

Two Years of the Green Investment Bank What next?



ALDRSGATE
GROUP Leaders for a sustainable economy

Leadership

»» The UK is one of the most attractive places in the world for renewable investment and we are number one for offshore wind. The Green Investment Bank (GIB) forms a significant part of this success and so far, has backed 34 green infrastructure projects and attracted nearly £3.5bn of private capital. This is proof of record levels of investment supporting green jobs across the country and delivering secure home grown energy for the future««

**Ed Davey MP, Secretary of State,
Department of Energy and Climate Change**

»» The GIB has not just helped to fill a critical capital gap for green infrastructure. Perhaps more importantly, it has done this in ways that build new markets and asset classes in the green finance arena, for example, in its work to launch the UK's first listed renewables fund. This is where its real leverage lies – enabling individuals and institutions from across the world to invest in Britain's low carbon transition««

**Nick Robins, Co-Director, UNEP Inquiry into the
Design of a Sustainable Financial System**

»» The climate finance world has been a better place since the GIB arrived. Their shade of green is very attractive – tinged with financial and environmental professionals, creativity, and serious firepower. On the strength of our first operations with them I look forward to many more««

**Christopher Knowles,
Head of Climate
Change & Environment
Division, European
Investment Bank**

»» The Green Investment Bank has shown vital leadership in levering investments that integrate technological innovation, resource efficiency and environmental performance. As its portfolio grows, I hope that the Bank is able to further support investments that demonstrate the value of nature to business and society, including sustainable land management in mitigating risks to business and providing exciting new commercial opportunities««

**Pat Snowden, Head of Economics and
Climate Change, Forestry Commission**

Geographic reach

»» Two years on the UK Green Investment Bank has established itself as a cornerstone in the development of the fast expanding green economy in our country. From combined heat and power plants to energy efficient street lighting, I am proud that the expert team in Edinburgh and London has worked with local authorities like Glasgow City Council and businesses across the country to help finance and harness our enormous green energy potential. I have no doubt that in two years and indeed twenty years' time we will be able to look back at many more success stories which have been realised thanks to the UK Green Investment Bank««

Alistair Carmichael MP, Secretary of State for Scotland

»» The Green Investment Bank has been proactive in Northern Ireland. We have already seen a number of successful investments in projects which have supported business expansion and innovative approaches contributing to Northern Ireland's 2020 renewable energy targets. I know there are discussions regarding prospective investment and I look forward to further announcements««

Arlene Foster, Enterprise, Trade and Investment Minister, Northern Ireland

»» The Green Investment Bank, set up by the coalition government, has already helped trigger billions of pounds of private sector investment into the UK's green infrastructure and economy. Given its success in the UK we are now exploring the potential for GIB to assist in investment of the UK's international climate fund (ICF) in developing countries««

Amber Rudd MP, Parliamentary Under Secretary of State for Climate Change, Department of Energy and Climate Change

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Aldersgate Group

The Aldersgate Group is an alliance of leaders from business, politics and civil society that drives action for a sustainable economy.

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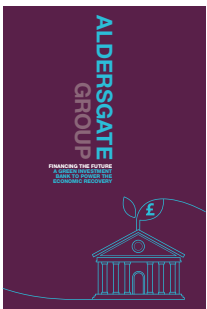
Foreword

The Green Investment Bank (GIB) is a rare beast. It represents a world first for the UK and enjoys strong support across the political spectrum. It is undoubtedly one of the major success stories of this government.

This publication marks two full years of operation. In this short time the GIB has leveraged more than £5bn into the UK green economy across more than 30 green infrastructure projects, as well as launching five small project funds; helping create a new asset class in green infrastructure worth £1.3bn; and accelerated market entry for new green technologies. Born in a storm, when European green investment was falling sharply especially in renewable energy, the GIB has helped stabilise the UK market and contributed to our international attractiveness for private sector green investment.

Aldersgate Group and the GIB

The Aldersgate Group has played a leading role to help bring about this success, from the institution's conception to delivery, working alongside partners including E3G, Climate Change Capital and Transform UK.



Right at the start of this Parliament, the Aldersgate Group published *Financing the Future*, which brought together the foremost thinkers on the GIB. They put forward proposals for a strong, powerful

and effective institution, alongside a position statement that was supported by leaders across business, politics and civil society.

It is encouraging that many of these recommendations have been acted upon and the institution is off to a sure-footed start. The talent it has attracted under its competent leadership and wise independent board has built a firm foundation. However, there is still some way to go for the Bank to reach its full potential. Further policy reform is needed to enable the GIB to be the major financial powerhouse in the transition to a low carbon economy that it was designed to be.

To help inform the urgent debate over unlocking the full potential of the GIB, this report brings together thought leaders for a second time. It reviews progress over the last two years and signposts key opportunities for developing the GIB over the next Parliament.

A success story so far

All those who have contributed articles to this report believe that the GIB has been a success. The Bank's CEO **Shaun Kingsbury** acknowledges 'It is a tribute to all involved that a consensus was formed and that the Bank was created' and describes the 'unshowy' innovations of the GIB which have been 'critical in attracting new investors to the UK's green economy'.

