Growing the green

THE UK HAS TO RAMP UP THE PROPORTION OF THE ENERGY IT DERIVES FROM RENEWABLES FROM 3% TO 15% WITHIN A DECADE. **GRAHAM BUCK** LOOKS AT ONE OF THE BIG IDEAS FOR STIMULATING PRIVATE SECTOR DEBT CAPITAL TO FUND THE NECESSARY ENERGY-EFFICIENT PROJECTS: A GREEN INVESTMENT BANK.

The era of cheap energy has been over for several years, and the new government wants far more of our energy needs to be met by renewables as way of reducing the UK's carbon emissions. Ministers are especially keen on wind power, with offshore preferred to onshore.

As a member of the European emissions trading scheme, which puts a price on carbon, the UK has been set demanding targets for cutting back emissions over the next 10 years. Its legally binding commitments include increasing the percentage of UK energy needs derived from renewable sources from 3% to 15% by 2020 (below the target of 20% set for Europe as a whole) and cutting greenhouse gas emissions by 34% from 1990 levels by the same date. So far the UK has achieved only a 19% reduction in emissions and the likelihood of achieving either target is increasingly remote. It hasn't helped that one of the coalition's first acts was to kill off plans to sell off the Channel Tunnel rail link and other government assets and use the proceeds for early-stage equity investments in green energy projects.

Recognising that progress was faltering, while in opposition the Conservatives commissioned an independent report on making debt capital available for carbon reduction projects and transitioning from public capital to private capital.

The commission published its report, Unlocking Investment to Deliver Britain's Low-Carbon Future, in late June.

The opening section of the report cites market failures and investment barriers that have hampered the financing of a UK low-carbon infrastructure. They include

- market investment capacity limits and limited utility balance sheet capacity;
- political and regulatory risks caused by previous government policy determining expected returns and a history of policy changes;
- lack of investor confidence in the face of technology risks, lack of transparency in government policy, and steep capital requirements for commercialisation; and
- how to make large numbers of small, low-carbon investments attractive to institutional investors.

The report recommends consolidating government quangos such as the Carbon Trust, the Energy and Technologies Institute, the Technology Strategy Board, the Ofgem Low Carbon Network Fund and the International Environmental Transformation Board to create efficiencies and free up annual funding of around £185m. However, the report also warns: "The scale of the investment required to meet UK climate change and renewable energy targets is unprecedented."

ACCELERATION IMPERATIVE Sean Hanafin, former managing director at Citigroup, was on the commission's advisory panel. He says: "The UK's legally binding reduced carbon emission targets won't be met at current rates, so the transition from public capital to private needs to be accelerated. The availability of debt capital is vital in achieving this. The intention is to accelerate the flow of capital into the low-carbon economy. A series of product offerings is proposed, which include venture capital funds, senior debt, mezzanine debt, insurance products and guarantees. These will either directly offer capital or facilitate the flow.

"The government is effectively stimulating demand for cleaner energy sources, and at the same time facilitating London's development as the world's leading green financial market. It also seeks to accelerate and develop the green bond market, which should be of particular interest to corporate treasurers."

A main plank of the proposed policy for increasing the flow of investment into carbon reduction initiatives is the establishment of a green investment bank, a manifesto commitment made by all three major parties at the recent general election. It could be funded by new consumer levies, the sale of emissions permits to industry, and new product offerings to investors. The report suggests the bank could attract up to £2bn annually for renewables projects through bonds.

The aim is for the green investment bank to be capitalised like any other bank and for it to work alongside existing players rather than displace them. There are precedents in Germany's state-owned KfW Bankengruppe (which invested an estimated €20bn in environmental projects last year) and the European Investment Bank (EIB).

A recent report by former PricewaterhouseCoopers consultant

James Leaton and economist Howard Reed makes the radical suggestion that the government, as the majority owner of Royal Bank of Scotland, should simply convert it into the green investment bank rather than establish a completely new entity. However, given that RBS finances a far greater number of gas and oil producers than companies in the renewable energy sector, it is highly unlikely that this proposal will be given much consideration.

