

GREENING PUBLIC FINANCE

THE UK'S PUBLIC FINANCE ECOSYSTEM AND THE NET ZERO TRANSITION

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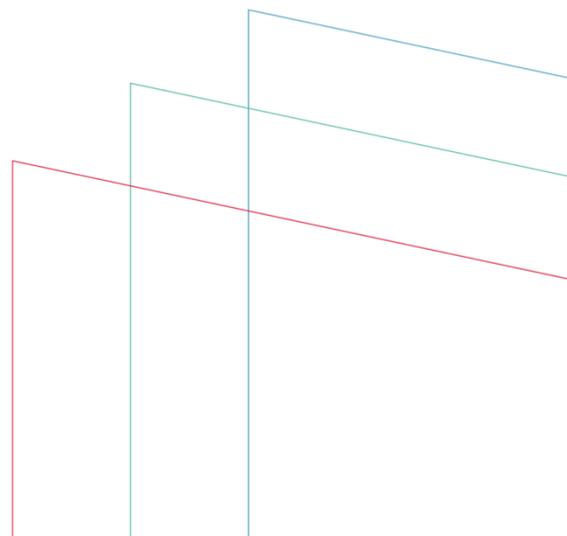
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EXECUTIVE SUMMARY

Achieving the UK's goal of reaching 'net zero' emissions by 2050 will require far-reaching changes to transform the UK economy and put it on a more sustainable path. Greening the finance system is a key part of this transition. While aligning the private financial sector with the UK's climate goals is an urgent priority, the scale and speed of the transition means that public finance must also lead by example.

In recent years the UK has established a range of new state-owned finance institutions (SOFIs) and significantly scaled up existing ones. These include the UK Infrastructure Bank (UKIB) and the British Business Bank (BBB), which operate domestically, and UK Export Finance (UKEF) and CDC Group, which operate internationally. Taken together, these institutions have significant financial firepower that could be effectively mobilised and scaled up to support the green transition. To date however, the UK's public finance architecture has not been updated in light of the UK's commitment to a net zero transition. If the UK is to achieve its net zero target and uphold its historic responsibility to deliver climate justice abroad, it is critical that its SOFIs are fully aligned with these goals. This requires a number of changes to their design and governance.

It is essential that the mandate of each institution is aligned with the UK's climate objectives. We recommend that the mission and supporting objectives of each SOFI is updated to align with a just transition to net zero and set out specific reforms for reforming each institution's mandate.

For the UKIB, we recommend that the Bank's private sector lending arm aims to decarbonise existing infrastructure and scale up low-carbon alternatives by offering new concessional financial products and technical support. The UKIB will play a critical role in substituting the loss of the European Investment Bank (EIB) and its remit should be broadened to ensure the delivery of a just transition. We recommend that the UKIB's local authority lending arm becomes a central coordinator for certain Just Transition initiatives across the country, engaging with local authorities to identify, design, and finance a pipeline of bankable projects that will accelerate a just transition to net zero.

We recommend that the BBB introduces a range of tailored concessional financial products to stimulate SME investment in the zero-carbon transition and announces that it will no longer work with private sector financial institutions that have not taken sufficient steps to align their business activities with the Paris Agreement. We also recommend that it should play a scaled-up green venture-capital role, providing high-risk, patient capital for innovators and startups that are contributing to the UK's climate goals, including taking equity stakes where appropriate.

For UKEF, we recommend that additional steps are taken to green its export financing, including providing more generous financing terms for exporters of low-carbon goods and services; proactively assisting exporting firms with preparation for and adaptation to climate-related risks; prioritising the development of global renewable energy supply chains; and assessing the protection of biodiversity and nature in its financing decisions.

For the CDC, we recommend that it end the practice of making investments through private equity funds and align its climate-related investments with national development plans and industrial strategies. We also recommend that the CDC becomes the UK's hub for a broader range of international climate assistance beyond finance, including technical support and technology transfers, to help drive a global just transition.

To succeed, it is crucial that each institution has sufficient financial firepower. Combined, these institutions on average finance over £7bn worth of projects every year. However, the proposals outlined in this report will enable the amount of finance these institutions provide to be significantly scaled up – making a considerable contribution to decarbonisation domestically and abroad. Instead of imposing arbitrary limits on how much SOFIs can borrow and lend, we recommend that the UK government commits to enabling each institution to raise the funding they need to meet their mandate, provided that their balance sheets are managed prudently within an agreed envelope of leverage and risk. We also recommend that the Bank of England finances SOFIs under certain conditions, for example if it believes the government is underusing its fiscal space.

The final area that requires reform is governance. Governance arrangements are particularly important for public financing institutions, as it is their distinct governance that enables them to play a fundamentally different role in the economy compared to that of private financial institutions. We recommend that the UK government establishes a new state holding company, UK Public Finance (UKPF), to exercise its oversight and control of the UKIB, the BBB, UKEF, and the CDC. Having a single governing entity oversee all four institutions will help to exploit synergies, promote strategic planning, establish a clear line of democratic accountability, and ensure a more cohesive public finance ecosystem. Chaired by the Chancellor of the Exchequer, UKPF Board members should include stakeholders from a wide range of backgrounds including finance, regional representatives, industry groups, and trade unions.

The UK has pledged to become a world leader in green finance. If structured and governed effectively, the UK's state-owned finance institutions can make a significant contribution to achieving this goal – both at home and abroad.

