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GREEN BANK DESIGN PRINCIPLES: A SYNTHESIS OF E3G'S LEARNINGS FROM BUILDING GREEN BANKS

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Context

It is estimated that infrastructure financing needs at the global level are between USD 3.3 trillion to USD 7.9 trillion per year between 2016 and 2030². Developing and developed economies face a similar challenge: ensuring a rapid and smooth transition to cleaner and more resilient policy choices for infrastructure and economic growth. Public finance plays a key role in infrastructure spending, particularly within developing countries where it often accounts for over 60% of all infrastructure finance³.

Furthermore, public resources are limited and need to be used effectively to attract private capital. There are several financial challenges that are unique to the low-carbon transition:

- Front-Loaded Finance: upfront investment in efficiency, renewable energy system is needed to displace lower ongoing fossil fuel purchases.
- Managing Risk: low-carbon investment has higher political, technology, novelty and policy risks. Investors' perceptions amplify the risk of lowcarbon investments and downplay the risk of high-carbon investments.
- Integration: regulatory reforms are needed to integrate low-carbon and climate resilience into ongoing infrastructure investment in cities and industrial clusters.

 $^{^{1}}$ Acknowledgements. The author would like to thank for comments to Nick Mabey, Chantal Naidoo, Taylor Dimsdale and Kate Levick

² See Aligning G20 Infrastructure Investment with Climate Goals & the 2030 Agenda

³ Ahmad, E (2015). Public Finance Underpinnings for Infrastructure Financing in Developing Countries. Infrastructure Finance in the Developing World Working Paper Series, Intergovernmental Group of Twenty-Four and Global Green Growth Institute, Washington DC.



Responses to promote the low-carbon economy such as carbon pricing and/or boosting private investment which only increase rewards are a costly way of dealing with risks and market failures. Private sector finance will not flow to the right investments without direct public finance intervention, together with regulatory and market reforms to reduce risks.

It is within this context that Green Banks can potentially play a key role, by serving as mission-driven institutions⁴. Mission-driven institutions can bridge the gap between finance and policy by providing a credible commitment from government. In doing so, they can fast-track the low-carbon transition, whilst also serving as a repository of expertise in low-carbon infrastructure finance. The OECD defines a Green Investment Bank as "...a public entity established specifically to facilitate private investment into domestic low-carbon resilient infrastructure through different activities and interventions. Using innovative transaction structures, risk-reduction and transaction-enabling techniques, and local and market expertise, GIBs are channelling private investment, including from institutional investors, into low-carbon projects"⁵.

Green Banks could be viewed as "investors of first resort", creating new markets in which the private sector can subsequently invest⁶. In principle policymakers across the world accept that Green Banks are a key tool for delivering the transition, therefore there is a surge of interest from emerging and developing economies in these institutions⁷. The functions of these type of institutions are well understood and documented⁸. Nevertheless, there is limited awareness of how to go about establishing a Green Bank.

One challenge is that while policymakers see the value in learning from international examples, they are unsure how it will fit within their local context. There are recurring questions such as how this institution will add value, who will run it, what its focus should be, and how it will fit within the wider landscape. Those answers are determined and defined by policy and institutional, sector, technology and market specific factors⁹; therefore, the institution's impact

⁴ Mazzucato, M. and MacFarlane, L. (2018). Patient Finance for Innovation-Driven Growth

⁵ OECD (2015). Green Investment Banks. Policy Perspectives

⁶ Mazzucato, M. and MacFarlane, L. (2018). Patient Finance for Innovation-Driven Growth

⁷ See https://rmi.org/press-release/green-bank-design-summit/

⁸ OECD (2014). LESSONS FROM ESTABLISHED AND EMERGING GREEN INVESTMENT BANK MODEL; OECD (2016). Green Investment Banks: Scaling up Private Investment in Low-carbon, Climate Resilient Infrastructure; NRDC, CGC, Climate Finance Advisors (2016). Green and Resilience Banks

⁹ Amal-lee. A, Dimsdale, T. and Jaramillo, M (2014). **Designing smart green finance incentive schemes: the role of the public sector and development banks**.



depends on how it fits inside its broader national context. There is no one-size-fits-all model for a Green Bank. By going through the process of establishing a Green Bank, policymakers will use the general idea of a mission-driven green finance body to design an institution that is tailored to the local context.

