NEW ECONOMICS FOUNDATION

FIRING UP THE FUND

EMPOWERING THE NATIONAL WEALTH FUND TO MEET THE UK'S NEEDS

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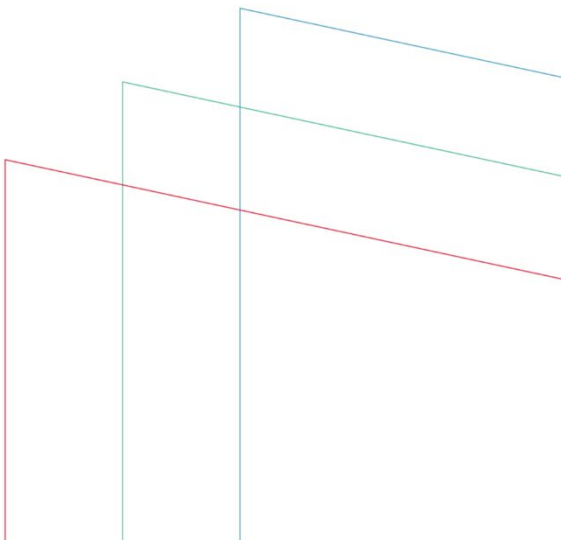

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EXECUTIVE SUMMARY

The upcoming publication of the National Wealth Fund's (NWF) framework document offers the opportunity to shift the policy bank into a new era of high impact.

To deliver on the government's industrial strategy, growth and net-zero objectives require a massive ramp up of investment that will not be delivered by private finance alone. The NWF is central to meeting this investment gap, yet the NWF's forebear, the UK Infrastucture Bank (UKIB), has struggled to get money out of the door, not once investing its full yearly budget.

This working paper explores how the NWF can be empowered to do more. Drawing on illustrative case studies and international comparisons, we propose three fundamental principles that must be embedded throughout the NWF's new framework to ensure that it delivers to its full catalytic potential.

RECOMMENDATION 1: A MORE PROACTIVE APPROACH TO INVESTMENT

Despite having a powerful mission in the form of its dual mandate (to help tackle climate change and to support regional and local economic growth) UKIB was held back by an excessively narrow and passive approach to investment. The NWF should take a more proactive approach to seeking out and originating investments in order to meet the goals of its mandate.

It should be less tied to proving stringent additionality criteria on a deal-by-deal basis, and instead take a bigger-picture, more strategic view of how its investments contribute to national economic objectives. The NWF framework document must include a clear definition and guidance that support this broader and more proactive interpretation of additionality. The NWF should aim not only to ensure sufficient quantities of investment in key sectors to meet investment gaps, but also target a reduction in financing costs where these would otherwise lead to undesirably high output prices, for example in renewable electricity generation. The government's commitment to broadening the NWF's mandate beyond infrastructure[1] should help

it to proactively venture into other sectors, as it is already doing though its social housing retrofit financing.[2]

RECOMMENDATION 2: FAIR RISK-REWARD BALANCE AND STRATEGIC CONDITIONALITIES

The NWF should maximise public value for money from its investments by ensuring: fair public/private profit-sharing and risk-taking in the sectors and technologies of the future; and that strategic conditionalities are placed on companies and co-financiers to enhance the public value of projects, where possible.

Given the NWF will be investing large sums of public money into private projects, it is important to leverage the impact of these investments by ensuring that the public finances see their fair share of the reward, via the NWF more regularly taking equity stakes or using convertible instruments. Getting full value from the investments also means ensuring that funded projects align coherently with the government's other economic goals. This might involve applying minimum environmental standards for recipient companies, and requirements for the creation of high-quality jobs and the use of local supply chains.

RECOMMENDATION 3: FLEXIBILITY FOR INCREASED FUTURE FINANCING CAPACITY

The ambition for a future scale-up of financing capacity must be embedded in the framework and governance of the NWF. This is critical if the NWF is to have a truly transformative impact on driving forward growth, net zero, and industrial strategy. It can also guard against the risk that new investment requirements to address new political priorities/challenges are traded off against existing ones which require long-term commitment.

Currently, the NWF's total planned investment capacity of £27.8bn over nine years is trifling compared to the volumes invested by policy banks in comparable countries. The french Banque Publique d'Investissement (Bpifrance) and german Kreditanstalt für Wiederaufbau (KfW) each invest roughly 1% of their country's gross domestic product (GDP) annually.[3] If the UK did the same, that would imply the NWF investing £21bn per year by 2028-29,[4] almost four times its current investment limit.

Of course, as a young institution, it is unrealistic for the NWF to reach this kind of scale so quickly. Initially, it must demonstrate that it can fully invest its current budget and show success in driving forward the government's economic goals. But the ambition for future scale-up, whether financed by the NWF's own bond issuance (our recommendation) or via general government borrowing, must be reflected in the NWF's founding documents. This would take advantage of the fact that the NWF can be ramped up without impacting the fiscal debt rule: the switch to measuring debt as "public sector net financial liabilities" renders the majority of NWF investments fiscally neutral, regardless of how much is borrowed to finance them.[5,6]

Collectively these recommendations outline a vision of an NWF that is able to invest its full endowment, able to leverage maximum public value from each investment, and able to grow in scale to achieve a genuinely transformative impact. A proactive NWF of this kind could play a central role in driving forward the UK's economic goals, when aligned with an industrial strategy that holistically assesses the requisite policy and financial support for each target sector.

INTRODUCTION

The UK infrastructure Bank (UKIB) was originally set up in 2021 to invest in, and encourage private finance into, infrastructure projects that promote regional and local economic growth and tackle climate change. This was in part a response to the UK leaving the European Union (EU) and losing access to the European Infrastructure Bank.

In October 2024, UKIB officially became the national wealth fund (NWF) – a "turbocharged" version of its predecessor.[7] The government set out a high-level vision for how the NWF will build on UKIB's leadership and expertise and, importantly, go further[8]: more catalytic, more impact, more capital, renewed focus, a proactive approach, greater regional focus.

The government committed to specifying clear principles that will reflect this increased ambition in an updated framework document to be released in 2025[9]. This document will include an updated set of strategic objectives and further detail on the determinants of the NWF's investment decisions, including operating principles, investment principles and governance structures.

The updated strategic priorities themselves will set the overall scope of the NWF's investments. UKIB's two strategic priorities – to help tackle climate change and to support regional and local economic growth – remain urgent and are aligned with the government's missions. These objectives should be retained alongside a new additional remit for the NWF to deliver the government's industrial strategy.

