projects.[1] Funding woodland creation meets all these criteria as the GIB can provide the long term safety for those wishing to plant trees, low interest loans or grant aid for projects which have genuine ecosystem benefits and stimulate market interest in tree planting and mass woodland creation.

[1] The Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future* (2010), pp. 14–15.

3. At a time when there is recognition across the political spectrum that there needs to be an increase in tree planting rates—the Low Carbon Transition Plan[2] and Read Report[3] both detailed the benefits—it could be potentially disastrous if the GIB was not empowered to fund tree planting projects. The Read Report advocated planting 23,200 ha per year over the next 40 years as “this could, by 2050, be delivering, on an annual basis, emissions abatement equivalent to 10% of total GHG emissions”.[4] Meanwhile the recently published Lawton Review demonstrated that the UK must redouble its efforts if it is going to create fully functional ecological networks.[5] It is therefore important that woodland creation be funded through the GIB as it is one crucial method for delivering on the aspiration to restore and safeguard the ecosystems that sustain our quality of life.

The objectives and roles the Green Investment Bank should assume, the areas it should operate (and not operate) in, and how its lending and investment decisions should balance green benefits against financial risks

4. The Green Investment Bank should finance those environmental projects that afford multiple environmental, social and economic benefits but struggle to access finance from commercial outlets due to the nature of the investment—often a low yield investment that repays over a longer term than its competitors. From the Trust’s perspective tree planting fits this model as it is perceived as an unattractive investment when compared to other opportunities. Nevertheless it delivers a range of benefits such as absorbing carbon from the atmosphere, aiding the management of flooding and improving water quality and supporting productive agriculture. Importantly there are a multitude of economic, environmental and social benefits associated with woods and trees which are outlined below:

THE COMMERCIAL BENEFITS

- Acting as a cost effective tool for absorbing carbon from the atmosphere. Mixed woodlands managed for multiple objectives can deliver abatement at less than £25 per tonne of CO_2 (the Committee on Climate Change considers £100 per tonne to be good value and David Reid considers his figure to be “pessimistic” as it does not include the co-benefits woodland provides).[6]
- Aiding the management of flooding and improving water quality. Research has shown that increasing tree cover in urban areas by 10% reduces surface water run-off by almost 6%.[7]
- Supporting employment: the timber industry is estimated to employ about 55,000 people in Great Britain.[8]
- Branding and market research opportunities.

THE ENVIRONMENTAL AND SOCIAL BENEFITS

- Supporting productive agriculture including the maintenance of healthy populations of pollinating insects (estimated to be worth between £120–£200 million per year) and providing on-farm energy generation.[9]
- Improving health outcomes as trees and woods could save millions in healthcare costs. Around £110 billion is spent each year in the UK on healthcare, equal to 8.5% of all income. It has been estimated that if every household in England had good access to quality green spaces such as woodland it could save around £2.1 billion annually.[10]
- Reducing the radiant heat in urban areas and providing shade and shelter.

The Green Investment Bank’s investment priorities, and whether and how the bank should support and foster areas where the UK has emerging green technology strengths

5. The Trust believes that there is a compelling business, environmental and social rationale for funding woodland creation and tree planting. Once created the GIB will have the advantage of being able to co-ordinate financing and provide the long term security for environmental investments. For example to double native tree and woodland cover across the UK in 50 years there needs to be an average of 15,000 ha planted per annum and this involves planting approximately 22 million trees. Assuming that the average cost per established tree

[2] Department for Energy and Climate Change, *The UK low carbon transition plan: national strategy for climate and energy* (2009).

[3] Sir David Read on behalf of the Forestry Commission, *Combating climate change a role of UK forests: An assessment of the potential of the UK’s trees and woodlands to mitigate and adapt to climate change* (2009).

[4] Ibid, p IX.

[5] A report chaired by Sir John Lawton, *Making Space for Nature: A review of England’s Wildlife Sites and Ecological Network* (2010).

[6] Sir David Read on behalf of the Forestry Commission, *Combating climate change a role of UK forests*, p. IX.

[7] Sustainable Cities, *Using green infrastructure to alleviate flood risk* (2006), at: http://www.cabe.org.uk/sustainable-places/advice/green-infrastructure-and-flood-risk

[8] Woodland Trust, Making Woodland Count (2009).

[9] DEFRA, *Farming Link April 2009: Honeybees in crisis* (2009).

[10] Woodland Trust, *Greening the Concrete Jungle* (2010). It is also worth reading the foreword from the Rt Hon. Caroline Spelman in the Natural Environment White Paper where she offers a figure for the health savings that accrue from a health natural environment: Defra, *An invitation to shape the Nature of England* (July 2010) at: http://ww2.defra.gov.uk/2010/07/27/caroline-spelman-speech-white-paper/

is £2 then the bill per year is £44 million (£440 million by 2020 and £2.2 billion by year 50). Given the wide range of benefits increasing native woodland cover affords this is not an unreasonable expense and would be a fraction of the £550 billion the Green Investment Bank Commission estimated was needed between now and 2020 to deliver a low carbon economy.[11]

The funding and governance structures required to create an effective and accountable body, including the role of "green bonds"

6. The Green Investment Bank will need to be independent from government, transparent and accountable if it is going to imbue investors with a sense of confidence. In terms of funding woodland creation there are a number of mechanisms the Bank could consider using to stimulate investment. These include the following points:

Government Grants

7. The report by the Commission suggested that the GIB should act as the administrative arm for all low carbon grants by merging organisations such as the Carbon Trust and Technology Strategy Board within the competence of the Bank. Assuming the GIB was to become the source for grant funding it is essential that the recipients of these grants are environmental projects such as native woodland creation where the motivation for the investment may be to deliver on conservation objectives or ensure other public benefits like civic amenity. Such grant funding is justifiable because woods and trees deliver a range of benefits such as alleviating flooding (and in the longer term perhaps reducing insurance costs), carbon storage and improved public health. These are all of commercial value but are not easily delivered by private sector investment.

Green Bonds (Woodland Bonds)

8. Green bonds are seen as a vehicle for tapping into the longer term and lower risk investment market. Due to the long term nature of any investment it is likely to appeal to the institutional investors, and in particular UK Pension funds, which by the very nature of these funds are long term investments with averaging liabilities of 20 years or more. Their current investment strategy is naturally driven into equities and long-term bonds; and this structure fits well with a climate related product and may appeal to insurance companies and investment/pension funds. For green bonds to be attractive they may need to be rated by an external agency and they will require a positive reason over and above their green credentials to encourage investors to switch to them. Bonds could be used to either fund a GIB, whereby the GIB is the issuer of the bond for individual projects such as woodland creation. In order for the Green Bonds to flourish there is a need for all participants to make a return on the investment as it is inadequate to simply label a bond as "green" and expect mass investment. Indeed, green branding alone may only have a limited appeal to a small minority of socially responsible investors or ethical funds and therefore be unable to unlock the capital needed. A green bond market should therefore reflect existing bond markets so that potential investors feel comfortable with it as an investment vehicle.

Green ISAs (Woodland ISAs)

9. The Commission's report argued that the Government could consider raising the personal allowances for Green ISAs and using the inducement of additional tax credits and/or low interest rates to stimulate investment. The GIB could manage these Green ISAs and market the product for people who had an interest in supporting woodland creation. As with the Green Bonds, part of the profit made from the favourable taxation and interest rates could be hypothecated into a particular tree planting project and may generate funds for the National Tree Planting Campaign. As mentioned above, the Read Report produced for the Forestry Commission demonstrated that woodland creation is a cost effective method of removing carbon.[12] Given these carbon savings Green ISAs should support a woodland creation drive as part of the carbon abatement strategy envisaged by the Commission's report.

Green Investment Debt Fund

10. Any profits from the Green Investment Bank could be re-invested into a green investment debt fund as laid out by the Commission report. Woodland creation could be funded by low interest loans from this fund as it may enable those who struggle to access the finance from commercial banks to do so and bring woodlands into management for projects such as renewable energy production. Any additional surpluses could also be re-invested into conservation projects that are not commercially viable but are of environmental and social value.[13]

[11] For an estimate of the investment required to achieve a low carbon economy see *Unlocking investment to deliver Britain's low carbon future* (2010), p. xiii.

[12] Read, *Combating climate change a role of UK forests*, p. ix.

[13] Green Investment Bank Commission, *Unlocking investment to deliver Britain's low carbon future*, p. 15. The Commission suggested operating a separate fund on non-commercial terms for projects that may be unable to secure private funding. Woods and trees act as carbon sinks, however, projects that support their creation and protection may struggle to secure private financing. Therefore the Bank could plug the funding gap and recuperate the investment as land values increase.

Levy on Energy Bills

11. Another method for raising funds suggested by the Commission was an additional levy on electricity bills. Consumers already pay environmental levies on their energy and so any additional charges should demonstrate direct and tangible benefits. Tree planting would be an ideal investment opportunity for this type of funding stream as the energy companies or the GIB could show how the additional expense was delivering benefits for the consumer in terms of creating woodland that offers ecosystem benefits like improved air quality and scenic green space for the public to enjoy.

Climate Levies

European Emissions Trading Scheme and the Renewables Obligation

12. There are a range of climate change levies that may be used to capitalise woodland creation projects. These include the European Union Emissions Trading Scheme (EU ETS) and the Renewables Obligation. Given the low cost and high carbon return of trees and woodland—alongside the other ecosystems benefits—there is a strong case that businesses should be able to use woodland creation as a mechanism for claiming permits under the ETS (it would need to be additional to existing woodland creation in the UK). Woodfuel and biomass production could also be counted under the Renewables Obligation as a means of bringing woods into management or financing new creation.

The Kyoto protocol

13. The Kyoto protocol gives each signatory a target for limiting or reducing emissions expressed as levels of allowed emissions or "assigned amounts". Signatories to the protocol can also generate credits for activities that absorb carbon from the atmosphere such as woodland creation. At present the Government includes grant-funded woodland creation in its UK greenhouse gas reporting meaning that private investors are unable to use domestic forestry as a carbon offset. By retiring its claim to the Assigned Amount Units (AAUs) for domestic forestry the Government will help stimulate the type of private sector investment needed to deliver on the aim of the UK Low Carbon Transition Plan to create an additional 10,000 hectares per year for the next fifteen years in order that those growing trees could remove up to 50 million tonnes of carbon dioxide between now and 2050.[14]

Sale of government assets, the public estate and regulatory powers

14. The Commission recommended that the sale of government assets might be used to capitalise the bank. Whilst the Coalition government appear to have rejected this as an option, there is logic to reinvesting the sale of public land—such as some parts of the Forestry Commission estate which deliver limited public benefit at present—into woodland creation, restoration and protection as this may stimulate a drive of activity in the private sector that will deliver on public policy.

15 October 2010

Written evidence submitted by Consumer Focus

Executive Summary

- A Green Investment Bank (GIB) should be used to address the market failures in domestic energy efficiency. There are three important market failures:
  - Firstly, a low cost financing mechanism is needed to develop immature industries like solid wall insulation. Because of their high cost and long payback period homeowners will be deterred from taking action.
  - Secondly, some measures need geographic co-ordination to achieve economies of scale. These include district heating and some community climate change adaptations. (This will need Defra to develop an appropriate regulatory framework).
  - Lastly, the GIB might play an important role in providing working capital to smaller and not-for-profit Green Deal providers.
- Access to low cost finance and grants is needed in addition to legislation allowing the Green Deal repayment to remain attached to the house's energy bill.
- GIB needs to provide services in addition to those supplied by the existing marketplace.
- GIB could explore the possibility of raising capital funds from retail savers through green ISAs and public sector pension funds.

[14] Department for Energy and Climate Change, *The UK low carbon transition plan*.

Introduction

1. Consumer Focus is the statutory organisation campaigning for a fair deal for consumers in England, Wales, Scotland, and, for postal services, Northern Ireland. We are the voice of the consumer and work to secure a fair deal on their behalf.

2. This submission covers those activities of the Green Investment Bank (GIB) which might improve households' and communities' access to funds to adapt to or mitigate climate change gas emissions and any role households might play in providing capital to the bank. We have drawn on examples from other countries, especially Germany's KfW which might provide a useful template for the activities of the GIB. Consumer Focus has no views on the GIB's lending to business.

Market Barriers

— the significance of any barriers or "market failures" requiring the establishment of a Green Investment Bank, and any risks of not getting this done quickly;

3. There are numerous market failures that inhibit homeowners or tenants from undertaking energy efficiency improvement to their homes even if it appears they have a financial interest in doing so. Reviews by the previous Government have highlighted some of the supply side weaknesses (eg Commission on Environmental Markets and Economic Performance (November 2007[15])) such as the lack of capacity in suppliers and in the local Government. There are also demand side weaknesses (see studies undertaken for the Energy Efficiency Innovation Review, 2005; Oxera's paper has a good overview of consumer barriers[16]) such as unfamiliarity with technologies, hassle costs, landlord-tenant issues and poor access to capital.

4. There are three specific market failures that the green investment bank could and should address.

5. *Infant industry and the lack of supplier competition*: some of the technologies are likely to become cheaper as the market matures. In time the production process will be improved providing economies of scale and also there will also be more competition amongst suppliers. This is especially true of the retrofit solid wall insulation industry and some parts of the renewable heat industry. In 2008 roughly 13,000 homes were retro-fitted with solid wall insulation[17] from a stock of around six million homes with solid walls. This sector has a huge potential to save energy. The average installed cost was £12,600 for individual homes. At present energy prices the payback is 20 years or more, which would deter many homeowners. We have also heard anecdotal stories that installers charge high mark-ups because of transaction costs, associated with the newness of the technology, and little local competition. The commercial viability of renewable heat and solid wall insulation is highly sensitive to interest rates. Low cost finance from an investment bank tasked with growing a low carbon economy could overcome "first mover" (both consumers and suppliers) disadvantages and bring down costs and allow these technologies to mature and become financeable from conventional sources.

6. *Co-ordination*: Communal mitigation technologies like electric vehicle recharging points or district heating networks have difficulty in accessing finance. Their projected revenues are low in the early years and only build up as customer numbers grow. Interest-during-construction and interest-during-market penetration becomes a significant proportion of the total costs. In both cases low interest finance greatly improves the viability of the infrastructure, by providing working capital / bridging finance while the revenue streams develop. Such investments could be refinanced commercially when the customer numbers have grown. The European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB) have both financed such communal low carbon assets.

7. Climate change adaptation measures like retrofitting sustainable drainage systems (SUDS) to hard surfaces and green spaces when they are renewed, offer a cost-effective opportunity to reduce expenditures to manage flood risk in areas prone to surface water flooding. At present it is a little unclear how the savings from those liable for mitigating and compensating for these costs: water companies, local government, homeowners and home and contents insurers will be routed back to the SUDS project sponsor. Work needs to be undertaken by Defra in establishing the appropriate regulatory framework.

8. *Working capital to improve hard-to-treat buildings*: energy efficiency projects in older buildings will have a positive but unspectacular internal rate of return (eg 4–8%). These might include improvements to the heating system, draught proofing, underfloor and ceiling insulation, but will judged as quite risky. (The Government is considering introducing support through the Energy Company Obligation for solid-wall-insulation.) Venture capital will not be interested in financing such schemes because of the low rates of return. Other classes of investors (eg pension funds) might judge these returns as adequate but not be prepared to accept the project risk while the work is being undertaken. The GIB might play an important role in providing the working capital to Green Deal providers *especially those in the voluntary sector* that could undertake low cost energy efficiency work in their communities but cannot access working capital. Once the work is complete the risk profile will change (reduced dramatically) and could be refinanced through other funding sources (like pension funds). The EBRD has routed its investment through local retail banks which then lend to households and small businesses. This might be alternate model rather than lending to Green Deal providers directly. Such

[15] http://bit.ly/9v2Zdm
[16] http://bit.ly/bNHS87
[17] EST and Energy Efficiency Partnership for Homes (May 2009) *Solid Wall Insulation Supply Chain Review*

"credit lines" to retail banks have been developed in Serbia, Bosnia and Herzegovina, FYR Macedonia, and Montenegro[18]. Loans to households have typically been for €1500.

Objectives

— the objectives and roles the Green Investment Bank should assume, the areas it should operate (and not operate) in, and how its lending and investment decisions should balance green benefits against financial risks;

9. Government already has numerous policies to incentivise or regulate particular "green" outcomes. These include banded Renewable Obligation, landfill taxes, Feed-in-tariff, possible renewable heat incentive, possible future floor prices for EU-ETS and carbon reduction commitment. Project sponsors will already take these incentives into account when devising a project for investment. We don't see any virtue in providing further guidance to the GIB aside from a general requirement to promote investment in communities and business to achieve low-carbon and environmental objectives. The objectives might refer to the particular market failures which deter investment. Our view on this is given above.

10. We believe the Green Investment Bank should be free to decide which projects it chooses to invest in: including projects on domestic energy efficiency. So far little detail has been given on the type of projects it will fund. The press notice accompanying the Deputy Prime Minister's speech in August on low carbon business support said: "The Government also plans to create a Green Investment Bank to deliver financial interventions to deal with market failures specific to green investment, stimulating growth while supporting environmental objectives." Meanwhile, the Government's Green Deal will provide a mechanism for financing the energy efficiency retrofitting of homes *at commercial interest rates*. Legislation will allow the Green Deal repayment to remain attached to the house's energy bill. We believe this is a useful innovation but insufficient to increase the uptake of energy efficiency of hard to treat homes. Access to *low cost* finance and grants is needed too. We see no reason why households should be excluded from accessing GIB finance. Investments that help homes decarbonise will make the UK less dependent on imported sources of energy and will employ local people. Economically this is equivalent to growth in our exports.

Investment Priorities

— the Green Investment Bank's investment priorities, and whether and how the bank should support and foster areas where the UK has emerging green technology strengths; and

11. We agree with the need to foster areas where the UK has technology strengths or which are likely to be internationally important. We believe the *avoidance of using imported energy* provides equivalent benefits and should be given equal priority.

12. If Government wishes to provide additional support we would like to see investment in technologies that help communities mitigate and adapt to climate change and which address other environmental problems: eg sustainable drainage, community energy, provision of working capital to SMEs working in green investment, and the early stage retrofit of hard to treat homes.

13. The GIB should also have mind to providing additionality to what the market is already prepared to lend to. It might have an eye to develop technologies and projects that venture capitalists will neglect i.e. those with low rate of return even when mature, but which have a large carbon saving potential.

Sources of Finance

— the funding and governance structures required to create an effective and accountable body, including the role of "green bonds".

14. We are aware of the idea of the green bond but are uncertain how these would operate in practice. Most public sector investment banks like EBRD, EIB and KfW issue conventional bonds at costs of finance based on their creditworthiness. These have to varying degrees the backing of national or local Governments, or capital injections. As a result they can lend relatively cheaply. If Government allowed the GIB to issue bonds either directly or through the Debt Management Office it could access capital based on the UK's credit worthiness—around 4% presently (rate based on a long-dated bond).

15. Households can provide a useful source of capital for the GIB. Many households are interested in ethical saving; they have short term saving needs (like savings accounts) and long term saving needs (like pensions). Commercial banks are presently offering poor savings rates, and the rates of return from pension plans have also been disappointing of late. Attracting capital from households offers an attractive possibility and they might be a cheaper source of finance than the money markets, especially if given tax advantages.

16. Cash ISAs are a tax sheltered form of saving popular with households—savers currently have £158 billion invested in cash ISAs with the leading high street banks. The average interest rate being paid on cash ISAs is presently only 0.4%. Over the past ten years ISAs have paid +/-0.5% above LIBOR[19] which has

[18] http://bit.ly/bBSKUF

[19] Consumer Focus (April 2010) "Cash ISA Super-complaint".

tended to be close to the base rate. This suggests if the GIB were able to issue a tax-exempt savings vehicle it might be attractive option for retail savers as well as being a cheap source of finance for the GIB.

17. We note that the National Savings & Investment (NS&I) used to offer an index linked savings certificate (RPI plus 1% today worth 5.7%) for a fixed three or five year term. Because the interest was free of income tax, this was worth considerably more to the higher rate tax-payer. This was withdrawn without notice in July 2010 because of the crowding out effect this put on inferior savings products offered by commercial banks. This was a very popular savings product and attracted £5.4 billion of savings in the last three months of its existence (a 69% increase on year on year). This suggests that NS&I might be an attractive way of accessing retail savers.

18. Public sector pension funds are another mechanism for directing long-term community capital into the GIB. Toronto City public sector employee pension fund has a majority stake in the city's innovative district cooling system Enwave investing approximately C$250 million in the facility[20]. The appeal of this mechanism is that it avoids some of the transaction costs and fees of accessing the conventional money markets.

19. Companies are starting to be affected by climate change through impacts on their assets, costs and revenues. Specific risks companies face from climate change have been classified into five broad categories

- regulatory risk;
- physical risk;
- litigation risk;
- competitiveness risk; and
- reputational risk.

Our review of the impact of climate changes on choices made by today's consumers[21] found that their long-term investments are likely not to be managed with climate risks in mind, even amongst ethical pension funds. "Green" investments must adapt to as well as mitigate climate change risks.

15 October 2010

Written evidence submitted by Ofgem

About Ofgem

Ofgem welcomes the opportunity to provide evidence to your inquiry on the Government's proposals for a Green Investment Bank. We are the Office of the Gas and Electricity Markets. Protecting consumers is our first priority. We do this by promoting competition, wherever appropriate, and regulating the monopoly companies which run the gas and electricity networks. The interests of gas and electricity consumers are their interests taken as a whole, including their interests in the reduction of greenhouse gas emissions and in the security of the supply of gas and electricity to them.