In order to establish a mission driven public finance institution (be it a Green Bank or a similar institution), it is necessary to follow an iterative process in order to map the financial landscape and understand financing needs, etc. This process is refined at the different stages of designing and establishing an institution. Each iteration of the process offers the opportunity to ensure that the institution is better matched to the local circumstances. The risk is that poor execution at any given stage increases the chance that the institution will lose sight of its mission.

The 'Green Bank Design Hub' (the Hub) has been created to take policymakers through this journey of refining their own processes to establish ambitious institutions, and to accelerate the learning process by reducing the time needed to establish such an institution. The tools and methods available from other experiences through the Hub allow policymakers to fast-track their own efforts to set up Green banks by simplifying and structuring the process.

GREEN BANK DESIGN HUB

E3G has created the Hub based on its experience of providing strategic, institutional design and operational processes support across different jurisdictions, both in developed and developing countries¹⁰. E3G has worked extensively on the greening of international development banks¹¹, the development of National Climate Finance Strategies¹², the design of smart green finance incentives schemes¹³, the creation of transformational change models¹⁴,

¹⁰ E3G Track Record; E3G Annual Review 2018

¹¹ See https://www.e3g.org/showcase/international-climate-finance

¹²Naidoo, C et al. (2014). **Strategic national approaches to climate finance;** Holmes, I. et al. (2016). **Considerations for a Climate Finance Strategy in Chile;** Amal-lee, A. et al (2014). **China's Low-carbon Finance and Investment Pathway**

¹³ Amal-lee. A, Dimsdale, T. and Jaramillo, M (2014). **Designing smart green finance incentive schemes: the role of the public sector and development banks**

¹⁴ Amal-lee. A, Dimsdale, T. and Jaramillo, M (2014). **Designing smart green finance incentive schemes: the role of the public sector and development banks**



and on supporting the advocacy, establishment and evolution of Green Banks¹⁵ as well as shaping green finance in the UK¹⁶ and the EU¹⁷.

Based on its experience, E3G has found that creating a green economy requires the use of public finance in an effective way to increase the ambition and scale of finance available for green projects, and to develop a pipeline of projects by using initiatives such as green incentives. From E3G's experience there are some key criteria and principles shaping the design of smart green solutions¹⁸, such as Green Banks:

- Integration with the policy context the effective mobilisation of private finance will be determined by how the institution fits within the wider policy landscape, and how the institution can break down the non-financial barriers to green investments. Policy contexts are unique and determined largely by the political economy of a country.¹⁹
- Transparency and predictability institutional arrangements and governance will have an impact on how the private sector views these arrangements and whether they are credible.
- Mission driven based on strong understanding of specific risks, and financial needs including the local policy and market context, whilst ensuring that risks are priced correctly to avoid crowding out the private sector or subsidising excess profits to the private sector.
- Additionality focusing on areas where the private sector is unwilling to invest. Leverage is necessary but insufficient, financial additionality needs to go beyond this to include first of a kind demonstration effects, which result in market creation.
- Innovation and learning integration by developing new financial instruments and investing in new sectors to provide 'proof of concept' and build a track record. In turn, this process can help guide the future design of new instruments and policies.

¹⁵ Holmes, I et al. (2015). **E3G** response to "EIB approach to supporting climate action); Ingrid Holmes(E3G) and Stephen Tindale (Centre for European Reform) (2013). **Briefing on the European Investment Bank's** new screening and assessment criteria for energy projects; Wright, H. et al (2017) Greening the Asian Development Bank: Aligning with Global Climate Goals; Greening Financial Flows: what progress has been made in the development banks?;(2018) Banking on Reform

¹⁶ Holmes, I and Orozco, D. (2017). Fifteen Steps to Green Finance

¹⁷ Holmes, I and Maule, S (2016). A Sustainable Finance Plan for the European Union

¹⁸ Amal-lee. A, Dimsdale, T. and Jaramillo, M (2014). **Designing smart green finance incentive schemes: the role of the public sector and development banks**

¹⁹ Tomlinson, S. et al. (2018). **The political economy of climate-related financial disclosure**; see **The political economy of the low-carbon transition: climate and energy snapshot: Bulgaria**



- Effective stakeholder engagement on-going consultation of public and private²⁰ stakeholders during the design process and the life of the institution. This could also minimise incumbents having a disproportionate influence.
- Collaboration across and between Development Finance Institutions (DFIs) in-country.

