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National Reconstruction Fund Taskforce
Department of Industry, Science and Resources
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Canberra ACT 2600

By email: NRF_Consultations@industry.gov.au

RE: National Reconstruction Fund consultations

The Australian Industry Group (Ai Group) welcomes the opportunity to provide feedback on the implementation of the National Reconstruction Fund (NRF).

Ai Group is a peak national employer association representing and connecting thousands of businesses in a variety of industries and sectors across Australia. Our membership and affiliates include private sector employers large and small from more than 60,000 businesses employing over 1 million staff.

Ai Group welcomes the Government's commitment to the transformation and diversification of Australian industry through the NRF. As we move into the post-Covid era, Australia is facing rapid technological shifts that will require change in our economic and industrial structure.

Digitalisation, automation, artificial intelligence and the clean energy revolution will remake global industry. Australia is well-positioned to benefit if we can seize emerging opportunities in areas where we have demonstrated or potential competitive advantages.

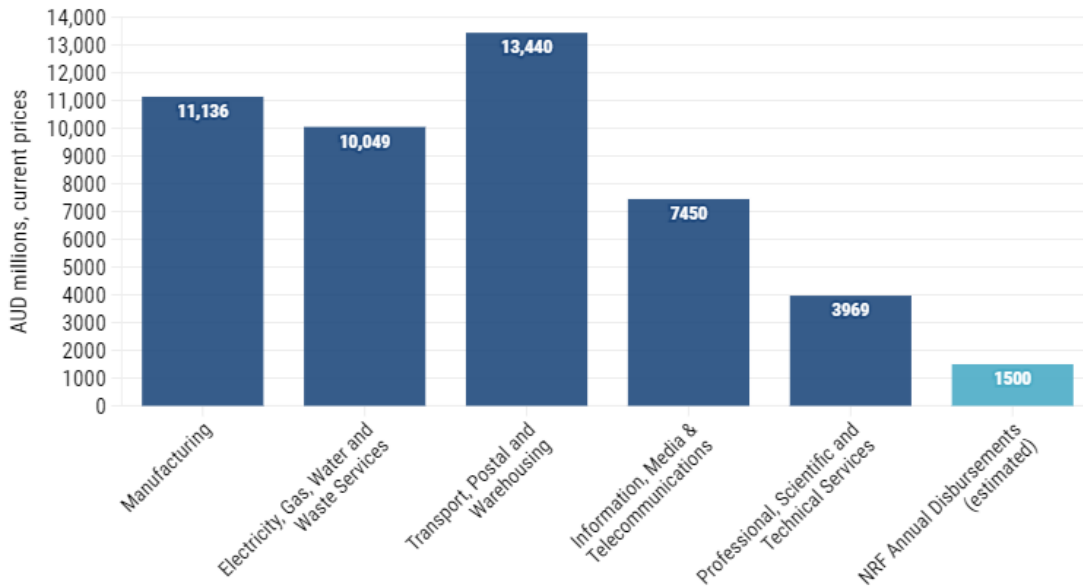
The NRF provides Australian Government a policy lever to accelerate and shape this industrial transformation. While "Industry 4.0" is already well-underway, the NRF will provide a new vehicle to advance in areas of strategic importance for Australia's prosperity and security.

The Government's commitment of \$15 billion to the NRF is a sizeable down-payment. Recognising the scale of the challenge and opportunity, it elevates industrial transformation to the top of the economic policy agenda. The NRF will be on par with other major government financing entities – such as the Clean Energy Finance Corporation (CEFC), and Export Finance Australia (EFA).

The NRF will be an adjuvant to private sector investment. In the five industry sectors covered the NRF's seven priority areas, there was \$46 billion of capital expenditure in the 2021-22 financial year (see chart). By contrast, the NRF is likely to invest approximately \$1.5 billion per annum over the next decade. This is equivalent to 3% of current private investment in these sectors.

At these aggregates, the NRF will certainly not 'crowd-out' private investment in Australian industry. But to 'crowd-in' transformative private investments effectively, it will need to be highly strategic in the capabilities which it chooses to support.

Capital expenditure in NRF-targeted sectors, FY2021-22



Source: [ABS Private New Capital Expenditure and Expected Expenditure](#)

The NRF marks a change in how Australian governments foster industrial transformation. It will offer financial support to business – in the form of loans, guarantees and equity – with investment decisions made by an independent Board guided by an investment mandate. The NRF will achieve a positive rate of return, and be exposed to and manage commercial risk.

This finance-based approach is distinctive from other forms of industry policy in Australia. These typically utilise grants, business development support, and/or research partnerships to aid SMEs to become ‘growth ready’. By contrast, the NRF targets a later stage in the industry life-cycle, offering financial to support businesses that are already growth-ready.