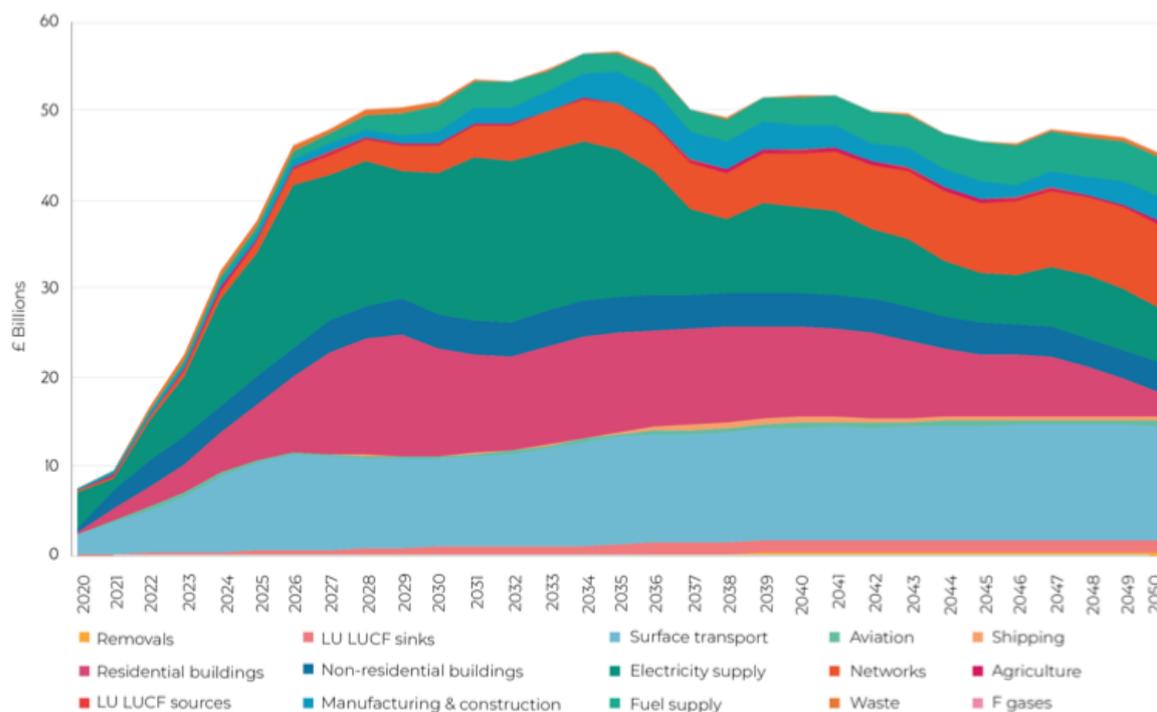
1. INTRODUCTION

The UK economy is in a crucial time of transition. While the UK government is committed to delivering net-zero emissions by 2050, the latest Progress Report by the Climate Change Committee (CCC) shows that the UK is failing to take sufficient action to meet its emission reduction targets.¹ The recovery from the Covid-19 pandemic presents an opportunity to change course and put the UK economy on a more sustainable path. As the CCC has noted, “as the UK rebuilds after the COVID-19 pandemic, there is an opportunity to make systemic changes that will fill the gaps in the UK’s climate response.”²

According to the CCC, green capital investment in the UK will need to scale up from around £10bn per year today to around £50bn per year by 2030, before peaking at over £55bn per year in 2035 and plateauing towards the 2040s.³ As well as delivering a wide range of environmental and public health benefits, this investment also has the potential to create a new wave of green, high-skilled, well-paid jobs. Unless this transition is carefully planned, however, there is a significant risk that workers and communities in some parts of the country could be left worse off. The same also applies to the impact of this investment on global supply chains: the UK’s wealth was built on fossil-fuel extraction and has contributed disproportionately to the impacts of global heating, which have mainly been felt in the Global South. It is crucial that the UK avoids recreating this dynamic through a new form of ‘green extractivism’ that delivers decarbonisation at home while inflicting social and environmental harm abroad. As a result, the UK’s green transition happens in a way that is socially just, without negatively impacting vulnerable and disadvantaged communities in the UK or overseas.

Figure 1: The UK needs to scale up investment in green infrastructure

Estimated additional capital investment by year (£bn, 2019 constant prices).



Source: Reproduced from the CCC (2020)

While fiscal, industrial, and environmental policy must all be mobilised to achieve a just transition towards net zero, greening the finance system will also be key. Article 2.1c of the 2015 Paris Agreement committed signatories to “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development”.⁴ But today UK private financial institutions are among the world’s largest financiers of fossil fuel companies. Since the Paris Agreement was signed in 2015, UK banks have invested £225bn in fossil fuels, with Barclays leading the way as the ‘dirtiest’ bank in Europe.⁵ The Bank of England also disproportionately contributes to the generation of greenhouse gas emissions through its monetary policy. As NEF and others have outlined elsewhere, greening the private financial sector is an urgent priority that can only be achieved by mobilising multiple policy tools, including:^{6,7}

- Decarbonising monetary policy and implementing greater monetary-fiscal coordination between the Bank of England and the Treasury.
- Regulating private finance to reduce environmentally destructive financial flows and steer private finance in a green direction, for example, by adjusting risk-weighted capital adequacy rules.

- Creating a new institutional ecosystem, including developing a green public taxonomy to distinguish between green and dirty economic activities in a way that minimises the risk of greenwashing.

It is widely acknowledged that the scale and speed of the transition means that public finance must also play a leading role.^{8,9} An increasing number of countries, including the UK, are mobilising state-owned finance institutions (SOFIs) to complement the greening of the private financial sector and accelerate the net zero transition. These include public investment banks,¹ development finance institutions, and export credit agencies. SOFIs have long played a key role financing and directing investment in many countries around the world; providing a crucial source of low-cost, long-term finance; and counteracting the often short-term and speculative nature of private finance.¹⁰ While the traditional roles of SOFIs have typically been financing investment in infrastructure and key strategic industries, in recent years some have taken centre stage in confronting the key social and environmental challenges of the twenty-first century, including climate change.^{11,12,13}

Unlike private financial institutions, SOFIs do not face pressure to deliver short-term returns, meaning they can provide lower-cost and longer-term financing, prioritise wider social objectives, and take a different approach to risk and reward. They also often house considerable non-financial expertise, such as specialist technical and engineering knowledge of certain sectors or technologies, which means they can play a powerful market-shaping role.¹⁴ Unlike fiscal policy, SOFIs' primary activity is the deployment of repayable financial instruments, such as debt and equity. As a result, SOFIs should not be viewed as a replacement or substitute for government spending.¹⁵ New fiscal rules, as well as greater coordination between monetary and fiscal policy, should play the leading role in funding a rapid transition to net zero, as NEF has proposed elsewhere.¹⁶

While SOFIs have long played an important role in other European economies, historic attempts to establish such institutions in the UK – such as the Industrial and Commercial Finance Corporation (ICFC) and the Industrial Reorganisation Corporation (IRC) – have failed to survive subsequent waves of privatisation. In recent years, however, the UK has established a range of new SOFIs, and significantly scaled up existing ones. Today the UK's major SOFIs are as follows:

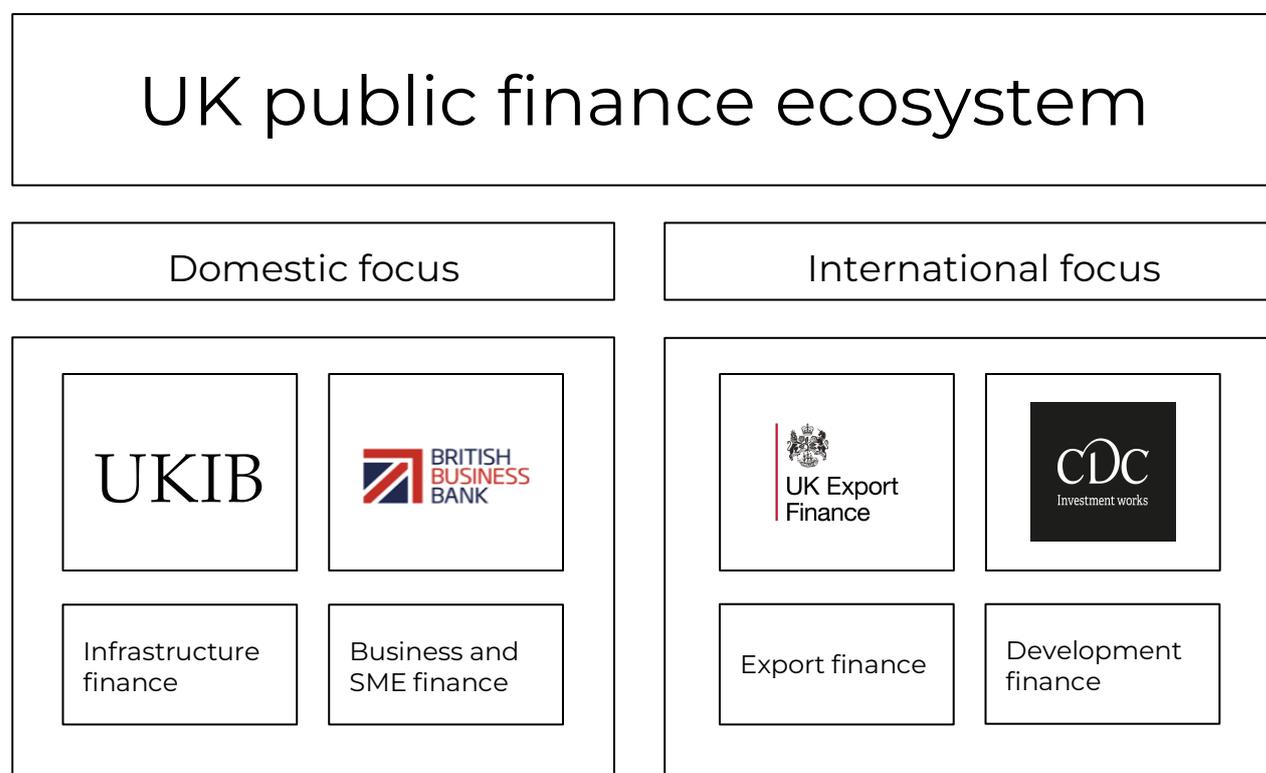
- **UK Infrastructure Bank (UKIB):** Established in 2021 to replace the loss of access to the European Investment Bank (EIB) and “help tackle climate change and