Investor and entrepreneur **Bob Wigley**, writes that the biggest achievement of the GIB has been 'the effective formation and mobilisation of a new financial institution, relatively quickly.' "This was no simple task," he says.

Economist and Committee on Climate Change member **Sam Fankhauser** speaks of the novelty and pride in 'having an organisation dedicated exclusively to green investment' which 'already feels like a mature institution', whilst the Green Alliance's **Matthew Spencer** simply asserts 'It is one of the best public institutions created in the last fifty years.'

The importance of continued cross-party support

The GIB's foundations have been built on consistent cross-party support. It is encouraging – and indeed critical – that representatives from the three main political parties all demonstrate their continued support for the Bank in this publication.

Secretary of State **Vince Cable** asserts 'We have established an effective financial institution which is 'both green and profitable.' He looks 'forward to it going from strength to strength.' **Tim Yeo** applauds the GIB's role in 'accelerating the UK's transition to a more low carbon and sustainable economy and showing true global leadership in the process.' He encourages the political consensus stating 'All parties should commit to allowing the Green Investment Bank borrowing powers', a request which almost all contributors highlight. **Iain Wright** notes the origins of the GIB in the last government and appreciates the way it 'has been able to steer through political debate and disagreement to enjoy a good degree of political consensus.'

What next: three priorities for the next government

While the GIB can celebrate many achievements in its first two years, there are significant opportunities to go further at the beginning of the next Parliament with major policy reforms. Many of these reforms are crucial to delivering some of the government's existing commitments such as the implementation of the first four carbon budgets.

Foreword

This report outlines a number of proposals for the GIB that would propel the Bank to the next stage. **Caroline Lucas** picks up an oft repeated demand, 'Through green bonds and green ISAs, the GIB can unlock billions of investment from new sources including pension funds and, crucially, the public.'

Bob Wigley states the institutional market, especially insurers, 'could provide £10bn a year of investment in green bonds structured by the GIB'. **Nick Mabey** of E3G agrees and sees green ISAs as vital for bringing in retail investors as well as urging for the power to borrow and a 'commitment to regionalise GIB offices and an expansion of shareholders to make it a truly British GIB'. **Emma Howard Boyd** of the Aldersgate Group notes that 'the GIB has already found opportunities to work at a city level. Further opportunities exist to make transport, waste management and building systems more efficient whilst reducing emissions'.

Whilst the GIB has much it could do in closing the large investment gap to achieve a timely UK transition to a low carbon future, the world leading influence that the GIB could leverage for competitive advantage and international status is not lost either. **Abd Karmali** of Bank of America Merrill Lynch suggests, the 'GIB should capitalise on its pilot opportunity to develop an international financing arm and make this a focus for the UK's international climate finance commitments.' **James Cameron** of Climate Change Capital agrees and thinks 'the GIB should go global, becoming a trusted intermediary of the UN's Green Climate Fund'.

Further quotes from the business community welcome the GIB's arrival to facilitate deals to build green projects now, especially in renewable energy and resource recovery. But equally vital is a wider definition of green to enable the GIB to reach sectors unstimulated by its current narrow remit, but which are equally important to deliver a sustainable economy.

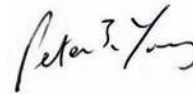
Three stand-out policy priorities for the earliest possible inclusion in the 2015 government's programme are:

- 1 Borrowing:** The power to borrow is needed urgently, especially given the low interest rates in the market
- 2 Issuing new products:** The power to issue green bonds and green ISAs and bring new investors into the market
- 3 Broaden remit:** Almost two thirds of the UK green economy falls outside GIB's remit. GIB must help here too, including by extending the quality of green ratings and reporting to assure investments are genuinely green.

Conclusion

We hope that through this report the Aldersgate Group has helped demonstrate the talent, commitment and ideas available to keep the GIB growing.

The GIB has grasped life strongly and built an excellent foundation, proving the UK can still pull off world first successes. Business, politics and society must now speak with one voice to support rapid fulfilment of the GIB's remit. The GIB is the investment catalyst essential to attract technologies, finance and projects; delivering the jobs, skills and social benefits which ultimately define a strong, growing and green economy. Only then will we have designed a successful and lasting model for financing the future.



Peter Young

Chair
Aldersgate Group



Nick Molho

Executive Director
Aldersgate Group

Dr Vince Cable MP

Secretary of State for Business, Innovation & Skills



Dr Vince Cable MP

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

Yes. We have established an effective financial institution that is leading the way in financing green projects while generating strong commercial returns – so both green and profitable. In a period when market conditions have been difficult, it has been innovative and helped to attract £3.4bn of additional private sector investment into those sectors in which it operates. And we expect its impact in mobilising investment to continue to grow.

2 What has been the Bank's biggest achievement?

The Bank plays a vital role in demonstrating to the wider market that investment in green infrastructure can be a profitable business, helping attract new sources of capital to invest in sectors they might not otherwise have considered. A further achievement has been to bring together such expert and motivated teams of people dedicated to making a real difference in these markets: getting more projects financed more quickly than would otherwise be the case.

