



Net Zero Fund submission

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Overview

At the same time as announcing Australia's 2035 emissions reduction target of 62-to-70 per cent below 2005 levels, the federal government committed \$5 billion to a new Net Zero Fund, from within the existing \$15 billion National Reconstruction Fund. The government intends the Net Zero Fund to contribute to large-scale industrial, manufacturing, and resources decarbonisation, and help develop technologies for low-emissions manufacturing and resources processing to commercialisation.

Grattan Institute's reports and submissions on industry policy have consistently advocated for a coherent industry strategy which consistently aligns our competitive advantage with the national interest.

The purpose of the Net Zero Fund is too unclear at this stage to provide detailed feedback on its design. We recommend that the government use the sector assessment process established under the *Future Made in Australia Act 2024* to identify which sectors should be priorities for the fund. We recommend that the government articulate a clearer purpose for the fund, and that it set out metrics to measure whether the fund is succeeding. Further, the government should clarify how the fund fits with the other government investment vehicles and grant funds.

Once it is clear what the fund is for, further design can proceed in line with the following principles.

- **Principle 1:** invest where it makes sense for government to do so – incorporating a clearer and more nuanced definition of 'national interest'
- **Principle 2:** don't compete with yourself for projects
- **Principle 3:** invest for long-term decarbonisation and industrial capacity by deeply understanding the business
- **Principle 4:** develop sector expertise – and build it within the fund
- **Principle 5:** tailor financing to the project, and have an exit strategy – including a preparedness to cut losses

The Net Zero Fund is a significant allocation of capital with the potential to drive meaningful decarbonisation in critical industries, and foster new world-leading technologies to commercial scale. It should be spent prudently and consistently with the governments' other policy objectives, and not be used as a 'slush fund' to try to save jobs and industries that would be likely to fall away without government support. It also needs to complement other special investment vehicles and funding programs, rather than duplicate or compete with them.

Following these suggestions will help bring the fund to achieve its full potential.

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1 Introduction

This submission is by Alison Reeve, Tony Wood, and Ben Jefferson of Grattan Institute, an independent think tank focused on Australian domestic public policy. Grattan aims to improve policy by engaging with decision makers and the broader community. Grattan has advocated in reports and submissions over several years for a consistent national industrial and decarbonisation strategy.

As it announced Australia's 2035 emissions reductions targets, the federal government announced the creation of the Net Zero Fund – a ringfence of \$5 billion within the National Reconstruction Fund's \$15 billion endowment. The stated intent of the fund is to 'support large industrial facilities seeking to decarbonise, including investing in the technologies and capital infrastructure required to transition to lower emissions or more productive processes', and to 'support scale up of manufacturing renewable and low emissions technologies'.

The Department of Industry, Science, and Resources has started consulting industry on the design of the Net Zero Fund. In particular, the request for submissions asked what kinds of projects and capital expenditures were most appropriate; what financing mechanisms and governance structures to consider; and how the fund could be complementary to and leverage the strengths of existing entities such as the Clean Energy Finance Corporation.

This submission draws on our previous Grattan Institute reports and submissions. It proposes principles for the investment decision-making, financing, and governance of the Net Zero Fund.

We would welcome the opportunity to engage further with the department on any of the matters raised in this submission.

2 Designing for success

2.1 The government should establish what the fund is for

The stated purpose of the Net Zero Fund is to:

- support large industrial facilities seeking to decarbonise, including investing in the technologies and capital infrastructure required to transition to lower emissions or more productive processes
- support scale-up of manufacturing renewable and low-emissions technologies.

Further, it is intended to ‘focus on supporting large-scale industrial facilities as they decarbonise their assets ... [ensuring that] Australia retains industrial capabilities vital to our national interest while working towards our 2035 target’.¹

This leaves many questions unanswered. How large is a large facility? Does ‘large’ mean high emissions, or does it refer to the size of the firm that owns it? How much decarbonisation should be required? Which sectors are more in need of assistance than others? Are these sectors really vital to the national interest and why? Does the government want quick wins in emissions reduction, or longer-term ones?