¹ The terms ‘public investment bank’, ‘national investment bank’, ‘national development bank’, ‘national promotional bank’, and ‘state investment bank’ are often used interchangeably.

promote economic growth across the regions and nations of the United Kingdom”, the Bank opened for business in an interim form on 17 June 2021.¹⁷

- **British Business Bank (BBB):** Established in 2012, its mission is to “make finance markets work more effectively for SMEs”.¹⁸ To date the Bank’s core programmes have supported nearly £8bn of finance to almost 94,800 smaller businesses.
- **UK Export Finance (UKEF):** Established in 1919 as the Export Credits Department, UKEF is the UK’s export credit agency. It helps UK exporters by “providing attractive financing terms to their buyers, supporting working capital loans and insuring against buyer default”.¹⁹ UKEF’s maximum financial commitment is £50bn.²⁰
- **CDC Group:** Established in 1948 as the Colonial Development Corporation, CDC is the UK’s development finance institution. It “helps solve the biggest global development challenges by investing patient, flexible capital to support private sector growth and innovation.”²¹ The Group has investments in over 1,200 businesses in emerging economies, mostly in Africa and Asia, with total net assets of £6.5bn and a portfolio of £4.7bn.²²

Figure 2: Overview of the UK public finance ecosystem



The Green Investment Bank (GIB) was also established in 2012 to address market failures in the renewable energy finance market and privatised in 2017. There are several

other SOFIs at sub-UK level, including the Scottish National Investment Bank, the Development Bank of Wales, and various local authority-led initiatives; however, this report focuses on the major UK SOFIs.

Taken together, these institutions have significant financial firepower that could be effectively mobilised and scaled up to support the green transition. To date however, their mandates and operations have not yet been aligned with the government's net zero objectives. As the Advisory Group on Finance for the CCC recently noted: "The UK's public finance architecture has not yet been updated in light of the net-zero transition in terms of existing and new institutions. The mandates of BBB, CDC and UKEF need to be updated in line with net-zero. The new National Infrastructure Bank could be pivotal for net-zero investment."²³

This report reviews the UK's existing public finance ecosystem and makes recommendations for aligning it with the government's net zero commitments and achieving them in a fair and just way.

2. UK INFRASTRUCTURE BANK

The UK Infrastructure Bank (UKIB) is the newest addition to the UK's public finance ecosystem. In its 2018 National Infrastructure Assessment (NIA), the National Infrastructure Commission (NIC) recommended that, if the UK loses access to the European Investment Bank (EIB) then a new, operationally independent UK "infrastructure finance institution" should be established by 2021.²⁴ In the 2020 Spending Review, the Chancellor announced the creation of a new National Infrastructure Bank, which would "support the government's ambitions on levelling up and net zero".²⁵ In March 2021, HM Treasury published a paper outlining the policy design of the new UK Infrastructure Bank, which opened for business in an interim form on 17 June 2021.^{26,27}

2.1 MANDATE

Historically, public investment banks have played a major role driving growth and development around the world. But in recent decades the roles and mandates of many public banks have been focused on addressing specific market failures (including the British Business Bank, as will be discussed later). This has followed a broader trend in economic policymaking that sees the role of the state to promote market competition, and to only intervene where ex-ante market failures can be identified to avoid crowding out the private sector.

While a narrow market-failure-focused mandate may be justified when the economy is broadly on the right path, it is less effective in the face of major societal challenges that require large-scale investment and structural transformation. In recent years, many public investment banks have started to play a more proactive role confronting major challenges, such as the global financial crisis, the climate emergency and, more recently, Covid-19. Many have adopted mission-driven mandates, meaning their activities are not focused on fixing market failures but targeted at tackling specific goals aligned with government policy.²⁸ By steering investment towards the achievement of national strategic goals, mission-driven public investment banks can create and shape new markets and industrial landscapes, and catalyse private investment by giving businesses the confidence they need to invest in new and emerging areas.^{29,30} As the climate think tank E3G notes: "Permanent, mission-driven institutions can act as market-makers, breaking down the structural barriers which are suppressing the green investment and job creation which are required to rebuild national economies."³¹

HM Treasury has recognised the merits of this approach and has proposed that the UKIB has a core mission to “to partner with the private sector and local government to increase infrastructure investment to help to tackle climate change and promote economic growth across the regions and nations of the United Kingdom.” This mission will be pursued through two strategic objectives:³²

1. Help tackle climate change, particularly meeting our net zero emissions target by 2050.
2. Support regional and local economic growth through better connectivity, opportunities for new jobs, and higher levels of productivity.

These goals must be clearly defined with underpinning definitions and metrics to ensure that progress can be effectively monitored and evaluated. As the UK works towards achieving its net zero goal, it is crucial that the transition happens in a way that is socially just – without negatively impacting vulnerable and disadvantaged communities. While the job creation potential of the net zero transition is well established, if this transition is not managed carefully communities in other parts of the country, and indeed across global supply chains, could be left worse off.³³ To ensure this does not happen, the UKIB’s mandate should therefore be supported by a third objective relating to supporting a just transition.

The International Trade Union Confederation (ITUC) defines a just transition as “decent work, social inclusion, and poverty eradication while reducing emissions in line with global commitments on tackling climate breakdown”.³⁴ Other literature, such as the 2019 Trades Union Congress (TUC) pamphlet *A just transition to a greener, fairer economy*, centres the importance of giving workers directly affected by industrial change a sense of voice and control.³⁵ Ultimately, a just transition would mean the communities most impacted by climate change and the net zero transition have the necessary support and social infrastructure in place. This could mean training and reskilling facilities or better mobility and broadband options to enable new opportunities. We recommend that specific objectives should be developed in collaboration with trade unions and should complement the Bank’s other objectives on net zero and levelling up. Crucially, the commitment to a just transition should extend internationally, meaning that projects financed by the Bank must not create social or environmental harm in other countries, for example, by relying on global supply chains with a large carbon footprint or exploitative working conditions.