3 What would you change?

GIB has been designed to perform a specific role: to work alongside private sector finance providers to mobilise additional investment for green infrastructure projects. It forms part of a wider range of government policy measures that are designed to promote development of green sectors and the UK's transition to a green economy. It remains right for GIB to go on performing that function within the wider policy framework. Developments such as the launch of GIB's offshore wind fund should help increase the speed of green investment and tap new sources of private finance.

It is clear that the task of mobilising significant additional investment in achieving energy efficiency in particular remains a real challenge, despite the significant economic and environmental benefits to be gained. GIB will continue doing what it can to help identify and enable investment opportunities in this area.

So I am not sure I would have changed anything – GIB is still only two years old and has achieved a lot in a short time. I look forward to it going from strength to strength.

4 What is your vision for the GIB in 2020?

GIB will have achieved its aim of overcoming finance related market failures in specific green sectors such that private sector investment is no longer constrained. This in turn will enable GIB to focus on the next set of challenging green sectors in which GIB investment can have greatest impact in attracting additional capital. There will also be private investment in the capital structure of GIB itself. This will enable GIB to continue operating in sectors in which it has built up expertise even after market failures have largely ceased to apply, such that state funded investment would no longer be appropriate.

5 What should be in the 2015 election manifestos?

We will realise the full potential of GIB by increasing its capitalisation, expanding its remit, allowing it to raise funds independently and enabling it to issue green bonds.

Tim Yeo MP

Chair of Energy and Climate Change Select Committee

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

Absolutely – it is tackling shortages of capital, providing both equity and debt and, importantly, financing construction risk in partnership with other investors. It is not a lender of last resort but a commercial operation that is already recycling finance.

2 What has been the Bank's biggest achievement?

It is already the most active investor in the sectors that it is able to work in. As the first institution of its kind, becoming such a credible operation in two years must be classed its biggest achievement.

Its creation has stimulated interest in creating similar institutions around the world. For example there is now an active debate at the highest levels in China about the merits of similar green banks being established in their markets.

The Green Investment Bank is accelerating the UK's transition to a more low carbon and sustainable economy and showing true global leadership in the process.

3 What would you change?

I would like to see its areas of focus expanded. In particular, more support should be given to energy efficiency projects in the domestic sector as well as for supply-chain expansion, which is one of the biggest bottlenecks in UK efficiency markets. The GIB should be at the heart of remedying the supply-side bias in UK energy systems and infrastructure.

The GIB should be allowed to access capital markets immediately by issuing green bonds, and potentially benefit from the UK government's guarantee scheme. Sales of GIB bonds should be targeted at UK pension and insurance companies – including NEST – and also at retail consumers who must be given the chance to invest directly in the UK low carbon transition they are paying for.

4 What is your vision for the GIB in 2020?

The GIB will remain a key financier in the enlarged green economy with a mixed portfolio of public and private funding. It should expand its role in smart grids, public transport investment, supporting resilience and driving innovative green investment internationally.

Through its ground-breaking work, the GIB should come to be seen as highly innovative and "best in class" globally, and this should inspire the creation of similar institutions around the world.

5 What should be in the 2015 election manifestos?

All parties should commit to allowing the Green Investment Bank borrowing powers so it can raise additional capital when required.



Tim Yeo MP

Iain Wright MP

Shadow Minister for Industry, Labour Party



Iain Wright MP

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

The Green Investment Bank was Labour's idea and is the product of plans we drew up at the end of our time in government. We very much welcome its establishment.

2 What has been the Bank's biggest achievement?

The Green Investment Bank has been able to steer through political debate and disagreement to enjoy a good degree of political consensus.

To attract investment and ensure economic success, the presence of long-term institutions that can provide stability and certainty over many decades is key. This will encourage the market to invest in low carbon technology. The leadership team of the Bank has played a vital role in building investor confidence, and should continue to do so.

3 What would you change?

Although the GIB is well established, I am frustrated that Britain's competitive advantage in low carbon technologies, manufacturing and services is being eroded. We are slipping down the attractiveness rankings for renewable investment. When Labour left office in 2010, we were third in the world for attracting investment – we are now seventh. Carbon capture and storage (CCS) was a technology in which Britain was world-leading and had an ambitious policy direction under the leadership of Ed Miliband as Secretary of State for Energy and Climate Change. Yet developments in CCS have stalled for the entire length of this Parliament, while other countries are taking the technology – and potential for new businesses and jobs – ahead.

Other countries are also racing ahead in terms of scale. Germany's KfW Bankengruppe has invested over €29bn a year, financed through international capital markets, into low carbon technology including energy efficiency schemes for homes.

The GIB is hampered by its scope. It claims to have leveraged in £3 for every £1 invested from the private sector, but there is potential to do much more. Meanwhile policy muddle and uncertainty are hampering investment opportunities and the GIB has to wade through that policy treacle. The government must provide a long-term policy framework out to 2030.

4 What is your vision for the GIB in 2020?

The GIB will help Britain to be the world leader in clean and low carbon technology and innovation, providing funding and investment opportunities to enable British firms to commercialise technology which can not only help mitigate climate change, but provide market and job opportunities for UK businesses.

5 What should be in the 2015 election manifestos?

The GIB's future is assured under the next Labour government. But to accelerate its achievements it will be given the power to borrow on the open market, leveraging capital. It will be allowed to invest freely, offering a range of financial solutions to accelerate the rate of private sector investment in clean energy. It will also target energy efficiency schemes so that Britain's homes can be better insulated, thereby reducing fuel poverty, lowering energy bills in the long term and creating more and better jobs here in the UK.