Our Response

Ofgem considers the main components of the inquiry to be outside of the scope of our remit and to be the responsibility of the Government. Correspondingly Ofgem cannot comment on the requirement for a Green Investment Bank, its objectives, priorities or funding and governance structures. However, we feel that we have some relevant information to provide to the Committee in relation to the inquiry. This includes:

- Some of the findings of our Project Discovery assessment of how the energy market can deliver secure and sustainable energy supplies. This work looked at some of the significant financing challenges faced by the industry.
- Our role in creating and administering the Low Carbon Networks Fund, which is designed to encourage innovation in network delivery. This fund was wrongly identified in the Report by the Green Investment Bank Commission as a cash fund for innovation trials. In fact it is part of the regulated company revenues and is funded through electricity network operators raising charges to consumers to fund the selected projects. If good projects are not found, consumers will not be charged.
- Our experience and role in administering mechanisms for ensuring investment in the electricity and gas networks. Ofgem has recently introduced a new regulatory framework ("RIIO") which will form the basis for securing £32 billion of network investment by 2020.
- Our role in creating (with the Government) the successful tender regime for encouraging new investment in offshore cables which attracted almost £4 billion of investment appetite for the first nine transmission links worth around £1.1 billion.

[20] Vaze P, Tindale S and Meyer P (forthcoming 2011) *Repowering Communities* Earthscan.
[21] http://bit.ly/aSOaYZ

Part 1: Project Discovery Work: Cost and Availability of Finance

As part of our year-long study into whether the current arrangements in GB are adequate for delivering secure and sustainable electricity and gas supplies over the next 10–15 years, Ofgem found that around £200 billion worth of investment would be needed by 2020. The work from Discovery has now fed in to, and been taken over by, the Government's Electricity Market Reform process.

The "Discovery" investigation (published February 2010) highlighted that while investor confidence appeared to be recovering from the global financial crisis, there was still a question as to whether the high levels of investment needed in the UK energy sector over the next decade will be available at a reasonable cost given the riskiness of the investment environment.

Discovery concluded that the markets' willingness to lend or invest and the associated cost of funding will be determined by the perceived risks in the GB energy sector relative to other sectors and markets. Low forward liquidity in power markets and uncertainty surrounding future carbon prices and subsidy levels were key risk factors facing investors. It also found that any perception of heightened policy and regulatory uncertainty, particularly given the long term nature of the investments required, may also push up the costs of financing them.

Discovery assessed that the bulk of the investment required in the GB market is likely to be focussed on riskier activities such as generation (especially renewables), gas storage and smart meters. Raising debt for these types of investment looked challenging, implying that a higher degree of equity finance may be required to meet funding requirements. The primary sources of such funding remain pension and infrastructure funds, other private sources of equity and sovereign wealth funds.

Companies can expand their balance sheets to fund new investment through borrowing, equity and bond issuances, but we assessed that they may start to face the constraint of limited market demand for further issuances should the companies become over-borrowed. Management teams may well proceed cautiously and multi-national players may prioritise investments in markets with a higher degree of confidence in achieving good returns.

However, Ofgem would add that while Discovery did find the above, Ofgem has not concluded whether a Green Investment Bank is or is not the solution. There are a number of ways to improve financing, both involving and not involving the creation of such an institution. Ultimately, it is for Government to decide how it best wants to tackle the financing challenge.

Part 2: The Low Carbon Networks Fund

Rationale for a fund

The future use of the electricity distribution networks will change considerably with the increased take-up of low carbon initiatives such as distributed generation (DG), demand side management (DSM), electric space heating, electric vehicles and electricity storage. This could require significant changes to the way these networks are designed and operated, and the commercial role the network operators (DNOs) play. For example, they may need to introduce more intelligence onto the networks to make sure they can adapt quickly to the changing pattern of network use and connect new users promptly without having to wait for new transformers or lines to be installed.

DNOs will need to better manage energy flows on their networks. Advances in technology, as well as the new data that will become available through smart meters could enable the DNOs to run the networks more efficiently, by directing energy around the grid in a more flexible way. More efficient movement of energy will allow the grid to better manage peaks in demand.

Network companies will need to innovate in the way they design, build, operate and charge for usage of their networks to deliver smarter networks and encourage customers to change their behaviour. The DNOs also need to anticipate and explore how they can ensure that the significant investments required in the future are cost effective and fit for purpose.

During the last electricty Distribution Price Control Review (DPCR5), Ofgem recognised that the regulatory framework whilst successful in incentivising efficiency and customer service, has not operated to encourage the companies to trial and innovate, since the companies believed they would gain little benefit and bear all the risk. Ofgem therefore decided to introduce a mechanism to incentivise network innovation.

Introduction to the fund

In the Final Proposals of DPCR5, we proposed a £500 million Low Carbon Networks Fund (LCN Fund) to encourage the electricity distribution network operators (DNOs) to use the price control period (1 April 2010 to 31 March 2015) to try out new technology, operating and commercial arrangements.

The LCN Fund will enable the DNOs to run trials to explore which technologies and commercial and operating arrangements are likely to provide best value for money for network users while helping to tackle climate change. We anticipate that the projects may highlight the technical, regulatory, commercial and legal changes that may be needed to ensure that the networks can meet the needs of users into the future. We also anticipate that the trials may reveal information about the way that consumers respond to the deployment of new technology. We expect these trials will help to inform the business plans that the DNOs submit to us at the time of the next price control review.

A key feature of the LCN Fund is the requirement that learning gained from projects can be disseminated, to maximise the benefits of the trials so that customers get value for money for their "investment" and receive the subsequent network cost savings and/or carbon benefits.

How the fund actually works

Currently electricity distribution network operators have price controls which are set every five years. These controls determine what expenditure is needed on each of the regional monopoly networks and what amount the network operator can recover from customers. The costs are passed onto energy suppliers in the form of distribution charges, the cost of which they reflect in the energy bills paid by their customers.

Although described as a "fund", the LCN Fund is actually part of the price control mechanism. There is no available pot of money to be used like a Government grant or a Carbon Trust loan, rather the costs of the selected projects are passed on to consumers via distribution charges as outlined above. We consider this makes it very different to the other funding mechanisms mentioned in the Report by the GIB Commission.

More specifically, the LCN Fund consists of two tiers. DNOs will be able to use the First Tier to recover a proportion of expenditure incurred on small scale projects and to recover expenditure incurred to put in place the people, resources and processes to progress small innovative projects. The total expenditure that a DNO can recover from the First Tier is subject to an annual limit, amounting to £20 million across all DNOs per annum.

The Second Tier provides total funding of up to £320 million over the five years (£64 million a year) for a small number of significant "flagship" projects. Ofgem will hold an annual competition for project funding and the DNOs will compete against each other for an allocation of the funds. The annual process involves DNOs putting forward outline project proposals for Ofgem to assess whether they meet the eligibility criteria. This is then followed by an annual call for, and submission of, full proposals. Ofgem (advised by a panel of independent experts) will decide which projects (if any) are to be awarded funding, against a predefined set of criteria.

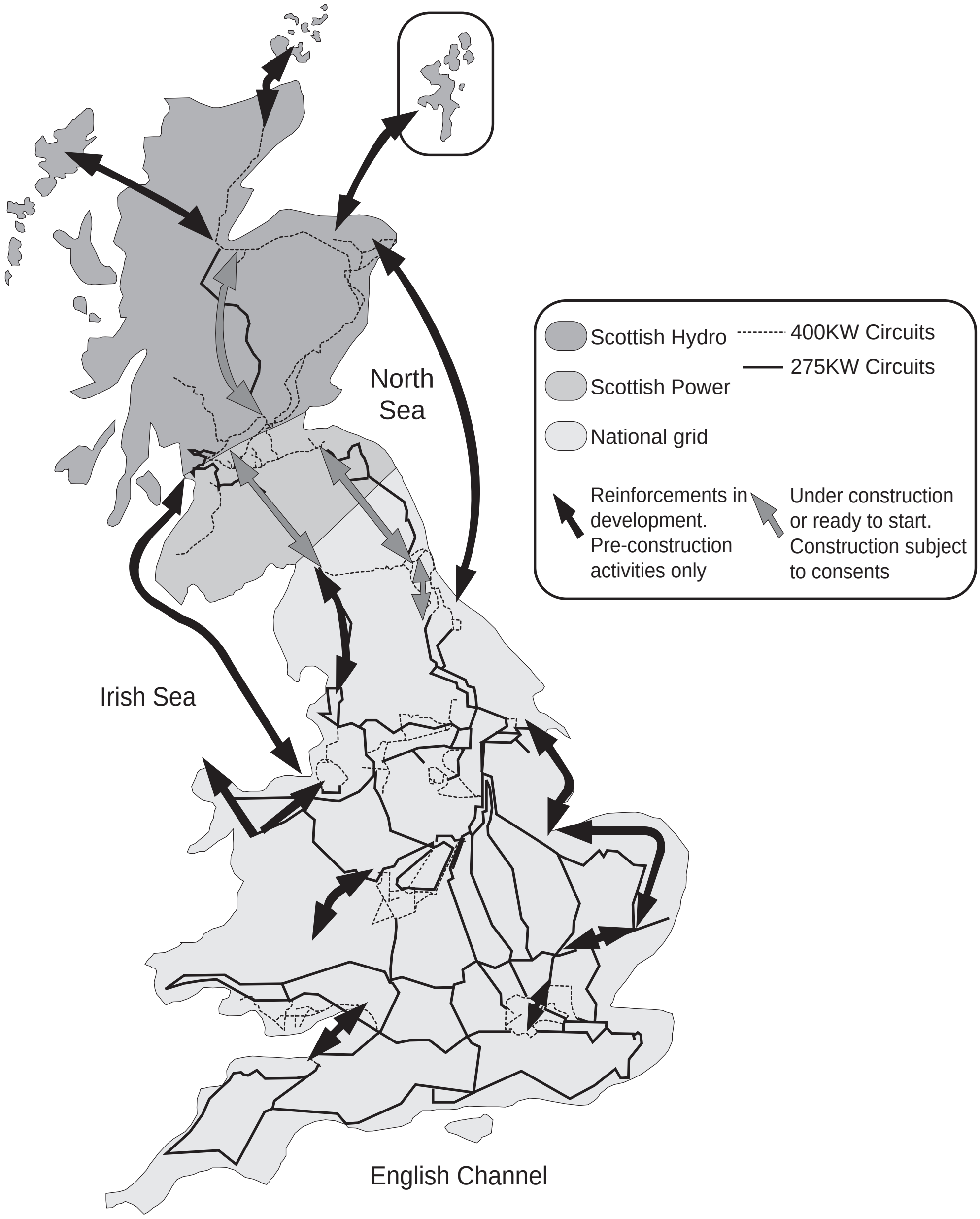
If a project is selected, costs will be spread across all of the DNOs (and therefore socialised across consumers). DNOs will transfer their share of the funding to the DNO with the winning project over the first year of the project implementation. Just as the costs are socialised, so too must be the benefits. Successful bidders have to demonstrate how they will pass on information to other companies so that the benefits are realised for all consumers.

Ofgem is part of the way through the first round of Second Tier Project evaluations. We have been encouraged by the projects received, which involve a wide range of partners and collaborators, and cover a broad range of areas including three "smart cities" and a range of projects aimed at investigating accommodating electric vehicles, distributed generation and wind energy intermittency. Ofgem will publish its decision by the end of the year.

In addition, a discretionary reward worth £100 million over the five year period enables Ofgem to reward successful delivery and projects that bring particular value in helping the DNOs understand what investment, commercial arrangements and operating strategies they should be putting in place to provide security of supply at value for money for future network users, while doing all they can to tackle climate change. We will seek to use the discretionary reward to imitate the commercial benefits of innovation through rewarding DNOs for successful innovation by relating these rewards to the risks that their shareholders have borne (relative to customers) and the benefits associated with that innovation, as well as any learning arising from it. This will not, typically, give rise to the same level of rewards that unregulated companies enjoy with successful innovation because under the LCN Fund DNOs will typically only fund 10% of the expected costs with customers funding the other 90%.

PART 3: REGULATING THE NETWORKS AND ENCOURAGING INVESTMENT

Of the £200 billion of investment needed by 2020 highlighted by Project Discovery, about £32 billion will be spent ungrading the electricity. This includes investment in the onshore and offshore grids. The diagram below illustrates some of the key onshore investments.



In order to ensure the necessary investment, as well as ensure that ths investment is underpinned by innovation and delivers security of supply, Ofgem has fundamentally changed the way in which it regulates networks. Following a comprehensive two-year review, we have scrapped the old RPI-X regime, which set each of the regional network companies' regulated performance over each five year "price control" period. While RPI-X was very successful in securing £35 billion of investment over its lifetime, Ofgem did not think it provided the flexibility needed to meet the challenges that the industry now faces.

The solution: "RIIO"

RIIO (Revenue=Incentives+Innovation+Outputs) is the successor to RPI-X and Ofgem's solution to the challenge. The RIIO model takes the best from RPI-X, but places far more emphasis on the delivery of specific outputs (eg network reliability) through a framework which heavily encourages innovation. This will support the delivery of environmental outputs and the delivery of smarter grids. It will protect consumers by rewarding those companies that innovate and invest efficiently, meeting their outputs, but will penalise those companies which perform badly for consumers with lower returns on their investment.

RIIO is designed to ensure that companies can operate economically and will be able to raise finance effectively through the regulated asset base. However, there will be no bailout for companies that make mistakes and get into financial trouble.

Each price control will continue to be set ahead of the period of activity. Targets will be set in advance, which continue to provide companies with the incentive to minimise costs.

Costs will be passed on to consumers more in line with the benefits incurred. If the benefits of a certain project will last over 20 years then it is reasonable to expect the costs to be spread over that time. Asset values will also be depreciated more in line with actual their lifetimes.

Innovation funding will be embedded in the RIIO framework through fund for Gas Distribution and Transmission which operate in similar way to the Low Carbon Innovation Fund. Whilst there will be a separate "virtual pot" of funding for gas trials and for electricity trials, both transmission and distribution companies will be competing for the same funding. In addition, third parties will also be able to compete to run trials.

Investment in the offshore grid

The offshore regulatory regime for licensing offshore electricity transmission, introduced in 2009 by the Department of Energy and Climate Change and Ofgem, uses competitive tendering to ensure the cable connections are delivered on time and at reasonable cost. Essentially, any company can bid for the right to own and operate offshore transmission links in return for a 20-year regulated revenue stream. The aim is to encourage competitive bids and new entry into an area that was the preserve of National Grid, Scottish Power and SSE (the existing network operators).

The early signs from this process are positive. The first round of tenders was very successful, attracting almost £4 billion of investment appetite for all nine transmission links worth around £1.1 billion. It has resulted in overall forecast savings of £350 million for offshore wind farms and ultimately consumers, and attracted new entry for firms like Balfour Beatty.

The key features of the offshore regime for investors are:

- — A 20 year RPI-linked revenue stream under a licence. This provides offshore transmission operators and investors with long-term regulatory certainty.
- — Bidders wishing to become Offshore Transmission Owners (OFTOs) have to bid their required revenue as part of the competitive tendering process.
- — Strong incentive regime which is availability-based and with no energy volume/price risk or stranding risk for the OFTOs.

Ofgem will commence a second transitional round of tenders later this year for assets for around 2GW of capacity, with a potential asset value of around £1.8 billion. In total high voltage cable links worth over £20 billion will be needed to connect a potential of around 50 GW of offshore wind over the coming years.

I hope that you consider this information useful and that it forms the basis for an interesting discussion at the evidence session.

Office of the Gas and Electricity Markets (Ofgem)

15 October 2010

Written evidence submitted by EDF Energy

SUMMARY

- — EDF Energy recognises the scale of the financing challenge faced by the UK energy sector in order to deliver decarbonisation, and intends to take an active role in project development and funding.
- — EDF Energy is broadly supportive of measures to encourage further investment to flow into the sector, including the creation of a Green Investment Bank (GIB).
- — EDF Energy believes that a GIB could fulfil a useful role if it is established according to the following principles:
  - — The GIB should be set up to provide equity co-investment alongside utilities into large scale energy projects that are in the national interest, and its focus should not be blurred by at the same time having responsibility for distributing small-scale grants or the other products and services that have been proposed, such as low cost loans, R&D funding and insurance products.
  - — The GIB should make its investment decisions on a commercial basis, with clearly defined criteria, adhering to governance arrangements set out in advance by Government.
  - — The GIB should have within its scope **all** low carbon technologies that can make a major contribution to UK environmental and security of supply objectives. Support for a subset of technologies would distort the UK energy market.

— The GIB should be capitalised to a sufficiently high level to enable it to make a genuine impact. Ofgem's Project Discovery concluded that £200 billion investment in energy infrastructure would be required between now and 2020 alone. The Aldersgate Group has recommended that the GIB must provide at least £4-£6 billion in the next four years[22], and EDF Energy supports this as a minimum level.

— EDF Energy believes that the funding of the GIB is a matter for Government, but supports the principle of Green Bonds offering stable but low returns to institutional and retail investors.

— Delivering stable returns to bond holders while investing in projects that are by their nature risky is a critical challenge that must be carefully considered. GIB must establish in advance a way of covering the bond repayments should returns from its equity investments prove insufficient.

GIB Objectives, Role and Scope

1. The objective of the GIB should be to support directly the delivery of energy assets or infrastructure that are necessary to meet climate change targets and that might otherwise not be progressed.

2. This objective should be fulfilled through the provision of funding to individual projects during and around the construction phase, when developers may face challenges in raising sufficient finance through existing channels as a result of the perceived levels of both political and technical risks. The expectation should be that it will be possible to refinance the projects once commissioned, returning funds to the GIB for debt repayment and investment elsewhere.

3. A recent report from Citi[23] concluded that the utility sector across the EU is constrained, in its ability to deliver the required investment, by over-stretched balance sheets, and that new sources of equity finance are needed, rather than debt finance, in the first instance. EDF Energy therefore believes the primary focus of the GIB should be on the provision of additional equity funding.

4. EDF Energy believes that the GIB should not look to provide debt finance to projects at the development stage. To do so could be considered to be a subsidy given that commercial lenders are generally not prepared to finance the riskier large scale projects during their early stages. The GIB would therefore not be able to demonstrate that it was behaving commercially and may therefore be considered to be providing State Aid.

5. The GIB must actively encourage an increase in private sector investment through its involvement in projects. Specifically, there is likely to be some level of protection from regulatory risk implied, which is a significant blocker in the availability of conventional finance for some technologies.

6. The GIB should limit its activities to low-carbon project investment, and not blur its focus by taking on responsibility for other areas such as the provision of capital grants or energy efficiency advice, or administration of R&D budgets. In particularly, EDF Energy firmly believes that the Energy Technologies Institute (ETI) should remain in its present form, as a private/public joint venture, and as such should not be included in the scope of the GIB. It is critical that the ETI retains its freedom of action to fulfil its special role in low carbon energy research, development and demonstration.

GIB Investment Priorities and Scale

7. The GIB should focus initially on investing in energy production projects and technologies that have the potential to deliver a positive environmental impact by 2025. This will allow the GIB to generate a return on a portion of its investments within a reasonable timeframe, and thereby build confidence in the GIB as an ongoing financial player.

8. Technologies and projects at an earlier stage of development may be better suited to alternative forms of financial support such as government grants. However, we do not believe that the GIB should be responsible for the distribution of capital grants or for providing investment support to technologies that are in the early stages of development before commercial deployment. There should be no overlap with other organisations working in the domain of the RD&D, eg the ETI, as noted above.

9. To enable the GIB to select its investments in a structured manner, it will be important that it has a clear view of the balance of technologies and measures that will deliver the required decarbonisation pathway into the long term. It should avoid favouring specific low carbon technologies, unless there is clear commercial and environmental justification.

10. Estimates of the total investment required in the energy sector alone reach £200 billion by 2020. The GIB must be of a sufficient scale to make a useful contribution to this figure. An initial capitalisation of £4–£6 billion, as proposed by the Aldersgate Group, is a reasonable minimum, but the Government should recognise from the outset that the ultimate scale is likely to need to be substantially higher if the GIB is to be a useful building block of the low-carbon economy.

[22] Financing the Future—Aldersgate Group, September 2010.
[23] The €1 trillion Euro Decade Revisited—Citi, September 2010.

GIB Governance and Funding

11. Investment decisions made by the GIB must balance commerciality with the reality of the scale of decarbonisation that is sought. Investment criteria must be transparent, and the GIB should seek to achieve commercial returns from its investments.

12. In order to encourage private capital markets to invest in low-carbon technologies through its own involvement, the GIB should be required to report regularly on the investment decisions it has made and on how it has addressed or overcome the underlying obstacles that may have previously suppressed private capital investment in the project or technology.

13. EDF Energy believes that the means of funding of the GIB is a matter for Government, but supports the principle of Green Bonds, structured to deliver low but stable rates of return, and designed to appeal to institutional investors who might naturally be wary of investing in the early stages of individual high risk projects with long construction periods.

14. The GIB must prepare a solution in advance to reassure investors that bond repayment costs will be covered even if the equity investments do not provide sufficient returns.

15 October 2010

Written evidence submitted by RenewableUK

— The scale of the low-carbon investment challenge is large, with wind, wave and tidal stream alone looking for £85–90 billion of capital in the next ten years.