The focus of this paper is on how these strategic priorities can be operationalised by the NWF to achieve maximum impact. Drawing on illustrative case studies and international comparisons, we propose three fundamental principles that must be embedded throughout the NWF's new framework to ensure that it delivers to its full catalytic potential.

1. A MORE PROACTIVE APPROACH TO INVESTMENT

UKIB invested far less in its first few years than it was entitled to, despite significant investment needs in the UK. Now, with a few years of experience, and reformed as the NWF, it must break this pattern and show leadership in delivering on the government's missions. That means proactively engaging with prospective projects. It means adopting a more strategic interpretation of "additionality" (the idea that NWF should only invest in a project if it can be proved that project benefits would not have been realised without it)[10] to open scope for impactful investment. It means investing not only to meet specific gaps in market provision, but also to bring down costs for consumers and businesses.

1.1 UKIB STRUGGLED TO GET MONEY OUT THE DOOR

In its first three years of operation, UKIB never invested more than 30%[a] of its annual investment budget. This in part reflects UKIB's newness as an institution and a lack of forthcoming green infrastructure projects over the period. Nonetheless, a more proactive investment approach would have empowered UKIB to drive forwards more investments, and this lesson should be applied in the design of the NWF.

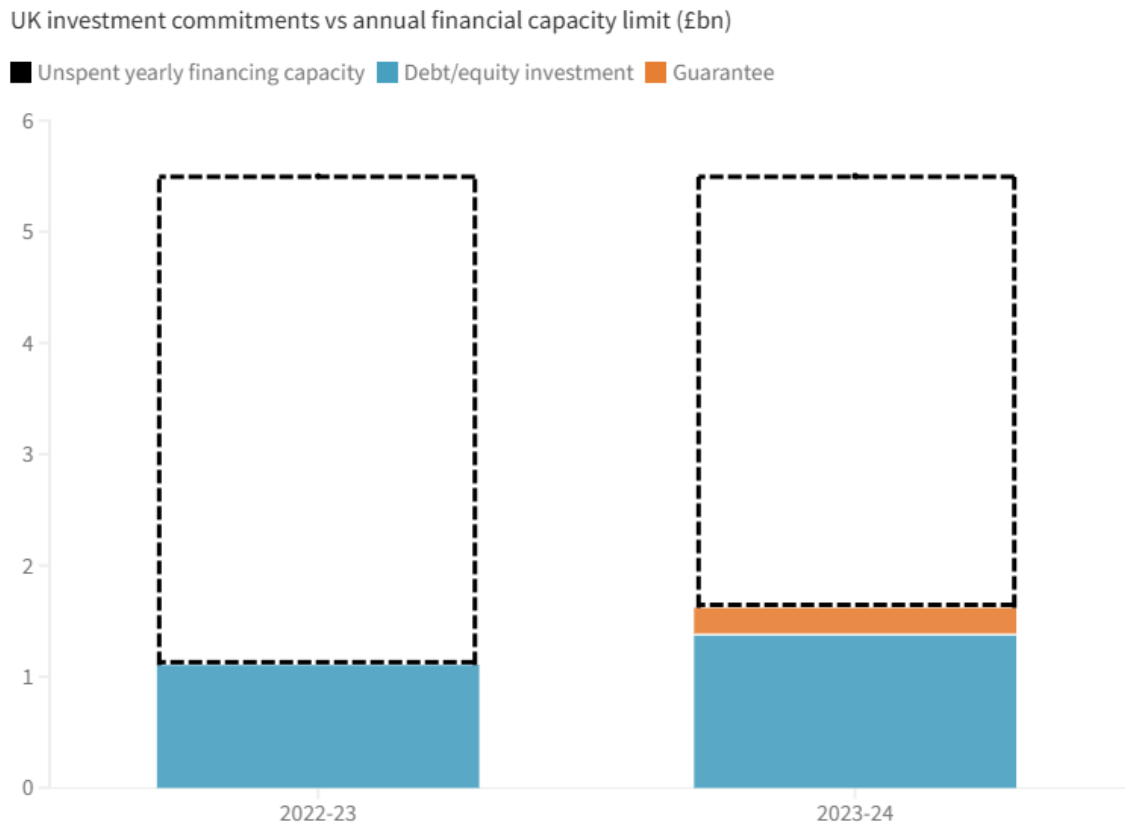
In October 2024, when UKIB became the NWF, its access to £22bn over its first five years was increased to £27.8bn. The NWF's framework limits how much of that can be drawn down from the Treasury each year in the form of equity, debt and guarantees. Annual financial capacities cannot exceed £3bn total for investment commitments in the form of debt and equity, and £2.5bn for guarantees.[b]

Figure 1 shows how UKIB deals have stacked up against the annual financing capacities so far.[c] In 2022-23,[11] eight deals were signed, committing £1.1bn –

[a] £1.7bn was committed against an annual financing capacity of £5.5bn in 2023-24 – UKIB/NWF's highest annual commitment in its first three years in operation.
[b] Note, these annual limits were set when the overall limit was still £22bn.
[c] 2021-22 is not included as UKIB was just being set up.

significantly below the £5.5bn annual financial capacity limit.[d] The £1.1bn committed in 2022-23 leveraged an impressive £8bn private capital and directly supported or created 3,200 jobs. But a further £4.4bn – which could have leveraged in even more private finance – sat idle.

Figure 1: UKIB struggled to get money out of the door



Source: NWF annual reports for financial years 2022-23 and 2023-2024

Similarly, in the financial year 2023-24,[12] UKIB signed 18 new deals, committing £1.7bn. This was an increase from the previous year but again, £3.8bn of the limit remained uninvested. The unspent £3.8bn could have leveraged an additional £12.9bn of private finance and supported or created a further 38,000 jobs in total, if you apply the same ratios that UKIB achieved in its other investments up to March 31 2024.[13]

[d] It is worth noting that the cashflow in each year towards the investment recipients was actually lower than the amount "committed", as recipients often draw down on their allotment over multiple years. In this sense, the above graph is actually a generous representation, as it overstates the literal cash invested by UKIB each year.

Table 1 details the projects financed in 2023-24. We note that these investments are already broadly in line with the government's industrial strategy and supporting domestic supply chains, with the potential for consumer-cost reduction. The issue, to which we recommend some solutions below, is UKIB's aggregate underspend compared to its investment limits, and the untapped potential this represents.