Caroline Lucas MP

Green Party

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

It was a very good idea. It has demonstrated the potential to leverage in a hefty proportion of the private sector investment needed for the UK's low carbon economy to flourish.

Some GIB-funded projects are exactly what we need on a transformational scale, such as offshore wind and energy efficiency, although other investments look distinctly less green.

2 What has been the Bank's biggest achievement?

The symbolic and practical value of the Green Investment Bank is phenomenal. It is a major success to have been operating for two years, proving the point that investing in low carbon infrastructure is good for jobs, the economy and the climate.

The recent European approval for the GIB to finance community-owned energy projects such as small-scale wind and hydropower is particularly welcome.

3 What would you change?

The GIB should be allowed to borrow and the green criteria should be tightened significantly.

When the GIB legislation was in the Commons, business and environmental groups pointed out that a modest borrowing ratio of 6:1 would unlock £90bn in private sector co-investment. It was a great shame that party political posturing on the front benches killed off a cross-party amendment to guarantee borrowing powers from 2015. The Bank's ability to borrow must be prioritised, as the Environmental Audit Committee has repeatedly recommended.

Nobody benefits when the UK's flagship green institution is accused of exacerbating forest destruction. The early decision to fund biomass burning at Drax coal fired power station was a mistake. There are serious concerns about the harm to nature and dubious carbon savings from imported wood and the decision perpetuated the life of one of the UK's most polluting power stations.

Alongside incineration projects which flout the waste hierarchy, this highlights the need for the Bank to adopt and apply more rigorous sustainability and carbon criteria to ensure that its activities are genuinely green.

4 What is your vision for the GIB in 2020?

The GIB will be playing a central role in energy efficiency, renewable energy and interconnection. We will have learnt from Germany's KfW Bankengruppe's active promotion and de-risking of community owned renewable energy projects and low interest loans. The GIB's role will extend to earlier stage technologies such as marine renewables.

Through green bonds and green ISAs, the GIB can unlock billions of investment from new sources including pension funds and, crucially, the public.



Caroline Lucas MP

5 What should be in the 2015 election manifestos?

Greening the GIB, allowing it to borrow, and expanding its remit.

But the GIB alone will not fill the multi-billion pound green investment gap. Nor does a successful GIB counteract the harm from ongoing support for major new roads, unconventional fossil fuels, new airports and other high carbon infrastructure.

We need a comprehensive and consistent re-prioritisation of fiscal, monetary and infrastructure priorities to secure, within a generation, a shift to a zero carbon economy.

Working with the Green Investment Bank

»» The Green Investment Bank has played a very positive role in financing new waste infrastructure such as anaerobic digestion plants. We have enjoyed working with them in the past and look forward to working together to create a more circular economy in the UK in the future««

Dr Liz Goodwin, CEO, WRAP

»» Well-structured partnerships between the public and private sectors are a crucial component of the transition to a low carbon economy. The Green Investment Bank has played an important role in mobilising private capital for low carbon infrastructure projects and with ongoing support it can continue to unlock much-needed financing««

Stephanie Pfeifer, Chief Executive, Institutional Investors Group on Climate Change (IIGCC)

»» We have found the depth and experience of the GIB team instrumental in enabling us to assess the merits and risks of renewable projects, resulting in GCP acting as a matched funder to the GIB on a number of successful transactions, including the Evermore Renewable Energy Project. Going forward we hope the GIB continues to have the freedom to develop and utilise innovative funding structures to facilitate growth and confidence in what is becoming an increasingly complex market««

David Conlon, Director, GCP UK

»» The skills and experience of GIB made a major contribution to the successful launch of the Speyside CHP project; its blend of technical and financial skills, and ability to work effectively with government, made a real difference. Speyside is one example among the GIB's growing track record, which positions it well to achieve its future objectives««

Derek Potts, Executive Director Primary Investment, John Laing

Key sectors

»» The Green Investment Bank has been instrumental in closing two challenging waste PFI/PPP projects in the last 20 months with Shanks Group plc, committing some £93m in difficult markets for project finance. This has made a significant contribution to the recycling and recovery aims of local authorities and we look forward to working with GIB on alternative funding solutions to enhance the waste management within the remainder of the UK economy««

**Bob Cartwright, Group Treasurer,
Shanks Group**

»» The Green Investment Bank has a vital role to play in supporting the construction of a new generation of resource management facilities the UK so badly needs. The GIB can help the UK re-shore the jobs and resources we currently lose to other countries because of the lack of domestic treatment capacity in recycling and energy recovery««

Gev Eduljee, Director of External Affairs, SITA

»» The GIB's ability to pump prime sectors like energy efficiency has been impressive so it should be allowed to increase its balance sheet – for example by marketing 'green ISAs'. It could also play a significant role working with cities and local government to fund mutually-reinforcing low carbon projects where finance is hard to come by««

**Will Straw, Associate Director for Energy,
Transport and Climate Change, IPPR**

»» GIB is an important catalyst in bringing industry and the financial sector closer together in understanding and managing risk. GIB should build on this capability by demonstrating a willingness to participate in construction phase financing alongside the other stakeholders««

**Jonathan Boles, FD
Siemens Wind UK & Ireland**

Shaun Kingsbury

Chief Executive, Green Investment Bank



Shaun Kingsbury

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

It would be a little awkward if I said anything other than yes!