— This scale and also the speed of mobilisation required point to the need for new catalysts for action, and a Green Investment Bank could therefore be a vital new institution.

— Any GIB must be the means of catalysing investment by others, and must not be in competition with existing finance and investment.

— The debate around the Bank is confused by the many different roles it could possibly take; it is difficult to be definite about how beneficial it could be without knowing more about Government thinking about its function.

— The extent to which the Bank is capitalised is key to how effective it can be, but all the routes by which capital could be channeled into the Bank appear problematic.

— No institution can compensate for bad policy; Government must ensure that investors see a stable policy landscape that they can navigate with confidence, which would result in a new Bank being able to be highly effective with relatively little resource.

Introduction

1. RenewableUK is the UK's leading trade association in the field of renewable energy, representing over 650 companies in the wind, wave and tidal stream sectors. Together, these technologies will provide the bulk of the renewable electricity we will need to meet targets in 2020 and through to 2050, and should be the motors of new industrial growth, providing thousands of new jobs and significant export revenue. Ensuring that our members are able to secure sufficient finance will be key to delivering on this promise.

The Scale of the Renewable Financing Challenge

2. One of the key challenges in meeting targets for renewable energy and reduction of carbon emissions is mobilising the capital required to finance the build of many gigawatts (GW—1GW = 1,000MW) of new generating capacity, alongside the need for funds to support the roll-out of efficiency measures and low-carbon heating and transport. There are a number of varying estimates of the total capital required, for instance a recent report by Ernst & Young[24] cites a figure of £170–180 billion of investment by 2025 required in the power and gas industries, while a group of leading low-carbon investors led by Hg Capital and Hudson Clean Energy estimate £190 billion by 2020, made up of £147 billion for new generation capacity, £5 billion for supply chain and £37 billion for efficiency and smart grids/meters.

3. Whatever the overall figure for investment in the low-carbon transition, it is clear that renewables will be a significant slice of the pie. RenewableUK estimates that over the next ten years, approximately 1GW of onshore wind will be built each year. At a capital cost of £1.3 million/MW, this implies a need for about £13 billion of investment. Given the maturity of this technology and the experience already gained in its use in the UK, this should be easier to secure than for some other technologies, but it is no trivial task. It pales next to offshore wind, however.

4. The build-out of the Round Two projects identified in late 2003 should proceed up to 2015 at the rate of about 1GW per year. With capital costs running at about £3 million/MW, this means that approximately £15 billion of investment will be required over the next five years alone, though much of this has already been committed for projects being delivered in the next two to three years. In 2015–20, however, many of the 32GW

[24] *Capitalising the Green Investment Bank: Key issues and next steps,* Ernst & Young, October 2010.

of Round Three projects awarded in January this year will be coming out of the consenting process, alongside much of the Scottish Territorial Waters round from last year, giving an opportunity to ramp up delivery of offshore wind from about 1GW/year to as much as 4GW/year from 2017 onwards, at which rate £10–12 billion per year of capital would be required. If 15GW of offshore wind capacity is installed in this period, a total of £40–45 billion would be needed.

5. We believe that delivery of offshore wind at this scale is necessary to provide the "critical mass" required to drive the creation of a manufacturing industry for this technology in the UK. If delivery were to continue at only 1GW per year to 2020, roughly the level in the UK's National Renewable Energy Action Plan submitted to the European Commission at the end of June this year, then this would provide insufficient "pull" to encourage manufacturers away from their existing supply chains in countries such as Denmark and Germany. If we are successful in doing so, however, then approximately £1.1 billion of investment will be required in the UK in factories and other supply chain investments.

6. If the technologies of wave and tidal stream successfully emerge from the technology development phase and are rolled out at scale by 2020, a further £5 billion might be required to develop projects, while further direct investment in the companies and technologies involved would increase the requirement further.

7. In total, therefore, the technologies that RenewableUK champions could need a total of £85–90 billion of investment. The result of this investment would be approximately 15GW of onshore wind, over 20GW of offshore wind and 1–2GW of marine renewables, in total generating about 25% of this country's power. We would also have world-leading industries in offshore wind and marine, which would be starting to earn significant export revenues from about 2020 onwards.

A Green Investment Bank

8. Given this need for capital in the coming decade, and the continuing fallout from the banking crisis of 2008, it is therefore welcome that the Coalition programme includes the establishment of a "green bank". It is vital, however, not to lose sight of the fact that strong and stable policy is the most important factor in inducing banks and institutional investors to direct the required investment into low-carbon sectors. Without confidence that the policy underpinning investments is secure, private capital will be inhibited, and no public-backed bank will be able to make up the shortfall.

9. In our view, the key features that any institution in this area must have are:

- It must encourage and invest alongside private capital, and not be in place of or in competition with such capital;
- It should seek to correct market failures including those resulting from the credit crisis; and
- It should advise the Government on the financial impact of policy changes.

10. It is also important to note areas in which there exists a need for an investing institution and those areas where such a need does not exist. While we welcome the suggestion of bringing together the various forms of support for new technology development under a single roof, we do not see venture capital as being an issue for wind power. The deployment of wind on and offshore over the next decade will require in the order of £75 billion of capital: this dwarfs into insignificance the amounts that will be needed to develop technologies and the companies that produce them. This is not to say that VC-type funding will not be helpful: firms in the marine renewable and small wind sectors may well benefit greatly. Innovation funds to bring forward cost-reducing techniques for offshore wind are also needed. But these other needs are orders of magnitude less than the requirement for mass deployment.

11. Ideally we would like to see the private sector bringing forward the capital needed for mass deployment of renewable generation capacity. With suitable financing structures, a situation is imaginable where banks could provide construction finance, exiting once projects are operating successfully through sales to institutional investors; the banks would be able to recycle limited capital after a 3–4 year commitment, while pension funds would have access to lower-risk, long-term investments that would fit their needs. It may take some time for such structures to develop, however, and there may well be a role for a "green bank" to play in de-risking key parts of such a solution to speed its implementation.

12. When bringing forward a new institution in this area, we would emphasise strongly that public-backed funds alone will not be sufficient to ensure the investment required, and that care should therefore be taken to ensure that any "green bank" does not compete directly against private banks. Given the better terms that an institution with the Government behind it would be able to offer, this would be unfair competition and result in a reduction of capital put into the market by the non-Government backed banks.

Possible Roles for a Green Investment Bank

13. There are many different roles that a public or quasi-public financial institution could perform in the low-carbon investment area, and indeed that multitude of possible roles has led to much confusion as to the impact a GIB could have. We discuss some of these roles below.

14. At the start of the value chain, one suggestion for the Bank would be to consolidate and make more coherent the landscape of low-carbon innovation funding, making it easier to navigate and presumably making

some efficiency savings in the process. RenewableUK has argued for some time that such rationalisation would be helpful, though it would not in itself make much more money available to the area, and additional funds are necessary if we are to have the technologies required. Investment in innovation will also be vital in attracting manufacturing industry. There is also a risk of hiatus in innovation investment as the different funding bodies such as the Energy Technologies Institute, the Carbon Trust and some of the work of the Technology Strategy Board, with their different staff and funding models, are brought together under one roof. We are also unsure whether a "Bank" is necessarily the right type of institution to play this role, in that awarding grants for technology development is different from taking equity stakes or lending money—there may be a clash of culture if this role is combined with some of the others suggested.

15. The previous administration made a proposal for an institution capitalised with £2 billion, which would take equity stakes in projects, with an initial focus on offshore wind. This could be a very useful function, "stretching" the capital that offshore developers have available and leveraging in debt. If the GIB were to make such investments and then sell to other investors once the projects were operating, then its capital could be "recycled" effectively, and relatively little money could have quite a large impact. There could also be a significant confidence boost through this model, as other investors could see that the Government had a direct stake in the success of projects part-owned by the Bank, and thus could be better relied upon to ensure the policy environment was stable.

16. In theory the Bank could provide debt finance to the low-carbon sector, but it appears unlikely that it could provide enough debt to make a difference. If it were lending, it would also inevitably end up competing to a greater or lesser extent with existing lenders. Were this to result in a withdrawal of lending by the private sector, then the whole initiative would have backfired spectacularly. We do not think this is a risk that should be taken.

17. While providing sufficient returns on investment is of course key, also vital is ensuring those returns are commensurate with the risks. One way of bringing new capital into the renewables market is to improve the risk/reward balance by reducing risks. The GIB could do this by providing targeted risk reduction products, such as insurance against weather risk in constructing offshore wind farms. We believe this would be a very beneficial role for the Bank to play, providing a significant impact for relatively low outlay of capital.

18. A further beneficial role for the Bank would be to provide a conduit for particularly institutional investors to channel funds to the renewable sector with the right level of risk and reward. This could be through Green Bonds or otherwise structuring portfolios of projects so that they can attain investment grade. While these kinds of structures might emerge organically, as noted above this may take too long for the needs of renewable developers, and the Bank could provide the impetus to make it happen sooner.

19. It is important that Government has good advice about how its policy measures will impact on the finance and investment communities, and this is a role that the GIB could very usefully play. We fear that the Government is currently making policy in the electricity sector partly on the basis of perceived needs of the investment community that we are not convinced reflect the reality. While a new institution will not be in place quickly enough to affect the current policy process, it could make a big difference in the future by dispassionately reflecting the position of the finance sector in its totality.

Capitalising the Bank

20. If a new institution is to make a significant difference, then it will have to have sufficient capital to work with. The previous administration's proposal for £2 billion, made up of £1 billion of public money contingent on certain asset sales plus £1 billion of private co-investment, would have been useful but to a certain extent just scratching at the surface. The Ernst & Young report referred to above gives a figure of £4–6 billion in the period to 2015, and this would of course be better, but also much more challenging in these stringent times. All the possible routes to provide funding look problematic.

21. Treasury officials appear to have ruled out using the proceeds of asset sales to fund the Bank, given the need to reduce the deficit, and as the previous administration showed, these sales would have only provided limited capital in any case.

22. The sale of Green Bonds, or Green ISAs to the general public, is another key option. But if there is any explicit or implicit Government guarantee then at least some of the value will reside on Government's balance sheet—again, something the Treasury will be keen to avoid. Without such guarantees, then what would make such a Bank different from any other? There is also an issue in that, as it stands, low-carbon is a higher-risk, lower-return kind of investment: will institutional or retail investors buy bonds or ISAs in such technologies?

23. It is possible that the GIB could borrow wholesale, using its credit rating to get lower interest rates, and then lend it on to its low-carbon customers. The European Investment Bank uses such a model. However, there would be no question of using such borrowing for anything less than fully commercial business, and thus the GIB would be restricted in its activities. How the GIB would achieve such a high credit rating without a Government guarantee is also not clear.

24. There will have to be a certain amount of direct Government subvention if the Bank is to perform an innovation funding role. It is possible that this could come from EU Emission Trading System auction receipts,

or simply from general Government funds. This line of capital would be relatively limited given the severe limits on Government spending, and would be limited to grant-type funding.

Conclusion

25. There is a strong *prima facie* case for a Green Investment Bank, given the scale and speed of the transformation in our energy economy that we require. A "paradigm shift" is required, and other countries already have such institutions, which are increasingly taking on the roles being talked about for a UK GIB. The scope and function of such a Bank must be carefully defined, however, if it is to catalyse investment and not compete with the private sector, which must provide the large majority of the investment. How the Bank is capitalised, and to what extent, will clearly be key to its effectiveness, but however much money it is given, it must be regarded as secondary to the job of ensuring that the policy that underpins low-carbon investment is right. If the mechanisms in place are effective, then even a Bank with limited funds can have a significant impact; if the policy is wrong, no amount of capital can compensate.

18 October 2010

Written evidence submitted by UKSIF

Summary

1. UKSIF welcomes the Government's plans to create a Green Investment Bank. We note that this measure has secured cross-party support.

2. We believe that there is strong and credible evidence from a range of sources as to the low carbon investment gap that needs to be bridged. In the current fiscal climate, it is clear that this will require mechanisms to encourage, support and accelerate private sector investment in the low carbon transition. Again, this view is widely supported.

3. Like other low carbon finance, the success of the Green Investment Bank depends crucially on a trustworthy and predictable (and hence investable) public policy framework that enables robust long-term business cases for low carbon investment. High political risk—including just the fear or perception of this—is likely to result in both insufficient and unnecessarily expensive capital.

4. Assuming such a stable and effective public policy framework, UKSIF believes that the Green Investment Bank can and should raise finance from both institutional and retail investors in the private sector via "green bonds" and "green ISAs". This does not preclude use of infrastructure funds. However, while investor exposure to infrastructure as an asset class may increase over time, there is a wide consensus that infrastructure funds alone are unlikely to secure sufficient investment within the required timescale.

5. These investments need to meet conventional investment requirements. To achieve the scale of investment required, they should not assume that a "green premium" is available until the market more effectively recognises and prices in the cost of carbon.

6. Such investment instruments could not only secure low carbon financing needs but also play a valuable role in encouraging saving, supporting financial security in retirement and securing public support for the low carbon transition.

Introduction

7. UKSIF, the sustainable investment and finance association, supports the UK finance sector to be a global leader in advancing sustainable development through financial services. We promote and support responsible investment and other forms of finance that advance sustainable economic development, enhance quality of life and safeguard the environment. We also seek to ensure that individual and institutional investors can reflect their values in their investments.

8. UKSIF was created in 1991 to bring together the different strands of sustainable and responsible finance nationally and to act as a focus and a voice for the industry. UKSIF's 200+ members and affiliates include pension funds, institutional and retail fund managers, investment banks, financial advisers, research providers, consultants, trade unions, banks, building societies and non-governmental organisations. For more information about UKSIF, please visit www.uksif.org.

9. In support of low carbon investment, UKSIF has contributed to a 2009 report on Green ISAs produced at the request of the current Chancellor of the Exchequer and convened our members to understand and influence the emergence of green bonds. For example, we have:

(a) Held seminars on World Bank green bonds and other sustainable investment bonds.

(b) Provided networking and signposting support to interested investment professionals.

(c) Convened UKSIF members active in the bond markets to inform and educate other stakeholders.

Size of the Challenge

10. According to a recent Ernst & Young report "Capitalising the Green Investment Bank"[25], the UK needs a total of £450 billion in low carbon investment over the next 15 years, with £225 billion in energy "supply side" investment and £225 billion in energy efficiency "demand side" investment. The report calculates that traditional sources of capital are likely to provide only £50 billion–£80 billion, leaving an energy investment gap of between £370 billion and £400 billion.

11. If this is contrasted with total investment funds under management within the UK, the scale of the challenge is clear. According to TheCityUK[26], total funds under management in the UK at end 2009 totalled £4.1 trillion (£4,110 billion). The UK's energy investment gap to 2025 therefore amounts to some 10% of total UK assets under management with half of this (ie 5% of total AUM) representing supply side investment. Of course, this does not mean that the UK's low carbon investment needs will be met only by UK investment managers but it gives an indication of scale. According to TheCityUK, total funds under management globally amounted to $71.3 trillion at end 2009 but, of course, UK low carbon investment requirements form only a part of the global total needed.

12. In the light of this challenge, UKSIF welcomes the Government's plans to create a Green Investment Bank. We note that this measure has secured cross-party support.

13. Assets managed responsibly in the UK at end 2009 amounted to nearly £950 billion, according to UKSIF data in Eurosif's European SRI Study 2010[27]. Of this, over £50 billion was subject to sustainable investment strategies like thematic investing using sustainability themes or values-based exclusions, while nearly £900 billion was subject to the integration of environmental, social and governance issues into conventional financial analysis and/or engagement with companies to improve their sustainability performance. The increase from under £550 billion at end 2005 indicates both the opportunity to secure low carbon investment but also the need to address conventional investment requirements to achieve this at the scale and with the speed required.

Recommendations: Institutional Investors

14. Our recommendations are based on discussions with UKSIF members active in the institutional bond market.

15. In our view, well-designed green bonds offer an effective means for the Green Investment Bank to raise funds rapidly and at scale from institutional investors.

16. Initially, few or no institutional investors such as pension funds will have an asset allocation specifically to low carbon investments. As a result, the investment instruments used must fit within existing asset allocations. For most such investors, this is likely to mean that bonds are more appropriate than infrastructure funds as they will tap into a deeper pool of capital.

17. There will be no initial premium for "green bonds". Indeed, green bonds may need to be more financially attractive to offset any perceptions of higher political or technology risk or greater due diligence requirements due to their unfamiliarity. For this reason, the green bonds should resemble other bonds to the greatest degree possible.

18. It is important that regular Green Investment Bank bond issues of significant size take place to create a liquid market. Sufficient equity will be required to leverage debt finance and a government guarantee is likely to be needed to attract debt capital at scale particularly before a credit rating and track record is available.

19. In the future, green bonds may become accepted as a distinct class of asset-backed securities or a familiar part of the bond market. The risk profile of green bonds will be understood removing any uncertainty premium. Their attractiveness as investments will benefit from a trusted policy framework within which there is wide acceptance of low carbon business cases. Carbon risk may be priced more highly into other investments. At this point, green bonds may well be more attractive than equivalent high carbon investments, resulting in a "green premium".

20. The development of a market in green bonds does not and should not preclude the parallel development of green infrastructure as an asset class. However, because institutional investors today tend to have higher exposure to bonds than to infrastructure, it is difficult to see that infrastructure funds alone would be likely to secure sufficient investment within the required timescales.

21. Both green bonds and green infrastructure are likely to increase in attractiveness as institutional investors seek predictable and preferably inflation-linked income from investments to meet the needs of an aging beneficiary population

[25] Capitalising the Green Investment Bank: Key issues and next steps, Ernst & Young LLP (October 2010).
[26] Fund Management 2010, TheCityUK (October 2010).
[27] European SRI Study 2010, Eurosif (October 2010) at www.eurosif.org/research/eurosif-sri-study/european-sri-study-2010.

RECOMMENDATIONS: RETAIL INVESTORS

22. In our view, it would be a missed opportunity if the Green Investment Bank raised capital only from institutional investors. We support proposals that capital should be sought from retail investors as part of the introduction of Green ISAs. It has been proposed that this extension to ISAs should offer access to a range of green investment opportunities including equities. Capital raised by the Green Investment Bank would form only part of this total.

23. The Wigley report estimates that the Green Investment Bank might, in time, raise £2 billion per annum from retail investments placed in Green ISAs. This would make a valuable if relatively limited contribution to the total needed.

24. More significantly, this opportunity could increase public support for and understanding of the low carbon transition and provide a needed boost to consumer savings. As the current Chancellor said in February 2008 "Green ISAs will engage the public in a new way in the issues around climate change and show them very clearly the economic benefits of green investment."

25. UKSIF research for the annual National Ethical Investment Week[28] has found that about half of investors would like to make money and make a difference in the world with their savings and investments, as long as they can achieve both at the same time. Retail investments in the Green Investment Bank could tap into that demand, offering additional diversification for all investors together with valuable lower risk opportunities for those investors for whom significant exposure to cleantech equities is not appropriate.

26. The Green Investment Bank might participate in National Ethical Investment Week as one way to raise public awareness about these opportunities. National Ethical Investment Week (NEIW) is a campaign to ensure that everyone knows that they have green and ethical options when it comes to their finance and investment decisions. As "Fairtrade Fortnight for money", it seeks to enable green and ethical investment and financial services to become as familiar and popular as Fairtrade.

18 October 2010

Written evidence submitted by the Aldersgate Group

INTRODUCTION

1. The Aldersgate Group (AG) is a coalition of businesses, NGOs, professional bodies, MPs and others that provide leadership on vital sustainability issues. We promote the case that strong environmental policies are essential for economic competitiveness and seek to be a catalyst for fast and effective change. The AG engages actively with key decision makers in government, business and civil society to contribute to the future development of UK economic and environmental policies.

2. The creation of a GIB was a key recommendation from the AG's report *Financing the Transition* (October 2009) that examined the financial barriers to building low carbon infrastructure at the scale and pace required to meet the UK's low carbon and energy needs. Since publication, the AG has been one of the leading proponents for the creation of a GIB, hosting high level events, debates and meetings with senior representatives from finance, business and Government.

3. In September 2010, the AG published a report *Financing the Future* which is a collection of articles from leading commentators on the scope, barriers and capitalisation for the GIB. This coincided with a joint position statement with Transform UK on key recommendations for the GIB that is reprinted in this response.

4. Please note that the views expressed in this document can only be attributed to the AG and not to individual members.

The significance of any barriers or "market failures" requiring the establishment of a Green Investment Bank, and any risks of not getting this done quickly

5. There is cross-party consensus on the need for the UK to drive major changes in energy supply, delivery and usage. The UK Low Carbon Transition Plan[29], a roadmap to 2022[30], sets a range of challenging targets which necessitate urgent and extensive investment in low carbon technologies. These include an approximate ten year timeframe to reduce greenhouse gas emissions by at least 18%, a five fold increase in renewable energy generation, smart meters to be installed in every home and new cars to be 40% more efficient. If action falls short, expensive offsets must be purchased, delaying action, losing competitive advantage and reducing the economic benefits that a swift transition could bring.

6. A Climate Risk report for WWF demonstrates that the low carbon transition would be "greater than any other industrial transformation witnessed in our history". Globally, low carbon industries would have to grow immediately at 24% a year, which is near the upper limit of what can be feasibility achieved given constraints

[28] Further details at www.neiw.org
[29] HM Government (June 2009) The *UK Low Carbon Transition Plan.*
[30] 2022 is the end of the third carbon budget period.

in resources, labour, skills, capital and equipment[31]. Although challenging, the transition is achievable, and experience in other countries have shown that industry can rapidly scale up if the appropriate policy and finance is in place, leading to widespread job and wealth creation.