Table 1: NWF deals signed in FY 2023-24

Sector	Deal name	Type of investment	NWF investment commitment (£m)	Private finance mobilised (£m)
Clean energy	Envisio AESC	Debt	200	50
	Greater London Authority	Debt	190	0
	Equitix	Equity	125	625
	Gresham House	Equity	75	425
	Pulse Clean Energy	Debt	63	113
	Pragmatic	Equity	60	102
	Pacific Green	Debt	60	60
	GeoPura	Debt	30	26
	Cornish Lithium	Equity	24	30
Transport	Transport for London	Debt	300	0
	Haventus	Debt	50	95
	Port of Tyne	Debt	50	50
	Gridserve	Debt	45	255
	ZeroAvia	Equity	33	50
	Rock Road	Debt	12	11
Natural capital	Greensphere Capital	Equity	50	100
	Highlands Rewilding	Debt	12	0
Digital	Gigaclear	Guarantee	240	325

Source: NWF 2023-24 annual report

We are yet to see results for the current financial year – but we do know that the new government has so far committed an additional £5.8bn to the NWF over the course of this parliament. This has been allocated to five categories: port upgrades and supply chains, gigafactories, the steel industry, carbon capture, and green

hydrogen.[14] This is in addition to UKIB's original priority sectors as set by the government: clean energy, transport, digital, water and waste.[15]

The volumes of underspend set out above partly reflect that UKIB was a relatively new institution that was just getting its feet under the table and building its institutional capacity and credibility. It also reflects some factors outside UKIB's control: the the uncertain policy environment it was born into and local council capacity constraints, as further discussed below. But limitations in UKIB's own investment approach also held it back from getting money out the door and into productive investments. Looking forward, now is the time for the NWF to step up to realise its full potential in helping fill the gaps that persist in the UK's investment landscape.

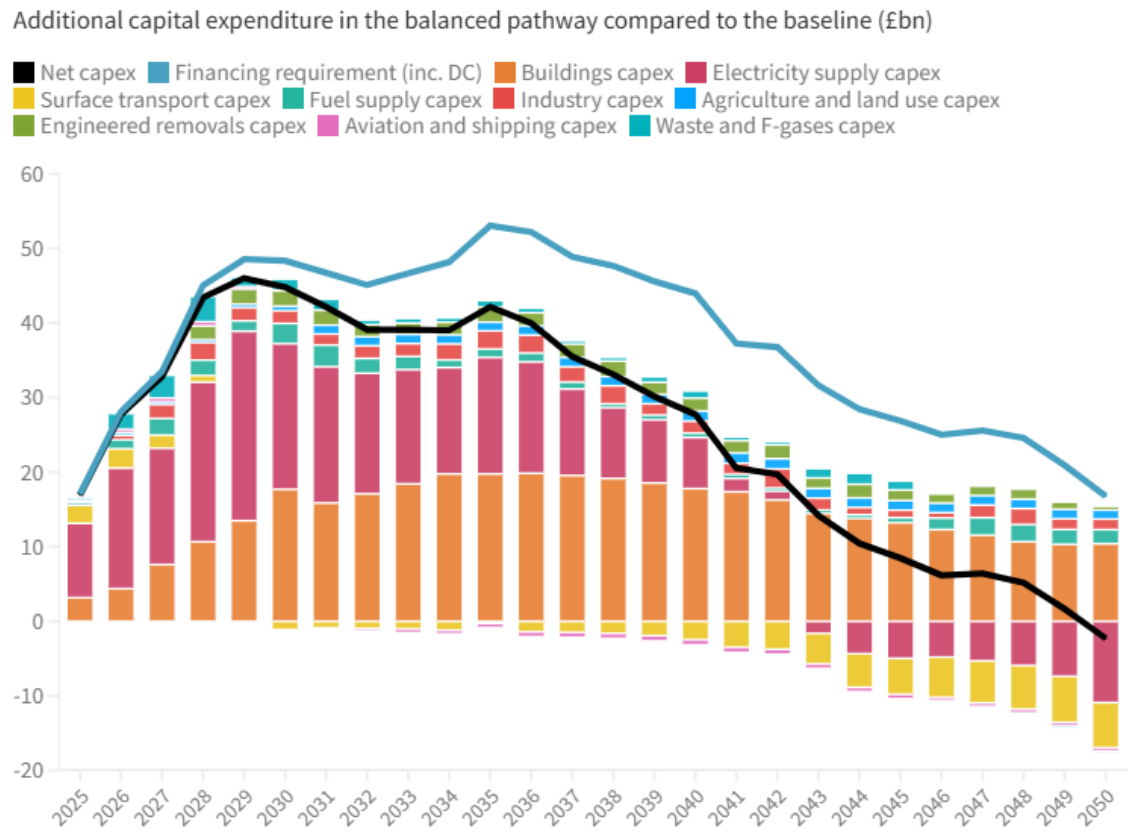
1.2 INVESTMENT UNDERSPEND DOES NOT REFLECT LACK OF NEED

The UKIB underspend is set against the context of huge investment gaps currently faced by the UK in its pursuit of industrial strategy and a green transition.[16,17] The Climate Change Committee (CCC) estimates that in order to meet the UK's legally binding carbon budgets, the UK requires an additional capital investment in net-zero technologies of between almost £30bn a year in 2026 to over £50bn a year at its peak in 2035 (see figure 2).[18] Further investment gaps will also be made clear by the UK's industrial strategy to be announced in June 2025. The government should provide further detail on investment gaps through a net-zero investment plan with quantified and tracked investment gaps, as recommended by E3G and the World Wildlife Federation (WWF).[19]

Large investment gaps also persist in the local and regional public investment that UKIB was designed to support via its local authority lending arm. NEF's Solid Foundations report quantified the major public investment ramp-up needed outside of London in order to meet net zero targets and provide the essential services for a decent standard of living.[20] To take transport as an example, the report identifies an annual investment need of £15.6bn in the areas of England outside of London, more than double the 2022-3 capital expenditure for transport in these areas. The three regions with greatest unmet need – the South West, North-East and the East

Midlands – need to more than triple their previous annual investment in transport. To achieve its mandate of driving local and regional economic growth, the NWF's local authority lending arm will need to increase in scale in to help local authorities to finance catalytic green infrastructure projects.