The *Future Made In Australia Act 2024* established a sector assessment framework to enable government to determine which sectors have the greatest potential to contribute to national growth in a net-zero economy. As yet, the government has not used the framework. It should do so as a matter of urgency. Sector assessments could be conducted for the highest-emitting commodities captured in the Safeguard Mechanism (alumina and aluminium, steel, and ammonia products). Further assessments should be conducted for manufacturing of clean energy technologies.

1. DISR (2025).

The government released the Net Zero Plan for the industrial sector in September 2025. This sets out three phases for decarbonisation: deploying existing technology (2025-2030); widespread adoption of existing technologies and commercialisation of new ones (2030-2025); and new market opportunities (2035 onwards). The government should clarify the role of the Net Zero Fund in each of these stages.

Finally, once the purpose of the fund is clear, the government should establish metrics to measure success. Some possible metrics are:

If the purpose is	then the metric could be
reduce emissions	abatement achieved, \$/tonne of abatement
commercialisation	cost reduction over time, deployment over time
productivity improvement	output per unit input
new export opportunities	share of international markets

Capital deployed should not be a metric by itself, although private capital leveraged via the fund could be one indicator of success.

2.2 Principles for Net Zero Fund investment and governance

Once the purpose of the fund is clear, we recommend that design proceed against the following principles.

Grattan has consistently advocated for the adoption of similar principles in the government’s development of industry policy and capital investment in major decarbonisation projects. Grattan does not have expertise in capital allocation, and is not best-placed to comment on the specific parameters of concessionality and risk tolerance that the Net Zero Fund should adopt.

2.2.1 Principle 1: invest where it makes sense for government to do so

In our 2022 report on industry policy (*The next industrial revolution*) and our 2022 submission on the design of the National Reconstruction Fund (*Funding Australian industry in the 21st Century*), Grattan identified three justifications for governments developing industry policy, which includes, but is not limited to, funding of the sort the Net Zero Fund has been proposed to provide. The three are:

1. First, markets do not generally provide adequate incentives for research and development of new technologies, because knowledge is often intangible, risky, and difficult to appropriate. Low-emissions technologies are particularly complex and uncertain.
2. Second, many of the technologies that might produce large emissions reductions are expensive and high-risk. Early investors face high costs, low returns, and the risk of competitors free-riding on their initiative. Investors require a reliable, long-term carbon price to underpin their investments. Yet a carbon price is inherently uncertain because it depends on the decisions of governments. For both these reasons, investment in low-emissions technologies is and will remain critically inadequate.
3. Third, there is a time imperative. Market forces are not good at managing structural transformations at high speed when the future is deeply uncertain. Moreover, the long-lived nature of industrial assets means they are particularly poorly suited to fast changes.²

The Net Zero Fund should enter the market only where funding is consistent with one or more of these three reasons for investment.

2. Wood et al (2022).

National interest considerations

An additional principle in Australia's industry policy codified in the *Future Made in Australia Act* is the preservation and promotion of industries considered of critical national significance.³ The interests framework delineated in the *Future Made in Australia – National Interest Framework* identifies two streams – the Net Zero Transformation Stream, and the Economic Resilience and Security stream.⁴

The Net Zero Transformation Stream would allocate funding only to sectors that would have a sustained competitive advantage in a net-zero global economy; and where public investment is likely to be needed for the sector to make a significant contribution to emissions reduction at an efficient cost.

The Economic Resilience and Security Stream would allocate funding where domestic capability in the sector is a necessary or efficient way to deliver economic resilience and security; and where the private sector will not deliver this capability without government support.