Ai Group welcomes the long-term, priority-driven approach embodied in the NRF model. Industrial transformation is a long-term endeavor, requiring the development of innovative capabilities in a range of interlined businesses and sectors.

Too often in Australia, short term funding cycles have prevented industry programs from achieving lasting transformation. Cuts to *Entrepreneurs Programme* (EP) announced in the October 2022 Budget are an example. For eight years, EP successfully helped thousands of SMEs through commercialisation, management and research coaching services. The loss of EP leaves a gap in Australia’s industry policy framework that the NRF does not replace.

By establishing a permanent government entity, the NRF will avoid the ‘chop and change’ that has characterised recent industry policies. However, it is critical that investment in complementary programs targeting earlier stage businesses are maintained. Indeed, these programs are essential for the NRF, as they develop the pipeline of projects that can subsequently graduate to NRF support.



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Three strategic principles for a transformative NRF

What strategic orientation will ensure the NRF has a lasting and transformative impact on Australia's industrial capabilities? Ai Group suggests three strategic principles – on the NRF's role in the investment marketplace, the priority accorded to industrial ecosystems, and the importance of adaptable capabilities – that will help ensure the NRF achieves these objectives.

1. The NRF needs a distinctive role in the investment marketplace

The NRF will co-exist alongside other commercial players in the investment marketplace. Australian industry can seek loan finance from commercial banks, and equity from public and private investment markets. The NRF will need to offer products that are distinctive from, and competitive with, existing commercial investment options.

Other government financing entities – particularly CEFC and EFA – already perform this role successfully. They achieve this by being specialist investors – offering distinctive products that fill a gap in the investment marketplace. EFA specialises in trade finance, and has recently developed bespoke offerings in subsectors (including defence industry and critical minerals) with unique financing requirements. CEFC is a specialist investor in clean energy projects, targeting emerging energy subsectors where private sector options are under-developed.

The NRF should emulate this 'gap-filling' approach to be successful. But it is unlikely to be able to deploy the specialist investor strategy of its peers. CEFC and EFA each have tightly defined industry verticals, whereas the NRF will need to operate across seven priority areas. The NRF will also need to identify and exploit synergies lying between those priority areas – for example, projects that link renewables with value-adding in resources. The NRF's objectives call for a generalist not specialist investor.

As telegraphed in the NRF Consultation Paper, some form of concessionality in the NRF's investment activity will be required. Concessionality is appropriate, given that the NRF seeks to unlock industrial transformation that will bring wider benefits to the Australian economy. These wider benefits are not priced by commercial banks and investors, and warrant the provision of concessional terms from the NRF.

There are multiple forms NRF concessionality could take, including:

- Lower required rates of return, recognising that NRF investments are expected to bring positive spillovers across the economy, and support other Government policy priorities
- Longer duration of support, where adopting a more 'patient' approach can support complex industrial projects with longer time horizons
- Greater tolerance of risk, particularly in emerging technologies where commercial investors often prefer mature and lower-risk options
- Flexible security terms, where the NRF may consider assets and forms of security not typically recognised by commercial banks (such as non-patentable IP).

The NRF's investment mandate should enable the Board to offer these forms of concessionality in its activities, with appropriate limits that proportionally tie concessionality to terms available from commercial investment markets.

2. The NRF should take an ecosystem approach to industrial transformation

The NRF will have a focus on targeting value-add activities. This will enable Australia to leverage our existing competitive strengths in energy, resources and agriculture, and upgrade our manufacturing industry into knowledge-intensive niches. A focus on achieving industrial transformation through value-adding on top of our primary industries is welcome.

Successful value-adding depends not on individual enterprises, but on the industrial ecosystems to which they belong. In knowledge-intensive industries, it is rare for a single enterprise to control all stages of production. Instead, enterprises reach the knowledge frontier by specialising in particular stages of production. Value chains linking multiple enterprises then combine their unique capabilities together to make a final product.

It has long been recognized that Australia needs to build cohesive ecosystems, not simply competitive enterprises, to succeed in industrial transformation.

The NRF can support the development of industrial ecosystems in the way it selects projects. While it is individual businesses that will receive NRF funding, their projects will offer positive spillovers both backwards and forwards along the value chain. Illustrative examples include:

- Manufacturing of low emission transport equipment, which unlocks further decarbonization projects across the transport sector
- Minerals processing capabilities, which open opportunities for new mining development in critical minerals
- Defence-related industries, which build capability and skills bases that are shared with the non-defence aerospace, resources and automation sectors
- High value-added agrifood sectors, which support local tourism precincts
- “Product stewardship” industries – such as innovative packaging and recycling – which enable manufacturers to more easily meet environmental standards and consumer expectations

These ecosystem effects have important implications for how the NRF defines and measures industrial transformation.