Figure 2: Significant capital investment is required to achieve the UK's carbon budget targets

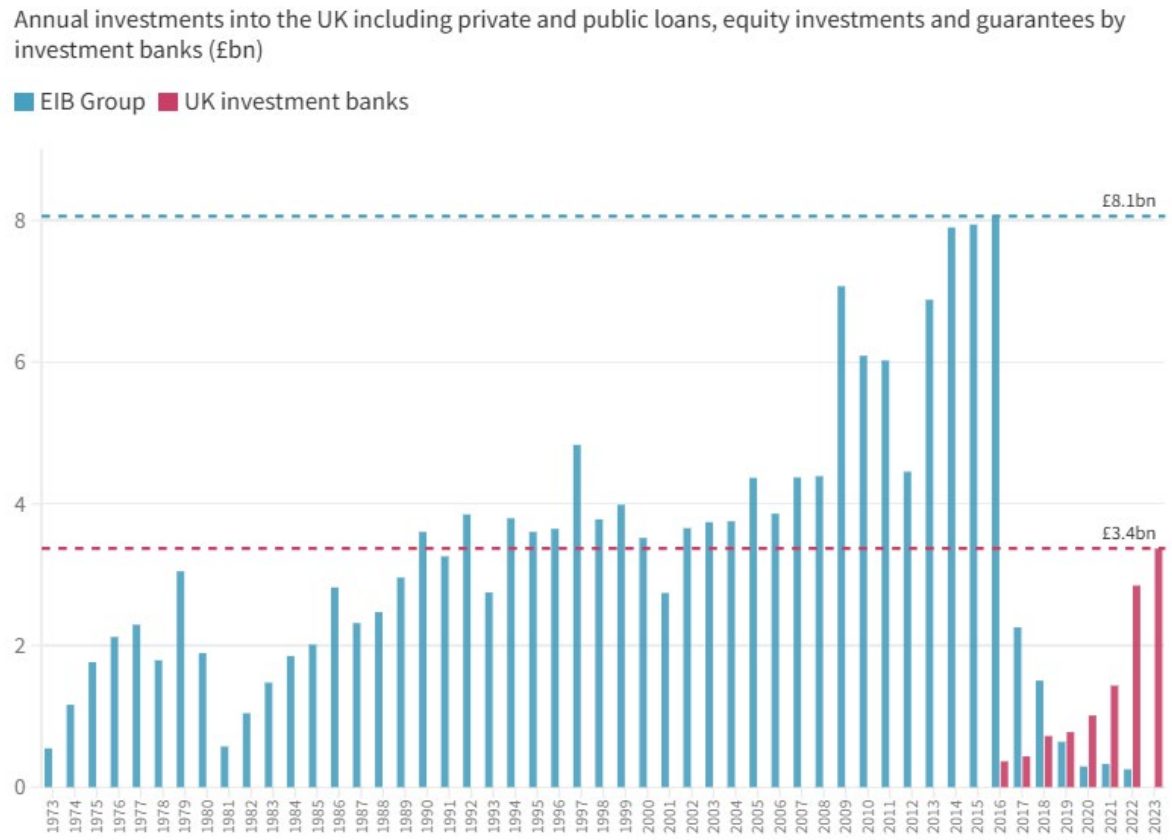


Source: Climate Change Committee Seventh Carbon Budget Report (2025)[21].

Notes: (1) 2023 prices. (2) Additional capital expenditure is relative to a baseline of no further decarbonisation action. (3) To avoid double counting (DC), the CCC's sector bars and net capex line include the cost of decarbonising the current energy system, while the cost of expanding the energy system is captured in their operating cost calculations. The financing requirement line includes this additional investment.

Part of the founding motivation of UKIB was to fill the institutional financing gap left behind due to the withdrawal of the European Investment Bank (EIB) post-Brexit. Yet, as highlighted by UK in a Changing Europe, the UK's public investment banks in aggregate are not financing anywhere near the scale of projects that were financed by the EIB pre-Brexit (which part-funded projects like the Channel Tunnel, the Elizabeth line and Scottish Offshore wind).[22,23] The Scottish National Investment Bank, similarly to UKIB, has also been struggling to meet its funding targets.[24]

Figure 3: Investments into the UK from the European Investment Bank pre-Brexit were much larger than current investment by UK investment banks



Source: UK in a Changing Europe (2024)[25] – data originally sourced from annual reports of each respective bank. Amounts overlaid not stacked. Figures in real terms using GDP deflator, 2023 base year.

Notes: EIB Group includes EIB and EIF investments. UK investment banks includes UKIB, BBB, SNIB and Banc.

1.3 A PROACTIVE APPROACH TO MAXIMISE IMPACT

A combination of lack of forthcoming infrastructure projects, local government capacity constraints,[e] and limitations in UKIB's investment approach held it back from getting money out the door and into productive investments.

Some of this is outside of NWF's control. But by shifting away from a "lender of last resport" approach to a more proactive investment approach, the NWF can both help

[e] UKIB reported that it was struggling to engage overworked council officers, meaning much of its dedicated £4bn lending facility, offering better rates than the Public Works Loan Board (PWLB), remains unused.

attract infrastructure investment to the UK, and play a larger role in financing a greater range of project types and technologies. This will empower the NWF to make full usage of its investment capacity and ensure that, where investment gaps persist, money flows where it is needed. Table 2 shows how this is crucial for it to achieve greater impact when it comes to driving forward industrial strategy, regional economic growth, and net-zero targets.

Infrastructure investment projects into the UK were not widely forthcoming in 2024[26] because of high input costs[27] (including electricity[28]), high capital costs, and policy uncertainty.[29] 2025 might see some of these pressures ease,[30] especially policy uncertainty. This is because various UK government strategies are due to be published this year, providing more certainty to businesses. These include the updated carbon budget delivery plan in spring 2025, the 10-year national infrastructure strategy, the industrial strategy and the comprehensive spending review in June.

The NWF is only one of many governmental initiatives that must be employed to encourage more infrastructure investment projects in the UK, but its impact could be amplified if empowered and encouraged to take a more proactive approach to engaging with potential projects. This means directly approaching projects that are on the threshold of financial viability to see if collaboration could tip the balance to make that project feasible. It also means providing a more proactive coordinating role, using its unique position between the private and public sectors to help identify synergies that can tip projects into viability or bring down costs.

