



APPGI Discussion
Infrastructure Funding and Finance
Thursday 8th July, 5:00 – 7:00 PM

1. Ingrid Holmes, Programme Leader Low Carbon Finance at E3G and Member of Advisory Panel to Green Investment Bank Commission (GIBC)

Background: the idea of the Green Investment Bank

With the unfolding of the global financial downturn, increasing attention has been paid to low-carbon finance and to agreeing fiscal stimulus which is greener. In the conditions of constrained fiscal environment, the need to establish an institution able to take on the issue of low-carbon finance and address the higher risks of low-carbon investment was recognized.

In 2008-2009 numerous discussions, research studies, and conferences on the issue led gradually to the inception of a new idea: an infrastructure bank (modelled along the existing German model)

In 2010 the Green Infrastructure Investment Commission was formed to deliver a proposal on a body able to address the existing gaps in low-carbon economy; address the concerns connected to the impact of the financial crisis on the infrastructure greening and provide a menu of sustainable options for the Government to choose from.

Why the interest? The challenges of low-carbon finance (vs. high-carbon) for private investors

- Incurs higher costs (new & unknown; more costly; comparative disadvantage)
- Low-carbon Finance is generated by Policy not Choice or Popular demand
- Requires new technologies; trained professionals; capacity & skills which are harder to find

How to address these challenges?

- Promote the idea of new low-carbon industrial regulation
- Promote and use policy framework which relies on renewables
- Promote a legislation which lowers the risks to investors over time

Why do we need to address these challenges through a new institution? The Green Investment Bank in this context:

- It is a consolidated body and incorporates a series of integrated institutions which would be able to provide risk assurance over 40 years of low-carbon infrastructure investment (Thus, eliminates the risk of projects being sold off; owners changed without transfer of contracts, etc.)
- GIB is accountable to Parliament not to the Government of the day! (Thus, provides long-termist and assurance to investment over time)
- GIB is modelled along the lines of the Climate Change Committee Recommendations (Thus, incorporates academic, political and industrial advice)
- GIB will address the existing tension between need to invest for commercial gain and following business interests and the need to invest in the public interest (Thus, addresses the issue of how to achieve value for money both in the context of business gains and public interest)

GIBC provided a broad range of products and it stays with the Government to pick and choose from this long menu of options. GIB is not a reality yet. At the moment there is an open door situation: political commitment and public enthusiasm for the bank is existent but on the back side we live in an environment of fiscal austerity. In addition, the options chosen need to go through the complex government machine – risk of lines being blurred and enthusiasm fading away over time.



Bottom-line:

- Uncertainty and Risk stops the capital flowing into the needed low-carbon Investment.
- Risk cannot be 'disappeared' but we can use public funds to manage targeted risks and allow private capital to flow
- Bank needs to have its own statute and a robust governance structure to protect it from short-term 'politick-ing'

2. Simon Grubb – Head of Strategic Development, Interserve Plc and Member of the ICE State of the Nation: Infrastructure 2010 Steering Group

Provided an overview of the Institution of Civil Engineer's recent report State of the Nation: Infrastructure 2010 which provided an evidenced-based assessment of the nation's energy, transport, water, flood and waste sectors

ICE assessment of infrastructure sectors provided the following grading.

- A: fit for future
- B: adequate for now
- C: requires attention
- D: at risk
- E: not fit for purpose

Energy – Grade D – gave the most cause for concern, in light of the massive challenges it faces to ensure security of supply in future. In particular the report noted the need to urgently address the lack of spare capacity, with maximum supply currently very close to peak demand. It stressed that Government must make crucial decisions in the next five years on renewable energy sources, nuclear power stations and technologies that can make fossil fuel power generation cleaner, such as carbon capture and storage (CCS), if we are to keep the lights on.