7. Incremental improvements under current government policies and structures will not be sufficient to deliver such accelerated growth and the Government cannot rely on price signals alone. Radical reform is required to significantly shift the UK's carbon emissions trajectory to meet its 2020 targets. To succeed, regulatory and legislative drivers must be competitive with global markets and supported with investments in the supply chain, skills and new technologies.

8. The UK Low Carbon Transition Plan is capital intensive and requires large scale capital over long timescales. Economist Dieter Helm and others[32] provide an "extremely conservative" estimate of £264 billion for the required UK low carbon energy infrastructure spend by 2020 (which includes renewable energy generation, energy efficiency and the roll out of smart meters). This is an immensely challenging target (approximately 16% of GDP[33]) and is impeded by current lending conditions as the economy emerges from the financial crisis and global recession.

9. It is clear that the bulk of the investment will need to be delivered by the private sector. Public spending must be reduced over the next Parliament to restore finances to sustainable levels and there is currently little political appetite for an additional economic stimulus. This means that the Government must in addition to strong climate change policies use limited public funds effectively and mobilise private sector capital flows at scale to ensure value for money. Policies directed at easing the cost of capital will significantly lessen the overall cost of the transition to society.

10. New analysis by Ernst & Young[34] estimate that the total funding requirement for the UK low carbon sector is estimated to be approximately £450 billion until 2025 including all energy efficiency programme capital requirements. It estimates that traditional sources of capital (including utilities, other corporate, project finance and infrastructure funds) can only provide approximately £50-£80 billion over the same period. Even with the active participation from institutional investors such as pension funds and insurance funds, the estimated funding gap is approximately £330-£360 billion. The timeframe and scale of the low carbon investments and their risk profile imply an enormous challenge, especially in the aftermath of the recent economic crisis.

11. The AG's *Financing the Future* report has a specific section on the barriers and solutions that the GIB should address.

12. This includes an article by Ronan O'Regan from PricewaterhouseCoopers on options for the GIB in **offshore wind** financing. He writes that:

> *"To date, the investment in offshore wind has been funded largely through utilities' balance sheets. But the UK's power utilities sector are now facing a funding challenge across a wide range of energy infrastructure assets, of which offshore wind is only one. The demand for capital in many UK utilities' overseas operations is also increasing and they are faced with pan European capital allocation decisions across multiple asset types.*
>
> *PwC estimates that offshore wind alone will require £30–£35 billion of capital to deliver the 2020 targets and a significant proportion of this will need to come from new equity and project finance debt. While there are a number of challenges to delivering significant volumes of offshore wind, the most significant is likely to be the availability of finance to support the construction phase of projects, given the constraints on utility finances described above.*
>
> *There are a number of areas where the GIB can play a role including:*
>
> — *Facilitating a co-ordinated approach to policy and regulation across the energy sector which will help unlock access to capital,*
>
> — *Acting as a single point of public funding to the clean tech sector and aligning this with private sector capital, and,*
>
> — *Bridging the early stage financing 'valley of death' for pre-commercialised clean technologies.*
>
> *The most obvious role the GIB could play would be to provide development capital to support the construction cost of offshore wind projects. The recent refinancing by Centrica of its Lynn and Inner Dowsing offshore wind farms demonstrated that there is appetite for new equity and project finance in operational assets, thus the priority should be to focus on the construction stage financing."*

13. In terms of **energy efficiency**, Ingrid Holmes from E3G writes that:

> *"As the source of over a quarter of UK carbon emissions, the UK's housing stock is a very significant important source of rising energy demand. Tackling energy efficiency is also the cheapest way of delivering*

[31] Climate Risk (October 2009) Climate Solutions II: Low carbon re-industrialisation.
[32] Dieter Helm, James Wardlaw and Ben Caldecott (2009) *Delivering a 21st Century Infrastructure for Britain* (Policy Exchange).
[33] Calculation based on World Bank's 2008 estimate for UK GDP at £1,644 billion.
[34] Ernst & Young (October 2010) Capitalising the Green Investment Bank
Key issues and next steps

carbon emission reductions and energy security. Yet despite the supposed short payback times for householders, many cost-effective opportunities to improve household efficiency are not being taken…

There is still no 'joined up story' of how energy efficiency will be delivered attractively to the consumer to create demand for products. The presumption currently is that the market will deliver but illustrative E3G analysis[35] *shows that a purely market-led Green Deal (with a 9% interest rate) would actually increase the average householders fuel bill by 13%*[36]*. There is therefore a significant risk that the Green Deal appears as a product offering on company websites, but shows very limited actual uptake."*

14. Jo Butlin from Smartest Energy writes that:

"In putting forward detailed proposals for a Green Investment Bank, the Government has a real opportunity to provide the framework to accelerate the development of ***small and medium scale renewable plants*** *as well as large scale projects.*

There are numerous SME energy projects, both commercial and community based, which have been consented but cannot move forward due to lack of credit finance. Small projects have struggled to get engagement from the banks, let alone raise necessary finance. The banks continually steer clear of complex technologies at the small end of the market and where they do engage charge prohibitively high due diligence costs.

Each project may be relatively modest in output, but with a far higher number of potential developers and project sites, the aggregate results can plug a vital gap in our energy supplies—at a far quicker pace—than the larger, slower projects favoured by utility developers."

The objectives and roles the Green Investment Bank should assume, the areas it should operate (and not operate) in, and how its lending and investment decisions should balance green benefits against financial risks

15. The following text is a joint position statement with Transform UK signed by a large number of companies, financial institutions, NGOs and MPs that was published in September 2010.

Green Investment Bank Position Statement

The UK is facing a time of considerable economic stress. Restoring growth and re-balancing the economy are urgent priorities. Focusing our recovery effort on low carbon growth can re-power the economy, increase our energy security and help tackle climate change.

Rapidly accelerating investment in low carbon and environmental technologies will also increase the long-term competitiveness of Britain's businesses in the global market, protect consumers from fossil fuel price shocks and stimulate growth, especially in the regions. But fulfilling this low carbon vision for Britain will require financial as well as technological innovation.

For this reason we fully support the Government's commitment to set up a Green Investment Bank. This crucial institution can help tackle the significant investment barriers standing in the way of delivering this vital investment in our future. By directly reducing the risks to investors the cost of the energy transition will be significantly reduced for taxpayers and consumers.

Following the publication of the report by the Green Investment Bank Commission, it is essential that the Government builds on this bold vision by swiftly putting forward credible proposals for a strong, powerful and effective institution. This will only be achieved if the plans meet the following key criteria:

1. **Context:** The GIB must be designed with a clear picture of the low carbon economy that we want to achieve and over what time frame. To provide the greatest financial leverage and maximise the macro economic benefits to the UK in terms of growth and jobs, the Bank should not be designed in isolation but in the context of a range of policies (such as energy market reform, effective renewable subsidies, carbon pricing and skills development) aimed at removing barriers to a low-carbon, resource efficient economy.
2. **Urgent Legislation**: A fully independent, accountable and enduring institution must be established in statute in 2011 with a clear low carbon investment mandate. The will also ensure the option is retained to set up the institution "off balance sheet". To maintain momentum and inspire confidence, a "shadow" Board should be set up without delay to lay the foundations for the new Bank. The Bank must be set up in a way which inspires confidence in its expertise, future growth and longevity. Delays in setting up the Green Investment Bank will hold up current investments in low carbon technologies.
3. **Focus:** The Bank must have a clear mandate to leverage low carbon investment and support the development of low carbon and environmental industry, R&D, manufacturing, services and exports. This will stimulate economic growth, jobs and competitiveness. As a priority it must unlock investment in energy efficiency and renewable energy infrastructure—both large scale projects but also smaller scale and community led schemes.
4. **Green Bonds & Green ISAs:** UK Institutional investors such as pension funds and life insurance

[35] Forthcoming E3G paper on energy efficiency financing.
[36] By way of comparison, a GIB-led Green Deal financed at 5.2% could see consumers save 18% on their fuel bills.

companies hold assets worth over £2 trillion. The low carbon energy transition will only be achieved if some of this large pool of capital is used to support it. To achieve this the Bank must be given the powers to issue a range of Green Bonds. Such products should be designed to meet institutional investors' needs, including their fiduciary duty to achieve the best possible risk adjusted returns for their clients and beneficiaries.

The Bank must also design other innovative financial products such as Green ISAs which could be a source of significant additional capital funding to drive forward low carbon infrastructure investment.

5. **Helping Deliver the Green Deal:** To ensure that the Government's plans for Green Deal energy efficiency loans for homes are successful the Green Investment Bank must be used to help provide low cost capital, financed by Green Bonds.
6. **Capitalisation**: The Government must ensure the Green Investment Bank is sufficiently capitalised by at least £4–6 billion over the next four years. Over time this could leverage over a hundred billion more in investment from the private sector. It is the minimum required to ensure the Bank fulfils its potential to help make the UK a world leader in the supply and deployment of low carbon technology and the catalyst for a green jobs boom.
7. **Expertise & Advice:** The Green Investment Bank should act as a central point of technical expertise and advice to central and local Government on low carbon finance. It should act in an advisory capacity to Government to ensure new policy frameworks being developed are 'bankable' and should also have the ability to provide specialist assistance and advice to the private sector on developing first of a kind products to grow new low carbon markets.

At a critical time for our country we call on the Government to lead by advancing an ambitious and effective vision for the Green Investment Bank, putting it at the heart of our economic recovery and opening the road to a low carbon future.

The Green Investment Bank's investment priorities, and whether and how the bank should support and foster areas where the UK has emerging green technology strengths

16. There is strong cross-party support for the UK transition to a low carbon economy with a secure, safe and affordable energy system. As the AG has demonstrated since its inception, this is not only an environmental imperative to meet the global challenges of climate change, energy security and sustainable development but also an economic imperative to secure jobs and prosperity in the future.

17. The UK market for environmental goods and services is valued at over £100 billion and employs more than 900,000 people[37]. While this is significant, the UK must do more to leverage fully its industrial and business strengths. For example, the UK's environmental sector represents less than 5% of a global market that will be one of key determining factors of economic success in the 21st century. Furthermore, the UK is ranked below competitors such as the US, China, Germany and India in terms of an attractive location for renewable energy investments[38].

18. A fundamental barrier that is holding back progress is the ability of companies to secure low-cost capital at the pace and scale required. The AG's *Financing the Transition*[39] report published in October 2009 finds that the achievement of low carbon targets for 2020 and beyond presents a major financing challenge for the UK economy. It recommends the creation of a GIB that would seek to reduce political and regulatory risks for low carbon investments and mobilise capital from institutional investors at scale[40].

19. The GIB's potential role must include analysis of how the institution can help accelerate:

— Meeting legally binding low carbon and renewable energy targets for 2020 as a step change in the pace of emissions reduction is required, despite the fall in output due to the recession[41];

— Creating jobs, stimulating growth and making the UK a more competitive location for green investment;

— Building a more balanced economy with a growing high-tech manufacturing sector;

— Delivering a more even distribution of wealth, supporting growth in the regions and rural areas; and

— Growing the Big Society, empowering local communities to meet their energy needs and share the proceeds of profitable energy projects.

20. The GIB could also have a significant role in supporting green manufacturing technologies in the medium to long term. This is unlikely to be part of the GIB's initial focus. However, the bank's remit should ensure that it can undertake this role in the future. Helping successful low carbon companies access finance as they grow will help to maximise economic opportunities and unlock competitive potential for British based firms, particularly in sectors where the UK is well placed to be a global leader (such as low carbon vehicles, buildings

[37] Innovas (March 2010) Low Carbon and Environmental Goods and Services: an industry analysis. Update for 2008–09.

[38] Ernst & Young (May 2010) *Renewable Energy Country Attractiveness Indices*.

[39] Aldersgate Group (October 2009) *Financing the Transition: A strategy to deliver carbon targets*.

[40] Such as the UK's commitments under the Climate Change Act and the EU Renewable Energy Directive.

[41] Climate Change Committee (June 2010) *Meeting Carbon Budgets—ensuring a low-carbon recovery.*

and construction, aerospace, chemicals and industrial biotechnology and information and communications technology)[42]. The potential role for the GIB to support manufacturing should be incorporated into the Government's wider review that will address market failures to accelerate the UK's economic success in environmental sectors.

21. Above all, the GIB must be assessed in terms of cost-effectiveness. A recent report by Policy Exchange demonstrates that a more holistic policy approach could lead to cost reductions for renewable energy subsidies[43]. In many cases, the GIB would help to lower overall costs by reducing perceived political risks. The alternative is to raise the rewards for investors, such as increasing subsidy levels for renewable technologies, to compensate for these risks, increasing the overall cost to energy consumers.

The funding and governance structures required to create an effective and accountable body, including the role of "green bonds"

22. Writing in the AG's *Finance the Future* report, James Cameron and Ben Caldecott from Climate Change Capital argue that:

> *"One way the GIB would raise new additional finance for low carbon projects is by structuring the issuance of long-dated and asset-backed bonds, with their proceeds ring-fenced for investment in tangible low carbon infrastructure. These would be issued at sufficient scale, so as to ensure that they were liquid and properly rated. As a result, they would be attractive to a range of investors, especially large pension funds, who are looking to diversify but still need good financial returns over the longer term.*
>
> *By offering low but stable rates of return over 15–25 years, the bonds would match the life of the assets into which the funds would be flowing. These 'green' bonds would be a sensible way to finance the needed long-term investment in tangible assets that society should have to improve the quality of our lives. Without these instruments, the UK will be unable to deliver the scale of investment required to transition successfully to a low carbon economy.*
>
> *There is a broader point too—the recession and the BP deepwater horizon crisis have highlighted the fact that our pension funds (and pensions) are now addicted to the dividends paid out by high carbon sectors, especially oil and gas. In a carbon constrained world, this is an unsustainable and undesirable model. To re-balance investment portfolios, we need to improve the attractiveness of low carbon investments relative to high carbon ones. The creation of a GIB and new products, such as green bonds, are critically important steps towards a resolving the current undesirable imbalance."*

23. In addition, Jason Langley from AXA Investment Managers writes:

> *"By forming liquid bonds the GIB would enable fixed income investors to purchase these bonds within their regulatory framework[44]. Decarbonisation plans call for small scale as well as large scale projects. An aggregator would group the debt from multiple projects to produce large bonds with significant liquidity. The GIB would be a conduit to enable institutional investors to finance renewable energy projects in a way that fits their mainstream business ie though an asset allocation to green investment bank liquid bonds rather than through private equity or project financing investments.*
>
> *Aggregation like this means very large issuances of bonds can be created leading to liquid bonds listed on the major bond benchmarks. As circa 85% of fixed income investors are benchmark investors, 'green bonds' created in this way and included on major bond benchmarks will result not in niche instruments but mainstream bond investments."*

24. In terms of Green ISAs, Emma Howard Boyd from Jupiter Asset Management writes:

> *"Institutional investors may provide the majority of funds for the GIB, but retail investors could also prove an important source of funding. Indeed, the public's ability to participate in a GIB is in many ways as important as any funding they may bring.*
>
> *The Green Individual Savings Account (ISA), first proposed in a speech by George Osborne in February 2008, is a new savings product in which all the funds invested would be used to help make our economy greener. Introducing a Green ISA could be a cost effective way to give everyone a chance to be an investor in our low carbon future. Based on Treasury figures, a £3,000 increase in the tax-free saving limit would cost less than £50 million, and a £5,000 increase in the tax-free saving limit would cost less than £70 million[45]."*

15 October 2010

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[42] These sectors are highlighted as UK competitive strengths in HM Government (June 2009) *The UK Low Carbon Industrial Strategy.*

[43] Policy Exchange (July 2010) *Greener, Cheaper.*

[44] Solvency 2 is the new regulator framework being introduced for European institutional investors.

[45] Green Investment Bank Commission (June 2010) *Unlocking investment to deliver Britain's low carbon future*.

Written Evidence submitted by Transform UK and E3G

KEY POINTS

1.0 According to E3G analysis[46], infrastructure and climate change-related investment of £750 billion is required across the UK economy to 2025. Building on this, Ernst and Young in a recent report concluded £450 billion is needed for energy supply infrastructure and energy efficiency measures by 2025. However, the traditional sources of capital (utility companies, project finance and infrastructure funds) are likely only to provide £50 billion to £80 billion over the next 15 years, leaving a finance gap for energy assets of £370 to £400 billion to 2025. This means that for energy infrastructure alone up to 10 times more investment is needed than will be provided by the market under business as usual. This gap can only be closed with a well capitalised Green Investment Bank. These findings mirror those in the Green Investment Bank Commission report[47], which found a GIB would be essential to deliver the UK's essential infrastructure investment.

2.0 To be credible and effective the bank must fulfil the following key criteria:

1.1 The GIB must be given an over-riding mandate to support low carbon development.

1.2 The GIB must be given enough capitalisation to kick start the transition. This should be at least £4 to six billion over the next four years.

1.3 The GIB must be a bank (and not just a fund) with the ability to raise Green Bonds to access the huge pools of capital held by the managed funds market.

1.4 The GIB must be set up in statute within a year to provide full accountability to Parliament, to maximise its credibility in the market place and to create an enduring institution that is able to tackle the uncertainties that lie ahead as the economy is decarbonised.

1.5 The GIB must prioritise both renewable energy and energy efficiency. Energy efficiency investment, mostly for the building stock, will require more than £200 billion in investment over the coming decades[48].

1.6 The GIB must be used to support the Green Deal—by assisting with the provision of upfront finance, to keep costs down for consumers and to provide equity and technical expertise for community and local authority low carbon investments.

1.7 The GIB must be set up to provide low carbon investment expertise and advice to both Government, local Government and the commercial sector.

1.8 If these requirements are met then the Green Investment Bank can play a truly transformational role in supporting the development of a highly successful low carbon economy and act as the catalyst for a green jobs boom.

Q1. *What are the significance of any barriers or "market failures" requiring the establishment of a Green Investment Bank, and any risks of not getting this done quickly?*

2.0 Market failure, in the case of climate change, is the failure of the market to properly value and address the impact of carbon emissions. Policies such as the Renewables Obligation are used to address such market failures by increasing the rewards for investing in low carbon assets or in the case of the European Emissions Trading Scheme, increase the costs of investing in and running high carbon assets.

2.1 "Investment barriers" in the low carbon context include structural problems with the market and also information gaps. Examples are market capacity limits; the confidence gap; and the aggregation challenge—all of which the Green Investment Bank is uniquely positioned to tackle. It should be the primary role of the Green Investment Bank to share the risks of low carbon investment with the private sector and to leverage high levels of private capital by providing financial products that can link developers of low carbon projects to the holders of long-term capital—the institutional investors.

3.0 **Market capacity limits**—The scale of the investment required in the UK economy is on an unprecedented scale. According to E3G analysis, the UK needs to see around £750 billion in infrastructure investment to 2025[49]. This includes around £516 billion in "supply" and "demand-side" energy infrastructure investment[50]. Traditional sources of capital (utility companies, other corporates, project finance and infrastructure funds) are only likely to provide a fraction of that. Ernst and Young estimates £50 billion−£80 billion in total. This leaves a funding gap just on energy infrastructure of upwards of £370 billion between now and 2025. Traditional investors are not able to provide the volumes of funds required to cover the high capital costs of building the low carbon energy infrastructure required.

[46] Accelerating the transition to a low carbon economy: the case for a Green Investment Bank, Ingrid Holmes & Nick Mabey—E3G, 2010.

[47] Green Investment Bank Commission (2010) Unlocking investment to deliver Britain's low carbon future.

[48] http://www.e3g.org/images/uploads/E3G_Financing_energy_efficiency_Bringing_together_the_Green_Infrastructure_Bank,_Green_Bonds_and_Policy.pdf

[49] See http://www.e3g.org/images/uploads/Accelerating_the_transition_to_a_low_carbon_economy_The_case_for_a_Green_Infrastructure_Bank.pdf

[50] For comparison, Ernst and Young estimate in their report around £450 billion will be needed to 2025.

4.0 **The confidence gap—**Some of the technologies that are going to be needed to deliver decarbonisation, including carbon capture and storage for example, are at the pre-commercial stage and subject to three very significant barriers to deployment.[51]

4.1 The "valley of death" funding gap[52]—a gap in the capital markets for funding the demonstration of unproven technologies that have high capital costs.

4.2 The high returns required by the commercial sector on early stage low carbon investments. UK-based Venture Capital Funds often require returns of more than 40% on their investments and private equity investors require returns of 15−20%. This reduces the amount of development capital available for companies to deliver low carbon technologies to a commercial stage. Without targeted support at the appropriate scale the technologies we require to come on stream may not be ready in time.

4.3 A lack of clarity on business models, some of which are likely to be based on public-private structures, or on the source of returns for new and as yet unregulated infrastructure assets such as a domestic energy efficiency retrofits, CO_2 transport network, heat networks and smart grids.

5.0 **The aggregation challenge—**There are 26 million homes in the UK and almost all of them need to be "retro-fitted" to a very high energy efficiency standard which could cost more than £200 billion between now and 2025[53]. However, energy efficiency is a low margin/high volume business and currently there is not the level of demand we need to see from consumers to drive the retrofit market. Delivering a national programme will require a very high degree of coordination between individuals, private companies and public policy to ensure investments go ahead. One of the key issues will be keeping costs for consumers down, another will be how to "bundle up investments"—each of which may only be few £1000s each to a scale of several £100 millions to interest the holders of vast pools of long-term capital—the institutional investors.