Back when the idea was first mooted, the concept of a state backed GIB was a bold, innovative policy idea. Nowhere else in the world had one and there was a great debate about whether it could work or even if the government should intervene in the market. It is a tribute to all involved that a consensus was formed and the Bank was created.

My hope is that we have not fallen short of anyone's expectations.

I believe we have made a good start – backing well over 30 important green infrastructure projects and mobilising what will be £5bn into the UK green economy. We have taken on complex projects that would otherwise not have gone ahead and we have been innovative, helping new technologies into the financial mainstream.

2 What has been the Bank's biggest achievement?

Although it has not grabbed headlines, I believe it has been financial innovation. We supported the UK's first listed green infrastructure fund, triggering the creation of a new asset class that has mobilised over £1.3bn into UK renewable projects. We have achieved financing firsts, from the next generation 6MW offshore wind turbine to the first project finance for an advanced technology gasification plant. We have developed a bespoke product for local authorities to finance their switch to low energy street lighting. These unshowy innovations are critical in attracting new investors to the UK's green economy, pulling it towards the financial mainstream in a way that will, ultimately, lower the cost of finance for the sector.

3 What would you change?

The nature of our business model means that we have to move at the pace of the wider market. This has been slower than we had hoped and I would, of course, have liked to see a stronger project pipeline coming through.

While it is important that we do not rush our development, given we are building a business that will be around for years to come, I would also like a mandate that was more expansive in what we can do in terms of sectors and the nature of our investment strategy.

4 What is your vision for the GIB in 2020?

I have three goals. To build a great portfolio of green, profitable projects that offer a demonstration effect, encouraging other investors to follow our lead. To widen our mandate, allowing us to broaden our investment sectors and strategy. And to move to a mixed economy of funding. This will begin, I hope, with our £1bn offshore wind fund and will develop to include borrowing and ultimately diversifying our equity base, which would be a great vote of confidence in GIB and the UK green economy. Taken together these three goals will allow us to fulfil the potential of the business we have built over the last two years, helping us realise our mission of building a greener, stronger economy in the UK.

Abyd Karmali

Managing Director, Climate Finance, Bank of America Merrill Lynch

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

GIB has made real the idea that a publicly financed institution can address a market failure, deliver a social good, and crowd-in private capital seeking to earn commercial returns. It has been excellent to see this theory being proven in practice in such a relatively short time.

I have been able to see the evolution of the GIB. I was honoured to be part of the team supporting Bob Wigley (then Chair of the GIB Commission) in the design phase and more recently I have been fortunate to renew my relationship with GIB by serving as a member of GIB's Sustainable Finance Advisory Group.

2 What has been the Bank's biggest achievement?

The acid test to gauge success of the institution is whether it attracts, and does not crowd out, private capital. I view it as a phenomenal accomplishment that the GIB has achieved roughly a 3:1 leveraging of private capital to date.

3 What would you change?

Our work in the Green Investment Bank Commission envisioned GIB evolving its mandate and structure over time. The question of which market niches need GIB's involvement should be asked continuously, but two areas seem ripe to consider:

1) GIB should be allowed to raise financing from the debt capital markets

2) GIB should capitalise on its pilot opportunity to develop an international financing arm and make this a focus for the UK's international climate finance commitments.

4 What is your vision for the GIB in 2020?

The GIB will continue to execute its mission enabling a low carbon economy in the UK, delivering green growth and green jobs. It acts as a hub for the growing network of GIB-like institutions that are being set up in other countries and regions to contribute ideas on how public finance can mobilise private capital.

I serve as a private sector representative to the Board of the Green Climate Fund (GCF) and I would like to see the GIB engage with GCF, which is due to be capitalised by the end of this year. GCF is a GIB-like institution set up under the UN climate change negotiations process and is expected to be one of the main conduits for climate finance flowing into emerging markets. The GIB could be an intermediary for the GCF and, given its public mission, serve as a role model to shine a light on how public and private capital can work together to achieve a positive financial, environmental and social outcome.

5 What should be in the 2015 election manifestos?

It would be admirable to see definitive long-term commitments enabling the GIB to move to financing by tapping into the rapidly growing green bond market. Bank of America Merrill Lynch's own capital markets team sees the green bond market growing from around \$11bn new issuance in 2013 to around \$200bn of total issuance by 2020. The GIB would be well positioned to capitalise on this trend.



Abyd Karmali

James Cameron

Non-Executive Chair, Climate Change Capital



James Cameron

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

It's a great idea. A permanent Bank, kick-started with – but not wholly reliant on – government money, with the explicit aim of providing finance and encouraging additional private investment to decarbonise our economy, is exactly what was needed. Business and finance are now fully aware of the need to transform our energy systems and not to lock Britain into fossil fuel investment.

2 What has been the Bank's biggest achievement?

Being there. There was significant resistance from those whose interests lay in preserving the status quo.