Local transport – Grade D – was also deemed to be 'at risk', with far too much dependence on private car travel, and local roads in 'poor condition'. An increasingly large backlog of maintenance work, worsened by the severe weather this winter, would make any funding cuts disastrous. The report called for local public transport networks to be improved, both in terms of capacity and integration with national networks, to encourage a shift from private cars, and for local roads to be brought up to a satisfactory level through adequate funding and better asset management.

Water and Wastewater – Grade B – Twenty years of regulatory-driven investment means water infrastructure is generally working well. However, major reductions in demand are needed to bring it into line with long-term carbon emissions goals.

Strategic transport networks – Grade B – Generally good condition however some form of demand management is needed to manage limited road capacity.

Waste – Grade C – Our entire approach to waste must change. The waste industry should be looking to become suppliers - of fuel, compost, manufacturing materials. It is also imperative we reduce the waste going to landfill to avoid infraction fines from the EU.

Flood risk management – Grade C – Current investment in flood risk management must continue however in the long-term our approach must change dramatically.



Conclusion: The four key points that must be adhered to with regard to infrastructure projects:

1. A robust and comprehensive infrastructure strategy – now being examined by Infrastructure UK through their imminent costs study and will look to improve the efficiency and transparency of these strategies and major projects.
2. To align the regulatory protocols and investment horizons.
3. Develop a robust suite of complementary funding models to manage the risk associated with these projects
4. The efficient commissioning, procurement, planning, delivery and operation of these infrastructure projects

3. Darryl Murphy, Associate Partner - Global Infrastructure, KPMG

Infrastructure is a major challenge for the UK but the challenge has to be put in context (There are infrastructure challenges globally and the response should not be standardized and models may not be simply exported/imported)

There are several issues we must consider:

- Infrastructure deficit;
- Energy Policy and in particular: Security of Supply and Move towards low-carbon Investment

In the outlined strategy for infrastructure published by IUK, the **national infrastructure plan is welcomed but especially in the current time of austerity the development of national investment plan is absolutely crucial.**

For the development of an effective National Investment Plan we need to look at:

- The Scale of Investment needed
- The Pace of Investment over time
- The risks involved with the underlying investment ie offshore wind or nuclear technology

Currently there are a variety of different models for investing in infrastructure, ranging from PFI/PPP models to direct public sector investment and private investment, but there is no real cross-sectoral strategy,

This is unsustainable in the context of our fiscally constrained environment. We need to:

- Socialize the cost: somebody needs to pay for the needed £40-50bn. The public budget is insufficient.
- Socialization of risk: Government or users; gradual move towards users undertaking the risk
- Find alternative sources of scarce capital and resources
- Reduce the burden on utility companies: make investment more attractive
- Financing should focus on outcomes (what we need to achieve) and designing financial strategies able or leading to the achievement of this outcome.

Several issues to bear in mind:

- The GIB is not a reality: it is still only a concept.
- It should be called a fund and we should be conscious of the fact that setting up the bank/fund will not all of a sudden fix the financing issue -> we need to lower the risks rather than increasing the rewards.
- The protracted process embedded into the Government procedure for designing the scope of GIB might lead to impatience amongst both investors and the public.



- There are too many institutions involved (BIS, HMT, DECC, etc) which may protract the process.
- Further, the GIB strives to finance high-risk ventures with low-risk money fund > How is this possible?

Approach should be focused on effective distribution and outcomes.

- What are the desired outcomes?
- How to achieve those outcomes?
- and how can we bridge any gaps?

We need to focus on risk mitigation to allow more free flow of capital from private investors

4. Terry Morgan, Chairman, Crossrail

Crossrail is the biggest infrastructure project in Europe at a cost of £15.9bn in capital investment, and will be delivered in 2017.

Business model based on delivering:

- Regeneration
- Increased economic productivity
- Increased Capacity for passengers
- A legacy for London

Crossrail was dependent upon the Hybrid Bill process – as a result it had obligations to some 4,000 stakeholders, resulting in a long and protracted process.

Crossrail is a unique project – requiring needed special skills from the 14,000 individuals required for the duration of the project.