The UKIB’s mandate should be enshrined in legislation and supported by articles of association setting out the parameters of the Bank’s operations. This should include a list of clear exclusion criteria that defines the types of projects that the UKIB cannot

finance under any circumstances, as is common with other successful public investment banks.³⁶ In light of the International Energy Agency's recommendation that investment in new coal, oil, and gas production must immediately come to an end to meet the Paris Agreement targets, these criteria should prohibit any investment in fossil fuel projects.³⁷

It is also important that the UKIB is designed to be a permanent feature of the UK's economic landscape. This is particularly the case given the experience of the Green Investment Bank (GIB), which was privatised by the UK government just five years after it was launched. While the UKIB's mandate may need to be reviewed periodically as the UK's infrastructure needs evolve over time, it is crucial that the Bank's articles of association include a commitment to long-term public ownership.

A key challenge will be to recruit leading talent across the UKIB. As well as financial expertise, many successful public investment banks also have significant in-house engineering and scientific expertise. This enables investment decisions to be based on a wider set of criteria than relying on market signals alone and means that social and environmental considerations can be appraised more thoroughly.^{38,39} This combination of financial and technical expertise also enhances their ability to mobilise private investment. Establishing a hub of infrastructure-financing expertise within the public sector also means that staff can be drawn on to provide expert advice on public policy design and implementation, as well as financing.

2.2 INVESTMENT ACTIVITIES

Once operational, HM treasury has stated that the Bank will have two main operational arms, one focused on lending to private sector customers and another focused on lending to local authorities.

As noted earlier, the CCC estimates that green capital investment in the UK will need to increase from around £10bn per year today to around £50bn per year by 2030, before peaking at over £55bn per year in 2035 and plateauing towards the 2040s.⁴⁰ Much of this is expected to be in infrastructure sectors within the mandate of the Bank.⁴¹

In selecting which projects to invest in, a distinction can be made between the *financing* of an infrastructure project, which is the provision of money to meet the up-front cost of building the infrastructure, and the *funding* of a project, which is how this upfront cost is ultimately paid for. Today, all UK infrastructure is ultimately either funded by the state through taxes or borrowing (eg social infrastructure and flood protection); by users of the infrastructure through charges and fees (eg utilities and energy); or a combination of both (eg digital infrastructure and transport). Long-term and low-cost financing from

state-owned finance institutions (SOFIs) provides a powerful mechanism to steer the investments of businesses, households, and local authorities in a green direction while minimising the impact on prices and customer bills.

For the UKIB to meet its mandate, it must identify investments that are:

- **Bankable:** Although the UKIB will not be a profit-maximising bank, it must manage its balance sheet prudently and ensure it does not make sustained losses. The projects it invests in must be ‘bankable’ – ie they must be expected to generate future revenue streams that can be used to repay the finance.² This means the UKIB is unlikely to operate in the very early stages of the innovation chain, where grants are likely to remain the most important funding mechanism. The UK government recently launched the Advanced Research and Invention Agency (ARIA), which will focus on early stage projects that have the potential to “produce transformative technological change”.⁴² However, the UKIB could work with ARIA and other partners in the UK’s innovation ecosystem to scale up technologies that can accelerate the net zero transition once they are proven to be viable.
- **Additional:** The UKIB should avoid investments that are already being financed effectively by the private sector or other public sector actors. Instead, the Bank should seek to catalyse socially useful projects that would not otherwise have happened on the same timescale.³ This might be because the upfront costs are too high, the risk and uncertainty is too great, the project time horizon is too long-term, or because the project is not yet viable while delivering a commercial rate of return. Because the UKIB will have a lower cost of capital and a greater risk appetite than most private financial institutions, these benefits can be passed on to borrowers to make projects viable that otherwise wouldn’t be. Projects best suited to UKIB financing are likely to be those with uncertain risk profiles or long time horizons, those where technologies have moved through the R&D and demonstration phases and are ready for large-scale deployment, and those where

² In some cases, for example, where there are significant externalities, it may be deemed politically desirable for the UKIB to finance projects that are not bankable (ie future revenue streams will not be sufficient to repay the finance). Where these cases arise, financing programmes should be subsidised by grant funding from central government. Such ‘blended finance’ approaches are widely used by some public investment banks, including the European Investment Bank.

³ This definition of additionality is consistent with that used by Vivid Economics in its study examining the role and impact of the EIB and GIB on UK infrastructure investment. <https://nic.org.uk/app/uploads/Vivid-Economics-Final-report-Analysis-of-EIB-and-GIB-projects-050718.pdf>

synergies can be exploited by aligning tailored financing instruments with new regulations and other areas of government policy.

HM treasury has stated that the primary focus of the private sector arm will be on the economic infrastructure sectors covered in the National Infrastructure Strategy: clean energy, transport, digital, water and waste.⁴³ Much of the infrastructure in these sectors is owned and operated by the private sector and paid for by users, with prices and outcomes overseen by independent regulators. The UKIB could play an important role decarbonising existing infrastructure and rolling out new low-carbon infrastructure under existing arrangements. The Bank should also seek to play a market-shaping role by stimulating demand for investment in particular areas, for example, by offering new concessional financial products and technical support. Some examples of priority investments include the following:

- **Building retrofits:** While the UK has made progress in decarbonising electricity emissions, reductions from buildings and heat have plateaued since 2012. This is mainly due to an old and inefficient building stock and the continued use of fossil fuel heating from gas and oil boilers, which policy thus far has failed to address. There is therefore an opportunity for the UKIB to become the central actor driving a rapid adoption of retrofit measures across UK buildings (Case study 1).
- **Clean energy infrastructure:** Although the renewable energy sector is now largely market driven, other potential areas for financing include energy storage technologies and smart grid infrastructure, and upgrading the UK's distribution and transmission networks. The UKIB could also help large industrial and manufacturing companies decarbonise their operations by providing finance to invest in energy efficiency technologies and other low-carbon production processes.
- **Public transport and micro-mobility options:** Transport currently accounts for nearly one-third of UK emissions, therefore priority areas for financing include an electric vehicle charging infrastructure, the development and scaling up of a battery supply chain, public transport upgrades, and micro-mobility options such as bikes and scooters.
- **Broadband:** As the CCC has suggested, investment in broadband should form a major element of a green recovery. While improved broadband infrastructure does not reduce carbon emissions directly, by enabling more people to work from home more often and long-term, it supports a positive shift towards more environmentally friendly behaviours, such as more remote working leading to reduced travel emissions.