The government will take the report into its comprehensive spending review framework, due to be issued on 20 October. It promises that "detailed proposals" on creating a green investment bank will follow and a "shadow" bank, with chairman and a board, should be established over the coming months.

THREE QUICK WINS "The three main focus areas recommended for the green investment bank are those able to score the biggest and quickest wins," says Hanafin. "These are offshore wind, a national 'smart' electricity grid, and energy efficiency, such as improved home insulation and simple demand reduction measures. At present wind power and solar energy are more expensive than conventional 'dirty' energy, but they can become more competitive and achieve grid parity over time, particularly when carbon emissions are priced in. However, it will require significant scaling up of investment to achieve this."

Nuclear, a more controversial energy source, has not been excluded by the report as a further means of reducing carbon emissions, although it would not be eligible for subsidies.

"You need an energy mix of wind, solar, nuclear and biomass as well as carbon capture and storage for coal and gas," says Hanafin. "The government's aim is not to be overly prescriptive about the market share of any individual technology. That is something the market will work out for itself over time."

Energy efficiency, through a combination of wall insulation and pipe lagging as well as demand reduction, incurs significant initial expenses but offers a long-term return on investment. The commission has proposed that the bank would roll out the Conservatives' green deal policy, enabling households to spend up to £6,000 on energy efficiency measures and obtain relatively cheap capital by borrowing at a low interest rate and repaying over a period of 20 years. An additional incentive is the immediate saving in electricity consumption.

"From the investors' perspective, encouraging carbon reduction projects is all about a proper balance of risk and reward," says Hanafin. "If that balance isn't achieved, the options are either to increase returns or reduce risk. The latter is clearly better policy as it delivers regulator certainty for investors and enables development of the low-carbon energy sector in the most cost-effective manner."

INVESTMENT SURGE The financial support needed to move the UK towards a low-carbon economy has been the focus of recent reports by PwC and the Federation of Small Businesses (FSB). PwC suggests that capital investment of £30bn in offshore wind farms is needed between now and 2020 if the UK is to increase the proportion of its electricity produced from renewable sources to 30% by the end of the decade.

Finding this additional investment will not be an easy matter. As the report notes: "The tight funding and banking climate has been of little help, but the main reason for the inability to project-finance offshore wind farms pre-construction is that the risk is deemed to be too high for the banks to take on board. The project sponsors would need to provide some form of guarantee to cover construction costs before banks will consider lending pre-construction. Even if some project developers can overcome this challenge, there are doubts as to whether this can be resolved for all projects requiring project finance."

PwC offers various suggestions as to how the necessary investment can be achieved, including the option already adopted by a number of US states of a flat levy on customer bills. As with other reviews of the energy market, it is clear that the key to attracting investors is to convince them that renewables projects will be profitable over the long term, which means higher prices for consumers and businesses alike.

The FSB's report, Making Sense of Going Green – Small Businesses and the Low Carbon Economy, notes that 44% of the UK's 4.8 million small businesses rent their premises, in many cases for less than five years. There means there is little incentive for either the landlord or the business to make the premises more environmentally friendly.

The FSB suggests this obstacle could be addressed by various means:

- incentivising private sector providers, including banks, energy and construction companies, to pay the upfront costs of major building energy efficiency upgrades;
- guaranteeing "pay as you save" repayments through energy bills – linking the responsibility of repayment to the building would help overcome the landlord/tenant divide;
- supporting new business owners to "green" their building by encouraging firms in the buildings worst-rated for energy efficiency (G-rated) to take steps to move to F-rated premises; and
- not penalising those businesses that increase their rateable value through greening their premises by waiving higher business rates.

However, the FSB also reminds small firms that they can access a 0% loan scheme for energy-efficient equipment, which it wants the government to expand. The scheme operates on a pay as you save basis, enabling firms to make cost savings through energy efficiency without having to pay costs upfront.

"We hope that the growing importance for firms to be seen to be green means that treasurers no longer view going green as an optional extra but as a growing imperative," says FSB spokeswoman Sara Lee. "With innovative financing schemes and mentoring services available from organisations such as the Carbon Trust, it can now make genuine business sense for the corporate treasurer."

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