17th October 2025

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To the National Reconstruction Fund Policy team,

Re: Net Zero Fund proposed design

The Australian Hydrogen Council (AHC) welcomes the opportunity to input into the design process for the Net Zero Fund.

The AHC is the peak body for the hydrogen and derivatives industry in Australia, and our membership includes companies from across the value chain. Our members are at the forefront of Australia's hydrogen industry, developing the technology, skills and partnerships necessary to ensure that hydrogen and its derivatives play a meaningful role in decarbonising Australian industry.

We welcome the release of the Net Zero Plan and associated material to guide the transition, particularly the introduction of the $5 billion Net Zero Fund to support the necessary investments. This carve out of a dedicated fund from the broader $15 billion National Reconstruction Fund (NRF), under the National Reconstruction Fund Corporation (NRFC), is a welcome signal of the Australian Government's intention to invest in industrial decarbonisation and advanced manufacturing.

We agree that it is important to (re)consider the design of the NRF/Net Zero Fund, because decarbonisation projects do not tend to generate financial returns in the near term. Instead, they generate *avoided emissions*, which only have financial value where carbon is priced or regulated (e.g. under the Safeguard Mechanism). However, the NRFC is required to operate as an investor, not a grant-maker. This creates an inherent mismatch: a commercial investment mandate in a market that is not yet commercial.

Background

As a specialist investment vehicle (SIV),[1] the NRFC is a corporate Commonwealth entity tasked with investing public funds across key sectors of the economy. Of the NRF's total $15 billion under management, $8 billion was earmarked for specific areas:

- Up to $3 billion for renewables and low-emission technologies,
- $1.5 billion for medical manufacturing,
- $1 billion for value-adding in resources,
- $1 billion for critical technologies,
- $1 billion for advanced manufacturing, and

[1] As of mid-2024, there were seven SIVs, see Department of Finance (2024) *Specialist Investment Vehicles (SIVs) (RMG 127)*, Australian Government, July, https://www.finance.gov.au/government/managing-commonwealth-resources/specialist-investment-vehicles-sivs-rmg-127. See here for useful breakdown of mandates from the Net Zero Economy Authority: https://www.finance.gov.au/sites/default/files/2025-08/DISR%20-%20Net%20Zero%20Economy%20Authority%20-%20Attachment%20A_Redacted_0.pdf.

- $500 million for value-adding in agriculture, forestry, fisheries, food, and fibre.

As shown in Table 1, as of October 2025, the NRFC has distributed relatively little funding, in smaller amounts (except for the Arafura investment). The projects supported are also low(er) risk.

Company	Date	Overview
Russell Mineral Equipment (RME)	Nov 2024	$40 million investment to support the expansion of its Australian manufacturing operations for mining and resources technology.
Resource Capital Funds	Nov 2024	$100 million commitment to its innovation strategy, supporting the value-add in resources sector.
Quantum Brilliance	Dec 2024	$13 million to create a quantum diamond foundry in Australia.
Myriota	Dec 2024	$25 million investment to scale the Australian-based manufacturing of its satellite communication modules.
Vault Cloud	Dec 2024	$22.5 million investment to expand its offerings in data and cyber security services.
Arafura Rare Earths	Jan 2025	$200 million investment to establish the first Australian mine and processing plant for critical minerals, neodymium and praseodymium.
Harrison.ai	Jan 2025	$32 million investment in Harrison.ai that will be used to further develop its suite of radiology and pathology diagnostics.
QuintessenceLabs	April 2025	$15 million equity investment which the company will use to establish a manufacturing site in Canberra.
PolyActiva	May 2025	$27 million investment to expand and consolidate its operations into a single facility.
Brandon Capital	Jul 2025	$150 million commitment to help create and scale the next generation of Australian medical breakthroughs.
Liontown Resources	Aug 2025	$50 million investment in the Kathleen Valley lithium project, a major supplier to the electric vehicle market.
Morse Micro	Sep 2025	$35 million to accelerate growth and develop its next-generation Wi-Fi HaLow technology.

Table 1: Announced NRF funding to date[2]

Despite the relatively small amounts of funding announced, we note that the NRF investment targets[3] are largely being met, as shown in Table 2 (noting that some of the money has gone to other investment entities rather than being investment in companies themselves).