Until now, the approach to creating this type of institution has been focused on providing off-the shelf solutions which, whilst valuable, don't solve the recurring questions from policymakers – why do we need a new institution, who will run it, etc.

Therefore, there is a perception that setting up green banks is complicated and cumbersome. However, we believe this is more perception than reality. Based on E3G's experience, the barriers to establishing a bank and the solutions to overcoming them are common across jurisdictions, regardless of the institutional backdrop or a country's level of development. For example, across countries the budget decisions are not under the control of the ministries of environment but instead of the treasuries/ ministries of finance who allocate public resources according to a different set of criteria.

E3G believes that the approach to designing green banks needs to move away from model-based to process-driven solutions²¹. E3G's experience has shown that the process of building Green Banks can be simplified into five phases.

Figure 1: Five Phases of Learning Process on Designing Green Finance Institutions.



In each of the phases of setting up a Green Bank, we break the process down into the **what**, the **who** and the **why**:

> What the key decisions are and how they are reached – *Decision Making Process*.

 $^{^{20}}$ Both public policy decision-makers, and financiers - including National Development Banks; and commercial finance decision-makers.

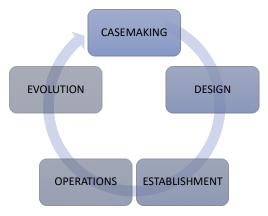
²¹ This is also based on the experience of the UK Green Finance Task Force, of which E3G was leading the Secretariat; and also being part of a similar process in the EU with the High level Expert Group on Sustainable Finance.



- > **Who** are the key actors and organisations to engage with that will inform the decision-making process and will be making these decisions *Stakeholder Engagement*.
- > **Why** are these policy decisions being made, what analysis is needed to develop the options which in turn informs the ultimate decision *Analytical Support, Standards and Frameworks*.

The green bank design process doesn't end when the institution becomes a reality. It will evolve over time, and each evolution of the green bank will require the same process, with the link between each cycle being a clear mission which defines what the institution needs to deliver and each subsequent step of the process about ensuring that the mission is hardwired into the institution. As the low-carbon transition moves forward, the mission of the institution may need to be adjusted and the cycle begins again to ensure the institution remains aligned with the new mission.

Figure 2. Five Phases of Learning Process on Designing Green Finance Institutions



Source: Naidoo, 2019²².

The Hub simplifies the structure of the process, as well as serving as a decision-making tool for policymakers. Our aim is to highlight that the steps taken to create a Green Bank are similar, the decisions taken at each step will ultimately shape the institution to match the local context. We believe policymakers and their advisors from different countries will benefit from E3G's learned experiences to fast-track the process of developing such institutions.²³

 $^{^{22}}$ Naidoo, C. (2019). Greening the Development Bank of South Africa: 1988 to 2019. An Evolutionary Approach

²³ We have developed learner profiles which are included in the learning strategy that has been submitted along with this briefing.



In order to better illustrate the commonalities of the process across regions we briefly discuss each phase below, highlighting the similarities of E3G's experience across some of the different countries in which we have worked. In separate documents we also give detailed accounts of the UK and South African cases, to highlight how two ostensibly very different cases (a new institution in an economically developed country and the evolution of an existing institution in an economically developing country) provide common lessons learned which can potentially be applied to the processes in other countries.

PHASE 1: CASE MAKING

Key outcomes for the Case Making phase:

The case making phase is about introducing the concept of Green Banks into the political dialogue and building a constituency of support for the establishment of such an institution in the country. Such a coalition will typically be broad, ranging from industry and finance through civil society to politicians and some policymakers. Typically, the case making phase ends when the idea is adopted by policymakers. As such, it about the reasoning/justification for a different policy or policy instrument. This initial phase should provide the direction of travel, the nature of the future institution/reform, and establish a proposal that it is aligned with the strategic goal(s) of the country.