Moreover, the NWF should take a broader and more strategic view of additionality, being more proactive in investing to close investment gaps and lower project costs rather than taking a "lender of last resort" approach. This will unlock the NWF's ability to coinvest in a greater range of projects that could directly reduce capital costs for key sectors and indirectly bring down input costs for prospective projects in neighbouring sectors. Reducing capital and input costs for synergistic technologies and sectors in this way will attract more projects into the UK and help resolve the shortage of feasible investment projects that was a barrier to UKIB. This can be demonstrated by looking at a potentially larger role for the NWF in infrastructure

projects like offshore wind generation and green hydrogen production, as set out in case studies 1 and 2.

Beyond attracting more infrastructure investment to the UK, a more strategic view on additionality would enable the NWF to venture into financing more proven, lower-risk technologies where scale-up is needed, that can also generate a healthy return. The NWF can bring additionality to these sectors by lowering costs of capital and driving an increase in the overall volume of investment. This broader interpretation could allow the NWF scope to invest in vital sectors like housing retrofit for able-to-pay households and heat pump manufacture, as demonstrated in case studies 3 and 4. Providing financing to more proven technologies could also help the NWF to balance risk and returns across its portfolio, potentially enabling greater risk-taking or concessionary rates elsewhere.

Another aspect of a broader interpretation of additionality would be the recognition that contributing to the speed of a project's deployment can also be thought of as an "additional" impact. If the NWF chooses not to invest in a given project that it has been considering, that project will then have to go and seek other financing options elsewhere, potentially being delayed or even suspended. This implies that a "yes" investment decision by the NWF would actually have the effect of bringing forward that project's deployment, compared to the counterfactual of the "no" decision. Such an interpretation requires expanding the notion of addressing market *failure* to a notion of addressing market *weakness*[31] or *slowness.* Similarly, if NWF financing anchors projects in geographical areas where investment is most needed, bolstering regional growth and equality, that is preferable to those projects being financed privately in already-thriving areas. Overall, a broader interpretation of additionality will allow for a forward-leaning, market-shaping NWF that can have more impact than a hesitant, reactive NWF.

Table 2: case studies - how a more proactive investment approach can unlock NWF investment

Industry	UKIB/NWF investments to date	Impacts of current approach	Impacts of a more proactive approach
Green hydrogen	- £30m equity investment in one project[32]	- The NWF is unlikely to proactively approach shortlisted projects in hydrogen allocation rounds (HAR). Instead, projects may be expected to approach the NWF if finance is needed. - Private financing may be available without the NWF, but at high rates, locking in high prices. NWF involvement could have brought costs down.	- The NWF is more proactive in approaching projects at HAR shortlist stage, potentially tipping more projects into viability. - The NWF recognises that investing in green hydrogen projects brings additionality if it contributes to lower costs of capital and improves the likelihood of delivering on green hydrogen targets. - The NWF behaves as a financing leader, rather than a lender of last resort, providing guarantees/financing to projects at lower than market rate to lower costs. - The NWF plays a coordinating role, matching green hydrogen projects to marginally unsuccessful contract for difference (CfD) renewable developers. - Elsewhere in its portfolio, the NWF finances renewables developers with the effect of bringing down electricity prices – making green hydrogen projects more financially attractive (see offshore wind example below).
Offshore Wind	- Only in ports (£50m Ardersier Port[33]; £50m Port of Tyne[34]) and cable manufacture (£20m initially, up to £87.5m)[35], not wind farm development.	- Offshore wind is a mature, low-risk technology and therefore should generally have access to private capital. NWF investment might not be deemed additional under current interpretation. - Private financing may be available without the NWF, but at high rates, locking in high prices. NWF involvement could have brought	- The NWF recognises that investing in offshore wind brings additionality if it contributes to lower costs of capital and improves the likelihood of delivering offshore wind targets. - The NWF guarantees private loans to wind projects, resulting in lower financing costs, lower prices on CfDs and purchase power agreements, and ultimately cheaper electricity bills for households and industrial customers.

		costs down, helping to ensure capacity targets are met.	- The NWF provides direct loans or equity to offshore wind developers, not only lowering electricity costs but also gaining a share in the profits generated. - The NWF proactively facilitates bilateral CfD negotiations between the government and partnered renewables projects, contributing to lower aggregate costs (requires shift to bilateral negotiations)).
Heat pump manufacturing	- None	- The NWF is unlikely to invest because, in theory, private financing should be available: large boiler manufacturers can access the financing required to switch production lines without intervention.	- The NWF recognises that, if financing strengthens the resilience of domestic supply chains for a green technology, investment is additional. - The NWF plays a leadership role in this space, taking minority equity stakes in manufacturing/supply-chain companies to encourage domestic production.
Housing retrofit	- Social housing loan guarantee (£1bn)[36], Housing Finance Corporation debt facility (£150m)[37] - None for able-to-pay households	- There are lots of financing options available on private markets for retrofit, so the NWF may deem investments as not additional. - Yet take-up has been very low. Private finance rates are prohibitively high. NWF would miss the opportunity to contribute to retrofit financing at low rates, bringing down costs and improving take-up.	- NWF recognises the additionality contributed by bringing down rates for retrofit financing, resulting in a cheaper transition for households, and a greater uptake of energy-efficiency measures, contributing to government targets. - The NWF offers affordable credit to banks and lenders for on-lending to home energy-efficiency projects and/or provides guarantees on home retrofit loans.

Case study 1: Offshore wind

As was made clear by the failure of the 5th allocation round for contracts for difference in 2023[38] – where high capital and materials costs pushed all offshore wind project bids above the government's strike price, resulting in no contracts awarded – the costs of capital for the construction and development of offshore wind farms pose a serious problem. In 2024, financing costs for a typical offshore wind farm represented 45% of an offshore wind project's costs.[39] This places policymakers in a double bind: keep strike prices low and fail to attract wind projects, or raise strike prices and lock in higher energy bills for years to come (because the CfD programme is funded via green levies on consumer bills).

Failing to attract wind projects means failing to deliver on the government's clean power mission. On the other hand, locking in high energy prices would be damaging not only for households, but also for industrial competitivity. Industrial electricity prices in the UK, a key input for many low-carbon technologies like green hydrogen production, were the highest of 28 countries covered by the 2023 International Energy Agency report.[40] Reducing the price of renewable-generated electricity should therefore be a key strategic goal for the industrial strategy.