The billions of investment in over 30 projects will be well documented elsewhere. What is equally important is that it has helped change the way business and finance think about the future; that a cleaner, more sustainable economy does not cost more, but can create wealth worth having.

3 What would you change?

The scale. Before the GIB was established, I and others suggested that the UK government should use the c. £40bn it receives from auctioning carbon credits to fund the Bank and boost green growth. This would encourage others to invest. We wasted the opportunity to reinvest our North Sea oil and gas windfalls the last time. If carbon is priced high enough to have an effect – and the government has committed to a carbon price floor of £30 by 2020 and £70 by 2030 – then this money can be put to better use. It is a perfect opportunity to create a quasi sovereign wealth fund where polluters' money cleans and improves our economy.

4 What is your vision for the GIB in 2020?

The GIB should go global, becoming a trusted intermediary of the UN's Green Climate Fund; supporting Britain's commitment to provide climate finance and therefore to compete with multilateral development banks.

Closer to home, it will have competition from the more traditional banks who will have changed their investment strategies, reflecting a global push to wean our economies off fossil fuels. This is already happening.

GIB will not rely on – but should still be receiving – funds from the state and it should have the right to lend. Investing in sustainable projects, companies, technologies and materials will be regarded as the norm.

5 What should be in the 2015 election manifestos?

A pledge to keep the UK on track to reduce greenhouse gas emissions by at least 80% by 2050, creating wealth and jobs. This should not be a party political matter, nor is it a burden on our economy. The higher the price of carbon, the more it will discourage emission and encourage innovation away from it. The government must stand its ground and not give in to interests of the incumbency. It can lead the way by decarbonising our built environment and infrastructure and giving tax incentives to low carbon research and development. The finance industry, including the GIB, should be given the tools to do the job.

Bob Wigley

Former Chair of the Green Investment Bank Commission

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

Absolutely. While there is a long way to go, the GIB has started to play a leading role to ensure the UK unlocks private sector investment to create a 21st-century green economy. At the end of the last Parliament, I was delighted to be invited by the then Shadow Chancellor of the Exchequer, George Osborne, to Chair the GIB Commission. This produced substantive policy recommendations, many of which have been acted upon.

2 What has been the Bank's biggest achievement?

The effective formation and mobilisation of a new financial institution, relatively quickly. This was no simple task. I wrote in the Aldersgate Group report *Financing the Future* back in 2010 that the process of creating the GIB should start immediately with a clear timetable for implementation. This has been delivered with great skill and commitment. Key to its success has been its official establishment through an Act in Parliament and the appointment of a strong and expert leadership team.

3 What would you change?

The GIB has the potential to implement and develop a number of specific policy recommendations from our early blueprint for the Bank, such as:

- the potential to finance some of its activities and commercial investments through green bonds. These could be targeted at UK pension funds and other institutional investors, matching long-term savings with infrastructure investment needs. The institutional market, particularly the insurance sector, could provide £10bn a year of investment in green bonds structured by the GIB.

- making existing government support for low carbon innovation more cost-effective, which should be a core part of the GIB's mission. Ad hoc government initiatives over the preceding decade have resulted in a large number of quangos and funds with similar objectives. The GIB could roll these up to radically improve government support for low carbon innovation and the commercialisation of new technologies.

- expanding finance for energy efficiency. This should be combined with government incentives for small and medium-sized businesses to implement energy efficiency measures through a graded version of business rates and measures that seek to spur investment specifically when commercial properties change hands. Similarly, new policies will be required to increase demand for domestic energy efficiency measures at scale, such as stamp duty incentives and penalties.

Overall, it is vital that the Bank facilitates and does not compete with private sector investment. As the GIB grows, it must pay very close attention to this in everything that it does.

4 What is your vision for the GIB in 2020?

The GIB delivers the scale of investment required to tackle climate change, whilst also helping create the companies and jobs for the future. This is a critically important mission.

5 What should be in the 2015 election manifestos?

Scaling up the GIB to accelerate the private sector investment required to deliver the UK's transition to a low carbon economy, financed by green bonds, green ISAs, a debt fund and other new instruments.



Bob Wigley

Emma Howard Boyd

Director, Aldersgate Group



Emma Howard Boyd

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

Most definitely – and this can be seen in the way the GIB has already unlocked investment of £4.9bn. The ongoing challenge will be to continue to scale this up and exceed this sum.

2 What has been the Bank's biggest achievement?

In its first two years, the GIB has swiftly moved from its initial start up phase into implementation and it now boasts an impressive number of deals across a range of low carbon sectors. One example is where the GIB is providing Glasgow City Council with a green loan to help the City deliver its plans to convert its 70,000 streetlights to low energy. The green loan has been specifically designed to finance public sector energy efficiency projects, delivering financial benefits as well as carbon savings.

3 What would you change?

Since its launch, there has been much debate about the GIB's ability to borrow to enlarge the scale of its work. The timescale on which this will be allowed still needs urgent clarification for the GIB to realise its full potential.