The case making seeks to build a coalition of support across a range of different stakeholders for the establishment of a Green Bank. These stakeholders can vary from case to case but may include national and/or local government, industry, the finance sector, academia and civil society and the general public.

Key questions to answer:

- > What's the low-carbon strategy?
- > Can the existing financial landscape deliver this strategy?
- > If not, is institutional innovation required or can new policies bridge the financial gap?



In the UK case, the agenda was set by a combination of thought leadership from E3G and external circumstances – particularly the global financial crisis in 2008. The idea for a Green Investment Bank stemmed from broader discussions about how to promote infrastructure investment and green the stimulus²⁴. The scale of financing needed was unprecedented: approximately £40-50bn per year over 15 years relative to £6-7bn actually invested²⁵. Rising rewards weren't correcting the risks, and it was inefficient to reward investors in line with their perception of the political risk²⁶. The solution needed to address at least two challenges: provision of finance and the coherence around policy frameworks. A public campaign was built, which led to the adoption of the idea of a GIB by all three major UK political parties in their manifestos prior to a general election, and the creation of the bank by the winners of that election.

The case making in the South African case evolved over a longer period of time and was driven by a different range of factors. In recent years the Development Bank of South Africa (DBSA) has increased its focus on green issues in response to shifts in government's engagement with green economy issues, notably in the lead up to South Africa's hosting of the FIFA World Cup and the hosting of COP17 in Durban. Based on a broader awareness across government of green economy as a political priority, the Green Fund emerged as an experimental financing mechanism and was designed and hosted at the DBSA. The greening of the DBSA's processes and funding lines built on a long history of activity within the organisation, although the creation of the Green Fund was critical in building inhouse capacity and experience. The experience was complemented by the DBSA's progressive approach to engaging the Global Environment Facility and the Green Climate Fund as an accredited entity.

In Colombia, during talks with the FARC to disarm, the Colombian Government wanted to channel development funds into areas which had previously been affected by FARC²⁷ guerrilla activity whilst ensuring that development was sustainable and that the environment was protected. These efforts were also influenced by Colombia's efforts to attract international funds in order to support the peace process.

²⁴ Mabey, N (2009). Delivering a Sustainable Low-carbon Recovery

²⁵ Mabey, N and Holmes, I (2009). **Accelerating Green Infrastructure Financing: Outline proposals for UK green bonds and infrastructure bank**

²⁶ Holmes, I. (2016). The experience of the UK with creating the Green Investment Bank

²⁷ Fuerzas Armadas Revolucionarias de Colombia Ejército del Pueblo (The Revolutionary Armed Forces of Colombia—People's Army) see https://en.wikipedia.org/wiki/Revolutionary_Armed_Forces_of_Colombia



In Mexico, there was an interest to understand how and who would be financing Mexico's Nationally Determined Commitment (NDC) – the estimated financial cost of achieving Mexico's NDC was USD 136bn for priority sectors alone²⁸, and despite the presence of seven National Development Banks (NDBs) focused on specific areas of the Mexican economy, within this crowded institutional landscape there was no clear focus on the low-carbon economy²⁹. Therefore, Mexico would have benefited from a better coordinated public- private financing strategy with a Green Investment Agency at its centre³⁰. This institution could leverage capital and expertise from the numerous NDBs in the country to develop the green economy, whilst also helping to mainstream low-carbon investments throughout the economy as a whole.

In each case, the local context determined the case making. In the UK case, green bank design was a response to the financial crisis and to stimulate the economy. In South Africa, it was a way to demonstrate South Africa's commitment to the low-carbon agenda. In Colombia, the aim was to stimulate the economy in certain areas whilst safeguarding the natural environment whilst these areas were being repopulated. In Mexico, the process began in response to figuring out how Mexico's NDC would be financed within the existing landscape of NDBs.

There were several commonalities between these four design processes. In all cases the aim was to leverage resources into priority sectors for the country, whilst creating markets for private sector investment as well as leveraging other potential sources of funding. Furthermore, each proposed institution was aligned with existing public policies and the financial landscape, but all served to increase accountability and the measurement of green impact.