5.1 While the private sector has an interest in energy efficiency investments, there is limited willingness to take on "first of a kind risk" in financing it. If they do, there will be a substantive risk premium applied—making it expensive for already very price-sensitive consumers. The GIB has a key role to play in managing costs for consumers and in aggregating "deals" to a size where they can be sold on to institutional investors.

5.2 Another example is community renewable energy projects: a substantive pipeline of viable projects exists but financial and legal expertise combined with lack of equity funding is preventing these deals from going ahead[54].

5.3 It is argued by some that good policy design combined with waiting for the market "to return to normal" will be enough to deliver decarbonisation. However, we believe that this is not enough. Such an approach ignores the unprecedented size and nature of the challenge and hence carries significant risks, not least around the time required to deliver this infrastructure transformation under a "business as usual" scenario. Ernst and Young has pointed out that just to cover our energy infrastructure needs, we will need to see up to ten times more investment in low carbon energy infrastructure than business as usual is likely to provide.

5.4 In terms of the risks of "not getting this done quickly", transformational change in an economy has rarely been achieved through allowing "the market to deliver" simply because of the risks, timings and scale involved. Delivery of the UK's 19th century sewerage system and railways networks or 20th century motorway network or gas infrastructure all required significant strategic public involvement. 21st century decarbonisation will also require such public involvement—this time not on health or mobility grounds but to ensure the UK remains a relevant and competitive global economy.

Q2. *What are the objectives and roles the Green Investment Bank should assume, the areas it should operate (and not operate) in, and how its lending and investment decisions should balance green benefits against financial risks?*

6.0 A Green Investment Bank (GIB) should have a mandate to support delivery of the UK's low carbon transition to 2050 at least cost to the taxpayer and consumer. Within that mandate the Bank should:

6.1 Identify and address investment barriers that limit private investment in carbon reduction activities through the creation and deployment of innovative finance instruments where such instruments are not available from the private sector on reasonable terms;

6.2 Not normally grant finance unless other private sources are also used;

[51] This is discussed in http://www.e3g.org/images/uploads/Accelerating_the_transition_to_a_low_carbon_economy_The_case_for_a_Green_Infrastructure_Bank.pdf

[52] Technologies get caught in the "valley of death", where later stage low carbon investments are often considered too capital intensive for a venture capitalist (who finance development), but the technological or execution risk is too high for private equity and project finance investors (who finance diffusion). For example, carbon capture and storage, energy efficiency finance and second generation biomass are traditionally indentified as sitting in this space. It is arguable that the same could be said for the first few GW of UK deep offshore wind projects. See discussion in Commodities Now (23 June 2009) Valley of death for low carbon technologies is widening http://www.commodities-now.com/news/environmental-markets/190-valley-of-death-for-low-carbon-technologies-is-widening.html

[53] Ernst & Young, 2010, Capitalising the Green Investment Bank.

[54] E3G discussions with the Cooperative Bank.

6.3 Align public and private financial interests on core specific projects, reducing costs through co-investment and securing greater value for taxpayers and consumers;

6.4 Coordinate UK climate finance investments, potentially in cooperation with other infrastructure and development banks.

Functionally it could also:

6.5 Consolidate existing government activities linked to delivering carbon emission reductions, pooling existing public finance expertise;

6.6 Drive the formulation of "investment grade" ie "bankable" policy making by acting as an adviser to government in its policy making;

6.7 Complement its lending activity by providing technical financial assistance services to facilitate smaller scale lending and reduce transaction costs. This would be especially welcome for local authority and community-led projects which suffer from a lack of expertise in project development or the funds to support this process.

6.8 There will always be a tension between the need to be commercial and the need to deliver carbon targets. This tension should be embraced but also managed through a strong governance structure and clear accountability to Parliament. In practical terms, we envisage two separate "pots" of capital would be required. The first pot would be public funds used to support un-bankable but strategically significant projects; the other would be used to provide finance on commercial terms and to augment private sector lending. So for example, for loans, the Bank would not grant reduced interest rates. This could only be provided if funded from the separate pot of capital by a government grant toward the payment of interest, and where compatible with State Aid rules, through a blended finance approach. This is the approach used by the European Investment Bank and KfW Bankengruppe in Germany.

6.9 Thus the Bank would have a duty to ensure that its funds are employed as rationally as possible in the interests of the UK. It would have the right to refuse to invest in a project if it is deemed to put the creditworthiness of the Bank at risk. In the event that the risks around initially less-bankable assets become understood and well managed, private sector refinancing would occur. In this way the balance sheet is freed up to invest in further projects.

Q3. *What are the funding and governance structures required to create an effective and accountable body, including the role of "green bonds"*

7.0 **Governance structure—**the structure must manage the tension between investing in the public interest and the need to be commercial. A three-tier structure is recommended, which is based on the European Investment Bank model:

— An Advisory Council made up of Shareholder representatives that advise the Bank on sub-sectors to "lean towards" within the context of the mandate and Statute but does not hold sway over individual investment decisions.

— The Board of Directors would consist of GIB Executives and non-Executives with relevant and primarily commercial expertise. The Board has legal responsibility for the commercial operation of the Bank, and final say on which investments go ahead.

— The Management team, led by the Chief executive and with extensive commercial expertise would be responsible for the day-to-day running of the bank.

8.0 **Accountability—**The GIB will need to be accountable to Parliament, producing a comprehensive Annual Public Report on activities that ensures transparency and full accountability on the use of public funds in mitigating carbon target delivery risk. To ensure this accountability the GIB must be set up in statute via primary legislation.

9.0 **Green Bonds—**The GIB is needed to play a key role in connecting long-term holders of capital (pensions funds, insurance companies etc) with the new generation of low carbon assets we need to see built. These assets will have long life-spans of 25 years or more, which are well matched to the long-dated investment needs of such institutions. The money is available—institutional investors have assets of around £3.4 trillion in the UK—it just needs to be accessed. One of the simplest ways to do this is for the Green Investment Bank to issue Green Bonds.

When a fund manager looks at buying bonds from an organisation, the factors they take into account are: credibility of the organisation, rating, price and so on. The GIB's governance structures, investment policies and track record will therefore be critical factors in whether the GIB is even able to raise Green Bonds. Poor separation of the GIB from Government is likely to expose it to political short-termism—and risks investments being made on their political rather than economic merits.

If the GIB is set up as only a fund it would not be able to raise bonds and there is no question that it would fail to bridge the huge gap in low carbon energy finance that the UK is facing.

Q4. *What should the Green Investment Bank's investment priorities be? Should the bank support and foster areas where the UK has emerging green technology strengths?*

10.0 **Energy efficiency**—The Green Deal is the centre piece of the Coalition's green agenda. Chris Huhne stated that as a result of the policy more than £7 billion would be invested by the private sector in energy efficiency each year over the coming decades. However, E3G analysis indicates the Green Deal will struggle to deliver. The barriers can be divided into three discrete areas. The cost of capital for consumers, unquantified risk around the untested Green Deal business model, and reputational risk around securitised asset-backed bonds.

10.1 Cost of capital for consumers—E3G financial modelling indicates that it will be extremely difficult for the Pay as you Save "golden rule" to be met beyond the use of low cost measures such as cavity wall and loft insulation. Only with 0% finance are "whole house retrofit" packages likely to break even or begin to reduce consumer bills. This means that to incentivise large scale take up the Government needs to achieve as close to 0% finance as possible. This means borrowing costs need to be minimised and large interest rate subsidies will be needed.

10.2 Assuming it has the power to raise green bonds, the GIB can access low cost finance—at a rate of around 5% over 25 years. If this money is raised by the market (as the Government is intending to do) it is likely to be at a rate of more than 9%. A further Government subsidy on the interest rate can then reduce the cost further.

10.3 In Germany the KfW development bank raises AAA rated, Government backed bonds for its energy efficiency household loan programme. It then subsidises these loans which are offered to the consumer at a rate of 2.65%. This is supported by further grants and some regulation. As a result the programme is achieving 100,000 retrofits of residential homes a year.

10.4 This is a significant achievement but the UK's Green Deal needs to be put in perspective. At the moment DECC expects to see corporate bonds used to finance the programme with limited subsidy. This means the Green Deal as currently envisaged will be at a higher interest rate than in Germany which is likely to lead to far fewer retrofits / year. However, in the UK we have 26 million homes to retrofit. So even if we matched the German "gold standard" finance package it would take 260 years to retrofit the all UK's residential properties.

10.5 The obvious conclusion is that to incentivise a very high uptake of energy efficiency home loans the UK has to ensure the Green Investment Bank is given the power to raise green bonds. It should then provide a subsidy to reduce the finance rate to 0%. It must then support the programme with an effective delivery model (including using the support of local authorities) and appropriate regulation. The economic benefits of such a programme could be huge for the UK. Between 2006 and 2009 in Germany, the KfW energy efficiency programme generated 200,000 jobs every year.

11.0 Unquantified risk around the Green Deal—there is a saying "banks will be first in line to finance the second project". The Green Deal carries unquantified risks around demand, default rates on loans, and the performance of assets in the home. Because of this, it is unlikely banks will provide any finance to the first tranche of green deal projects. The GIB could help by providing capital to the first tranche of those projects and facilitate "proof of concept" and generate a dataset from which risk can be priced by the banks.

12.0 Securitisation—the GIB can provide a critical role in kick-starting the market for good quality securitised asset-backed bonds. This step is key to aggregating and recycling the initial investments to the long-term holders of capital—the institutional investors.

13.0 **Offshore wind:** £33 billion−42 billion[55] will be required to finance offshore wind over the next 10 years. To date the construction of all offshore wind projects has been funded from developer balance sheets. This is because offshore wind projects are perceived as highly risky (see Table 1), so insurance is not available[56]. Because of this, banks are in the main not interested in financing offshore wind projects until they are operational.

14.0 Going forward the UK utilities have significant balance sheet constraints[57] and face vast competition for limited capital both across technologies and across geographies (four of six are foreign-owned). On an ongoing basis, capital for offshore wind will be limited and is likely to be available only sequentially—through recycling capital via refinancing after each project becomes operational. This creates a bottleneck.

[55] Range of estimates from the market provided during discussions.

[56] EPC stands for engineering, procurement and construction—under such a contract the contractor carried the project risk for schedule as well as budget in return for a fixed price.

[57] Moody's (2010) The quest for debt capacity.

Table 1

OFFSHORE WIND: KEY RISKS

Resource risk	Will the wind blow enough to generate a power output sufficient to service the debt and provide adequate equity returns to investors?
Technology risk	Offshore wind is considered "near commercial" but has a limited track record so there are questions over how long the kit will last and what required levels of maintenance will be—all exacerbated by the hostile deep offshore environment and the fact that new 5MW turbines (up from 3.6MW) are now coming through.
Construction risk	Will projects get built on time and to budget? Work can only be carried out during the most clement 6-months of the year; bad weather and accident risk can therefore have a substantive impact on project over-run risk.
Operation and maintenance risk	Is as much power generated as expected at outset? Is the kit reliable? Are the specialised cranes/shipping/ports available to facilitate maintenance?
Distribution risk	Is the relevant infrastructure in place and accessible?

Solutions and the role of the GIB

15.0 We can learn lessons from the onshore wind market. Initially the energy utilities took on much of the risk (driven by the returns from the Renewables Obligation). As the track record developed turbine manufacturers took on the risk (driven by the desire to see market share expand). And finally banks have stepped in (because returns compared to risk are very attractive). So onshore moved from on to off balance sheet financing, accelerating the scale of deployment significantly.

16.0 There are a range of views from the market on what solutions the GIB could deliver for accelerating offshore wind deployment should be.

17.0 The view from energy utilities and some project financiers has been that further ROC uplifts are needed. We do not believe this will accelerate the deployment rate because the problem is not returns but risk. There is a strong consensus that any further market interventions should focus on risk management to enable more capital to flow into offshore wind construction.

18.0 Another suggestion has been that more equity is needed. We believe the issue is not available capital—there is plenty available for the "well understood" projects—the issue is risk, particularly around the construction phase, but also residual risk in the operational phase (i.e. will the wind blow as much as expected).

19.0 GIB products to target risk

19.1 The "cautious" end of the finance spectrum suggests the GIB should focus on construction risk management tools. PWC has suggested that the GIB should underwrite generic project cost over-run risk, paid for by a levy on consumers[58]. The Carbon Trust suggested that, for a charge to developers, more targeted products such as Extreme Events Insurance for project cost over-runs or contingent loan facilities, to be drawn down in the event of cost over-runs, or contractor default letters of credit could be provided[59].

19.2 Once construction risks are managed, whether by the market or by the GIB, there will still be a need to refinance projects. Institutional investors, who are the most obvious long-term holders of operational assets, are wary of asset-backed bonds because of their poor experience with securities such as collateralised debt obligations. But these are decent products, if backed by the right projects. A role for the GIB could be to act as purchasers of asset-backed offshore wind bonds, again to demonstrate a "proof of concept" for such products. A further and final role for the GIB that is worth exploring is whether it should provide a long-term insurance policy for wind resource. For a charge, the GIB would insure a portfolio of UK offshore wind projects and pay out to policy holders if the wind resource is lower than expected in any one year, keeping the upside if wind loads are as expected. In this way returns to institutional investors from such asset-backed bonds are "smoothed" over time and geographies, delivering the required returns.

19.3 The GIB, once established, will need to work with the market to establish the most appropriate interventions to mitigate construction risk and facilitate faster build out of offshore wind.

19.4 There is a fairly clear consensus that once the first few GW of deep offshore wind are operational, and a track record for offshore wind is established, banks will become more comfortable with the risks involved in construction and the operational performance of these assets (wind load in particular) so that early stage finance becomes more easily accessible—as it did for onshore wind. Banks may then also, as they did for onshore wind, start to take more risk, thus enabling the GIB to step back and the private sector to step forward.

[58] PWC (July 2010) Filling the offshore wind financing gap.

[59] Green Investment Bank Commission (2010) Unlocking Investment to Deliver Britain's Low Carbon Future.

19.5 Addressing pre-construction financing bottlenecks will unleash substantive capital flows, driving confidence in the supply chain and provide a strong signal to the market that the offshore wind market is an attractive market to be operating in.

Innovation

20.0 In the cleantech space, the Government has put substantive funds into low carbon initiatives but this has been spread thin. There have been too many funding experiments and policy initiatives. Much of the financial decision-making on which projects should be funded has been outsourced to various funds—eg Environmental Transformation Fund (£400 million: 2008−11)—and organisations—eg NESTA (£400 million), Carbon Trust (£90 million/pa).

21.0 There has been little appetite for a more targeted funding approach with poor coordination between Government departments in part to blame. “White elephant” projects from the 1960s and 1970s such as Concorde prey on the minds of Government officials. But in reality, selective use of limited capital will be key to delivering success—but with a focus on backing technologies (as the US has done with second generation biofuels[60]) rather than single companies. The result is the UK has a thriving innovation base and is long on ideas but very short of technology commercialisation and sustainable wealth creation[61].

22.0 A more coordinated approach is needed—one that could be delivered via the GIB. Public funds targeted to projects and technologies that are in the UK’s strategic interests. With a combination of this targeted funding and smart policy design, scale and risk issues can be overcome.

23. Conclusion

The Green Investment Bank could play a central role in filling the huge investment gap in low carbon infrastructure investment that the UK is facing. But it will only achieve this if it is set up as a well capitalised public bank that can share investment risk with the private sector and issue bonds to access the vast pools of capital held by the institutional investors. If set up in this way the Green Investment Bank could play a transformational role in building a highly competitive low carbon economy and catalyse a green jobs boom.

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E3G

E3G is an independent, non-profit European organisation operating in the public interest to accelerate the global transition to sustainable development. E3G builds cross-sectoral coalitions to achieve carefully defined outcomes, chosen for their capacity to leverage change. E3G is not a campaigning NGO, a thinktank or a consultancy, although its activities overlap with all of these models. E3G is an attempt to build a new type of organisation which can help drive change inside existing global frameworks at a rate consistent with preserving critical ecological limits. E3G aims to creatively reconcile the conflicting imperatives of day-to-day politics and long term climate change risks, and E3G senior staff have unique experience at the highest levels of Government and from the private and NGO sectors. In its first five years E3G has:

- Played a critical role in Russian ratification of the Kyoto Protocol.
- Gained agreement to cooperation on a full-scale EU-China CCS demo plant.
- Delivered €6–8 billion for 10 CCS power plant demos in the EU.
- Developed the concept of Low Carbon Zones and gained agreement from the Chinese government to five LCZ pilot projects in areas of five to 15 million people.
- Proposed a public UK Green Investment Bank to support low carbon infrastructure, and played a critical role in delivering UK government agreement to establish it.
- Initiated and supported the first UN Security Council debate on climate security.

Transform UK

Transform UK is an alliance of business, finance, union and charity organisations that campaigns together to accelerate investment into the low carbon economy.

[60] New Energy Finance (2007) Hitting a Home Run with Cellulosic Biofuels. In 2005 the US made a commitment to the advancement of cellulosic biofuels and the enzymatic hydrolysis pathway. In 2007 alone the US government committed over $260 million to companies developing this single conversion pathway and provided and complementary policy framework to drive demand.

[61] Discussion with Hugh Parnell, Envirotech.

Transform UK founded the campaign for the Green Investment Bank in January 2009. It seeks to build consensus among key stakeholders on the most effective model for the GIB to support the rapid transition to a low carbon energy system and co-ordinates the alliance campaign for its delivery.

Annex 1

TRANSFORM UK & ALDERSGATE JOINT STATEMENT ON THE GIB

Green Investment Bank Joint Position Statement—September 2010

The UK is facing a time of considerable economic stress. Restoring growth and re-balancing the economy are urgent priorities. Focusing our recovery effort on low carbon growth can re-power the economy, increase our energy security and help tackle climate change.

Rapidly accelerating investment in low carbon and environmental technologies will also increase the competitiveness of Britain's businesses in the global market, protect consumers from fossil fuel price shocks and stimulate growth, especially in the regions. But fulfilling this low carbon vision for Britain will require financial as well as technological innovation.

For this reason we fully support the Government's commitment to set up a Green Investment Bank. This crucial institution can help tackle the significant investment barriers standing in the way of delivering this vital investment in our future. By directly reducing the risks to investors the cost of the energy transition will be significantly reduced for taxpayers and consumers.

Following the publication of the report by the Green Investment Bank Commission, it is essential that the Government builds on this bold vision by swiftly putting forward credible proposals for a strong, powerful and effective institution. This will only be achieved if the plans meet the following key criteria:

1. **Context:** The GIB must be designed with a clear picture of the low carbon economy that we want to achieve and over what time frame. To provide the greatest financial leverage and maximise the macro economic benefits to the UK in terms of growth and jobs, the Bank should not be designed in isolation but in the context of a range of policies (such as energy market reform, effective renewable subsidies, carbon pricing and skills development) aimed at removing barriers to a low-carbon, resource efficient economy.
2. **Urgent Legislation**: A fully independent, accountable and enduring institution must be established in statute in 2011 with a clear low carbon investment mandate. The will also ensure the option is retained to set up the institution "off balance sheet". To maintain momentum and inspire confidence, a "shadow" Board should be set up without delay to lay the foundations for the new Bank. The Bank must be set up in a way which inspires confidence in its expertise, future growth and longevity. Delays in setting up the Green Investment Bank will hold up current investments in low carbon technologies.
3. **Focus:** The Bank must have a clear mandate to leverage low carbon investment. As a priority it must unlock investment in energy efficiency and renewable energy infrastructure—both large scale projects but also smaller scale and community led schemes. Supporting the development of low carbon and environmental industry, R&D, manufacturing, services and exports will stimulate economic growth, jobs and competitiveness.
4. **Green Bonds & Green ISAs:** UK Institutional investors such as pension funds and life insurance companies hold assets worth over £2 trillion. The low carbon energy transition will only be achieved if this large pool of capital is used to support it. To achieve this the Bank must be given the powers to issue a range of Green Bonds. Such products should be designed to meet institutional investors' needs, including their fiduciary duty to achieve the best possible risk adjusted returns for their clients and beneficiaries.

   The Bank must also design other innovative financial products such as Green ISAs which could be a source of significant additional capital funding to drive forward low carbon infrastructure investment.
5. **Helping Deliver the Green Deal:** To ensure that the Government's plans for Green Deal energy efficiency loans for homes are successful the Green Investment Bank must be used to help provide low cost capital, financed by Green Bonds.
6. **Capitalisation**: The Government must ensure the Green Investment Bank is sufficiently capitalised by at least £4–6 billion over the next four years according to preliminary independent analysis. Over time this could leverage over a hundred billion more in investment from the private sector. It is the minimum required to ensure the Bank fulfils its potential to help make the UK a world leader in the supply and deployment of low carbon technology and the catalyst for a green jobs boom.
7. **Expertise & Advice:** The Green Investment Bank should act as a central point of technical expertise and advice to central and local Government on low carbon finance. It should act in an advisory capacity to Government to ensure new policy frameworks being developed are "bankable" and should also have the ability to provide specialist assistance and advice to the private sector on developing first of a kind products to grow new low carbon markets.

At a critical time for our country we call on the Government to lead by advancing an ambitious and effective vision for the Green Investment Bank, putting it at the heart of our economic recovery and opening the road to a low carbon future.