The GIB has already found opportunities to work at a city level. Further opportunities exist to make transport, waste management and building systems more efficient whilst reducing emissions, with the GIB playing a key role in unlocking finance. The GIB could work collaboratively with others through the City Climate Finance Leadership Alliance, which was launched at the recent UN Climate Change Summit to help stimulate the flow of public and private investment to climate-smart infrastructure in cities. This is just

one way the GIB could continue to lead the way boldly in financing green infrastructure projects, while generating strong commercial returns.

4 What is your vision for the GIB in 2020?

That the GIB is playing a full role in unlocking the investment needed for the UK to deliver a transition to a low carbon economy. This will in part have come about because of its ability to borrow from capital markets. There is huge potential for the GIB to issue green bonds, raising money from new sources including pension funds. There is also potential to involve the public through the launch of green ISAs.

5 What should be in the 2015 election manifestos?

The GIB's initial success has in part come about because of the cross-party consensus behind its creation. If the GIB is to continue to reap real benefits in the future it is important that all parties share this ambition across their manifestos. But this will only come about if there is strong ambition for the low carbon agenda generally. We must not let the GIB get bogged down by party political differences. Its mission is too important to the UK economy for that to happen.

Nick Mabey

Chief Executive, E3G

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

The GIB has been one of the major green achievements of this government. While many people recognised the danger of the "clean energy investment gap" to the UK's energy security and decarbonisation goals, many argued for ad hoc funds to solve it, believing that creating a GIB would be too slow and too interventionist. The rapid establishment of the GIB as an independent statutory institution, development of solid project pipeline and clear market additionality has shown its true value.

2 What has been the Bank's biggest achievement?

The GIB's acceleration and leveraging of green investment has been vital to maintain investor confidence in the feasibility of the UK's low carbon transition throughout the economic recession and through the market instability created by the changing regulatory arrangements for the energy sector.

However, the GIB has also opened up the potential policy landscape for action in the UK and internationally. It has given the government a broader and more efficient toolbox for meeting its low carbon and environmental goals. The GIB's example of how to use clever market leverage has stimulated fresh thinking about how to fund and shape UK infrastructure to maximise public benefits.

3 What would you change?

The GIB has huge capacity to develop. For example:

– The GIB should play a formal role in advising government over the financial

aspects of policy and market design, especially in areas such as demand-side electricity market creation.

– An expanded GIB should be at the heart of a reformed cluster of new public financial institutions that are capable of supporting business development, supply-chain expansion and more effective innovation and development in the UK green business sector. These should replace the current maze of ad hoc funds and schemes which companies find impossible to navigate.

– The GIB should be at the heart of a more financially devolved UK. Regional GIB offices should be created to support the devolved administrations and leading English city regions as they gain greater control over planning and infrastructure investment.

The GIB's governance should reflect its broader role. The devolved administrations and English city regions should become shareholders and invest their resources in the Bank. The GIB should aim to be a global leader in transparency and set up a strong expert advisory group to handle complex environmental issues such as biomass and investment in resilience.

4 What is your vision for the GIB in 2020?

That the GIB is seen as a key driver of low carbon investment and the green economy across the whole of the UK; supporting market transformation to a more decentralised, efficient and smart energy and infrastructure system.



Nick Mabey

5 What should be in the 2015 election manifestos?

Give the GIB power to borrow and issue green bonds to institutional investors as well as green ISAs for retail investors. A commitment to regionalise GIB offices and an expansion of shareholders to make it a truly British Green Investment Bank.

Professor Sam Fankhauser

Co-Director, Grantham Research Institute on Climate Change

Member of the Committee on Climate Change



Professor Sam Fankhauser

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

Absolutely. Access to finance has long been a constraint for clean technology and energy efficiency investment. The GIB can help overcome negative perceptions, share risks and introduce the financial sector to new low carbon opportunities.

The European Investment Bank, Germany's KfW Bankengruppe and the European Bank for Reconstruction and Development (EBRD) all have sustainable energy programmes, but having an organisation dedicated exclusively to green investment is novel and something to be proud of.

2 What has been the Bank's biggest achievement?

There are many. The GIB has had an impressive start. It was constituted without noticeable delays but already feels like a mature institution. It has a strong presence in the market and a healthy project portfolio. There have been notable "firsts", such as its cornerstone investment in Greencoate's listed wind energy fund.

3 What would you change?

It is mostly about fine tuning. From a banking point of view an immediate challenge is to become profitable. The GIB's portfolio is promising, but at this early stage the Bank has yet to realise a return on its investment.

In terms of impact, the main challenge is how the GIB balances its public mandate with its private sector culture. Other organisations at the public-private interface have found that a "City" mentality is essential when interacting with private investors, but this inevitably creates friction between the parts of

the Bank responsible for deal flow and those safeguarding the mandate. It is an ongoing, creative tension that I remember well from my time at EBRD. How it is handled will decide how much impact the GIB can have.

4 What is your vision for the GIB in 2020?

The GIB is still small relative to investment needs. It will have to grow, and raise capital to do so. Before long the capital base and borrowing capabilities of the GIB will have to be discussed.

To remain additional, the GIB must evolve continuously. Offshore wind and energy efficiency are long-term priorities, but new opportunities should constantly be explored. One of them might be low carbon transport. The pilot arrangement with DFID could lead to an international opportunity for GIB operations, although questions must be resolved about comparative advantage and the extent to which this distracts the Bank from its core domestic mandate.