A broader interpretation of additionality would empower the NWF to be more proactive in the financing of renewable energy projects, helping to bring down prices and avoid the risks of underdelivery on targets**.** Under a strict definition of additionality, investment in wind or solar power could be seen as "crowding out" private investment as, given the stable income provided by CfDs, these projects generally have recourse to private financing.[6] But it is vital to recognise the additionality that NWF investment in offshore wind could provide by enabling a reduction in the costs of capital and an increase in overall contracted capacity compared to the counterfactual where it did not invest. Such investment could make

[6] In 2022 UKIB did provide finance for two seed assets to support a fund financing solar power projects (NextEnergy Capital ESG), before they had secured CfDs which they then went on to win in 2024's 6th allocation round in 2024. We argue the NWF should invest greater volumes in renewables projects, and look to do so directly as well as via portfolio funds.

a major positive contribution towards lower energy bills and the delivery of the government's growth and net-zero targets. To encourage these types of investment, the NWF framework document must include a clear definition and guidance that supports this broader and more proactive interpretation of additionality.

Table 2 suggests potential mechanisms through which the NWF could help to expand renewables deployment and/or lower the cost of that deployment (and therefore the price of electricity). The Green Finance Institute recommends the NWF can guarantee purchase power agreement loans to support renewable developers outside of the CfD scheme to help mitigate costs and raise finance.[41] The NWF could offer guarantees to commercial lenders lending to CfD bidders and/or offering direct debt-financing or equity to offshore wind developers. E3G suggests[42] that switching to bilateral, cost-based CfD negotiations can reduce excessive profits made through the auction process. If this process were adopted, the NWF could play an important role, as positive relationships with private investors and knowledge of financial markets makes the NWF well placed to proactively facilitate more bespoke CfD negotiations.

Of course, NWF efforts must come alongside a suite of policies from across government targeting a reduction in electricity bills, including for example: shifting green levies onto general taxation[43]; implementing a National Energy Guarantee[44]; electricity market reform; and a Bank of England introduction of a green interest rate.[45] The NWF's relationship with Great British Energy must also be clarified to ensure synergies.

Case study 2: Green hydrogen

Given that electricity is a key input influencing the cost of producing green hydrogen, NWF support for bringing down the cost of renewable electricity (as outlined above) can in turn make hydrogen projects more financially attractive.

NWF financing can also lower delivery risk and financing costs for green hydrogen projects themselves. The government's flagship policy to kickstart the UK's green hydrogen industry is through hydrogen allocation rounds, where the government agrees to pay producers the difference between the hydrogen sale price and the cost of production over 15 years.

11 green hydrogen projects[46] were successful at the UK's first hydrogen allocation round in 2024 (20 were shortlisted[47]), achieving half of the government's target capacity for that round. The NWF is only financing one of those projects,[48] despite green hydrogen being one of its key focus sectors. With a more proactive approach, the NWF could be more involved – potentially increasing the success rate of projects moving from shortlist to selection, and bringing down production costs.

The NWF could be more proactive about its offer to prevent companies withdrawing due to financing concerns, by directly approaching shortlisted companies and helping them to develop bespoke solutions where possible. By not approaching companies, the NWF acts as a lender of last resort. This may be for fear of competing with private financing were it to approach companies directly. A broader definition of additionality would grant it more space to do so, prioritising delivering as much capacity as possible in a sector that needs to be scaled up fast, over the risk of crowding out private investment.

The European Hydrogen Observatory[49] estimates the current cost of green hydrogen production in the UK at £4.3/kg using direct renewable energy and at £8.4/kg[50] using grid electricity, meaning it is much cheaper for projects to source electricity directly from a producer than from the grid. The NWF can use its coordination ability to incentivise renewable projects to co-locate near green hydrogen production sites. This would enable utilisation of the much cheaper cost of green hydrogen production when coupled with direct renewable input, making more projects financially viable and bringing down the price of the hydrogen produced. Renewables UK suggest that the NWF could approach renewable projects that bid in marginally higher than the contract for difference strike price and pair them up directly with green hydrogen producers, guaranteeing their power purchase agreement on either side.[51]

Case studies 3 and 4: Heat pump manufacture and retrofit for able-to-pay households

Heat pump manufacture and retrofit loans for able-to-pay households provide two interlinked examples of where NWF investment outside of its current scope can contribute to facilitating industrial strategy and the green transition. In both cases,

large investment gaps persist when compared with what the sector needs to achieve government targets. The NWF should therefore take a proactive approach to investing in them and not be held back by the fact that private finance options may already exist.

For **retrofit loans for able-to-pay households**, there are lots of financing options available on private markets for retrofit, including green mortgage products, personal loans, consumer credit, and securing a loan against one's home.[52] But only a few of these products offer affordable borrowing rates[7] and uptake has been low.[53]

Initially, government regulation, incentives, and communication are what is needed to drive consumer demand for retrofit financing products. But as investment volumes increase, there is a clear role for the NWF to play in keeping financing costs low and helping to achieve the rapid scaleup of retrofit rollout that is needed to get the UK closer to its energy-efficiency targets, which the CCC's 2024 progress report deemed to be "significantly off-track".[54] As set out in NEF's Blueprint for Warmer Homes,[55] NWF financing products could introduce new, affordable loan schemes for able-to-pay households – by offering affordable credit to banks and lenders if funds are exclusively used for home energy-efficiency projects. This could be especially effective if delivered in tandem with monetary policy instruments offering affordable credit for green lending.[56] Alternatively, the NWF could use guarantees to bring down the cost of personal retrofit loans, following the example of the European Investment Bank's provision of guarantees in Ireland's Home Energy Upgrade Loan Scheme.[57]

However, applying UKIB's interpretation of additionality criteria could lead to it being deemed not to be additional for the NWF to offer loan products or guarantees where the private market already has an offer. This is why a broader notion of additionality, based on an assessment of how NWF investment could lower financing costs and increase uptake on an aggregate scale, is needed in order for the NWF to invest in retrofit.

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[7] For example, Nationwide's 0% retrofit loan for mortgage customers; and Lloyd's 0% buildings transition loan for SMEs.

Retrofit scale-up means increased demand for heat pumps. The UK has a potential domestic comparative advantage in **heat pump manufacture**[58] because of its strong existing boiler and air-conditioning production. Demand for heat pumps is expected to grow globally, and pivoting away from boiler manufacture towards heat-pump manufacture can deliver considerable productivity and employment benefits.[59]

In theory, large boiler manufacturers can access the financing required to switch production lines without intervention. However, there is currently a lack of confidence in the government's commitment to adhere to its heat pump installation targets, with potential manufacturers requiring a long-term, stable policy environment in which to operate.[60]

The NWF's provision of affordable financing for retrofitting, as mentioned above, can strengthen the government's ability to meet its installation targets while offering certainty to potential heat pump manufacturers regarding demand. On the supply side, NWF equity financing in manufacturing and supply chain companies can promote domestic production, showcasing the government's dedication to the heat pump industry. This, in turn, can set a precedent, encouraging boiler and air conditioner manufacturers to transition toward heat pump production.