Case study 1: Home retrofitting vs offshore wind

Buildings are responsible for 17% of the UK's greenhouse gas emissions, but to date the UK has failed to invest in household retrofit and energy efficiency on a large enough scale. This is in contrast to the successful story of offshore wind deployment in the UK, which represents a potentially replicable blueprint for scaling up housing retrofits. As the Advisory Group on Finance for the UK's CCC has noted, the critical enabling factors that led to the development of an investable new market in offshore wind included identification of an untapped high potential technology, specific policy instruments to target bespoke legal or regulatory barriers, reduction of high investment hurdle rates through the creation of the Contracts for Difference (CfD) incentive regime, clear indication of future market demand through competitive bidding rounds for access and construction permissions, and – crucially – the provision of key financial support through the GIB. In contrast, to date the building sector has not benefited from the support of a public financial institution to drive market innovation, which the Advisory Group on Finance for the UK's CCC has identified as a “critical bottleneck”.⁴⁴

Separate analysis by NEF has proposed the establishment of a National Retrofit Taskforce to deliver whole-house retrofits for over 12m homes by 2030. We need to see new investment of at least £11.7bn over the next three years as part of the government's spending review in 2021. This could create anywhere between 190,000 and 500,000 full-time-equivalent annualised jobs across every region of the UK. The cheapest way of financing this is to provide government grants to low-income homes, and state-backed 25-year 0% interest loans for ‘able to pay’ households. The model is similar to that pursued in Germany, where the KfW has played a vital role decarbonising the buildings sector.⁴⁵ The UKIB is well placed to play a similarly important role in the UK, providing concessional loans for retrofits to households via financial intermediaries (retail banks and building societies), and technical assistance and low-cost finance to local authorities to roll out social housing retrofits and heat decarbonisation projects. The UKIB could also collaborate closely with the BBB, which could provide tailored financial support to local SMEs to develop local retrofit supply chains. Taken together, the UKIB and the BBB could play a powerful role driving the home retrofitting agenda in the UK.

According to HM Treasury the public sector arm of the UKIB will “provide local authorities across the UK with access to efficient finance for high value and complex

economic infrastructure projects.”⁴⁶ It will also offer advice and support to local actors to help deliver on their objectives and act as a convenor, bringing together local actors for collaborative projects and aggregating projects together where appropriate.⁴⁷

The UKIB should engage with local authorities to identify, design, and finance a pipeline of bankable projects that will materially contribute to a just transition to net zero. This could include financing Energiesprong/net zero retrofits for social housing; adding new smart grid infrastructure to support community clean energy projects; decarbonising existing public transport networks; and rolling out new forms of low-carbon public transport, such as cycle lanes and municipally owned electric buses. The UKIB has the potential to act as the central coordinator for Just Transition initiatives across the country, playing a similar role as the EIB does in the EU.

A key pillar of the European Commission’s European Green Deal is the Just Transition Mechanism, which aims to mobilise €65–€75bn of investments for helping territories and regions most affected by the transition to a climate-neutral economy, prioritising those that have less capacity to deal with the costs of the transition. The EIB is playing a key role delivering the Just Transition Mechanism, including by offering a €10bn public sector loan facility to support territories and regions most affected by the transition to a climate-neutral economy, which is expected to unlock investment of at least €25bn.^{48,49} Investment areas eligible for the loan facility include energy and transport infrastructure, district heating networks, public transport, energy efficiency measures, and social infrastructure. The public sector loan facility is accompanied by a Just Transition Fund, which will provide €17.5bn of grants for eligible projects, and an InvestEU Advisory Hub that will act as a central entry point for advisory support requests.⁵⁰

A final issue relates to how the UKIB will interact with its customers and the wider financial sector. Given the bank will mainly be financing large infrastructure projects, the UKIB should lend directly to the end customer rather than via a financial intermediary, unless there is a compelling reason for doing so. The UKIB should avoid making investments that simply socialise risks while privatising the rewards, for example, by de-risking investments for private investors through the provision of guarantees. Lending directly avoids unnecessary rent extraction and therefore keeps financing costs low, and also minimises the risk of moral hazard (ie the risk that a financial intermediary takes dangerous risks because it knows it will not bear the full costs of that risk).^{51,52} Where there is a case for co-investing with private investors, this should be structured at the project level and should involve an appropriate sharing of risks and rewards, for example by taking equity stakes in projects where it is exposed to considerable risk. In this sense, the UKIB’s lending model should more closely resemble that of the GIB before it was

privatised rather than that of the BBB, which as will be discussed further lends indirectly via financial intermediaries.

2.3 CAPITALISATION AND FUNDING

HM Treasury has stated that the Bank will have £22bn of financial capacity, consisting of the following:^{53,54}

- A £5bn equity injection from HM Treasury that can be drawn down flexibly.
- The ability to borrow up to £7bn from a government credit facility administered by the Debt Management Office (DMO) and private markets, with an annual borrowing limit of £1.5bn a year.
- Authority to issue up to £10bn of guarantees, with an annual limit of £2.5bn.

While this should be sufficient during the UKIB's start-up period, it is likely that the Bank's financial firepower will need to be dramatically scaled up if it is to meet its mandate. The Office for Budget Responsibility (OBR) has reported the government expects the UKIB to support £1.5bn of investment a year. In contrast, the EIB was investing more than €6bn per year in its final active years in the UK. Going forward, green capital investment needs to be dramatically scaled up if the UK is to meet its net zero commitments.^{55,56} This includes many projects that can be financed straight away: previous NEF research has identified £28bn of priority green infrastructure projects that could be invested in over an 18-month period alone, creating more than 400,000 full-time-equivalent jobs.⁵⁷

As a result, the UKIB's financial firepower will need to be significantly increased if it is to make a material contribution to the UK's net zero transition. In practice, however, introducing arbitrary limits on how much the UKIB can borrow and lend could significantly hamper the Bank's ability to accelerate the UK's net zero transition. Instead, HM Treasury should commit to enabling the Bank to raise the funding it needs to meet its mandate, provided that the Bank's balance sheet is managed prudently within an agreed envelope of leverage and risk. This would be similar to the prudential framework that currently governs local authority borrowing and is also the approach taken by other successful public investment banks such as KfW.

A final area to consider is the opportunity for coordination between the Bank of England and the UKIB. Central bank financing of public investment banks was common across a wider range of countries in the post-war period, and continues to occur in east Asian economies, such as China.^{58,59} During the Covid-19 crisis, the Bank of England has undertaken an additional £450bn quantitative easing (QE); however, concerns about

QE's effectiveness and adverse consequences have continued to mount. A public investment bank like the UKIB can be viewed as an alternative – more strategic – instrument for channelling monetary stimulus into the real economy, acting as an allocative counterpart to the central bank.⁶⁰

NEF and others have previously proposed that the Bank of England could be given the power to delegate additional investment in green infrastructure to a public investment bank if it believed aggregate demand was below its desired level and there was additional spare capacity in the economy.^{61,62} In the case of the UKIB, this would involve the Bank of England making additional purchases of UKIB bonds from third party private investors. To be most effective, the UKIB would have to coordinate with monetary policymakers and increase its lending beyond what it otherwise would have been without support from the Bank. The additional demand for UKIB bonds would help keep its borrowing costs low; and any profits made by the Bank of England for holding UKIB bonds would re-circulated to the Treasury. Governed effectively, this coordination of fiscal, monetary, and industrial policy could be a powerful way to accelerate the transition to a zero-carbon economy while simultaneously providing more strategic support of aggregate demand.

3. BRITISH BUSINESS BANK

The British Business Bank (BBB) was established by the coalition government in 2014 to “make finance markets in the UK work more effectively for SMEs, allowing them to prosper, grow and build UK economic activity”.⁶³ The Bank describes itself as Britain’s national development bank, and provides funding for SMEs indirectly through 180 private sector delivery partners, including high street banks, private investment funds, and peer-to-peer lending platforms.