5 What should be in the 2015 election manifestos?

It would be good to see strong support from all parties for the further growth of the GIB. Even more important, though, is a firm commitment to the low carbon agenda generally. The GIB will not be successful without a regulatory environment that is conducive to low carbon investment.

In their manifestos, parties should signal their support for a strong fifth carbon budget, which will be set in the next parliament and outline their policies to meet the third and fourth carbon budgets, where additional action is still needed – including a carbon intensity target for the power sector.

Matthew Spencer

Director, Green Alliance

1 On the basis of what you've seen so far has the creation of a Green Investment Bank been a good idea?

It is one of the best public institutions created in the last fifty years.

2 What has been the Bank's biggest achievement?

Investing our money wisely: it has made UK low carbon projects happen faster and quickly established a reputation for strong market analysis and financial rigour.

3 What would you change?

The Board and executive team should resist the temptation to shift focus towards lower risk projects. It might improve the GIB's balance sheet in the short term, but would reduce its additionality and erode its status as a public institution.

The last big public financial institution innovation in the UK came in 1945 when the Industrial and Commercial Finance Corporation and Finance Corporation for Industry were established to overcome a shortage of growth capital for SMEs. They made a significant impact in their early years, but were eventually merged and floated on the stock market and are now known as the international investment manager, 3i. Yet the UK continues to suffer from a chronic shortage of growth capital for SMEs. 3i should have maintained its original public mandate.

The GIB must stay focussed and actively engage with government in the huge task of infrastructure policy development and delivery, as well as executing good deals on the ground. Politicians, meanwhile, must resist the pressure to get the GIB off the government's balance sheet and must retain a controlling stake in the Bank in perpetuity.

4 What is your vision for the GIB in 2020?

There are two very different scenarios for UK green investment, both dominated by the fate of the power sector.

The worst case is that by 2020 we have thrown in the towel in our efforts to secure a modern, low carbon power system in the face of short-term cost concerns. In this scenario the GIB would become largely redundant.

The best case is that investment momentum picks up in the second half of this decade following successful implementation of Electricity Market Reform and government is able to build on this progress by committing largely to decarbonise the power sector by 2030. In this scenario the GIB will play a pivotal role by accelerating private investment in renewable energy, and driving cost reduction in offshore wind by encouraging 'learning by doing' in projects it backs. For example, by offering its own green ISAs through the Post Office the GIB could normalise green investment by individual savers and help stimulate a new wave of crowd funding for clean technology. The combination of a credible cost reduction pathway and 'skin in the game' amongst hundreds of thousands of citizens would give government the confidence to take the next step in the UK's low carbon journey.

5 What should be in the 2015 election manifestos?

A commitment to decarbonise the power sector by 2030, as recommended by the Committee on Climate Change.

A commitment to grow the GIB, using equity and debt from government, capital markets and citizens.



Matthew Spencer

Future priorities

»» To make a lasting impact in helping the UK transition to a greener, low carbon economy, the Green Investment Bank must mobilise the private sector. GIB's 3:1 leverage ratio, ie securing £3 of private investment money for every £1 invested, is a real achievement; the next challenge is to exceed that ratio in both current and new target sectors««

**Gina V Hall, Investment Director,
Carbon Trust**

»» Current levels of investment fall well below the scale that is needed to fully grasp the opportunities of the transition to the low carbon economy and avert dangerous climate change. The GIB has started to play a critical role in this but it needs to be scaled up in the next Parliament to catalyse additional flows of capital in coming years««

**John David, Investment Director, Rathbone
Greenbank Investments**

»» WWF wants to see the impact of the Green Investment Bank maximised, which means removing unnecessary constraints – for instance reviewing its ability to borrow from capital markets, and increasing the range of green investments within its mandate««

**David Nussbaum, CEO,
WWF-UK**

»» The Green Investment Bank's record on job creation has led to hundreds of new skilled jobs across its diverse portfolio. In future we need a major increase in the pace and scale of GIB's activities in low carbon infrastructure, from energy efficiency at home or at work, to energy supply transformation and new low carbon technologies for our energy intensive industries. The GIB has proven its effectiveness – it now needs the borrowing powers to deliver far more substantial change««

Frances O'Grady, General Secretary, TUC

Future priorities

»» We will only decarbonise the global economy at the speed and scale required with the support of public banks to maximise the leverage of private investment into low carbon industries. If it is allowed to borrow the GIB can fulfil its destiny to be a global beacon for green investment and catalyse a low carbon energy revolution to inspire the world««

Ed Matthew, Director, TransformUK

»» A manifesto commitment from all the main political parties should be for wind power beyond 2020. We need to build on the skills and economic benefit we have been creating, helped greatly by the investment power of the Green Investment Bank, not to jeopardise their continuation due to political uncertainty««

Clark Macfarlane, MD, Siemens Offshore Wind UK & Ireland

»» The Green Investment Bank has made a good start, but total finance for low carbon infrastructure in the UK is currently only around half the levels needed. The Bank should be allowed to borrow in order to significantly enlarge the scale of its work, and also ensure that finance is available to small and community energy groups««

Joan Walley MP, Chair of Environmental Audit Committee



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