Annex 2

KEY FINDINGS FROM ERNST & YOUNG REPORT—"CAPITALISING THE GREEN INVESTMENT REPORT" AS SUMMARISED BY TRANSFORM UK, E3G & GREEN ALLIANCE

Ernst & Young Report—"Capitalising the Green Investment Bank"

KEY FINDINGS

— There are significant barriers standing in the way of low carbon investment—including high levels of risk in terms of new technologies that need to be deployed and the new business models that need to be developed. It is also clear that with the increase in the scale of low carbon investment we need to see, companies and banks cannot be expected to be the long-term holders of low carbon assets. The Green Investment Bank can help tackle these challenges by providing products and services aimed at sharing low carbon investment risk with the private sector and acting as a bridge to tap the vast pools of long-term capital held by the institutional investors.

— The UK needs to see a total of £450 billion in low carbon investment until 2025. This includes £225 billion in energy "supply side" investment and £225 billion in energy efficiency "demand side" investment.

— Traditional sources of capital (utility companies, other corporates, project finance and infrastructure funds) are only likely to provide approximately £50 to 80 billion to 2025 for energy investment.

— This creates an energy investment gap of between £370 and £400 billion between now and 2025. To meet this investment gap, average investment needs to increase from the £3 to 5 billion pa available from traditional sources to £30 billion pa—a six to tenfold increase.

— GIB should be structured to appeal to the widest and deepest sources of capital. The managed funds market in the UK is worth £3.4 trillion—the GIB could effectively tap this source of capital by raising GIB bonds in the capital markets and co-investing in low carbon assets with the private sector on behalf of the UK. A fund structure does not offer this opportunity to achieve the appropriate scale.

— There are particularly strong opportunities for the GIB to develop a number of risk-sharing and other financial products in the offshore wind generation, carbon capture and storage and energy efficiency sectors.

— At least £4 to 6 billion in tier 1 credit risk capitalization is required for the Green Investment Bank over the spending review period to 2015.

— In the absence of an institution such as the GIB, the UK low carbon sector will not be able to access institutional capital on the scale required. Without it significant competitive advantage in the low carbon economy may be lost.

19 October 2010

Written evidence submitted by Green Alliance

SUMMARY

— Green Alliance believes there is a very strong case for the creation of an independent, state backed, Green Investment Bank with a remit to facilitate sufficient private capital investment in infrastructure in order to deliver the legally binding carbon reduction targets set out in the Climate Change Act 2008.

— The case has now been accepted by government that, without some intervention by the public sector to share more of the risks of these investments, the private capital is simply not available at the scale required to deliver the low carbon transition.

— The finance gap exists in many parts of the low carbon economy, including equity and debt availability for large infrastructure projects, lack of financial products to enable institutional investors to get involved in energy efficiency or smaller scale renewable, insufficient insurance to cover construction risk in offshore wind and growth capital for low carbon manufacturers to scale up their businesses.

— An independent Green Investment Bank, initially capitalised with government equity, but with the powers to raise its own finance on capital markets, through bond issuances, would have the financial expertise, balance sheet and knowledge of the policy process to be able to make long term investments, share risks with the private sector and thereby attract more private capital into the UK low carbon economy.

- The GIB should be established by an Act of Parliament, clearly linked to the Climate Change Act. Its remit should be clear not to compete with private investors and crowd out other institutions, but only make investments where there is evidence that the private sector would not otherwise do so.
- Ernst & Young have estimated that such a bank would need to have an initial capitalisation of £4–6 billion over the period of the current Spending Review to be effective. It would also crucially need to have the powers of other development banks such as the EIB and KfW in Germany, to borrow and lend money independent from government control. This power would enable a far higher leverage of private capital over time.
- The Government has announced it will create a Green Investment Bank, but has yet to agree what powers and freedom it should have. If it follows through on its commitment to set up a Green Investment Bank with the £1 billion allocated from departmental budgets, and quantifies the amount they can raise from asset sales, it could attract tens of billions of pounds of private investment to modernise the UK's infrastructure. This would be a flagship institution driving the UK on a trajectory of green growth. If however the government puts the money in a fund with no ability to raise money on the financial markets it will be too small to make an impact. This would be reneging on the prime minister's commitment to set up a bank and the coalition agreement.

1. Barriers to Private Investment in Low Carbon Infrastructure

1.1 It is now widely accepted that a very large amount of money needs to be invested in low carbon infrastructure in order to deliver the targets in the Climate Change Act. The figures vary and the definitions of each study are different at the margins, but we are talking about several hundreds of billions over a decade or two. Far more than has been invested in the previous decades.

1.2 Estimates from Ofgem, the Institution of Civil Engineers, PwC, Policy Exchange, the CBI and others have all pointed to the large capital investment needs of the UK, a large majority of which are needed to decarbonise the economy and improve energy security. The most recent review of the investment needs of the UK to deliver energy security and keep to the emissions trajectory set out by the Committee on Climate Change is from Ernst and Young. They estimated that £450 billion of capital investment will be needed in UK energy supply, infrastructure and energy efficiency between 2010 and 2025.[62]

1.3 The majority are also clear that the current policy framework and market conditions will not deliver anywhere near the scale and speed of investment required. The financial risks of those investments are far too great for the private sector to bear alone, when other less risky opportunities are out there. Some of these risks could be reduced by changes to the planning regime or the way grid infrastructure is delivered. But even these changes will not remove the perception of risk making private capital more expensive in this area. Further measures are required.

1.4 Ernst & Young estimated that, without such interventions, traditional sources of capital, such as utility balance sheets, project finance from the major commercial banks and infrastructure fund, might be able to fund £50–80 billion of investment between 2010 and 2025. They also estimated that pension and insurance funds might also contribute £25–40 billion in that period. This still leaves a gap of £330–360 billion.

1.5 The Green Investment Bank Commission, a group of independent financial experts, chaired by Bob Wigley, asked by the Conservative party to look at the case for a GIB, also argued that in current conditions only about 15% of the investment required to deliver 2020 low carbon targets in the UK, is in place. The vast majority of this comes from utility bond issuances, which are very unlikely to be expanded to meet the other 85%. Indeed, utilities themselves, such as Centrica, have stated they do not believe their balance sheets are large enough to deliver the capital required.

1.6 Other potential areas of capital, such as banks, infrastructure funds and institutional investors, like pension funds, are not investing at the pace and scale required. There is little evidence that they will do without further ways to reduce the risks and therefore cost of the capital.

1.7 Work of the Green Investment Bank Commission, the Carbon Trust, PwC, E3G and others has shown a variety of areas of the low carbon economy where a finance gap exists, including equity and debt availability for large infrastructure projects, lack of financial products to enable institutional investors to get involved in energy efficiency or smaller scale renewable, insufficient insurance to cover construction risk in offshore wind and growth capital for low carbon manufacturers to scale up their businesses.

1.8 Whilst each of these gaps could be addressed by specific policy interventions, a Green Investment Bank with a clearly defined, but broad remit, would be able to address all of them, and anticipate future finance gaps because this is a transition that will take decades, not just a few years.. That is not to say that a GIB would be a silver bullet, but Green Alliance believes it will be an essential part of any low carbon transition package.

[62] *Capitalising the Green Investment Bank: Key issues and next steps,* Ernst & Young, October 2010.

2. Objectives and Role for the GIB

To fulfil the pledge in the coalition agreement, we believe the Green investment Bank must have the following characteristics:

2.1 It must be established as a permanent, independent financial institution, under an Act of Parliament, to maximise private investment into the infrastructure required to deliver the targets set out in the Climate Change Act**.** The low carbon transition is a multi-decade project that requires a long term redirection of private capital. If the market is to develop confidence in the longevity of GIB investments, then making the bank permanent and independent of day to day political interference is essential. This is particularly important for engaging with the large pools of capital in pension and insurance funds.

2.2 **It must be able to take decisions that affect investments in to infrastructure provision, deployment of low carbon technologies at scale and the improvement of the energy efficiency of our building stock**. As described above, there are finance gaps in many parts of our low carbon economy. Unless the GIB is given the remit to find solutions in all of these areas, then it will not be able to structure its investments in the most cost effective way. Investment in energy efficiency now, for example, will reduce the capital requirements for energy supply in later years.

2.3 **It must have some initial capitalisation from government at a scale that will allow the GIB to make a significant impact on private investment flows into those markets**. Ernst & Young estimated that the minimum required over the period of the Spending Review would be £4 billion–6 billion.

2.4 **It must be able to issue debt and raise money from the capital markets, whilst the government liability is restricted to its subscribed equity shares, so keeping the total capital raised off the public sector balance sheet.** This is the critical power that makes it a independent bank and not a government controlled fund. It would allow for significantly more leverage of private investment in years to come, would enable engagement of institutional investors through green bonds, and give the bank credibility in the City. The government has not yet agreed to give the bank this power, and it is known that HM Treasury is reluctant to do so. Without this power, the GIB would simply not be able to do the job that Ministers are setting it up to achieve.

2.5 **It should also be given the ability to create green individual savings products (eg Green ISAs) and offer the government independent advice on policy barriers to private low carbon investment.** Issuing green savings products would be a politically powerful way to engage citizens more directly in the low carbon economy, beyond what they do with their own homes and vehicles. It would also be another means of raising capital, so building the balance sheet and enabling greater potential for leverage. The policy advice function would be a vital way to ensure that future regulatory changes are made with a much better understanding of their potential impact on investors. The lack of understanding of the investment needs within the policymaking community has become a common criticism.

2.6 **It should be clear that GIB loans or investments must not directly compete with the private sector, but only be made where there is evidence that private capital is not available.** One fear is that GIB capital would simply displace investments that private banks would be making anyway, thus distorting the banking sector and not facilitating addition investment in the low carbon economy. Experience of the EIB, KfW and other development banks shows this need not be the case, but it should be clear in the Act of Parliament that such "crowding out" would be against the bank's investment criteria.

3. Investment Priorities

3.1 Inevitably there are a whole range of potential areas that the GIB could get involved with, and it is easy to be drawn into discussions about the ideal structure for a GIB to solve any given low carbon finance problem. There will be a number of priority areas that need attention first, but it would be a mistake to design the GIB solely around optimising those early activities. For the job of the GIB will be a long term one. Its structure and remit should be defined in an open way so as to enable interventions on many fronts. That, however, does not mean that it has to intervene on many fronts from day one of its existence.

3.2 The Carbon Trust and others are making a strong case that some support in terms of equity investment is required to help address the financial challenges of deep offshore wind projects. This has led others to argue that to address that problem, government could just set up an equity fund, and doesn't need a Green Investment Bank. Whilst this narrow statement may well be true, it ignores the fact that there is plenty of evidence of a simultaneous shortfall in debt financing for low carbon infrastructure, with utility balance sheets unable to provide all the investment and private sector project finance sources not able to fill the gap.

3.3 There are a number of insurance products that the GIB could issue to help overcome some of the construction risk issues facing offshore wind, as well. These might include extreme weather insurance, which the private sector is not yet willing to provide as there is little experience of deep offshore turbine construction.

3.4 There is also an immediate need for low cost capital for energy efficiency investments. Modelling from E3G suggests that the Green Deal financing is unlikely to be scaled up into a major programme of retrofitting without some deep source of low cost capital. This is the lesson from successful retrofitting schemes in Germany, where the state bank, KfW provides much of the capital at low cost, but distributed by retail banks.

3.5 We also know there is a shortfall of early stage investment in low carbon technologies and manufacturing, however these are higher risk investments and before getting heavily involved in these markets, the GIB would need to develop an investment track record. Allowing GIB to be involved in longer term, lower risk investments such as grid and pipe network upgrades, as the EIB does, might be another way of offsetting the higher risk VC style investments.

3.6 These are the finance gaps that exist at the moment. We can also be sure that new problems will arise in the years to come, which we cannot anticipate now. Another role of the GIB would be to adapt to the new market conditions and provide products and solutions to them as they arise.

4. Funding and Governance Structures

4.1 For the bank to be credible with investors, it has to be independent from day to day control of politicians and Whitehall officials. The investments made have to make a return, albeit one over a longer time period than would be demanded by a fully private bank. At the same time there will be considerable taxpayer investment in the institution, so accountability to Ministers and Parliament must also be in place.

4.2 The Act of Parliament should set out the objectives and terms of reference for the bank. An independent board and chair should be appointed. That board would then establish its own investment committee to decide on disbursement. The accounts of the bank should be a transparent as possible, with annual published reports and scrutiny of the National Audit Office, Public Accounts Committee and Environmental Audit Committee.

4.3 Representatives of the board, including its chair, should be required to appear at a public joint session of the PAC and EAC on an annual basis.

4.4 The GIB cannot be set up without some tax payer funds being put up as initial capitalisation. But from the outset the aim is to attract private sector capital as well, as it is clear that current public sector finances cannot accommodate the size of balance sheet that a GIB would require to carry out the task of levering the level of private sector investment into low carbon infrastructure that is required.

4.5 Ernst & Young have recommended that an initial capitalisation of £4 billion–£6 billion will be required over the period of the Spending Review to enable the bank to function and grow its balance sheet in future years. Currently the government have pledged £750 million from the UK departmental expenditure limits, with an additional £250 dependent on the Scottish Executive, to come in 2013–14. They have also said that funds from asset sales would be also be used to capitalise the bank but have not specified what assets, estimates of the value or timing of such sales. If, for example, the proceeds of HS1 rail link were used, then this could be £1–2 billion. Proceeds of the sale of nationalised banks could be used, but obviously the timing of this is less certain.

4.6 To enable the balance sheet of the GIB to grow over time, giving it the opportunity to lever far more private capital, it must be given the powers to issue bonds and raise finance from the capital markets and institutional investors, such as pension funds. In the current fiscal climate the inevitable concern is over the treatment of such a bank on the public sector balance sheet. How much liability does the tax payer need to take on?

4.7 Some have argued that if this private sector capital were only raised through bonds, guaranteed by the government, then this would simply be more public sector borrowing and count against the deficit. A non-starter in the current fiscal environment, but could be a viable option at a different point in the economic cycle.

4.8 The position, however, is not as simple as that and there are many factors that influence whether how much of the liability of the GIB would rest on the public sector balance sheet. Diversity of capital sources helps, so if some initial equity came from other development banks, sovereign wealth funds with low carbon mandates, or through the ability to offer green ISAs, then the UK liability would fall. Also if the GIB were UK-wide with equity stakes coming from England, Scotland, Wales and Northern Ireland, that would spread the risk.

4.9 Independence of control is also a factor that determines the ruling by the Office for National Statistics over whether something counts as public sector debt or not. Here we come to the heart of the paradox in government thinking. An off-balance sheet institution being hard to control, but and on balance sheet one being impossible to afford. The trade-off politically, is whether the government, and specifically the Treasury, is willing to give away control of the capital investment it has made to a new body established under clear statutory rules and independent governance. If it does not, and wishes to retain control, then there will be a clear limit on how large the balance sheet can get. And a GIB with a small balance sheet will not be able to make the interventions in the infrastructure market particularly to make much difference to capital flows.

4.10 One possible solution could be the provision of limited government protection of the equity base of the GIB. This would enable some risk to be removed from the equation for private investors. The first set of green bonds may need a time limited government guarantee, but as the track record of good investments is be established then the balance sheet could be grown through more green bonds, probably not AAA high investment grade, but possibly slightly lower grade which would give a higher return.

4.11 Finally there are other routes to further capitalisation in years to come, possibly through the allocation of a proportion of the revenues from EU carbon permits, due to start in 2013. The estimates revenue from these auctions is up to £40 billion.

5. Conclusion

The government could go down in history in the next few weeks and months by setting up an enduring financial institution that started to forge a genuine partnership between public and private sectors to deliver the low carbon transition. But the risk of short termism, lack of political will and a determination to control from the centre of government, could still snatch defeat from the jaws of victory. The Green Investment Bank is a big idea for a big problem, with a coalition of business, finance, engineers, NGOs and academics behind it. If the idea is watered down by Whitehall, then the small idea that is left will be inadequate for the challenge of the low carbon transition.

25 October 2010

Written evidence submitted by Scottish Power Limited and ScottishPower Renewable Energy Limited

Introduction

1. This evidence is provided on behalf of Scottish Power Limited (a major UK energy supply, networks and generation business), and ScottishPower Renewable Energy Limited (the UK's leading renewables developer). Both companies are subsidiaries of Iberdrola S.A. and references to "ScottishPower" and "we" are to either or both companies as the context requires.

2. Scottish Power Limited is an energy business that provides electricity transmission and distribution services to more than three million customers, supplies over five million electricity and gas services to homes and businesses across Great Britain (GB), and operates electricity generation, gas storage facilities and associated energy management activities in the UK.

3. ScottishPower Renewable Energy Limited is part of Iberdrola Renovables, which is 80% owned by Iberdrola SA. Iberdrola Renovables is the largest developer of renewables globally. Among our projects is the Whitelee wind farm which, at 322MW, is the largest onshore wind farm in Europe.

4. ScottishPower is also at the forefront of research into and investment in Carbon Capture and Storage (CCS) and we leading a consortium proposing to build and operate a commercial scale post combustion CCS plant at our Longannet Power Station. That project is the sole remaining entry in the Government's competition, which has been allocated a budget of up to £1 billion in the Comprehensive Spending Review.

5. Iberdrola is also a major producer of nuclear power in Spain and is partnering with GDF Suez and SSE with a view to undertaking new nuclear build in the UK, including a proposed power station of up to 3.6GW on land adjacent to the existing nuclear complex at Sellafield.

6. This memorandum provides a summary of our view of the establishment of a Green Investment Bank (GIB) in the UK.

Scope and Objectives

7. We strongly support the establishment of a GIB to accelerate the development of a clean, low carbon energy system within the United Kingdom. We believe that the GIB has a genuine potential to stimulate private sector investment by addressing risk that the market is not sufficiently financing. This should enable further funding to be levered in, and so make a valuable contribution to the £200 billion plus that is needed for the energy and utility infrastructure between now and 2025.

8. Whilst there are many projects across the energy sector that can benefit from GIB supported investment, the focus of the GIB should be on large scale infrastructure provision including carbon capture and storage, major power line development and large scale renewable deployment (especially offshore wind). Emphasis should be placed on addressing risks that the market has difficulty in supporting.

9. We are not persuaded that the scope of the GIB should be directed towards lower technology readiness activities. As we state above, it should focus on the material deployment of technology rather than research & development. There may be a case, in exceptional circumstances, for some demonstration activity to be overseen by the GIB. This should only be the case where it is a clear prelude to widespread technology deployment.

10. Our broad view is that current institutions (e.g. the Technology Strategy Board, Low Carbon Network Fund, parts of the Carbon Trust, elements of the Energy Technologies Institute) support R&D reasonably effectively and present a strong bridge between academic, business and commercial activity. However these are organised in the future (and there is some scope for rationalisation), there is a danger that the GIB could stifle innovation if some R&D activities were made to compete for limited funds against projects with stronger and more predicable financial return.

11. Some discussion has mentioned an advisory role for the GIB. In itself, this poses no problem but any such role needs to be carefully set out. There are already a number of statutory and non statutory advisors that Government rely upon to help form energy and environmental policy. The executive and advisory functions of all Government sponsored organisations may need to be rationalised rather than expanded.

Investment Priorities

12. Studies undertaken by Ofgem, CBI, CCC and others suggest that the level of investment in energy and associated infrastructure in the UK by around 2025 will need to be up to and beyond £200 billion. All these estimates suggest a significant acceleration of investment against current rates.

13. In our view, the following areas offer the best opportunity for the GIB to increase the market investment capacity.

- *Offshore wind deployment.* The UK will require a massive increase in offshore wind capability in a relatively short period of time. It is estimated that the rate of deployment from 2014 onwards will require to be at the level of between £3–4.5 billion per annum.
- *Marine renewable development*, including wave and tidal, could have a significant role to play in the future UK energy mix. Post demonstration, the GIB has a role in supporting wider deployment in UK waters. This is likely to occur post 2017.
- *Carbon Capture and Storage.* The deployment of CCS is likely to have strong support from the GIB for both new and existing fossil fuel power plant. As demonstration is proven, the GIB could provide funding for capture plant, infrastructure development and improving storage capability.
- *Transmission line development.* This includes onshore transmission upgrades, offshore HVDC links, inter-connector capacity with other EU member states and the development of offshore grid capability to connect wind and marine activities to mainland UK. This is likely to be an early priority for the GIB.

14. We welcome the Government's announcement of more than £200 million to be spent for the development of low carbon technologies including offshore wind technology and manufacturing at ports sites. To the extent that additional support is needed for infrastructure associated with green energy, including Port and Harbour developments, the GIB could play a role.

15. Some reports have suggested that the GIB has a potential role in smart grid development. This is not something that we see as a pressing priority at this stage. The deployment of smart metering is likely to be undertaken within existing resources for most energy companies. The development of new grid technology is being funded mostly at this stage via the Low Carbon Network Fund and will be deployed over time via the regulatory price reviews. These are both likely to be relatively predictable and low risk investment programmes.

16. One of the more difficult areas of investment is the much needed upgrade of the built environment in order to achieve higher energy efficiency performance. It is not yet clear whether the GIB can, or should, have a role in supporting this area as an early priority. This, however, should be kept under active review, as the Green Deal is rolled out and the new supplier obligation is developed. It is possible that the GIB can offer some funding for the set up phase of Green Deal finance or to cover some of the default risk from customers. It may also be necessary to consider involvement of the GIB if the demand from households for the Green Deal is larger than the available market investment capacity for that opportunity.