Independently of the financial measures in the *Future Made in Australia Act*, the federal government has made several large investments (with the states) in industrial support measures for resources manufacturing facilities – including the \$2.4 billion Whyalla Steelworks Support Package, the \$600 million Mt Isa copper smelter bailout, and the \$135 million Port Pirie and Hobart smelter bailouts. The payments are tied to decarbonisation investments; and insofar as these industrial facilities are critical to the national interest in either the Net Zero or Economic Resilience stream, these may be justified investments. But it is hard to know without a more clearly defined strategy for investments to secure the 'national interest'.

3. Commonwealth Government (2024a).

4. Commonwealth Government (2024b).

Grattan has previously articulated three common pitfalls of industrial policy. The first is using the smokescreen of the ‘national interest’ to justify preserving manufacturing capabilities that are not the most critical for Australia’s economic or security interests. The second is letting short-term job-saving guide payments to industrial facilities to shore up elections or regional employment figures. The third is banking on the ‘pivot to green’ – a proposed decarbonisation of carbon-intensive facilities based on unproven technology, which may ultimately result in limited decarbonisation in return for investment.

The government has taken the time and effort to develop the national interest framework outlined above. To avoid these pitfalls, it should develop rigorous sector decarbonisation plans with reference to this framework, and embed it in the design of the Net Zero Fund.

Non-fiscal interventions

As identified in Grattan’s submission on the *Future Made in Australia* Bill, non-fiscal interventions can be just as or even more effective at guarding Australia’s national interest.⁵

Where manufacturing capability is thought critical to protect Australian supply chains during times of war, pandemic, or environmental disaster, setting minimum stockholding requirements or ‘friendshoring’ (contracting manufacturing and supply from close-by, friendly countries) are also possible solutions to consider. The Net Zero Fund’s investment mandate should incorporate a rigorous consideration of why critical supply requirements in Australia need to be met by onshore manufacturing.

5. Wood and Reeve (2024).

2.2.2 Principle 2: don’t compete with yourself for projects

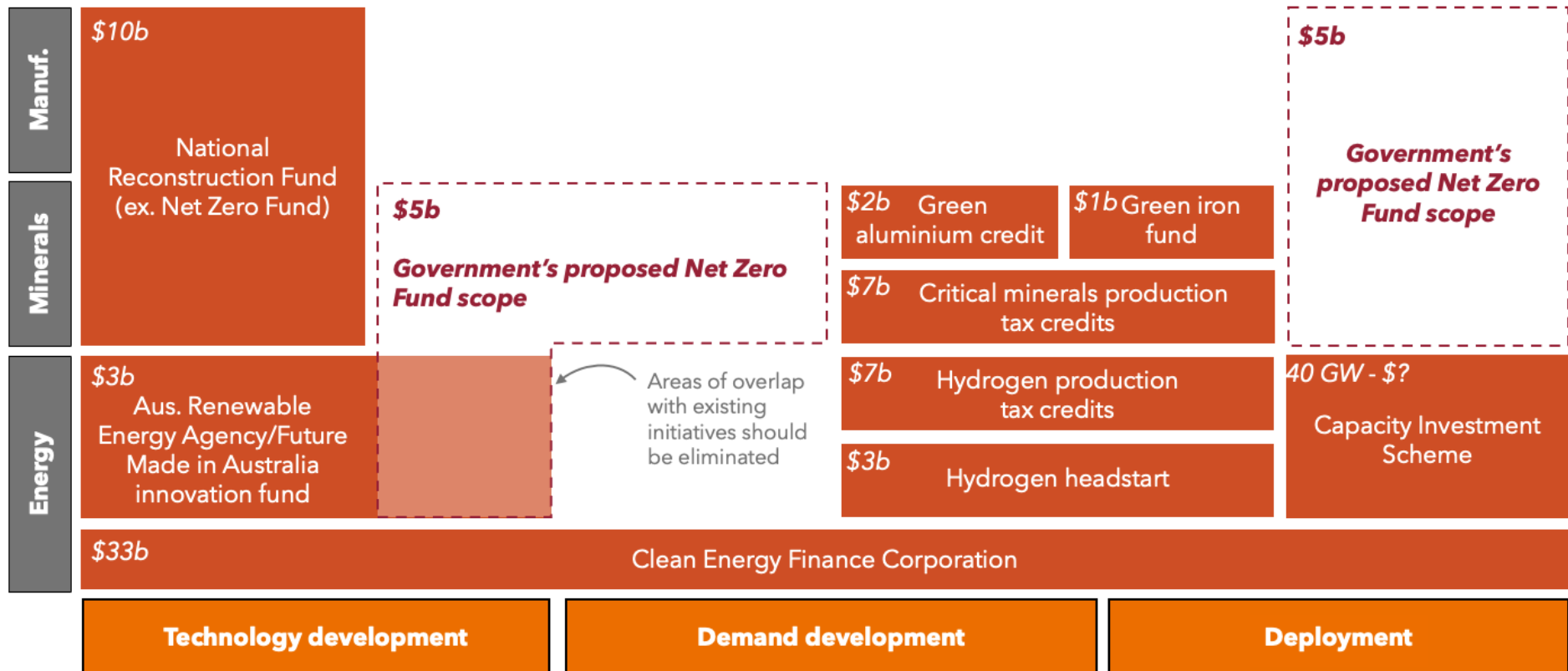
If the first principle is followed carefully, government should only be investing in projects where it makes sense for government to invest. However, the decarbonisation and clean economy space is crowded in Australia – in both private and public capital. Capital constraints remain, but approval and construction bottlenecks are increasingly more of a problem than capital constraints.⁶