Much larger funding amounts are due in the next two years (and, we assume, in later years to add up to $15 billion). This provides the necessary window to get best value for government money to meet strategic interests under the Net Zero Plan.

Financial year	Investment targets ($ million)	Actual investments ($ million)
2024–25	550	474.5 (86% of the target amount set)
2025–26	1,050	235 (22% of the total target invested in the first quarter)
2026–27	2,505	
2027–28	3,050	

Table 2: NRF investment targets and actual investments from Table 1

[2] See NRF (n.d.) 'Our investments', https://www.nrf.gov.au/our-investments.
[3] See NRF (2024) *Corporate Plan 2024-25*, page 14, https://www.nrf.gov.au/sites/default/files/documents/2024-08/nrfc_corporate_plan_2024-2025.pdf.

The role of Australian Government's SIVs to support the Net Zero Plan

While the NRF appears to be on track, based on its investment targets, it is a good idea to consider its future investments more strategically, and through a net zero lens. Major industries are confronting asset renewals and new capital expenditure to reduce their emissions, and providing insufficiently targeted government support might see Australia losing strategically important industries.

This is particularly the case when we recognise that the current broader SIV group has not deployed capital at the pace required, or with the necessary coherence. Application processes are reportedly needlessly complex and slow, the risk appetite of the SIVs is too limited, and funds are spread across fragmented programs that do not line up with the needs of large-scale transformation. The result is that industry struggles to reach final investment decision on critical projects even though billions remain notionally allocated on government balance sheets.

The AHC supports many of the themes and actions to reform the SIVs that the Chair of Net Zero Economy Authority highlighted in the organisation's submission to the Treasurer and the Minister for Finance on the opportunities to support the Government's productivity agenda in August 2025.[4] Key themes in the submission include the need to optimise finance, streamline the funding ecosystem, improve collaboration, and reform regulatory settings.

For the Net Zero Fund to succeed, the Australian Government must adopt instruments that have been proven to unlock private capital internationally, that restructure risk allocation by technology stage, and move towards a case-management approach that coordinates support across the ecosystem. Without reform, Australia risks falling behind competitors such as those in the Middle East, which are moving faster to close investment gaps.

Under the Future Made in Australia (FMIA) industry policy,[5] the Australian Government has committed to building sovereign capability in hydrogen, green iron, low-carbon fuels and other clean industries. The $5 billion Net Zero Fund is a critical opportunity to demonstrate that Australian Government institutions can deliver. To do so, we must accept additional risk, shorten timelines, deploy instruments proven internationally, and coordinate across the full ecosystem. Guarantees, procurement, targeted subsidies and declining financial support as technology moves up the TRL-based support have worked elsewhere and should be adapted here. Above all, priority designations must mean more than symbolic statements; they must guarantee real, coordinated action.

We have addressed the consultation questions below.

Consultation paper questions

Question 1: What are the types of projects or capital expenditure that should be supported to achieve the Net Zero Fund's objectives?

- Consider the level of investment required for large industrial decarbonisation and/or manufacturing renewable and low emissions technologies. This includes the relevant structure and combination of funding sources from government and the private sector.

[4] Net Zero Economy Authority (2025) 'Submission to the Economic Reform Roundtable', July, see https://www.finance.gov.au/sites/default/files/2025-08/DISR%20-%20Net%20Zero%20Economy%20Authority%20-%20Attachment%20A_Redacted_0.pdf.

[5] The Treasury (2024) *Future Made in Australia*, Australian Government, https://treasury.gov.au/policy-topics/future-made-australia.

We support the Net Zero Fund supporting facilities that are, or are soon to be, covered by the Safeguard mechanism. This could include a Decarbonisation Investment Class within the Net Zero Fund, which might be coupled with CFDs or offtake support for additional crowd-in leverage.

Within this, the Net Zero Fund could underwrite or pre-purchase Safeguard Mechanism Credits (SMCs). This is because industrial projects (e.g. CCS, process upgrades) can be expected to fall below their baselines and generate SMCs, but the future price is too uncertain to finance capex now. The Net Zero Fund could underwrite SMCs at a fixed or floor price, and so guarantee a minimum value. The NRFC could also pre-purchase SMCs directly from specific projects under bilateral agreements. If SMC prices rise, the Commonwealth profits; if they fall, it absorbs the loss but gains emission reductions and jobs.