²⁸ See sustentabilidad.energia.gob.mx/portal/DefaultS.aspx?id=2445.

²⁹ IDB (2017). Supporting National Development Banks to Drive Investment in the Nationally Determined Contributions of Brazil, Mexico, and Chile

³⁰ Holmes, I. Orozco, D and Paniagua, A. (2018). **Unlocking investment to accelerate the low carbon transition in Mexico. Proposal to create a Green Investment Agency**



PHASE 2: DESIGN

Key outcomes for the design phase:

This phase starts once there is consensus from key decision makers that the current approach is insufficient and there is agreement that a GB provides a solution. The outcome of the design phase is to determine what the institution should - and should not - be doing. This phase takes the theoretical proposal and starts shaping it into a viable institution. Therefore, this phase has a more hands-on involvement from the government, which must carry out this process based on the best information available. Consultation with wider range of key stakeholders is key to inform the decisions.

Key questions to answer:

The key elements in this phase are: a more formalised testing of the market to establish whether the current financial system can meet demand;

- > What is the size of the funding gap?
- > What is the approximate level of capitalisation required?
- > What is the proposed relationship between this institution and other players in the financial landscape? i.e. whether a standalone institution or another shape is needed.

More broadly, regardless of whatever institution is adopted it will be key that it has enough flexibility to adjust to changing market needs.

In the UK case, the result of the case making phase was the adoption by the major political parties of commitments to establish a Green Investment Bank (although there were different views of the institution's ideal size), and its announcement in the 2010 Budget. As a result, much of the design phase was focussed on the mechanisms of the UK government, parliament and civil service, although there were important contributions from civil society and the finance sector.

There was significant opposition from the Treasury, which preferred to allow the private sector to develop its own tools. This idea was tested with financiers who felt it would take 15 years for the sector to adapt – which did not match the unprecedented scale, urgency and nature of the challenge. The Treasury's opposition meant that, whilst the UK GIB's capitalisation was set at £3 billion



based on an analysis of priority sectors and the ability of the private sector to invest, it did not have the power to borrow using its own balance sheet. Another element of the design phase was developing the six operating principles of the GIB, including a double bottom line of both green impact and financial returns.

In South Africa, the design stage followed an iterative approach. The first design challenge for the DBSA was understanding how to benchmark its environmental risk practices against international agencies and to ensure that local specificity was reflected. The second design challenge happened in 2010, as the Bank supported the South African government in evaluating a programmatic approach to green economy and the associated financing mechanisms. The policy support process culminated in the design of the Green Fund and the Bank's contribution to the National Climate Change Response Policy. As the momentum grew around access to international climate funds, the DBSA designed its engagement strategy with the Global Environment Facility (GEF) and the Green Climate Fund (GCF), which eventually led the DBSA to establish the Climate Finance Facility.

In Colombia, the initiative was driven by the office of the President in Colombia in order to attract international investment into Colombia. In order to reassure international investors that the resources would be utilised efficiently, the decision was taken to place the administration of the fund under the InterAmerican Development Bank³¹.

The outputs from the design process will establish the vision and scale of the green bank. These will be conditioned by the results of the case making, which will have already laid the groundwork for how this institution will come into being and how it will fit into the existing institutional landscape. However, in all cases the challenges remain the same; establishing what the key decision points would be, who would be there to take them and what information did they need to reach the best decision. In each case, the critical function of the design phase is to design a governance framework of the institution which will ensure that the institution itself will be fit for purpose and provide additionality.

³¹ IDB, Colombia Sostenible (2018). Reglamento Operativo Fondo Colombia Sostenible J



PHASE 3. ESTABLISHMENT

Key outputs from the Establishment phase:

The decisions made during the establishment phase are key to ensuring that the institution's operations will reflect its mandate – governance arrangements are fundamental. This is a crucial stage, as it will also ensure that the institution is fit for purpose and adds value to the economy.

Therefore, the question is how to ensure that the governance framework of the institution provides the foundations for its success – to bridge the gap between finance and policy. This is fundamental to market confidence which will be built over time as it becomes clear that the institution is not subject to political interference.