The government already has several policy instruments and investment vehicles playing in adjacent spaces to the Net Zero Fund’s proposed mandate.

The government should aim for the Net Zero Fund to be the only entity pursuing its investments, and that it is neither double-stacking nor competing for projects with other entities drawing from the government balance sheet. Duplicating investment diligence, front-end support, and reporting, is bureaucratic waste. And from the project’s side, playing multiple government entities off against each other for investment could bid up the terms of investment, making taxpayers fund more than they otherwise would have. For both of these reasons, government entities should have clearly marked-out investment spaces.

6. The case of the Rewiring the Nation Fund is instructive. This fund was intended to provide government finance to accelerate the development of transmission lines, in order to unblock the development of new renewable energy generation capacity. The modelled acceleration of transmission development when the policy was developed was in the order of 15 to 20 years, in some cases. However, the funded projects have failed to be developed in line with estimates – because the obstacle to transmission development is not capital, but approvals, available land, community concerns, and other construction and labour constraints. Throwing more capital at a problem where capital is not a binding constraint is, in general, unlikely to dramatically improve results.

Figure 2.1: The energy innovation investment space is crowded; industrial resources decarbonisation is open
 Indicative investments and size of government policies and investments across key sectors



Source: Grattan analysis of government publications.

As it stands, the government's proposed scope for Net Zero Fund (large-scale industrial decarbonisation) does not overlap with existing initiatives (Figure 2.1 on the preceding page). The exception is innovation funding or venture-style investment in low-emissions energy technologies. ARENA's innovation fund was topped up by the *Future Made in Australia Act*; the Clean Energy Finance Corporation spin-off, Virescent Ventures, is an active investor in clean energy technology. Plus, the private sector (Pollination, Skip, and other traditional venture capital funds) are playing in cleantech. Insofar as innovation is part of the investment mandate, the Net Zero Fund should focus on resources and manufacturing technology, and leave energy to established funds.

The government should also specify additional detail to determine the threshold scale for investment in 'large-scale' decarbonisation efforts. Whether this scale is determined on facility size or decarbonisation potential will influence availability. The driving principle should be that no good decarbonisation opportunities fall through the cracks of the government's schemes.