Proactivity in practice

These case studies demonstrate what a more proactive NWF might look like in practice. Reaching out to prospective projects to explore potential for increasing their viability and bringing mutually beneficial projects together. Taking a strategic view of additionality that enables proactive investment into sectors where private finance may be available but deployment is slow and delivery risks are high. Investing not only to meet specific gaps in market provision, but also to bring down costs for consumers and businesses. The guiding principles in the new framework document must clearly grant the NWF the scope to take this more forward-leaning approach.

2. FAIR RISK-REWARD BALANCE AND STRATEGIC CONDITIONALITIES

The NWF can guide investments in the UK towards sustainable, long-term projects that deliver maximum value for British taxpayers. By taking equity stakes in more of the projects it supports, the NWF can directly share profits and indirectly influence companies to reinvest profits, moving them away from potentially extractive financial practices.

Governments can apply various levels of conditionalities to investments. Some conditions are easier to apply and implement, for example requirements for local job creation, sourcing materials from local supply chains, or guaranteeing good working conditions. The NWF already reports on job creation and emissions savings, and the next step should be to support these aims by making some or all of its investments conditional on recipient projects meeting certain jobs and emissions targets.

Other conditionalities are more difficult to apply and implement but could have further-reaching impact. For example, the French government's €4bn recapitalisation of Air France during the pandemic[61] allowed it to impose robust climate conditions due to the company's financial dependency. While the NWF may not always have such strong negotiating power, it can still leverage its financial influence to encourage companies toward economically and environmentally beneficial decisions.

For instance, the NWF could co-finance large infrastructure projects at favourable rates, contingent on companies having credible climate transition plans in place. NEF's Blueprint for Warmer Homes suggests that NWF's retrofit lending should be tied to energy savings, similarly to Germany's KfW scheme, ensuring that investments deliver full value in reducing energy bills and meeting climate goals.[62] By imposing such conditions, the NWF would ensure that its investments create lasting public value and better value for money.

With more resources, the NWF could expand its impact, following examples like the US CHIPS and Science Act, which applied conditions such as limiting share buybacks and improving worker conditions.[63] This would also reinforce the objectives of the UK government's existing new deal for working people.[64]

Case study 5: Carbon capture

A recent complaint from the Public Accounts Committee about the lack of profit-sharing in carbon capture, usage and storage (CCUS) projects highlights a missed opportunity and offers valuable lessons for the NWF's investment approach.

Although the complaint relates to direct government spending and not the UKIB/NWF, it emphasises the importance of including profit-sharing mechanisms in future projects. As the chair of the committee pointed out, “If you were a venture capitalist investing this sort of sum of money, which is effectively what the taxpayers are doing here, you would expect to have a big equity stake in this whole thing."[65]

The complaint centred on the UK’s first CCUS clusters, Hynet and the East Coast Cluster (ECC), which began construction in 2024. A substantial portion of their funding is provided by the government, which has pledged nearly £22bn over 25 years for CCUS, expected to attract £8bn in private financing.[66] However, the private companies managing these projects, including major fossil-fuel producers like Eni, BP and Total Energies,[67,68] are receiving significant government subsidies without any share of the profits returning to the public sector.

This situation underscores the lesson for the NWF: when public money is used to support private sector projects, the NWF should seek equity stakes or convertible instruments to ensure that the public benefits from future profits. By taking an equity position, the NWF would have also have more of a voice in governance, ensuring that public value is considered in decision-making. As the Institute for Public Policy Research (IPPR) has noted, the NWF could act as an “enlightened” shareholder, influencing the projects’ governance and promoting long-term value creation.[69]

In cases like the CCUS projects, where government support heavily subsidises private firms, the NWF should push for equity stakes as a condition for funding. This would ensure that the public benefits from the guaranteed profitability of these projects, and highlights the need for a coordinated and strategic approach between the NWF and relevant government departments.

This also calls for a broader interpretation of additionality. While the NWF may not typically invest in projects where private finance is already available, it could justify

its involvement in projects like Hynet and ECC by emphasising its role as an enlightened shareholder. The NWF should not shy away from investing equity alongside private financiers in large, flagship infrastructure projects so that companies can be steered towards public value activities, and the value generated by those assets can be shared with the taxpayer over time.

3. FLEXIBILITY FOR INCREASED FUTURE FINANCING CAPACITY

Under its current planned investment limit of £27.8bn over this parliament (to mid-2029), the NWF is much smaller than European policy banks like the French Bpifrance and German KfW, which each invest roughly 1% of their countries' GDP annually.[70] If the UK did the same, that would imply the NWF investing £21bn per year by 2028-29,[71] almost four times its current investment limit. While it would be unrealistic to expect the NWF to reach this scale in such a short timeframe, the ambition should be set now for a significant ramp-up of its financial capacity over the medium and long term. Otherwise, it will remain only a small player compared to international peers, and make only a marginal impact towards the UK's investment needs, far short of its transformative potential.

Scaling up the NWF would not directly be constrained by the fiscal rules. At the 2024 autumn budget, the chancellor replaced "public sector net debt" as a binding fiscal rule with "public sector net financial liabilities", which effectively rendered the NWF neutral to the fiscal rules by counting its financial assets positively against its liabilities.[72] This means that the NWF's budget can be expanded without directly reducing the government's fiscal space, which was previously not the case.

So far, the government has not taken advantage of this new headroom to increase the NWF's financial capacity, which remains at the amounts initially pledged in the 2024 Labour manifesto. Indeed, it may be sensible to wait until the NWF has demonstrated successful impact in investing the full extent of its current limits before scaling up its capacity. But the ambition for a future scale-up of resources must be embedded now, in its founding documents.

A future scale-up could take the form of 1) the NWF leveraging its balance sheet via issuing its own bonds; 2) an arrangement similar to the Public Works Loan Board where funding comes from general government borrowing but the quantity is flexible to the NWF's investment needs; or 3) simply via the Treasury substantially increasing the equity, loan, and guarantee limits available to the NWF. These options are not mutually exclusive, and all three should be kept open in the legislation and

framework document, so that the fund is well-positioned to be scaled up in the medium term.