Funding

17. Sources of funding for the GIB should ideally come from both public and private sectors. We welcome the proposed setting aside by Government of £1 billion of funding for the GIB in 2013–14. This is a helpful start, but it will be important that the Government follows through on the intention to augment this with significant proceeds from asset sales. In addition to these sources of funds, the following should be considered:

- The NFFO surplus in England and Wales. This now stands at several hundred million pounds and primary legislation to allow it to be used should be considered;
- A proportion of the receipts from the EU ETS auctions from 2012 onwards. It is assumed that much of the receipts from the EU ETS will need to be set aside for general expenditure. We believe, however, that some receipts from 2014 onwards could be used to extend the capitalisation and funding for the GIB; and
- Some, but not all, of the existing funding for the Carbon Trust, ETI and TSB. Following the formal review of these organisations, we anticipate a small proportion of the current expenditure should be set aside for the GIB. As we state above, we do not believe that the GIB should have a focus on R&D activities for technologies that are some way from being market ready, and we think that the R&D funding should continue to be separate.

18. There is also a possibility that private sector funding could be attracted to the GIB, subject to an appropriate pipeline of projects, tax benefits for investors and appropriate underwriting by Government. As the GIB model develops, a further examination of this source of finance may be helpful. It is possible that this source of funds could be significant and it is likely that institutional green bonds may be able to form a large

component of long term GIB financing. Should market conditions prove right, we also anticipate a lesser, albeit important, role for retail investors via ISA type investments, providing that the investment risk profile is appropriate for retail.

19. It may be helpful for the GIB to make available a mixture of green bonds for investors, so as to leverage additional funds into projects. These bonds should include those offered in respect of single asset classes, bundled asset classes and single projects. As with all investments, it is important that investors have full and transparent information

20. We are not supportive of direct regulatory funding (levies, charges, etc) being used for the GIB. These are already used efficiently to stimulate investment in low carbon energy plants and infrastructure. Such funds work with the grain of energy markets and are helping re-engineer a new lower carbon energy model for the UK.

Project Selection

21. Projects must clearly demonstrate cost effective carbon reduction, but this is unlikely to be the sole criterion. The GIB needs to establish well understood strategic and financial criteria for projects that need support:

- *Strategic needs.* Government need to establish clear strategic criteria for the GIB. These include, but are not limited to, guidance on cost effectiveness of carbon reduction, project risk, explicit links to the UK low carbon strategy and climate budgets, support for subsidiary renewables targets, methodology for carbon reduction assessment, the extent to which supporting infrastructure for low carbon transition is applicable, location of projects (including to extent to which some may be trans-boundary in nature), project technology readiness and the materiality of the project.
- *Financial needs.* The GIB obviously needs to identify projects that meet minimum financial criteria consistent with its risk appetite. It must also identify where the funding will be used best, as an accelerant or catalyst, so as to increase overall market investment capacity for relevant projects. Clear guidance needs to be established by the GIB on the types of projects (ie risk profile) that it feels to be reasonable and the financial rating strength of organisations with whom it will offer project funding. The credit assessment of projects needs to be based on clear and transparent principles, though it is understandable that much discretion will exist due to the individual circumstances of those seeking project funding.

Governance

22. We broadly agree with the findings of the Report by the Green Investment Bank Commission in regard to the legal form, governance and reporting structure for the GIB. It is important that the Board of Directors has strong representation from industry. The role of the Advisory Council needs to be more clearly set out in order that the GIB receives clear direction on priorities for investment.

23. The key capabilities for the GIB should be project selection, project appraisal and raising funding. The GIB should be seen as a facilitator to assist, support and engage investors keen to fund long term, secure, low carbon infrastructure in the UK.

24. Thought should also be given to the location of the Green Investment Bank. There are a number of viable locations outside the City of London that would be able to service the skills, expertise and required capabilities to support the GIB in a cost effective manner. Scotland, especially Edinburgh, should be considered as an ideal location due to the presence of a financial and professional services base together with a high level of international expertise that exists due to the recent rapid expansion of renewable, grid and low carbon technologies.

25 October, 2010

Written evidence submitted by Justine Greening MP, the Rt Hon Chris Huhne MP, and the Rt Hon Vince Cable MP

Thank you for your letters of 22 September regarding the Government's plans for a Green Investment Bank (GIB).

As part of the Spending Review, the Chancellor announced that the Government will capitalise a new UK-wide institution with £1 billion of DEL funding together with significant additional proceeds from the sale of Government-owned assets. Funding is subject to final design and the GIB must meet the tests of effectiveness, affordability and transparency. £250 million of the allocated funding will be made available on the basis that the Scottish Executive agrees to the drawdown of funds from the Scottish Fossil Fuel Levy surplus.

In the coming years, the UK economy will require significantly *higher* levels of investment in (particularly green) infrastructure. These requirements are well above historical levels, with demand expected to be in the range of £40–50 billion per annum until 2030.[63] Of course, not all of this investment will be "green" and it is anticipated that the significant majority of it will come from the private sector.

The Government is examining evidence that market and institutional failures and constraints can limit the availability of finance needed to deliver the scale and pace of investment required to deliver Government green growth objectives. Government will be looking at different models for the how the bank could operate in future and have as great an impact as possible.

Some of issues can be addressed, at least in part, by policy measures, such as reforms to the electricity market; reforms to the climate change levy which provide more certainty and support to the carbon price; changes to the planning consents regime; and so on. In other cases, the GIB may have a role in supporting these policy interventions. And, together, the policy measures and financial interventions can provide a more efficient and effective package than either is able to do by itself.

BIS has the lead responsibility for setting up the GIB, which is a key element of our green growth agenda. The green economy is, however, a cross-cutting issue and BIS officials are working closely with officials from Defra, DECC and DfT. HMT officials are also closely involved, given the need for options to be fiscally affordable and to provide effective use of public funds. And Infrastructure UK is helping to ensure the proposals are consistent with the Government's emerging national infrastructure strategy.

We are looking to create an institution which will make a radical new contribution to financing green infrastructure. We expect it to have an explicit mandate to tackle risk that the market currently cannot adequately finance. It will, thereby, catalyse further private sector investment and facilitate the entrance of new types of investor into green infrastructure. As a result, its impact on the finance gap will be many times the scale of the public contribution.

To be effective, the GIB will make its investment decisions independent from political control and it will employ private sector skills and expertise. We are also looking to create an enduring institution which can re-invest the proceeds from its investments.

We are looking to complete our design and testing work by Spring 2011.

26 October 2010

Further written evidence submitted by the Rt Hon Vince Cable MP

Thank you for your letter of 3 November updating me on the progress of your inquiry into the Green Investment Bank (GIB).

I welcome the Committee's work on the design, financing and remit of the Green Investment Bank. We are committed to working with you and with the private sector to create an effective, transparent and affordable institution.

I understand that Aldersgate Group's recent Green Investment Bank summit gave a clear message to Government to maintain momentum following the recent Spending Review announcement. This is certainly my ambition and why my department has undertaken to complete and publish the design of the institution by May 2011 and to make it operational by September 2012.

I hope that this timetable will give your committee time to report its views.

Consistent with the need for pace, work on the "incubator phase" of the GIB has already commenced. We are, however, looking to create an enduring institution which can grow, meet new challenges and fulfil its potential. I can reassure you that the current work will not prejudice decisions over the long term path for the institution.

Working together, I am confident that we can create a Green Investment Bank which will support the country's economic growth and make significant contributions to our environmental and carbon reduction goals.

16 November 2010

Supplementary written evidence submitted by Ben Warren Ernst & Young LLP

Further to your letter dated 2 December 2010, I have pleasure in setting out below my response to your specific queries:

1. *How should government/Green Investment Bank combine the very different skills of finance and green technologies into a single organisation?*

These skills are not necessarily mutually exclusive. There are a large number of finance professionals working in the green and low carbon sector in the UK, whether financial investors, utility and other trade

[63] Strategy for National Infrastructure, HMT, March 2010.

players, or advisory professionals. Ernst & Young employs some 70 people working full time in the low carbon sector itself, all of these people being from an accounting, banking, finance or engineering background.

Depending on the role and functions of the GIB, there are likely to be some specific skills and expertise required in the organisation, such as capital markets experience, the ability to assess the credit and investment qualities of certain deals, projects, or investment opportunities. This expertise does reside in the market place, both in a general sense, but also with specific sector expertise.

The GIB's ability to attract talent will, I suspect, be largely influenced by the remuneration packages it proposes to offer, including the provision of market rate bonuses. However, it might be able to secure some talent on the basis of good will. In considering the resourcing and staffing needs of the GIB, the ability to outsource work and expertise should be considered to avoid building an unduly large overhead for the institution.

2. *What (if any) bridging role would you like to see GIB adopting?*

The remit of the GIB should be clear, whether it is there to invest or co-invest alongside commercial funders, or in providing certain risk products to stimulate private sector investment, or in providing a conduit for new capital providers to enter the sector—ie helping address the liquidity market failure. In performing these activities the GIB is likely to get good visibility over some of the barriers and constraints faced by private sector capital providers. As such, the knowledge collected by the GIB would certainly be of value to government and policy setters. However, this should in no way act as a substitute for Government engagement with the market itself, in particular the financial market.

3. *Financial accounting implications*

Unfortunately, we are not able to provide advice on the relevant public accounting issues that might be faced regards the products and activities the GIB might provide without a sufficiently detailed review of this subject, which is inherently complex and at the moment open-ended regards the possible structure and roles of the institution itself.

I am sorry I cannot be more helpful in relation to point 3 above, however this subject matter requires suitably detailed consideration to ensure robust advice and guidance is given.

21 December 2010

Written evidence submitted by KfW Bankengruppe

KfW Bankengruppe gives impetus to economic, social and ecological development worldwide. As a promotional bank founded 1948 under the ownership of the Federal Republic and the Laender (federal states), it offers support to encourage sustainable improvement in economic, social, ecological living and business conditions.

KfW's domestic business in the areas of small and medium-sized enterprise, entrepreneurship, environmental protection, housing, infrastructure, education finance is done under the brands "KfW Mittelstandsbank" (SMEs), KfW Privatkundenbank" (private individuals) and "KfW Kommunalbank" (municipalities)

On top of that KfW is active in international project and export finance. This business is done through KfW IPEX Bank, a 100% subsidiary of KfW which is commercial bank in competition with other commercial banks. Development cooperation is done within KfW as a specific mandate on behalf of the German government within the brand "KfW Entwicklungsbank" (development bank).

KfW has a balance sheet total of 400 billion Euro as per 31 December 2009. Total Commitments in 2009 amounted to 64 billion Euro.

Environmental and climate protection is a major promotional priority. Therefore, KfW focuses on investments in renewable energies and energy efficiency in housing and SMEs. Commitments in this sector in 2009 were up to 20 billion Euro. KfW Bankengruppe is one of the world's biggest financing institutions for energy efficiency and renewable energy.

When answering to the following questions we refer to KfW's domestic business since this is the bulk of KfW's activities.

1. *The KfW "business model"*

KfW's business model in the domestic business is specifically designed to combine promotional/policy goals with market elements. The latter is achieved by providing financing through the commercial banking sector.

In order to take out a KfW loan a customer has to get in touch with a commercial bank first. The commercial bank assesses the project and the creditworthiness of the potential final borrower, negotiates collateral and checks compliance of the project with the terms and conditions of a KfW promotional program. In case of a positive assessment by the commercial bank, the bank presents the project to KfW. KfW checks eligibility of the project within the promotional program and provides the commercial bank with a refinancing loan.

The refinancing loan to the bank is only extended if the project fully complies with the terms and conditions of the respective promotional program. Eligibility criteria touch on eg the type of investment/costs, the size of the company. KfW funds itself in the capital market based on its AAA rating. The AAA rating is an essential precondition for KfW to be able to extend the refinancing loan at a preferential interest rate.

On the basis of the refinancing loan including its terms and conditions, the bank extends the loan to the final borrower. Any advantage which might be included in the refinancing loan is thus passed on to the final borrower. This procedure of channelling KfW funds through the commercial banking sector to the final borrower is known as "on-lending".

In the standard on-lending model KfW assumes the credit risk of the commercial bank, while the commercial bank assumes the credit risk of the final borrower. In order to cover this risk, as well as administration cost the commercial bank is allowed to charge a credit margin which is set within a framework determined by KfW. In case of default of the final borrower, the commercial bank has to repay the refinancing loan to KfW.

In addition to this basic onlending model, KfW has introduced elements of risk assumption for the benefit of the commercial banks, ie KfW provides partial cover for the final borrower's risk in some instances.

2. *In what areas does the bank provide finance / who decides what areas to provide financial support to?*

In its domestic business KfW provides financing in the areas of small and medium-sized enterprise, entrepreneurship, environmental protection, housing, infrastructure and education finance.

The areas in which KfW is active are clearly stated in the KfW law, which is the basis for everything KfW may do. Within this framework KfW may at its own discretion support specific areas eg stress promotion of energy efficiency, environmental protection and climate change.

Nevertheless, there is of course an ongoing dialogue with the German government KfW's activities as KfW's mission is to support the German Government's policies in the areas stipulated in the KfW law.

3. *How does KfW raise its funding?*

KfW covers its borrowing needs basically in the national and international capital markets. In 2009 KfW raised long-term funds in the equivalent of roughly EUR 75 billion in the capital market.

4. *How does KfW balance investment risk against generating a commercial rate of return?*

KfW's business model allows for KfW's priority being aligned with existing policy goals. The commercial decision on which project may be supported is taken by the commercial banks, ie the market. Adverse selection is being avoided by making sure that the commercial bank always assumes part of the risk.

Additionally, KfW has a risk management in place according to banking industry standards.

5. *How is KfW's performance measured and reported?*

KfW's performance is mainly measured in loan commitments per year and the impact achieved by the different programs offered (ie effects intended by the promotional program like creation of jobs, CO_2 emissions avoided, volume of investments generated etc). Since promotional goals differ between the promotional programs, it is difficult to compare the products amongst each other.

6. *What lessons should the UK learn from KfW?*

For the last 60 years KfW's business model has proven to be an efficient and lean promotional model as it allows for:

- a large number of projects and;
- a range of promotional goals;
- to be supported simultaneously; and
- at low cost for the public sector.

This business model is subsidiary to the market since it always involves the commercial banks and leaves an opportunity for the commercial bank to match KfW's terms or undercut them. By using the commercial banks as a distribution channel, the business model minimizes potential crowding out effects of promotional loans.

The key to efficient support of the economy is the funding capacity of a AAA rated state backed institution in combination with highly standardized loan programs which are then structured into tailor made financing packages by the commercial banks, ie the market.

When setting up a promotional bank in the UK, the decision on the "promotional model" should be made eg against policy goals or the financing culture in the UK.

25 November 2010

Supplementary written evidence submitted by David Paterson, Head of Corporate Governance, The National Association of Pension Funds Limited

1. How should Government/Green Investment Bank combine the very different skills of finance and green technologies into a single organisation?

— How should the Green Investment Bank attract the best expertise from the finance sector?

— Should a Green Investment Bank be able to offer bonuses in the same way as commercial banks?

2. What (if any) bridging role would you like to see the Green Investment Bank adopting, whereby investors and financial markets might be able to shape Government policy on the various initiatives that might affect green infrastructure investment?

NAPF Response

1. We suggest that the Green Investment Bank should focus on developing the necessary financial skills, building on the project finance expertise which already exists in London. Such an approach fits with the idea that its primary role will be to raise capital for infrastructure projects where that capital has been hard to attract in the private sector. It is hard to see how the full range of green technology expertise can be developed in the GIB, so inevitably it will have to make use of consultants and other specialists when evaluating technical aspects of projects.

The Bank will compete with the private sector for the best expertise (some of which may be available on secondment in the early years) so it will have to offer employment packages which are market-based, including bonuses.

2. We believe the Bank can play an important role in educating investors as to the opportunities and reflecting investor issues to Government. However it should reflect carefully on whether, given its ownership/sponsorship by Government, it can act as an effective lobby for the finance sector rather than an "expert witness" on green issues.

6 December 2010

Written evidence submitted by the House of Commons Scrutiny Unit

GREEN INVESTMENT BANK—EFFECT OF OPERATIONS ON NATIONAL ACCOUNTS

1. The impact of the Green Investment Bank (GIB)'s operations depends upon:

(a) whether GIB is a separate institutional unit for National Accounts purposes;

(b) the institutional sector within National Accounts to which it is classified; and

(c) whether the public sector exercises control over GIB.

2. These decisions are for the Office for National Statistics (ONS) to take, by applying the standards set out in the *European System of Accounts (ESA95)*. ONS is guided in its application of the ESA standards by a case history of previous classification decisions. The case history is not publicly available in an accessible form, but HM Treasury's public website does include a guidance note for Government Departments on sector classification, *Class (2010) 1 Sector Classification* (see attached link) which sets out the relevant issues.

http://www.hm-treasury.gov.uk/d/classification_sector.pdf

The remainder of this note draws upon information in the guidance note.

Separate Institutional Unit

3. GIB needs to be a separate institutional unit to be classified by ONS for National Accounts. It will be a separate institutional unit if it has its own legal form and is able to lead a separate existence, by, for example:

— making decisions in an autonomous way;

— entering into contracts;

— owning assets and disposing of them;

— employing staff;

— making payments from its own bank account; and

— drawing up accounts.

Institutional Sector

4. Assuming that GIB meets the criteria for a separate institutional unit, it would then be classified by ONS to one of the five institutional sectors available within *ESA95*, that is:

(a) non-financial corporations;

(b) financial corporations;

(c) general government;

(d) households; and

(e) non-profit institutions serving households.

5. Given the planned scope of GIB's operations and that it will be a market body, the expected classification would be "financial corporation".

Public or Private Sector

6. ONS will determine whether GIB is in the public sector, ie a "public corporation" or the private sector, ie a "private financial corporation on the basis of "who controls the body".

7. *ESA95* defines control as the ability to determine general corporate policy by choosing appropriate directors if necessary. It says further that control exists through ownership of more than half the voting shares or, in the case of government, through special legislation or regulation empowering the government to determine corporate policy.

8. Thus, if GIB was set up with Government majority shareholding or under legislation that allowed the Government to appoint directors or determine corporate policy, then it would be classified to public sector by ONS.

9. However, control can also be exercised in a variety of other ways. The most common are discussed below.

Appointment Rights

10. A right to be consulted over the appointments of directors or a veto over appointments is viewed as exercising very similar control as given by the right to make appointments. So, if the public sector has these rights for a new body, it would be classified to the public sector by ONS.

11. If the initial appointments to the board of a body are made by the public sector, it will be classified as in the public sector, and this classification will continue, even if the body subsequently becomes operationally independent of the public sector.

Multiple Sponsorship

12. Where a body is owned or controlled by a number of public sector bodies, it is the overall weight of the public sector that counts for classification purposes. So, a body where Government bodies appoint the majority of directors would be in the public sector even if a private sector partner appointed more directors than any single Government body.

Special Shares/Reserve Powers

13. There is a distinction in this area between active controls and passive controls. The existence of passive controls, eg to prevent changes in ownership or the disposal of assets, would not, in itself, lead to the classification of a body to the public sector.

14. The presence of active controls, eg the ability of the public sector to seize control of a Company or replace the directors in the event of poor performance, would normally lead to a body being classified to the public sector.

Special Terms in a body's constitution

15. A body's memorandum and articles may have terms that require government consent for certain actions. If the restrictions are time-limited, then they would not amount to control requiring the body to be classified to the public sector. Permanent restrictions over important areas of a body's work would normally result in a body being classified to the public sector.

Second Tier Controls

16. Where the Government can influence the behaviour of a body's board. eg by retaining controls over directors' pay or dividends, this could be seen as a sign of public sector control.

Indemnities

17. The existence of government indemnities does not, in itself, mean that a body is in the public sector, especially if they are time-limited, narrow and unlikely to be called. Wide ranging indemnities could be seen as evidence that the body's functions are seen as being within the public sector.

18. Government guarantees of the borrowing of a business would be viewed as the equivalent to shareholding if the guarantees would be called upon before the equity of private investors.

Funding

19. A body can be classified to the private sector even if 100% funded by Government, provided that it is clearly controlled by the private sector.

20. Where Government funding is by way of grant with conditions that allow public sector control over the wider policy of the body, including approval of the business plan, this would be seen as a form of public sector control.

Ownership

21. Where the public sector owns the majority of the shares, there is control and the body is classified to the public sector. Public sector control can exist with minority share ownership if other forms of control are in place.

22. A body not set up as a company can be classified to the public sector on the basis of a participating interest, defined as:

- conferring any right to share in the profits or the liability to contribute to the losses of the undertaking; or
- giving rise to an obligation to contribute to the debts or expenses of the organisation in the event of a winding up.

23. However, if the participating interest does not give the public sector control, the body could still be classified to the private sector.

ONS Decision on GIB Classification

24. It is possible that GIB could be set up in such a way that classification to the public sector was obvious e.g. Government majority shareholding or right to appoint directors. If this was not the case, ONS would take a decision on whether viewed in the round, it is credible that the body should be seen as being in the private sector or public sector. They would look at whether the various controls discussed above were present and attach an appropriate weighting to the control. The aim would be the assess whether the total influence the public sector holds over the body amounts to " control" as defined in *ESA95*.

25. The ONS decision on GIB would be taken on the basis of information supplied by the DBIS that had been agreed with HMT. The decision would be published, but is not subject to negotiation. Classification would only be revisited in the event of a major trigger e.g. sale of Government shareholding, exercise of reserve powers in exceptional circumstances.