2.2.3 Principle 3: invest for long-term decarbonisation and industrial capacity by deeply understanding the asset

Investments in industrial facilities should be made with a long-term view. The life cycle of many of these assets are 20-to-40 years. If the intent of the Net Zero Fund is to provide incremental support (a 'sugar hit') towards 2030 or 2035 targets, the long-term benefits of the investments are unlikely to be realised.

Facilities should be here for the long haul

Large outlays of capital on decarbonisation projects should be for the long term.

Banking decarbonisation benefits is only meaningful if the carbon-intensive plant was going to continue operating economically for a

long period, rather than shutting down. Calculation of abated carbon emissions should be made against credibly continuous emissions profiles, from plants that are likely to stay open anyway. And, investing lots of capital in a plant that ends up shutting down a few years later is a big waste of public money.

The key considerations in determining which projects to fund should be the expected incremental contribution to decarbonisation; the relative cost of funding the entity; and the downside risk of its early exit, or requirement for additional funding to stay open. This should all be driven by an understanding of the asset replacement lifecycle of each plant – large-scale decarbonisation decisions are made many years in advance, with the technology and costs available at the time of design.

Facilities should be meaningfully contributing to the Australian economy

Many facilities are operated by international conglomerates. Profit-shifting and internal cross-subsidies mean that in some cases, profits are moved offshore and taxes are not paid. Australians should see the benefits of their natural resources, taxpayer-funded investments, and hard labour, in tax bills that are distributed back to the public.

Jobs are also a common justification for the investments made. Investing to make industrial facilities more cost-competitive often entails automation; even though this increased productivity increases output, in some cases it costs jobs. The jobs that remain also change – from 'making things' to 'managing machines that make things', with the skills not always directly transferable. Where employment is a key justification for the investment, facilities should commit to benchmark local employment conditions for a defined period in order to receive investments. They should also develop a plan to upskill and retrain employees to make the most of new job opportunities.

Planning should incorporate a range of possible scenarios

- **International prices:** international commodity prices influence the profitability of industrial facilities significantly. At a certain global price of lead, the Port Pirie smelter is profitable; at others, it is uneconomical.
- **Green premiums:** while the capital investments required to produce green outputs are often more expensive than conventional upgrades, if domestic or overseas customers are willing to pay more for 'green' metals and manufactured outputs, the investment may yield better economic returns. This green premium could be driven by customer preferences (e.g., internal corporate and supply chain benchmarks), or by enforced international government policy (e.g., a Carbon Border Adjustment Mechanism).
- **Market access:** varying scenarios of trade access influence market demand. For example, even if Australian copper is economically competitive, geopolitical developments might affect demand from key markets such as China or India.
- **Input costs:** energy prices and wages are a key determinant of industrial and manufacturing profitability. Notably, this is a source of OPEX rather than CAPEX risk; the capital investment may have been optimal given uncertainty, but changes in input costs will influence the total project profitability.
- **Supply chains:** changes to supply conditions can impact cost-competitiveness. For example, Mt Isa's original copper mine has now closed, and copper ore is now being shipped further, from lower-quality reserves.

Investments should not overwhelm existing price signals

The Safeguard Mechanism applies a carbon price of about \$35 per tonne to industrial facilities in Australia. As baselines decline and this price increases, facilities will be encouraged to decarbonise for purely economical reasons. Likewise, if trade partners begin using Carbon Border Adjustment Mechanisms – paying less for carbon-intensive resources – or offering a premium to cleaner manufacturers, facilities will be incentivised to invest their own capital irrespective of government support.

Where government investment from the Net Zero Fund provides additional capital, it may distort these sorts of price signals. The government should carefully design the project origination process to model the potential intrinsic economic benefits of decarbonising before committing to provide capital.

2.2.4 Principle 4: develop sector expertise

Conducting the analysis suggested above requires a deep understanding of the sector. The filtering process of determining which facilities and initiatives are in the national interest should deliver a focus on particular commodities and subsectors where the delivery team for the Net Zero Fund should concentrate their time and energy to develop expertise.