3.1 Issuing bonds increases impact with operational and fiscal advantages

We strongly recommend that the NWF be provided with the capacity to issue bonds on private financial markets, as we have argued elsewhere.[73] The independent national wealth fund taskforce, led by the Green Finance Institute, also recommended that this be considered as part of the NWF's medium-term strategy in their July 2024 report.[74]

This is a tried and tested mechanism utilised by successful policy banks around the world. Leveraging their own balance sheets is what has enabled international comparators to reach the impressive scale that they have (see table 3). Without this power, the NWF has far less chance of achieving a scale remotely near to the state development banks of our peer countries.

Table 3: European policy banks scale

Institution	Location	Launched	Bond issuance start	2022-23 investment (% GDP)	Assets/ portfolio, (% GDP)
KfW	Germany	1948	1949 – first failed attempt 1958 – with lasting success	€40bn (1%)	€560 (14%)
Bpifrance[8]	France	2012	2012[9]	€26.4bn (1%)	€100.4 (4%)
EIB	Europe	1958	1961	€75.1bn (0.4%)	€566 (3.6%)

Source: 'Launched' column and final columns CETEx (2024)[75] using data from Kreditanstalt für Wiederaufbau (2023)[76]; Bpifrance (2023)[77]; European Investment Bank (2024)[78] and Eurostat (2023)[79]. 'Bond issuance start' column: Kreditanstalt für Wiederaufbau (n.d.)[80]; Bpifrance (2014)[81]; European Investment Bank (2008)[82].

[8] Bpifrance was a merging of three existing financial institutions in France: Oséo, CDC Enterprises and Fonds Stratégique d'Investssement (FSI).

[9] Prior to becoming Bpifrance, Oséo could issue its own bonds and also borrowed from the EIB and CDC. CDC enterprises issued bonds. FSI was capitalised by the French state and the CDC.

A major benefit of the NWF being able to tap private bond markets of its own accord is the operational independence this would grant. For example, if the NWF starts getting close to hitting the investment limits imposed by the Treasury, but recognises further investment opportunities aligning with its objectives, it could choose to issue bonds rather than knock on the Treasury's door to negotiate an increase to the limits. This financial and operational independence is what would render the NWF a true national investment bank in line with international peers, as opposed to its current form: a kind of non-ministerial government department tasked with dispersing the investment of a set budget. Such operational independence would not stand in contradiction to the need for the NWF to work closely with government in identifying investment opportunities and ensuring objectives are aligned, but simply grant it greater flexibility in levelling up its funding capacity to meet the UK's investment needs.

There are clear advantages of the NWF being able to increase its own funding flexibly in accordance with demand, without requiring a budgetary decision from the Treasury. There would be no need for changes to fiscal planning and forecasts, negating the need to compete with other departments for spending. It would enable a more independent approach to borrowing, and eliminate direct upwards pressure on the gilt rate.

Policymakers have suggested that it would be "less efficient" for the NWF to issue its own bonds,[83] as opposed to being financed via general government borrowing (gilts), but this viewpoint misses two important considerations. If the NWF were to issue its own bonds, this would not be directly competing with the market for gilts. Investors will see that the NWF is a financial institution, operating only in specific sectors and only investing in bankable projects, separate from the general pool of government borrowing that can be used for a huge variety of purposes. Therefore, issuing a given quantity of NWF bonds would not create the same upwards pressure on gilt yields as issuing the same quantity of gilts, leaving general government borrowing costs lower for other forms of spending.[10] Allowing the NWF to issue its

[10] While of course there may be a marginal indirect increase in the gilt rate via NWF issuing bonds, this would be significantly smaller than the effect of issuing the same quantity of gilts.

own bonds takes advantage of its independent financial robustness to reduce the burden on government borrowing for other purposes.

Secondly, while it may be marginally more expensive to the NWF to gain funding via its own bonds than via gilts, this should not be conceived of as "inefficient" management of public funds. This money would not in a real sense be taxpayer money, but rather private finance that has been leveraged via the NWF. If anything, this would be a more efficient management of public finances, as it would mean that for a given amount of taxpayer money (the Treasury's equity and loans to the NWF), the NWF had also leveraged-in further private finance at a fund level. The fund-level leverage ratio (which in the case of the KfW is 14:1) would then have a multiplicative effect on the private finance leverage ratio of 3:1 that NWF seeks to achieve on a deal-by-deal basis.[84] This would lead to a far greater overall leverage ratio, and therefore a greater impact in delivering the industrial strategy, regional economic growth, and net-zero goals.

CONCLUSION

In the NWF, the government has created an institution with the potential to have a transformative impact on delivering the UK's industrial strategy, regional growth, and net-zero targets. The government has identified that it wants the NWF to be more catalytic and have more impact than its predecessor UKIB.[85] But to achieve this potential, the NWF must be designed bearing in mind the lessons learned from UKIB and the best practice of international comparators. This requires a more proactive investment approach, an emphasis on public value for money, and an ambition to increase the NWF's scale in the medium term.

A **more proactive investment approach** means: proactively seeking out and originating investments in target sectors; an investment strategy that seeks out synergies between sectors in order to increase the overall pipeline of viable projects; and a broader definition of additionality that fully accounts for all the ways in which NWF investment can provide value, including where an explicit aim is to reduce the costs of capital for projects in key sectors. This proactive approach is crucial for overcoming the difficulties UKIB faced in being able to get funds out the door: without this proactivity there is a risk of underdelivery.

While a more proactive approach will support the delivery of a greater quantity of investments, an **emphasis on public value for money** will mean that the maximum contribution to national economic goals is leveraged from each investment. This includes ensuring that the public purse is fairly rewarded for the expenditure and risks it takes on, and making investments conditional on projects' contributions towards targets such as local job creation and emissions savings.

In the medium term, once the NWF demonstrates success in investing its full yearly limits and driving forward its objectives, it must be empowered to **increase its financial capacity**. Otherwise it will never reach a transformative scale comparable to the state investment banks of our international peers. The ambition for this future scale-up must be embedded now into the NWF's founding documents, leaving multiple options open for how this funding could be attributed, including via the NWF issuing its own bonds on private markets.

Collectively these recommendations outline a vision of an NWF that is able to invest its full endowment, able to leverage maximum public value from each investment, and able to grow in scale to achieve a genuinely transformative impact. A proactive NWF of this kind could play a central role in the driving forward the UK's economic goals, when aligned with an industrial strategy that holistically assesses the requisite policy and financial support for each target sector.

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