

# **Green Investment Bank**

Response by  
the Sustainable Development Commission  
to the Environmental Audit Committee Inquiry

October 2010

---

## Introduction

---

- The Sustainable Development Commission is the Government's independent adviser on sustainable development, reporting to the Prime Minister, the First Ministers of Scotland and Wales and the First Minister and Deputy First Minister of Northern Ireland. Through advocacy, advice and appraisal, we help put sustainable development at the heart of Government policy.
- The Commission, as well as publishing several reports on the technical and economic issues around energy technologies, has also examined the scale and speed of the low-carbon investment required in the UK (see [www.sd-commission.org.uk/publications/downloads/SND\\_booklet\\_w.pdf](http://www.sd-commission.org.uk/publications/downloads/SND_booklet_w.pdf)).
- The Commission also put forward proposals for a Green Investment Bank in the 2009 'Breakthroughs' Report (see [www.sd-commission.org.uk/pages/breakthroughs.html](http://www.sd-commission.org.uk/pages/breakthroughs.html)) and examined what role a Green Investment Bank could play in effecting a step-change in neighbourhood energy efficiency and renewable investment and wider community retrofit programmes (see [www.sd-commission.org.uk/publications/downloads/SDC\\_TFiL\\_report\\_w.pdf](http://www.sd-commission.org.uk/publications/downloads/SDC_TFiL_report_w.pdf))

---

## 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** We identify five barriers to low-carbon investment that requires the establishment of a Green Investment Bank: the scale of investment required to stay within the UK's carbon budgets and meet internationally agreed targets; the speed with which investments must be made for the same aim; the inability of the market to respond to the uncertainty (as distinct from probabilistic risk) of climate change; the need for aggregation of smaller projects to attract investment; and current institutional structures that are not designed for a low-carbon future.
- 2** Assessments of the scale of investment required to meet target reductions in carbon emissions vary but all of them represent an immense challenge. Economist Dieter Helm and others<sup>1</sup> provide an "extremely conservative" estimate of £264 billion for the required UK low carbon energy infrastructure spend by 2020. Ernst and Young's assessment that £450 billion in low carbon investment is required until 2025 includes £225 billion in energy "supply side" investment and £225 billion in energy efficiency "demand side" investment.<sup>2</sup>
- 3** These figures are made more difficult both by current lending conditions, as the economy emerges from the financial crisis, and the inability of traditional sources of capital (utility companies, project finance and infrastructure funds) to provide a small percentage of the total required. Ernst and Young's analysis identifies an investment gap of between £370 and £400 billion between now and 2025. A Green Investment Bank could be structured to appeal to the widest and deepest sources of capital such as the managed funds market in the UK (which is worth £3.4 trillion) by raising bonds in the capital markets and co-investing in low carbon assets with the private sector on behalf of the UK. A fund structure, for example, does not offer this opportunity to achieve the appropriate scale.
- 4** The speed at which investment needs to occur is both crucial and daunting. Globally, low carbon industries would have to grow immediately at 24% a year, which is near the upper limit of what can feasibly be achieved given constraints in resources, labour, skills, capital and equipment.<sup>3</sup> Although challenging, the transition is achievable, and experience in other

countries have shown that industry can scale up rapidly if the appropriate policy and finance is in place, leading to widespread job and wealth creation. 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. We share the concern of the Committee on Climate Change that the impact of the recession on carbon emissions may lead to a temporary slowing down of the low-carbon investment that is required now in order to meet what will be far more challenging carbon budgets beyond 2020.

- 5 Uncertainty, as opposed to probabilistic risk, and the potential for significant, irreversible and non-linear impacts that characterises climate change cannot be addressed in existing risk assessment and cost benefit analysis. The Green Investment Bank can begin to move investment decisions toward addressing these threats by developing a number of risk-sharing and other financial products. 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 speed or scale required.
- 6 Aggregation is also a barrier. Energy Efficiency “upgrade” investments in millions of UK buildings amounting to more than £100bn<sup>4</sup> in the residential sector alone require a very high degree of coordination between individuals, private companies and public

policy. The challenges of aggregation, distribution and payback of funds as well as deal execution and transaction cost management are surmountable, but it is difficult to see how the current institutional framework and capital markets can deliver. 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. 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.

- 7 Current institutional structures also form a barrier that the Green Investment Bank can help overcome. Public sector finance is shrinking and private sector finance continues to de-risk. The relationship between the two needs to be renegotiated. 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. A Green Investment Bank has the ability not only to engage with managed fund finance but also to build a new relationship with private sector finance more broadly. A conventional fund model would not be able to do this.

.....

**The objectives and roles the Green Investment Bank should assume, the areas in which it should operate (and should not operate), and how its lending and investment decisions should balance green benefits against financial risks**

.....