Lessons learned from government experience with specialist investment vehicles (SIVs) indicate the importance of developing domain expertise to avoid having to 'hire in' talent for specific projects.

One of the questions in the consultation request is how the Net Zero Fund could complement the Clean Energy Finance Corporation, or other investors in the space. As discussed above, Grattan's position is that all government investors should be chasing different opportunities. There might be projects sourced by the CEFC that the Net Zero Fund is

more appropriate to fund; for this reason, open communication between the front-end of CEFC and the Net Zero Fund should be encouraged. But it is critical that the Net Zero Fund develops its own expertise, residing with its own project teams and back-end functions.

2.2.5 Principle 5: tailor financing to the project, and have an exit strategy

A variety of financing instruments and mechanisms could be used by government to implement the Net Zero Fund's objectives. Broadly, these are:

- **Equity** – pay the owners to take partial or full ownership of the asset or company operating the asset, mandating the equity injection be used to invest in decarbonisation capital projects. Most large operators would resist government equity injections because they are typically able to secure debt at more economical rates.
- **Contingent debt** – lend money to the company operating the asset, in return for implementing agreed-upon decarbonisation investments. Debt may be preferred by larger entities, but may not be appropriate for operators who are already heavily indebted.
- **Contingent grants** – grants are delivered to the operator of the asset in return for decarbonisation actions; e.g., relining a blast furnace to make smelting compatible with green iron.
- **Contracts for difference** – protect the assets' economics against ups and downs in output prices by specifying a midpoint 'strike price'. If the commodity falls below this price, the government pays the operator a pre-determined amount to top up their revenues. If the commodity rises above this price, the operator pays the government a pre-determined amount in return. This instrument would be more useful for giving operators cash flow certainty if faced with large capital outlays to decarbonise.

- **Guarantee** – the government guarantees an operator's loan in the case of their default, enabling them to borrow more.

Given the Net Zero Fund's target space of large industrial producers is small and each facility is large, the required investments to decarbonise are likely to be large, one-off, highly site-specific, long-term investments. The most appropriate financing mechanism may differ materially between sites. To most effectively deliver on the fund's objectives, the government should not close off any financing avenues while designing the fund, and should aim to evaluate each proposal for funding on a case-by-case basis. In addition, the amounts of funding should be flexible, because different industries will have differing capacities to absorb funding and deploy it sensibly.

Have an exit strategy

While maximal flexibility increases the likelihood of project origination, government also needs to have a plan to exit from financing arrangements. While corporate debt markets are highly liquid, even for government-issued concessional debt, experience suggests that government equity stakes are harder to dispose of.

Because equity holders are the last to get paid should a firm fail, it can be difficult for governments to withdraw from equity positions. While equity investments should not be ruled out, the government should enter these with partner investors willing to buy the equity from the government, or an agreed-upon plan to sell the ownership share back to the operator as the investment proceeds.

Alternatively, government could explore hybrid or convertible instruments. Equity could be converted into debt over time or at a particular decision point, whereby the government could then sell the debt in secondary markets.

The fund should also establish criteria for selling debt, and capital recycling.

Manage portfolio risk over time

The fund should have a target rate of return, measured and managed at fund level. This should be lower than commercial finance, recognising that the fund is addressing a market failure and should not crowd out private investment.

The potentially long-term nature of the financing arrangements requires the Net Zero Fund to prudently evaluate its risk profile over time. The risk profile will vary with the instruments used, the facilities supported, and the timeline of their implementation. Systemic and interdependent risk (from commodity and input price changes, for example) should be evaluated rigorously in scenario planning to ensure taxpayers are not overly exposed.

And, if in an equity position, government should pre-commit to a point at which it exits from its investments if the asset is sufficiently uneconomic. This should operate like a stop-loss clause, to bind the government to consistently implement the fund's objectives, rather than continuously making incremental concessions.

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