To date, the BBB’s core programmes have supported nearly £8bn of finance to almost 94,800 smaller businesses.⁶⁴ Since March 2020, the BBB has also played a key role in the government’s response to Covid-19, administering four new Coronavirus business loan schemes, which have delivered almost £73bn of finance to around 1.6m businesses.⁶⁵

3.1 MANDATE

The BBB was launched in 2014 with the aim of “building a single institution that will address long-standing, structural gaps in the supply of finance” and bringing all government finance support for SMEs together into one place.⁶⁶

Today the BBB’s mission is to “help drive economic growth by making finance markets work better for smaller businesses – wherever they are in the UK and wherever they are on their business journey – enabling them to prosper and grow”.⁶⁷ This is supported by six key objectives, including “to increase the supply of finance available to smaller businesses where markets do not work well” and “to help create a more diverse finance market for smaller businesses, with a greater choice of options and providers”.⁶⁸

The Bank’s focus on addressing market failures in the supply of finance for SMEs means that it has historically taken a ‘sector neutral’ approach to its lending. The Shareholder Relationship Framework Document between the BBB and HM Treasury states that the Bank must “seek to overcome market imperfections and improve market effectiveness” while also minimising “distortion and any displacement effects where markets function well”.⁶⁹ This means the BBB has primarily focused on reducing barriers on access to finance in general rather than steering investment in a particular direction, which in practice means the Bank is reinforcing the climate crisis and carbon lock-in rather than helping to mitigate it.

If the UK is to achieve its net zero target, then it is critical that the BBB is mobilised strategically to accelerate the decarbonisation of the UK’s business landscape and steer

business investment in a green direction. This requires a number of changes to the BBB's mandate:

1. An explicit reference to supporting a just transition to net zero should be added to the BBB's core mission. For example, "The British Business Bank's mission is to help drive economic growth **and a just transition to a net zero economy** by making finance markets work better for smaller businesses – wherever they are in the UK and wherever they are on their business journey – enabling them to prosper and grow."
2. An additional objective should be added to the Bank's mandate focused on scaling up businesses that are providing green solutions and helping all businesses decarbonise their operations. For example, "**To scale up the supply of finance to businesses for the purposes of investing in green technologies, products or solutions.**"
3. A clear set of exclusion criteria should be introduced to define the types of environmentally harmful projects that the BBB could not finance under any circumstances, as with the UKIB.

3.2 INVESTMENT ACTIVITIES

The BBB typically does not finance businesses directly, but instead provides funds and guarantees to 180 privately owned delivery partners who then on-lend to end customers. When designing the Bank, the government opposed giving it the ability to lend directly to SMEs because of costs the Bank would need to incur in establishing its own delivery infrastructure and the risks of displacing private sector activity.⁷⁰

The BBB has 12 core finance programmes that help SMEs access a range of financial products including debt, equity investment, and financial guarantees. Significantly, the BBB does not offer any products that are tailored towards stimulating investment in green technologies and processes. This is despite the government taking high-profile steps to encourage businesses to cut their emissions. In May 2021, the Prime Minister and Business and Energy Secretary launched the *Together for our Planet* campaign, a new initiative to encourage small businesses to commit to cutting their emissions in half by 2030 and to net zero by 2050.⁷¹ Although businesses can access a range of tools and advice via the UK Business Climate Hub to help them achieve this goal, there is no tailored financing support to help them invest in decarbonisation.

In contrast, in Germany, the public investment bank KfW offers a number of tailored financial products that target particular types of desirable green investment. One example is KfW's *Climate action campaign for SMEs* initiative, which provides a

combination of low-interest loans and grants to companies who agree to invest in climate-friendly products, technologies, and processes.⁷² The loans are provided in combination with government grants from the Federal Ministry for Economic Affairs and Energy (BMWi), which makes the scheme particularly attractive for businesses.

By creating attractive financing options that encourage businesses to invest, KfW stimulates demand for finance as well as increasing its supply. The BBB should therefore consider introducing a similar range of concessional financial products to stimulate SME investment in the zero-carbon transition.

The BBB should also consider attaching green conditions to all financing to promote structural change in the economy and accelerate the net zero transition. For example, financing can be made conditional on a business reducing its carbon footprint within a certain timeframe. As the Committee on Climate Change (CCC) has recognised, attaching conditions to debt and equity investments in this way can be a “powerful lever on a Net Zero trajectory”.⁷³

There is also an opportunity to use BBB funding as a tool for promoting wider structural change in the financial sector. For example, the BBB could review the climate commitments of its 180 private sector delivery partners and announce that it will no longer work with financial institutions that fail to take sufficient steps to align their business activities with the Paris Agreement.

As noted, since March 2020 the BBB has also administered four Coronavirus business loan schemes: the Coronavirus Business Interruption Loan Scheme (CBILS), the Coronavirus Large Business Interruption Loan Scheme (CLBILS), the Bounce Back Loan Scheme (BBLs), and the Future Fund. While the first three of these schemes are mediated via high street banks, the Future Fund invests in companies directly. This represents the first time the BBB has interacted with customers directly rather than indirectly via private sector intermediaries.

Launched in April 2020, the Future Fund provided convertible loans of between £125,000 and £5m to innovative companies that faced difficulties accessing finance during the pandemic. Since then the Fund has made more than £1bn of convertible loans to over 1,000 startups. Under the terms of the scheme, the loans convert into equity during subsequent fundraising rounds or exit events. This means that the BBB is guaranteed a flow of interest income in the short term while retaining the potential upside of equity should the business be successful.

While the fate of the specific investments made by the Future Fund is still to be determined, the novel investment model – investing directly in firms with mechanisms

to capture the upside – could be scaled up within the BBB and used to invest in green innovation and accelerate the net zero transition.

In recent years many public investment banks have taken on similar venture capital roles, learning lessons from the crucial role state investment has played driving previous technological revolutions.⁷⁴ This involves providing long-term, patient finance to innovative firms that are helping to tackle particular societal challenges. At present, the UK critically lacks this type of patient finance; innovators often face little choice but to work with exit-driven private venture capital firms whose short-termism often stifles innovation rather than promote it. Although the BBB has long provided a range of equity products, this has involved investing via third-party private investment funds rather than taking direct equity stakes, and as such they have not been directed towards tackling national strategic goals.

Going forward, the BBB could therefore play a scaled-up green venture capital role, providing high-risk, patient capital for innovators and startups that are contributing to the UK's climate goals. By helping to steer the path of innovation in a green direction, the BBB could make a material contribution to the UK's net zero transition. By using innovative mechanisms to capture the upside of successful investments, the BBB could also make a positive contribution to the UK's public finances.

3.3 CAPITALISATION AND FUNDING

Although the BBB is referred to as a bank, in reality it is more akin to a government fund. Unlike most public investment banks, the BBB is not able to leverage its own balance sheet or raise its own finance. This means that its operations are limited by the fixed budget it receives from the government every year. In 2018/2019, the BBB received an operations budget of £63.1m and an investment budget of £361m.⁷⁵

While the Bank has grown since 2014, these restrictions mean that it remains remarkably small relative to the size of the UK economy and compared with other successful public investment banks. As with the UKIB, these arbitrary restrictions could also significantly hamper the Bank's ability to contribute to the UK's net zero transition. The BBB should therefore be given the power to leverage its balance sheet, and HM Treasury should commit to enabling the Bank to raise the funding it needs to meet its mandate, provided that the Bank's balance sheet is managed prudently within an agreed envelope of leverage and risk.