- 8 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. Within this framework we identify the following key roles for the GIB:

- Helping to structure, in partnership with the private sector, the financing of major projects to deliver the energy, transport and other infrastructure investment necessary to achieve a sustainable low-carbon transition;

- Providing some initial capital or guarantees, as part of multi-bank project financing for major renewable energy, if it is clear that the private capital markets are unwilling to take on the whole risk;
- Helping Deliver the Green Deal by providing low cost capital to minimise the costs to consumers as this remains a significant barrier to its potential uptake;
- Working in partnership to bundle small projects to a scale that attracts wider investment interest;
- Raising capital from government and investors;
- Working closely with both Government policy makers and the investment community to come up with innovative ways to finance the major investment in energy efficiency, renewables, grid improvements and public transport links that will be required to deliver the Low Carbon Transition;
- Providing loans, equity or venture capital to companies seeking to bring a proven and demonstrably low carbon technology, project or service to full commercialisation; and
- 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.

## 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

- 9** 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.
- 10** If developed effectively, a GIB could also provide a supportive framework for many of the mechanisms for ensuring low-carbon investment at a local level. For example, with the Pay As You Save (PAYS) concept, the idea is that the cash from PAYS flows to the intermediary funding vehicle which then issues bonds (to institutions and other purchasers) or borrows (from a bank). There would be potential for a GIB to loan money to the intermediary funding vehicle in the early stage of the project, which the vehicle would subsequently re-finance in the capital markets. Some of the investment could be longer-term and be retained by the GIB. The GIB could also play a role in setting up and managing the intermediary vehicle. Given the amount of time required to establish a GIB,

the European Investment Bank (EIB) could provide immediate support in these roles. Joint European Support for Sustainable Investment in City Areas (JESSICA) could also be utilised differently by funding pilots. Based on PAYS, it could sell these cash flows to an intermediary funding vehicle or GIB, which would then refinance in the capital markets.

- 11** In turn, the GIB could be useful in disbursing Green Bonds that can unlock the long-term 'patient capital' required by pension funds for investment in low carbon projects with a high up-front cost, but a long and steady payback period. These would be conventional bonds (to attract a wide range of interest), but with funds ring-fenced to deliver sustainable outcomes. Climate Change Capital and E3G recommend that a GIB would be the most effective way to disburse funds from these in a direct, controlled way.<sup>5</sup>

- 12** Neighbourhood partnerships could also seek development debt from a GIB, which would bundle the mature revenue producing assets and sell these to institutional investors, recycling the proceeds into new developments and providing a return to communities.

---

## The funding and governance structures required to create an effective and accountable body, including the role of 'green bonds'

---

- 13** 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 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.
- 14** Ring-fencing the proceeds from long-term, asset-backed bonds that are issued at sufficient scale will not only attract a range of significant investors but also provide significant flows of capital for low-carbon investment.

---

### Endnotes

- 1** Dieter Helm, James Wardlaw and Ben Caldecott (2009) *Delivering a 21st Century Infrastructure for Britain* (Policy Exchange).
- 2** *Capitalising the Green Investment Bank* (Ernest and Young) (2010)
- 3** Climate Risk (October 2009) *Climate Solutions II: Low carbon re-industrialisation*.
- 4** SDC (2009) *A sustainable new deal*. [www.sd-commission.org.uk/publications/downloads/SND\\_booklet\\_w.pdf](http://www.sd-commission.org.uk/publications/downloads/SND_booklet_w.pdf)
- 5** Climate Change Capital and E3G (as before), 2009.



**Sustainable**  
Development Commission

**The Sustainable Development Commission is the Government's independent watchdog on sustainable development, reporting to the Prime Minister, the First Ministers of Scotland and Wales and the First Minister and Deputy First Minister of Northern Ireland.**

**Through advocacy, advice and appraisal, we help put sustainable development at the heart of Government policy.**

**[www.sd-commission.org.uk](http://www.sd-commission.org.uk)**

### **England**

(Main office)

**55 Whitehall**

**London SW1A 2HH**

**0300 068 6305**

**[enquiries@sd-commission.org.uk](mailto:enquiries@sd-commission.org.uk)**

### **Scotland**

**Osborne House**

**1 Osborne Terrace**

**Edinburgh EH12 5HG**

**0131 625 1880**

**[Scotland@sd-commission.org.uk](mailto:Scotland@sd-commission.org.uk)**

**[www.sd-commission.org.uk/scotland](http://www.sd-commission.org.uk/scotland)**

### **Wales**

**Room 1, University of Wales**

**University Registry**

**King Edward VII Avenue**

**Cardiff CF10 3NS**

**029 2037 6956**

**[Wales@sd-commission.org.uk](mailto:Wales@sd-commission.org.uk)**

**[www.sd-commission.org.uk/wales](http://www.sd-commission.org.uk/wales)**

### **Northern Ireland**

**Room E5.11, Castle Buildings**

**Stormont Estate,**

**Belfast BT4 3SR**

**028 9052 0196**

**[N.Ireland@sd-commission.org.uk](mailto:N.Ireland@sd-commission.org.uk)**

**[www.sd-commission.org.uk/northern\\_ireland](http://www.sd-commission.org.uk/northern_ireland)**

---