Key questions to answer:

- > What will the priorities of the institution be?
- > What will the legal structure and governance of the institution be?
- > How it will be structured financially?
- > What will be the risk management and oversight framework?

In the case of the UK GIB, it was decided during the design phase that the institution needed to be enshrined in legislation, to ensure it was viewed as independent and as representing a credible commitment by the UK government³². Ensuring the independence and ability of this institution to operate at arms-length from the Government was the key determining factor for its success. The non-executive directors within the GIB board helped to safeguard the green impact of the bank whilst also providing access to expertise within the field. Additionality was integrated as a key performance indicator to minimise market distortion³³.

By contrast, in South Africa the existing framework was already broadly in place and instead the challenges revolved around persuading key individuals within the DBSA to support the frameworks being put in place. The key discussions revolved around receiving accreditation from the GEF and Green Climate Fund for the

³² This happened as a result of continuous pressure from different stakeholder across the economy.

³³ This was a requirement from the EU Commission to ensure maximum 'additionality' and minimum market distortion following State Aid Rules. See http://europa.eu/rapid/press-release_IP-12-1110_en.htm



DBSA, which had benefited from the learning provided by running the Green Fund. This laid the groundwork for the eventual creation of the Climate Finance Facility in 2018.

In the Colombian case, since the decision had been taken to have the fund administered by the IDB but sitting in the Agency of International Cooperation of the President of Colombia, the establishment phase was relatively straightforward. The creation of a Technical Coordination Unit, employed by the IDB but responsible to the Colombian government, helped align all Colombian government ministries, whilst – similar to the UK GIB case - non-executive directors help to inform strategic direction in line with the institution's mandate.

Amongst these three cases, the eventual shape of the institution differed significantly. However, there are clear common themes:

- > In every case, the governance of the institution was set up to guarantee legitimacy and credibility at a local and international level.
- > The aim was to use the institution as a policy instrument, and by putting some 'skin in the game' demonstrate that the government was committed to greening the economy.
- > Similarly, in each case the institution was given a clear mandate to stimulate a certain part of the economy.

PHASE 4. OPERATIONS

Key output from the Operations phase:

The operations phase translates the high-level procedures and structures put in place in the establishment phase into the day-to-day running of the institution. Whilst steps taken in the establishment phase are key to ensuring the bank's potential for green impact, it is in the operations phase that this green impact can be achieved by having the right staffing and procedures that can safeguard the green impact, ensuring that the institution meets its performance criteria. However, the local context will shape what the principal mechanisms and safeguards are to ensure green impact.



Key questions to answer:

- > Is the institution actually being proactive in developing the pipeline and providing advice to developers?
- > Are the operations of the institutions in line with the green standards? are the green standards actually green?
- > How does the board manage risk?

In the UK GIB case, the institution officially opened for business in November 2012. Its mandate was to crowd private sector investment into renewables and green infrastructure³⁴. The GIB was proactively developing the project pipeline, for example it pioneered a flexible and competitive debt product helping different UK local authorities to invest in energy-efficient LED streetlights that deliver immediate revenue savings³⁵. In order to assess projects, the GIB devised a Green Impact methodology that measured the avoidance of greenhouse gas emissions, air pollutants and fossil fuel consumption over the project lifetime.³⁶ The GIB's investment managers had to meet criteria on additionality, market rate equivalents, the five green credentials, risk profile and to maintain the GIB's reputation when getting projects signed off by the Chief Risk Officer.³⁷

Whereas the safeguarding of the green impact of the UK GIB was mainly undertaken by the development of its methodology and the oversight of its Board, the South African case leveraged international standards. The GCF and GEF have aided the bank to improve its standards and safeguards, which is opening new policy development processes. This includes reframing the Bank's approach to sustainable infrastructure, recognising natural environment as ecological infrastructure.

The operations phase will refine and implement the framework set out in the establishment phase. In order to ensure that the institution's operations safeguard green impact, the operations stage will need to undertake a new iteration of the previous work of establishing standards and frameworks,

³⁴ Offshore wind; waste recycling and energy from waste; non-domestic energy efficiency and support for the Government's Green Deal and five non-priority sectors: biofuels for transport, biomass power, carbon capture and storage, marine energy and renewable heat.