As with the UKIB, there is also scope for coordination between the Bank of England and the BBB. One option would be to recycle the funds the Bank of England lent to

businesses during the Covid-19 pandemic via the Corporate Covid Financing Facility and the Term Funding Scheme by transferring them to the BBB as loans mature, as NEF has proposed elsewhere.⁷⁶

4. UK EXPORT FINANCE

UK Export Finance (UKEF) was established in 1919 as the Export Credits Department and is the UK's official export credit agency (ECA). ECAs offer trade finance and other services to facilitate their companies' international exports. UKEF helps UK exporters by “providing attractive financing terms to their buyers, supporting working capital loans and insuring against buyer default”.⁷⁷

4.1 MANDATE

UKEF's mission is to “ensure that no viable UK export fails for lack of finance or insurance, while operating at no net cost to the taxpayer”.⁷⁸ This mission is supported by four delivery objectives including a goal to “provide export finance, insurance and guidance to help UK companies of all sizes sell overseas, supporting delivery of the government's Export Strategy”.⁷⁹

Since the Paris Agreement was signed, the impact of ECA policies on climate change has come under greater scrutiny. Studies have shown that ECA financing plays a crucial role in shaping levels of carbon emissions globally, through export subsidies, lending, insurance, and guarantees for fossil-fuel-based exports and infrastructure projects.⁸⁰ Between 2016 to 2018, ECAs provided \$31.6bn annually to support fossil fuel projects – \$7.1bn for coal and \$24.5bn for oil and gas. This is compared to only \$2.7bn annually for renewable energy.⁸¹

Although UKEF's 2020–2024 Business Plan stated that it will “support the global transition to a low-carbon economy” and the UK government has stated it will no longer provide financial support for the fossil fuel energy sector overseas (which will be discussed later), to date UKEF's mandate and operations have not yet been fully aligned with the government's net zero objectives.⁸²

If the UK is to achieve its net zero target and uphold its historic responsibility to deliver climate justice abroad, then it is critical that UKEF's mandate is fully aligned with these goals. This requires a number of changes to UKEF's mandate:

- An explicit reference to the net zero transition should be added to UKEF's core mission. For example, “ensure that no viable UK export fails for lack of finance or insurance, while operating at no net cost to the taxpayer **and in line with the UK's commitment to a just transition to net zero at home and abroad.**”
- An additional delivery objective should be added to support UKEF's mandate on the net zero transition. For example, “**promote the export of low carbon**

technologies around the world and help UK exporters reduce their carbon footprint.”

- A clear set of exclusion criteria should be introduced to define the types of environmentally harmful projects that UKEF should not finance under any circumstances, as with the UKIB and the BBB.

4.2 INVESTMENT ACTIVITIES

UKEF’s finance and insurance products are provided in collaboration with delivery partners in the private sector. A recent report by the Environmental Audit Committee found that between 2013 and 2018, UKEF provided £2.6bn for energy projects in high-income countries; around 96% of this went to fossil fuel exports and only 4% was provided to finance renewable energy exports and projects.⁸³

Following a consultation on aligning the UK’s international support for the clean energy transition, in March 2021 the government announced that the UK will no longer provide new direct financial or promotional support for the fossil fuel energy sector overseas – defined as the extraction, production, transportation, refining, and marketing of crude oil, natural gas, or thermal coal, as well as any fossil-fuel-fired power plants.^{84,85} The announcement applied to any new Official Development Assistance, investment, financial, and trade promotion activity overseas – including support provided by UKEF. In addition, UKEF recently announced that it will make its first climate-related disclosure in its 2020/2021 Annual Report. This will detail the steps UKEF has taken to align itself with the Task Force on Climate-related Financial Disclosures key pillars and outline how it will enhance subsequent disclosures to improve its support for UK exports.⁸⁶

Despite this recent progress, there is more that can be done to ensure that UKEF's financing activities abroad match the UK's pledges on climate at home. This could include taking additional steps to green UKEF financing, including the following:

- Providing more generous financing terms for exporters of low-carbon goods and services.
- Proactively assisting exporting firms with preparation for and adaptation to climate-related risks,
- Prioritising the development of global renewable energy supply chains.
- Assessing the protection of biodiversity and nature in its financing decisions.

Recent polling by Bright Blue shows there is strong support for these measures among UK exporters.⁸⁷

5. CDC GROUP

CDC Group was established in 1948 as the Colonial Development Corporation, a statutory body to promote the economic development and resources of Britain's colonies. It was renamed the Commonwealth Development Corporation in 1963 and was given authority to invest outside the Commonwealth in 1969. Today, CDC is the UK's development finance institution, which has investments in over 1,200 businesses in emerging economies, mostly in Africa and Asia. CDC aims to "increase capital flows to underdeveloped markets so countries can finance their own way out of poverty".⁸⁸

Unlike the British Business Bank (BBB) and UK Export Finance (UKEF), UK Government Investments (UKGI) does not manage the shareholding of CDC on behalf of the Foreign, Commonwealth and Development Office (FCDO), and does not have a representative on the CDC's Board, although it does provide it with expert advice.

5.1 MANDATE

The history of the CDC has been mired in controversy. In recent decades, it has repeatedly been accused of prioritising financial returns over the development impact of its investments. It has been criticised for investing in private schools and hospitals, for its excessive executive remuneration and expenses, and for its use of companies established in tax havens to make investments.^{89,90}

In 2010, the Secretary of State for International Development sought to address these criticisms by reconfiguring CDC to "radically increase its development impact".⁹¹ The reforms included a new business plan and performance framework to turn the CDC into a "development-maximising, not a profit-maximising, enterprise".⁹² Today, the CDC says it aims to "help solve the biggest global development challenges by investing patient, flexible capital to support private sector growth and innovation."⁹³ Its two objectives are as follows:⁹⁴

- Support business growth and economic stability that will enable countries to leave poverty behind.
- Make a financial return, which is reinvested "to improve the lives of millions of people in Africa and South Asia".

Despite reforms made over the past decade, critics maintain that the CDC's activities continue to be problematic, and often "do more harm than good".⁹⁵ Problems highlighted include a continued reliance on investing through unaccountable private

equity funds, a lack of evidence that the CDC's activities are helping to tackle poverty, and continued use of tax havens.

In July 2020, CDC launched a new climate strategy made up of three building blocks, which attempts to align our activities and investments with the goals of the Paris Agreement:⁹⁶

- **Net zero by 2050:** investing for a net zero world, because investment decisions today affect emissions tomorrow.
- **Just transition:** supporting a just transition to a net zero economy by keeping the creation of decent jobs and skills development at the forefront of the change.
- **Adaptation and resilience:** strengthening adaptation and resilience of sectors, communities, businesses, and people to the effects of climate change.

To date, however, these principles have not been incorporated into CDC's mandate. If the UK is to achieve its net zero target and uphold its historic responsibility to deliver climate justice abroad, it is critical that CDC's mandate is fully aligned with these goals.

Global Justice Now has recommended that a new mandate for CDC should focus on "reducing poverty, closing global inequalities, doing no harm to the climate and facilitating a just, green transition" with supporting objectives to:⁹⁷

- Strengthen universal public services and ensure equal access for all, especially the poorest and most marginalised.
- Support food sovereignty and put small-scale food producers and consumers at the centre of the global food system.
- Support developing countries to manage a just transition to environmentally sustainable modes of development, through transfers of resources, finance, and technology from historic emitters in the global north to the Global South.
- Invest in genuinely public-public and public-commons partnerships (a proven form of solidarity that helps to build capacity and share knowledge on both sides).
- Provide direct and sectoral budget support to developing countries to assist with appropriate national industrial strategies.