Effect of Classification of GIB on Government Debt and Borrowing

26. If GIB is classified as a public corporation, then its borrowing from the market or overseas will score in Public Sector Net Debt (PSND), the measure used by ONS and HM Treasury to measure the stock of public sector net debt. Any borrowing from the UK Government would have a neutral effect on PSND, as both sides of the transaction will be removed in the consolidation.

27. If GIB is classified as private financial corporation, then the effect of its operations on PSND and other measures of Government spending are confined to its transactions with public sector organisations.

12 January 2011

Supplementary written evidence submitted by the Environmental Industries Commission

We the Environmental Industries Commission (EIC) and its 230 member companies are delighted to have the opportunity to submit our written evidence to the Environmental Audit Committee on the Green Investment Bank (GIB). We have followed the debate on this subject to date and we would like to congratulate the chair and all the members of the committee for facilitating and inducing such a robust, varying and wide ranging debate.

The EIC believe that the UK needs a new approach and new thinking to create sustainable jobs and low carbon resource efficiency which will save the economy money and protect our environment.

Today we have an opportunity to shape a new economy that is driven by industrial processes which are low carbon and resource efficient, and protect our environment. The fundamental logic of this “new economy” must be for ecological sustainability.

If we are to do this the government must reconcile the markets with the environment. We need above all a strong and robust economic-environmental policy framework that puts a cost on pollution, thereby encouraging finance and investment in low carbon resource efficient industrial operations and supply chains.

We presently have a serious market failure that is stopping investment in the environmental technology and services sector. We believe the GIB will be a key part in the jigsaw in correcting this failure. It is the job of the GIB to aggregate environmental projects that will profit across the UK and start the investment process.

The GIB and its focus will be a key decision this government takes in stimulating growth and driving innovation right across the environmental sector, not just in the low carbon subsector.

We understand the difficulty and the pressure that the Treasury is under to take the right decision. We have some concerns of our own. The GIB could be a pivotal point in job creation and greening the UK economy.

We believe that the GIB should not be a fund but a fully operational commercial bank that drives profit for the taxpayer.

We believe that, in starting, the GIB should not invest in high risk projects which are unproven or cannot be funded off the balance sheets of the companies that want the investment. This would turn the GIB into a fund and would prolong the market failure and deadlock we are trying to break out from.

The investment strategy of the GIB needs to be transparent if it is to get public support to buy green ISA’s. The first investment priority must be on technologies and companies that are not reliant on burning organic high carbon matter to create energy. We must implement a strategy to fill the energy gap that starts with energy efficiency, renewables and works through all options before we use retrofitted old technologies.

If the GIB just focuses on energy efficiency and created investment capital of £1 billion on this sector it would immediately and directly create 50,000 jobs (This does not account for indirect, induced or gross employment) and return £3 billion in energy spend to the wider economy.

The GIB is about building confidence and sending the right message to the markets so they unlock finance and invest in environmental technologies. The GIB must be the finance mechanism that supports industry exploiting the positive synergies between environmental protection and economic growth.

On 24 November 2009 the then Shadow Chancellor George Osborne consulted on the creation of a GIB and tasked it with investing in the next generation of green British businesses. The original focus and remit of the Wigley report was on Offshore Wind, Smart Grids and Energy Efficiency. We recommend that the government expand this to embrace investment opportunities right across the environmental technology and services sector (including water pollution control technologies, air, land, waste, buildings, etc).

We would like to thank the Chair, Committee members, the clerks and all the staff of the Environmental Audit Committee for all the hard work that they have put into this inquiry and we look forward to seeing the report when it is launched.

The Environmental Industries Commission

The Environmental Industries Commission (EIC) EIC was launched in 1995 to give the UK’s environmental technology and services industry a strong and effective voice with Government. The EIC is at the forefront of the move towards a low-carbon and resource efficient environmentally focussed economy. We work to provide our sector with a strong and effective voice with government to ensure that UK companies are able to succeed in the rapidly growing global market place for green technologies.

With over 230 member companies EIC has grown to be the largest trade association in Europe for the environmental technology and services (ETS) industry. It enjoys the support of leading politicians from all three major parties, as well as industrialists, trade union leaders, environmentalists and academics.

The EIC and its members work to provide solutions to meet environmental standards set by government legislation. We ensure these standards are met through good practice and “after sales” service to clients. We work with government to strengthen the UKs policy framework. This work ensures that the Government’s intentions to put environmental protection at the heart of its plans for economic growth. This framework ensures that the government’s environmental targets are realised and the UK have cleaner air, water and land.

The EIC operates eleven membership policy subgroups which focus on: Business and Innovation, Renewable Transport Fuels, Scottish Group, Carbon& Environmental Management, Waste Resource Management, International Business, Industrial Air Pollution, Water Pollution Control, Contaminated land, Environmental Laboratories, Sustainable Buildings and Energy Efficiency and Transport Pollution Control.

While members support this publication and provided extensive input, individual recommendations cannot be attributed to any single member and the EIC takes full responsibility for the views expressed.

Adrian Wilkes
Chairman

Jonny Mulligan
Chief Executive Director

EIC Recommendations

1. *It is vital that GIB embraces a full understanding of the economic opportunities of "green investment"*

There is a risk that a GIB will institutionalise a narrow understanding of the economic opportunities of "green investment". If the Bank's mandate is limited to helping the UK meet the low-carbon investment challenge, the UK risks forfeiting the huge investment opportunities that exist across the whole of the environmental sector.

2. *Protecting the environment is not only the defining challenge of the coming decade. It is also the defining business opportunity*

The industry is currently worth £112 billion to the UK economy and is projected to grow to £224 billion by 2020. At that time the global market is expected to be £3–4 trillion in direct and indirect goods and services. There is no reason that the UK cannot lead this growth and rebuild its economy to take advantage of these economic realities. The opportunities are huge.

3. *The GIB offers tremendous opportunity to rapidly scale up the investment we need to tackle environmental challenges, whilst simultaneously creating the jobs and industries of our future*

The delivery of carbon targets for 2020 and beyond and the tackling the significant challenges of land remediation; water and resource efficiency; water pollution control; air quality, and so on present a major financing challenge for the UK economy, the majority of which will need to be delivered by the private sector.

The absence of automatic self-correction of market failures dictates a role for government. To make the transition to a sustainable economy a success we need to make investment in low carbon resource efficient technologies and services the primary focus for business and households. These sectors are facing a market failure in finance and we believe it is time that government intervened to correct this failure. This is why we need a GIB to free up capital flowing to these sectors and create jobs.

4. *We cannot leave it to the market alone—a GIB will only be as successful as the environmental policy framework that underpins it*

The range of environmental challenges we face are a product of the greatest and widest-ranging *market failure* ever seen. Government intervention in the economy is vital for creating the high growth markets that the Bank will be looking to invest in. The foundation for all green markets is principally a strong and stable economic environmental policy and regulatory framework. This will give investors long-term certainty on their investment decisions.

Without a strong and stable economic environmental policy and regulatory framework there will be no market and, therefore, nothing for the GIB to invest in.

Good policy design, of course, is not a panacea. There is a huge finance gap in delivering the transition to a low carbon, resource efficient economy, which the GIB must fill. However, a long term, ambitious environmental policy framework is the foundation on which the GIB must build.

5. *Taking advantage of the green economic opportunity is dependent on Government intervention, ahead of international competitors*

The UK's international competitors have become increasingly aware that environmental protection yields significant economic benefits as well as ecological gains. We must take urgent action to compete. If we fail to do so countries such as Germany, China, the USA, Japan and Korea—whose governments are continuing to put in place ambitious support measures for their environmental industries—will gain an early mover advantage. The government must take a decision. Do we want to be leaders or laggards in this sector?

6. The GIB must be a bank and not a fund

The GIB must be a commercial bank and not a fund. The GIB should invest in low risk cost effective technologies we know will work and create immediate employment in the UK economy today. We believe the big impact, high risk, unproven and high cost projects that will take years to realise a return will create problems for the GIB. If the money for the GIB is used for these projects we believe it would essentially turn the GIB into a fund. This must be avoided.

Goldman Sachs has reported that in April 2010 the World Bank funded CCS projects in South Africa for part of a $3.4 billion loan. We believe that this is the correct approach and source of funding these big projects that benefit global organisations. Today the cost to get just one CCS plant to test phase is estimated to be between £750 million to £1 billion. In comparison, research from the Carbon Trust show that £1 billion invested in energy efficiency would create 50,000 jobs and put £3 billion back into the UK economy on money saved on energy spend.

7. *The GIB must be a commercial bank with a focus on profit for the taxpayer and a transparent investment strategy for consumers*

The GIB must be a commercial bank with a focus on profit for its investors including the Treasury. It should employ economists and financial leaders that can de-risk the investment propositions. It must drive its profits by investing in the new technologies and companies that are on the ascendency and are not reliant on high carbon burning organic matter and retrofitting old technologies.

The GIB should invest in companies that have high environmental criteria and generate their profits from low carbon environmental means across its global operation. It must invest in socially and environmentally worthwhile projects that serve society, job creation and local projects.

We believe public support will be key to the success of the GIB. The GIB must be open for the public to invest in with green ISAs and trust. To build the public support the GIB must be very transparent with its investment strategy. It should focus on projects that the public can understand and trust and see a return on. It should sell ISA's that are targeted at energy efficiency or local renewable energy projects across the UK.

8. *The objectives and roles the GIB should assume, the areas it should operate (and not operate) in, and how its lending and investment decisions should balance green benefits against financial risks*

The GIB must have a remit to invest in the whole low carbon environmental industry.

The 2009 Government report "Low Carbon and Environmental Goods and Services: An Industry Analysis" identifies emerging markets that the UK should prioritise in terms of market size and forecast growth. It concludes that the water treatment sector is a market that forecasts "high levels of growth in market value".

The report's forecast growth rates in market value for sub sectors between 2007–08 to 201415, (ranked by cumulative market growth): 1) wind, 2) alternative fuels, 3) building technologies, 4) alternative fuel for vehicles, 5) geothermal, 6) carbon finance.

The sectors that the EIC would like to see investment being made available for would include: Building Technologies, Recovery and Recycling; Waste Management, Water & Waste Water, Energy Management, Contaminated Land, Environmental Consultancy, Air Pollution Control and Low Carbon Renewable Transport.

9. *The GIB's investment priorities, and whether and how the bank should support and foster areas where the UK has emerging green technology strengths*

It should be the primary role of the GIB to share the risks of green investment with the private sector and to leverage high levels of private capital.

The GIB should focus on energy efficiency as a priority. After this it should focus on renewables and work through all options before we use retrofitted old technologies to fill the energy gap. Finance should also be available to the environmental technologies that we have already listed.

10. *The funding and governance structures required to create an effective and accountable body, including the role of "green bonds"*

The GIB must be designed with a clear picture of the environmentally sustainable economy that we want to achieve and over what time frame. A fully independent and accountable Bank must be established in statute with a clear mandate to invest across the environmental industry.

The GIB must be a bank (and not just a fund) with the ability to raise Green Bonds to access the huge pools of capital held by the managed funds market. The Bank must also design other innovative financial products including Green ISAs.

The Bank should also be used to support the Green Deal—by assisting with the provision of upfront finance, to keep costs down for consumers and to provide equity and technical expertise for community and local authority low carbon investments.

We believe that even though we are in fiscally constrained times the £1 billion for the GIB is very low and that the government should look to more funding. The government has a range of options that it could use to raise additional finance for the GIB. The Government could recycle the revenue from existing "green taxes" through the GIB.

The landfill tax, which used to be recycled through BREW could be directed through the Bank.

The report "The Economy and Public Finances: Supplementary Material" that accompanied the 2009 Budget forecasts that Landfill Tax receipts will increase by 60% between 2008–09 to 2013–14, from £1 billion to £1.6 billion. This could be directed through the Bank.

8 February 2011

Supplementary written evidence submitted by the Department for Business, Innovation and Skills

1. This note sets out the possible public and departmental finance impacts of different Green Investment Bank models.

2. All references of borrowing in this note could be done through GIB-issued bonds

Relevant Public Accounting Principles

3. The National Accounts, from which measures of deficit and debt are drawn, are compiled by the independent Office for National Statistics (ONS). National Accounts includes GDP statistics, and Public Sector Finance (PSF) statistics. The latter are economic statistics relating to the activity of the public sector including receipts, expenditures, borrowing and debt.

4. HMG chooses to define fiscal policy objectives by reference to PSFs statistics, most notably Public Sector Net Debt (PSND) and Public Sector Net Borrowing (PSNB—the deficit). In broad terms, PSNB is the difference between the Public Sector's income and spending in a financial year. PSND is the difference between public sector financial liabilities and liquid public sector financial assets.

5. Alongside the fiscal mandate[64], the Chancellor set out in Budget 2010 a supplementary debt target—to ensure that PSND as a percentage of GDP is falling by 2015–16. As part of meeting these targets, the Spending Review plans entail a reduction in total managed expenditure of over £80 billion in 2014–15[65].

6. These are factors in considering the classification of the GIB and treatment of its functions. It is also important to note the need for transparency for the government's fiscal credibility and also for the GIB's credibility if it is to eventually attract investment.

Classification of the GIB as "Public" or "Private"

7. The ONS assesses whether bodies are classified to the public or private sector. The decision would be based on whether the Government was deemed to be in control of the general corporate policy of the body, with relevant considerations being whether Government:

- Had the right to appoint directors.
- Owned the majority ownership of shares.

8. There are also a number of other secondary factors which could indicate control including:

- Right to limit financial flexibility (such as borrowing limits).
- Right to approve business plans.
- Right to control Director's pay.

Private sector classification

9. Private sector classification of the GIB would mean that any borrowing by the GIB would not impact on PSND; and the impact on PSND would be limited to any Government equity investment in the bank.

Public Sector classification

10. The activities of a public sector GIB would score against the fiscal aggregates when the GIB transferred money outside of the public sector, i.e. made investments in the private sector. GIB activities could also create contingent liabilities for the public sector which could materialise as an impact on the fiscal aggregates at a later date. The OBR is looking to improve reporting of contingent liabilities.

Liability Side of Bank: Impact on PSND/B of Different Sources of Funding

Asset sales

11. Sales of government financial assets reduce PSND and are PSNB neutral. Since government taking an equity stake a private sector GIB would also be a financial asset, redirecting the funds from asset sales in this way would have no impact; other than to note a lost opportunity to pay down debt. Similarly, if the GIB was public sector, then the granting of loans or purchase of equity by the GIB would be financial transactions giving rise to financial assets, so would similarly net off.

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[64] To achieve cyclically-adjusted current balance by the end of the rolling five-year forecast period.

[65] Relative to a baseline of growing DEL in line with general inflation in the economy, and AME as forecast in the June 2010 Budget.

Conventional Government funding

12. Government could fund the GIB as it does with other Government spending: through tax receipts or borrowing through either the Debt Management Office (DMO) issuing gilts, or to a lesser extent National Savings and Investments. The principle in determining the mix of borrowing is to minimise the costs of debt management.

13. But to control the overall need for borrowing, the Chancellor sets an overall envelope for Government spending which is then allocated to departmental budgets (Departmental Expenditure Limits—DEL) at the Spending Review. Transactions outside this envelope will increase PSND and PSNB, depending on the nature of the asset bought.

14. The £1bn that has been allocated to the GIB from departmental budgets in 2013–14 is funded within the planned spending envelope

Bonds and other borrowing by the GIB itself

15. If the GIB were classified by the ONS as being in the private sector, any borrowing by the GIB would not impact on PSND/B.

16. For a public sector GIB, funding additional activity through issuing its own bonds or otherwise borrowing would score against PSND and possibly PSNB (depending on how the cash was spent, see next section)[66] in the same way as if funding came directly from Government.

17. All borrowing could impact other fiscal measures, such as PSNB and General Government Gross Debt, in the event that the GIB could not pay its debts and the Government provided further funds to support it. The precise impact would depend on the form of support provided.

18. An important consideration is the efficiency of a GIB borrowing itself compared to its activities being funded from general government (eg extra DMO borrowing activity at the margin). GIB debt issuance would need to pay a premium on DMO debt issuance, even if the GIB debt had an explicit government guarantee, as institutional investors would demand a premium to reflect the fact that GIB debt would be significantly less liquid than gilts.

Asset Side of Bank: Impact on PSND/B of GIB Products

Equity and Loans

19. Financial transactions with the private sector—the GIB making loans or equity investments in return for which it receives an asset—would increase PSND but not PSNB. A public sector GIB could make loans and equity investments up to the Spending Review allocation (including up to the level of additional asset sale proceeds that are allocated to it), without increasing PSND above the overall path set out in the Spending Review.

Guarantees

20. Any payouts made as the result of a guarantee would score as grants so, would score against PSNB and PSND and therefore need to be funded from within the GIB's DEL allocation if the overall PSNB/PSND impact is to remain within the Government's SR plans.

21. Payouts from guarantees, however, are by their nature uncertain. The income from guarantees would score to offset PSNB/PSND (unless used to fund further departmental spending) but there would be a timing mismatch (as the income would reduce PSNB/D in earlier years but payouts would increase PSNB/ PSND later on); and a risk that payouts exceed the total sum of costs (if charged below market value or if payouts exceeded expectations). In addition, the payouts could be lumpy and uncertain.

Deficit Reduction and the Scale of the Bank

22. A borrowing, public sector GIB would need to restrict its borrowing to stay inside the Government's fiscal plans, and could particularly impact on the ability to meet the supplementary debt test set alongside the fiscal mandate. It could also create pressures on PSNB and the central test of the fiscal mandate as the contingent liabilities involved in GIB borrowing could materialise into calls for further government support.

23. Assuming that the GIB was successful in obtaining return on its investments these restrictions would become less of a burden as its balance sheet increased organically.

24. Unless excluded from Basel requirements, the GIB also would need to keep a capital reserve as a certain minimum percentage of equity capital, so could only borrow a limited amount for a fixed amount of equity.

[66] If the GIB were to borrow and then not spend this money there would be no direct impact on the fiscal aggregates as the cash reserves (liquid assets) it would hold would offset the borrowing (liabilities) in the National Accounts. There could however be secondary effects if the interests rates paid and received by the GIB differed.

COMPARISON WITH EUROPEAN MODELS

25. An analysis of other European models, including KfW in Germany, CDC in France and CDP in Italy, shows a wide range of models, most of which are majority owned or wholly owned by the state. A summary table is at Annex 1.

Scope and role

26. European development banks have key differences to the GIB:

- They have broad scopes, well beyond green infrastructure.
- Their customer base is different—most European state banks lend to the public sector and to other banks.
- They have conservative investment policies, focused on asset quality.
- Most provide low cost liquidity rather than risk-mitigation products.

Accounting treatment

27. While all European countries operate under the European System of Accounts ("ESA") 1995, European development banks operate under different national fiscal policies. In particular, the UK uses a wider (and truer) definition of "public sector" debt and borrowing (PSND/B) than other European Governments (which use "general government" net debt and borrowing). As a result, European state banks score differently on their countries' balance sheets.

Should UK change its accounting treatment or treat GIB differently?

28. Excluding GIB borrowing from PSND, as was done for Lloyds and RBS, would remove the risk of the GIB breaching the fiscal mandate through borrowing. The treatment of Lloyds and RBS debt was, however, justified as a temporary and extraordinary (non-discretionary) situation.

Annex 1

EUROPEAN STATE DEVELOPMENT BANKS

				Debt Ratio (public sector net debt/ GDP)	
Country	*Relationship to National Government*	*Local Accounting Treatment*	*Expected UK Accounting Treatment*	*Existing (according to CIA's world fact book, 2010)*	*If Development Bank were included*
Germany — KfW — €400bn	— Public corporation 100% owned by Govt — Explicit state guarantees on publically issued debt — State control provides implicit guarantee for the entity itself	— Equity stake counts towards general Government gross debt — Liabilities and entity explicitly guaranteed (and unconditionally) guaranteed — Guarantee of the entity itself not accounted for	— Balance sheet would contribute to PSND — PSNB would reflect guarantee payouts, voluntary debt write offs and operating losses	72%	~90%
France — CDC — €221bn	— Public corporation 100% owned by Govt — State control provides implicit guarantee for the entity itself	— Equity stake counts towards general Government gross debt — Implicit guarantee of the entity itself not accounted for	— Balance sheet would contribute to PSND — PSNB would reflect guarantee payouts, voluntary debt write offs and operating losses	77.5%	~87%

				Debt Ratio (public sector net debt/ GDP)	
Country	*Relationship to National Government*	*Local Accounting Treatment*	*Expected UK Accounting Treatment*	*Existing (according to CIA's world fact book, 2010)*	*If Development Bank were included*
Netherlands — FMO — €2.3bn	— Public-private development bank; 51% owned by Govt — State control provides implicit guarantee for the entity itself	— Equity stake counts towards general Government gross debt — Implicit guarantee of the entity itself not accounted for	— Balance sheet would contribute to PSND — PSNB would reflect guarantee payouts, voluntary debt write offs and operating losses	62.2%	~63%
Scandinavia — Nordic Investment Bank — Liabilities total €24.7m	— Public corporation — 100% owned by member Governments — Government control provides implicit guarantee for the entity itself	— Equity stakes count towards general Government gross debt — Implicit guarantee of the entity itself not accounted for	— Balance sheet would contribute to PSND — PSNB would reflect guarantee payouts, voluntary debt write offs and operating losses	*n/a—multiple member states*	

17 February 2011

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