³⁵ See https://readymag.com/greeninvestmentbank/100-projects/4/

³⁶ The summary of this approach has since been made public and shared through the Green Investment Handbook - GIB **Green Investment Handbook**

³⁷ Imperial College London (2015). **UK Green Investment Bank – Case Study**



analysis, stakeholder engagement and decision-making which have characterized the previous phases.

PHASE 5. EVOLUTION

Key output from the Evolution phase

The evolution phase is key to the ongoing relevance of a green bank. As the Green Bank breaks down market barriers and leverages private capital into sectors of the green economy, it will need to establish new markets and areas of investment for the private sector to subsequently enter. The private sector always has the option to not invest.

The Bank's detailed sectoral knowledge, together with continued engagement with the market and civil society, should shape its changing priorities and its entry and exit from different market sectors. This phase may also be an opportunity to take stock of the transition needs and align with the national priorities. Private sector shareholders may become more important, or other sources of capital (green bonds, retail investors) may be tapped to increase total funding levels.

As mentioned in the introduction, the evolution phase can also usher in the next phase of the cycle. If the mission needs to be redefined then the process of case making, design, establishment, operations and evolution will need to be repeated.

Key questions to answer

In the evolution phase, the key points to cover include: whether its performance – and the measurement of that performance – is still aligned with its mission, how the bank is adjusting to changes in the finance sector and the real economy, and whether changing the bank's remit or capital structure would increase its impact.

In the UK case, in 2015 a review of the GIB's performance found that the institution was successfully addressing market barriers and that there were other areas that could have benefitted from GIB intervention such as energy storage, carbon capture and storage, and wave and tidal energy³⁸. However, this finding

³⁸ NERA (2015). **UK Green Investment Bank –Examining the Case for Continued Intervention**



was overtaken by the government's decision to privatize the GIB, largely driven by its focus on reducing public sector net debt (to which the GIB contributed).

In the South African case, setting up the Green Fund gave the DBSA a sufficient track record and portfolio of green projects to gain accreditation from GEF and GCF. The collective experience gained led the DBSA to work with a team of experts in designing a specialist funding facility that would mainstream climate finance into the DBSA's operations. The greater knowledge of the green sector gained through this process led to the launch of the Climate Finance Facility as a more nuanced institutional response to the requirements of financing the Green agenda.

The evolution of a Green Bank will reflect the changing local context of the Bank, as well as progress in leveraging the private sector into financing the low-carbon economy. Continued evolution is how green banks and similar institutions will remain relevant as the low-carbon transition progresses; therefore, adaptability needs to be baked into such institutions.



CONCLUSION

As it stands, infrastructure investment decisions are largely made by public finance. Therefore, specialised, and mission driven Green Banks offer a way of reconciling the scale of infrastructure investment³⁹ with the urgency of the low-carbon transition⁴⁰. Such institutions would also enable practitioners to specialize and share best practice more easily.

The experiences from different countries are helpful, as through their own process of creating Green Banks they each have created tools and methods that can help fast-track the process in other countries. However, each country is unique and following an iterative process will ensure that the end result will be an institution that is adapted to the local context. Attempts to simply transplant a single model for a Green Bank from one jurisdiction to another are likely to fail; it is this iterative process of establishment which will allow them to succeed.

The Hub takes policymakers through a journey of refining their own processes to establish ambitious institutions, whilst reducing the time needed to establish such an institution. The Hub is also a repository of best practice to enable policymakers to fast-track the process of setting up a Green Bank, and it will act as a network for peer-to-peer exchanges to discuss the obstacles that they face, ways of overcoming them and ensuring that the financing available for infrastructure investment also ensures that such investment delivers the sustainable, low-carbon infrastructure which is required.

³⁹ Over the next the next 15 years, the stock of infrastructure is expected to more than double – see Aligning G20 Infrastructure Investment with Climate Goals & the 2030 Agenda

⁴⁰ See https://medium.com/@drhelenawright/do-we-really-have-12-years-to-save-the-planet-58a9f58b2c7f