Projects need a robust business case to define where they sits on the priority list. For Crossrail this was done through communicating its:

- Impact on regenerating many areas of London.
- Multiple funding streams and lack of dependency on the public purse. This was done through a mix of Government guarantees, with a third of the funding emanating from the Government plus securitised future revenues and incremental business rates

Crossrail also has a number of political champions – vital for a project of its size during current economic downturn.



Question and Answer Session

- **How to finance renewable energy**

Darryl Murphy

- With a renewable energy such as wind, a subsidy is very attractive to investors however there is more of a problem with the broader energy market as you have a liberalised market but with the requirement of attaining specific and fixed outcomes
- In the end if we want to move away from oil there needs to be Government intervention
- However the biggest participant in the low carbon economy will be nuclear

Ingrid Holmes

- At the start of an renewable energy infrastructure project there is always a high cost to be incurred which will reach parity over time
- The political economy is geared to accruing the majority of the benefit to the manufacturer, this requires change

- **Is £2 billion to start up the GIB too small?**

Ingrid Holmes

- Through equity capitalisation of the original funds provided by the Government, the private sector the debt market will be used to raise capital using the multiplier effect
- The aim is protect private sector investment and not to crowd it out

Darryl Murphy

- One has to note that currently, 70% of annual investment is coming from private sector companies which leaves infrastructure in their hands

- **Governance, structure and regulation of the GIB**

Ingrid Holmes

- Regulation has not yet been considered however it must be accountable to Parliament
- An idea is for a board made of private sector professionals with over arching scrutiny provided through a statutory footing with a separate advisory body
- Due to the moral hazard problem we have a problem of positioning politicians against investors therefore the governance structure of the bank is critical and that is why an advisory board is vital to providing independent scrutiny

Darryl Murphy

- Must beware of the moral hazard
- The bank is underwritten by the Government and therefore if it fails the cost is incurred by the Government
- Politician proof with regard to preventing “dodgy” investment decisions



- This could lead to a set of stringent criteria against which investment decisions are (in)validated to mitigate the moral hazard problem as investors will recognise their decisions are immune from personal failure

Terry Morgan

- There is a need for decisions to be apolitical otherwise the GIB will invest or want something that is not suited to the infrastructure timescale
- If there is a sufficient capacity for the GIB to fail then the private market will not take that risk
- Obviously you cannot de-politicise the process totally due to the huge level of interest in such projects

Nick Raynsford

- Need to strike a balance between the political championing that is required to drive forward the requisite infrastructure projects and the need to attract private investment and assuage their fears of political interference

- **The need to instigate behavioural change**

Darryl Murphy

- driving down demand is as important as supply and possibly overlooked
- Need to attach a proper value to energy and to do this 'sticks' may be appropriate to change behaviour

Ingrid Holmes

- Government intervention is required to aid the public to initiate behaviour change
- This can be illustrated in retrofitting requirements underpinned by an inefficient building stock, perhaps through initial down payments

Nick Raynsford

- This is not just about demand management but also supply management

- **The balance between risks, rewards and the socialisation of costs**

Ingrid Holmes

- We have a commitment both in the EU and the UK to reach specific renewable energy targets
- Therefore to encourage and convince investors we must lower the risk and increase the reward

Darryl Murphy

- There are specific risks to deal with, with regard to offshore these centre around delivery and funding it from utilities balance sheet
- Government intervention is required to take liability for the risk
- A major concern is the underestimation of infrastructure costs leading to paying over the odds the larger projects
- Some of this must be passed on to the consumer or the users through cost socialisation



- The need to learn lessons from abroad regarding infrastructure projects

Darryl Murphy

- Abroad there is much greater state intervention, especially in places such as China and less debate
- This stems from a leaner command and control model of governance

Ingrid Holmes

- Planning is the biggest problem in energy
- The Planning Act was a missed opportunity as it did not give the requisite democratic accountability concerning the NPS
- Therefore this lack of transparency had an adverse effect on the legitimacy of the process