However, we note that the $5 billion will not necessarily go far for very large facilities, and suggest careful planning is required for best value. Issues to be resolved will include whether investment is sought for establishment of new facilities or expansion of existing facilities.

Recent cases of significant funding contributions from the Australian Government for Safeguard facilities illustrate the fundamental economic and political problem of how to supporting significant assets of national importance in an unstructured way. This includes the $135 million package for the Nyrstar zinc smelters in Port Pirie and Hobart,[6] the $600 million for Glencore's Mt Isa copper smelter (which is still in doubt as Dyno Nobel's adjacent phosphate facility is still at high risk of closure),[7] and the discussions between Rio Tinto and the Australian Government for support of the Tomago aluminium smelter.[8]

For newer technologies, we note that Australia does not have a funding body with the risk appetite to fund the second valley of death (at scale pilot demonstration, above $150 million investment) for TRL7+. These are the stages where technologies are too advanced for research grants but too early for commercial banks. Australia has almost no instruments with the required risk level risk tailored to this gap.

The Net Zero Fund should be prepared to invest in commercialisation pilots as part of larger, multistage deals that are staged and based on successful milestones. For example, there might be a total investment of $500 million with $150 million released for a commercial scale pilot and if successful, the remaining $350 million released for commercial operation scale.

- What are the existing commercial barriers to these investments reaching final investment decision?

For large industry, this includes uncertain technology options, and major asset renewals cycles, upgrades and costs. A major problem is the nature of returns and where and when returns might be expected compared with other investments.

While not a commercial barrier as such, a concern for industry is the unnecessary complexity and delay in current processes. Companies seeking support often face duplicative applications to multiple facilities,

[6] ABC News (2025) 'Nyrstar to get $135 million bailout for struggling smelters', *ABC News*, 5 August,https://www.abc.net.au/news/2025-08-05/nyrstar-135-million-support-deal-for-struggling-smelters/105613710.

[7] Halter, A. & Austin, S. (2025) 'Fertiliser plant uncertainty puts Mount Isa Copper Smelter future in doubt despite bailout', *ABC News*, 9 October, https://www.abc.net.au/news/2025-10-09/dyno-nobel-fertiliser-plant-impact-on-mount-isa-copper-smelter/105869194.

[8] Macdonald-Smith, A. (2025) 'Even a bailout may not save Tomago smelter', *Financial Review*, 11 October, https://www.afr.com/companies/energy/even-a-bailout-may-not-save-tomago-smelter-20251010-p5n1lv.

each requiring costly legal work and data rooms. Small firms developing breakthrough technologies simply cannot absorb these costs.

Across Australian Government and state programs we have also seen timelines stretch well beyond what is commercially useful. Outsourcing due diligence to specialist investors would help, with government focusing instead on oversight and audit. Setting a benchmark of three months from application to decision would align Australia with international norms and restore confidence.

Question 2: What financing mechanisms are best suited for these investments, based on the mechanisms available to the National Reconstruction Fund e.g. loans, equity, guarantees?

- Should corporate financing be within the scope of the fund? For example, equity financing of companies or convertible options.

The NRFC should consider the provision of mezzanine financing to incentivise greater allocation of private capital to projects of national significance which may also be higher risk. Mezzanine finance would act as a catalytic tool, helping to crowd in private capital by de-risking projects for commercial lenders and investors who have typically been hesitant to move first.

Mezzanine finance typically sits between senior debt and equity in the capital structure and can help bridge financing gaps for commercially viable but capital-constrained projects. Many priority sectors for Australian SIVs including clean energy and advanced manufacturing involve projects with strong long-term cash projections but significant upfront funding hurdles.

The Australian Sustainable Finance Institute (ASFI) has advocated for blended finance products,[9] that is, the use of public funds to attract private investment in projects that may have high social or environmental benefits but are less commercially viable, with mezzanine finance being one of the potential instruments they recommend for consideration by SIVs.

From a policy perspective, given the size of the investments, there may be value in providing for government equity in assets that are being co-funded. This is particularly if significant amounts of taxpayer dollars are being drawn down to support existing facilities and assets in need of upgrade.

Mezzanine finance providers are also able to convert debt to equity as part of the finance structuring. In this case, instead of the Net Zero Fund providing grants or debt, it could take a subordinated class of equity shares. There could be additional dimensions to this, such as improved dividends in the case of expectations being exceeded. The benefit for government is that this approach provides a potential return, unlike grants, and when decarbonisation succeeds, the taxpayer shares in the upside. The approach also matches decarbonisation timelines, where equity's patient capital suits long asset lives and slow market ramp-up.