5.2 INVESTMENT ACTIVITIES

CDC mainly invests in private companies in the Global South through private equity funds, although it also makes direct investments in private sector projects. The company currently has total net assets of £6.5bn and a portfolio of £4.7bn.

Under its new climate change strategy, CDC has committed to decarbonise its portfolio to achieve net zero emissions by 2050 and has stated that 30% of total investments to be spent on climate finance in 2021.⁹⁸ Unlike the UK's other SOFIs, the CDC has already specified a list of sectors that the Group won't invest in due to incompatibility with climate commitments.⁹⁹

Despite this progress, the CDC must go further if it is to fully align its activities with the UK's climate commitments and restore its credibility. This could include:

- Becoming a fully-fledged green development bank with the ability to raise its own funds and lend to the public sector as well as the private sector overseas, as well as state-owned enterprises, mutuals and cooperatives.
- Ending the practice of making investments through private equity funds, which has been the source of much of the CDC's controversies, and instead investing directly via transparent and accountable debt and equity programmes.
- Aligning investments with national development plans and industrial strategies, transforming CDC into a body which helps countries achieve their own development goals rather than one which imposes the UK's economic interests.
- Acting as the UK's hub for a broader range of climate assistance beyond finance, including technical support and technology transfers, to play a leading role driving a global just transition.

6. CROSS-CUTTING ISSUES

6.1 GOVERNANCE

Governance arrangements are particularly important for state-owned finance institutions (SOFIs), as it is their distinct governance that enables them to play a fundamentally different role in the economy compared to that of private financial institutions. Achieving the right balance between democratic accountability, alignment with public policy goals, and independent decision making is a key challenge.

Previous NEF research that reviewed the governance arrangements in public financial institutions overseas drew the following broad lessons:¹⁰⁰

1. A clear division between a Board of Governors (or Supervisory Board) and a management or executive board is almost universal practice. The former can and should contain political representation as part of the chain of democratic accountability. The latter should contain finance experts and external non-executives from a range of backgrounds. Where this division has not been maintained problems have arisen.
2. There is a strong case for the Board of Governors to contain representatives of the opposition as well as the governing party. Giving the opposition the chance to test and question the organisation's strategy from the inside helps keep the management focused on its mission, prevents collusion between government representatives and management to depart from the mandate and makes the SOFI less of a political football.
3. Many of the most successful SOFIs include a diverse range of stakeholders from across civil society – such as trade bodies, trade unions, and regional representatives – as well as representatives from the financial sector. This form of stakeholder governance ensures that a wide range of relevant perspectives are represented, and helps to avoid the emergence of 'groupthink' and capture that can occur when the Board is dominated by one particular interest group (from either the public, private, or third sector).

Whereas in some countries the activities of different SOFIs (eg business lending, infrastructure finance, export finance, development finance) are carried out by different standalone institutions, elsewhere they are undertaken by different arms of a single entity (eg Germany's KfW). Although there are now four UK SOFIs playing different roles, there is a strong argument in favour of establishing a common supervisory

governance structure in order to exploit synergies, establish a clear line of democratic accountability, and ensure a more cohesive public finance ecosystem.

As noted earlier, UK Government Investments (UKGI) already manages the shareholding of the British Business Bank (BBB) and UK Export Finance (UKEF) on behalf of the UK government and has a representative on each of their Boards.

However, given that UKGI's shareholder responsibilities extend to a diverse range of non-financial state enterprises including the Post Office and Channel 4, it is not ideally placed to provide strategic oversight to the UK's SOFIs. Instead, we recommended the following:

- The UK government should exercise its control of the UKIB, the BBB, UKEF, and CDC through a new state holding company, UK Public Finance (UKPF). In collaboration with HM Treasury and the relevant ministerial department, UKPF should be responsible for setting the overall policy framework and mandate for each SOFI, appointing and overseeing the Board, appointing the Chief Executive Officer (CEO), and approving annual reports and accounts.
- UKPF should also coordinate strategic planning between the BBB, the UKIB, UKEF, and CDC with a view to promoting long-term structural transformation and wider public policy objectives. In practice, this would involve identifying and exploiting common synergies; sharing intelligence about common challenges and opportunities; and coordinating multi-year Strategic Plans in line with strategic national strategic goals, such as decarbonisation.¹⁰¹
- The UKPF Board should be chaired by the Chancellor of the Exchequer, but members should include stakeholders from a wide range of backgrounds including finance, regional representatives, industry groups, and trade unions. Importantly, the UKPF Board should include politicians from opposition parties as well as the governing party.
- Each SOFI's executive board should be responsible for running day-to-day operations and making all financing decisions. Members of executive boards should include senior SOFI management and non-executive directors from a range of backgrounds. There should be at least one staff representative on each executive board with trade union backing.

6.2 NATIONAL ACCOUNTING

Under normal circumstances, a body classified as a public financial corporation will have an impact on public sector finance statistics and the UK government's fiscal targets. This is because in the UK the measure of public debt used by the government in its fiscal

targets is ‘public sector net debt’, which is defined as public sector financial liabilities less liquid assets. For the purposes of the definition, the public sector comprises central government, local government, and public corporations. Any new liabilities issued by SOFIs would therefore contribute to public sector net debt (PSND) and public sector net borrowing (PSNB).

While the UK government targets total debt across the whole public sector (ie PSND), this is not standard practice internationally. Most other countries, including across the EU, monitor and target ‘general government gross debt’, which includes both central and local government but excludes public corporations– including SOFIs. So while across Europe major SOFIs such as the German KfW and the Italian Cassa di Risparmio di Roma can borrow and lend prudently without clouding the debate about the public finances, their UK equivalents currently cannot.

Following the bailout of the banking system in 2008, the UK government changed its main measure of public debt to ensure that the liabilities of the publicly owned banks such as Lloyds Banking Group and the Royal Bank of Scotland did not affect the PSND. This change was not required under international accounting principles, and demonstrates that there is flexibility in the way the performance of management of public finances is assessed.

The case for excluding SOFIs from fiscal metrics is strong: there is a significant difference between general government borrowing because spending exceeds tax revenue, and a SOFI issuing liabilities that are matched by financial assets. It is therefore recommended that HM Treasury excludes SOFIs from its measure of debt and deficit, as it currently does with publicly owned retail banks like RBS.

7. CONCLUSION

The Chancellor Rishi Sunak has pledged to make the UK a world leader in green finance. Recent steps, including the decision to green the Bank of England's mandate, have made significant strides towards realising such an ambitious goal.

However, the UK must go much further to align finance with the UK's climate targets. While much of these changes will be to the private finance sector, the UK's state-owned financial institutions have a responsibility to lead by example. To date, however, their mandates and operations have not yet been aligned with the government's net zero objectives.

This report has outlined a set of proposals to align the UK's public finance ecosystem with the government's climate goals, including a new governance framework to oversee all four institutions and exploit synergies, establish a clear line of democratic accountability, and ensure a more cohesive public finance ecosystem.

If structured and governed effectively, as outlined in this report, and empowered with an appropriate level of financial firepower, the UK's state-owned finance institutions can make a significant contribution to the transition to net zero – both at home and abroad.

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