There are risks to the NRFC if it chooses to take equity positions in the projects that it finances, largely related to the ability and the appetite of the NRFC Board to become shareholders in funded projects. Leaving aside issues of reputational damage should an investment prove unsuccessful, equity positions would require the NRFC to manage investments and plan for exit to get a return.

[9] Australian Sustainable Finance Institute (2025) *ASFI Welcomes ACCC Authorisation to Advance Sustainable Finance Collaboration*, media release, 10 July, https://www.asfi.org.au/asfi-news/asfi-welcomes-accc-authorisation-to-advance-sustainable-finance-collaborationnbsp.

Loan guarantees are another option if the asset is also sourcing significant private debt, which may help to lower the cost of capital.

- Consider the specific parameters of any concessional support required. For example interest rates, risk tolerances, forgiveness clauses, equity or debt structures, repayment periods.

As with the loan guarantees, concessional loans could be an attractive option for companies, though it may unintentionally crowd out private sector investment and finance.

Given the interdependency of many projects in the supply chain, support that underwrites the delivery risk may be beneficial. This may include where there may be input problems (such as with power generation and green electrons are not available), or where there is policy shift at the demand side so that the products produced cannot be sold as low carbon (a risk of not fulfilling contracts).

- Consider current barriers to the National Reconstruction Fund investment in large industrial decarbonisation and/or manufacturing renewable and low emissions technologies. How can the design of the Net Zero Fund remove these barriers?

Currently there is a low risk appetite to finance projects and assets and this should be addressed in the design of the Net Zero Fund.

Decarbonisation investments resemble venture capital more than infrastructure, with long paybacks, uncertain markets, and potential asymmetric upside. There may be merit in the NRFC partnering with a PE or VC firm to fast track the investment process and have an arms-length, perhaps less risk averse, investment committee push through investments that may not otherwise be supported by NRFC directly. Fund-of-funds arrangements, such as the NRFC's use of Brandon Capital, can provide a more nimble deployment channel, but Australia's venture capital ecosystem is thin and concentrated, creating risks of exclusion if access is limited to a small circle of funds.

We note that Australia also underutilises procurement as a lever to create bankable demand. In health and defence, procurement rules create predictable markets for local products, but there is no equivalent in industrial decarbonisation. Without long-term offtake certainty, projects are left in limbo. International experience shows that demand-side signals, whether through procurement or long-term contracts, are as important as supply-side subsidies in unlocking investment.

Question 3: How can the Net Zero Fund complement established financing vehicles such as the Clean Energy Finance Corporation?

- Consider the best ways to leverage existing capabilities of the Clean Energy Finance Corporation to help rapid, effective implementation of the Net Zero Fund.

If the Net Zero Fund is to succeed, the Australian Government must move towards a case-management model that coordinates across facilities. At present, the system lacks integration. An integrated approach would involve one due diligence process followed by triage into the most appropriate vehicle, whether CEFC, NRFC, ARENA, NAIF or EFA.

For larger businesses, the NRFC and CEFC should where possible, pre-qualify opportunities together and proceed through due diligence accordingly. Where possible, they should structure offers together to support whole-of-project or supply chain decarbonisation.

For technology manufacturers, other SIVs such as EFA may be more appropriate, such as to execute their market expansion strategies.

Priority designation must also carry real weight. In other jurisdictions, if a project is deemed state-significant or nationally strategic, that status guarantees coordinated support across agencies. However, in Australia it seems that priority designation is symbolic only: a project may be labelled state-significant yet still be told by investment facilities that it does not qualify. This inconsistency creates reputational risk and deters international investors. Priority status should be a guarantee of integrated support, not just a badge.

Finally, packages of support must cover the whole business case. For example, for a green iron project it is not sufficient to fund only the production facility; success requires aligned investment in hydrogen, transmission, electricity supply and offtake. Leaving gaps in infrastructure or demand makes otherwise viable projects unbankable. Australia's competitors understand this and coordinate end-to-end packages. Without reform, we risk falling behind.

If you wish to discuss any element of this submission, please contact me at fsimon@h2council.com.au.

Kind Regards,

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