The NRF should prioritise transformation at the ecosystem level. Projects offering positive spillovers across the broader industrial ecosystem should be accorded highest priority. Ideally, the NRF could make coordinated investments in multiple stages within an industry to maximise these ecosystem effects.

The NRF should measure value-add at an ecosystem level as well. So-called ‘mid-stream’ industries – those which process raw materials into intermediate components – play a crucial role here. Mid-stream industries are important not just for their own value-adding, but for their ability to support downstream industries that layer additional value-adding on top.

When evaluating transformation and value-add, the NRF should measure the contribution of a potential project across the entire ecosystem.

3. The NRF should take a 'sovereign adaptability' approach to industrial transformation

The NRF seeks to build Australian industry capabilities. Its agenda is therefore linked to debates over Australia's 'sovereign capabilities' – of our diverse economic needs, which should be met by local industry, and for which will we rely on imports?

Like many countries, Australia was affected by supply chain disruptions for many critical goods – including medicines, agri-chemicals and semiconductors – during the pandemic. Shortages were most acute in products in which Australia did not possess local manufacturing capability.

The pandemic experience has led both government and business to reappraise the value of sovereign capabilities. Were such disruptions to occur again sovereign capabilities will prove invaluable. It is now widely recognised that for some highly critical goods, complete dependence on imports poses an unacceptable level of risk for national economic security.

The NRF will play a key role in advancing the sovereign capability agenda. Several priority areas – medical manufacturing, critical technologies and defence capability – have already been identified as those where greater sovereign capability is required. Projects within its clean energy, resource value-add and agriculture value-add streams are likely to be the same.

However, taking a simplistic approach to developing sovereign capabilities is likely to miss the mark. Australia requires more critical goods than our economy could feasibly manufacture. For many critical goods, Australia lacks either the scale and/or technology to develop competitive industries. What constitutes a critical good is also likely to change with technological progress.

With limited resources, Australia – and the NRF – will need to be strategic in which current and future sovereign capabilities we choose to cultivate.

Adopting a 'sovereign adaptability' philosophy will assist in this agenda. Sovereign adaptability considers what an industry could *feasibly adapt itself to produce*, not simply what it produces under business-as-usual conditions. Adaptable industries are valuable because they can dynamically adjust to meet different supply chain interruptions that could potentially occur.

There are several examples of adaptability in Australian industry, including:

- During the early phases of the pandemic, several MedTech and non-medical manufacturers were able to quickly pivot towards producing PPE or medical equipment which was in very short supply globally
- In defence, many first- and second-tier suppliers can shift between defence and civilian applications, including into oil & gas, shipbuilding, electronics and aerospace.
- Low-emissions technologies developed for the road transport sector can be reapplied to decarbonisation in high-emitting mining and industrial sites
- Advanced cybersecurity techniques developed for the finance and technology sector can support the broader roll-out of cyber capabilities across the economy

Cultivating adaptable industries will make the greatest impact for Australia's sovereign capability and supply chain resilience agenda. The NRF should place a premium on sovereign adaptability in its investment decisions. Adaptability attributes are under-priced by commercial investors and banks, making them an ideal niche in which the NRF could specialise.

Implementing a successful NRF agenda

The NRF requires an investment mandate and operational practices that will enable the independent Board to realise these objectives. Ai Group suggests eight further implementation steps that will aid successful establishment of the NRF:

1. Complementary industry support programs to build a pipeline for NRF projects

The NRF will provide finance to 'investment ready' businesses. However, many innovative industrial businesses in Australia are at an earlier stage of the life cycle. These businesses require support for initial commercialisation before they can graduate to NRF support.

Cuts to the *Modern Manufacturing Initiative* and *Entrepreneurs Programme* in 2022 deprive the NRF of two main pipelines for preparing innovative SMEs to be investment-ready. Several state government industry support programs remain, but these are less-resourced than Commonwealth efforts, and may not be aligned to the NRF priority areas.

It is imperative that complementary industry support programs are put in place by the Commonwealth to support the NRF pipeline.

2. Defining the relationship between NRF and other government financing vehicles

The NRF will operate alongside the CEFC and EFA. In three NRF priority areas – renewable and low-emission technologies, value-add in resources, and defence capability – it will overlap with existing CEFC or EFA funds or facilities. There is a clear need to define the relationship between these independent bodies, and establish a division of labour that will prevent competition.

In renewables, one possible approach would be for CEFC to focus on transport and transmission projects, while the NRF targets industrial decarbonisation. In critical minerals, EFA might continue to focus on upstream projects (mining and processing) while the NRF supports downstream applications (product manufacture).

Such an approach allows each entity to develop complementary specialisations, and telegraph to industry from which entity financial support should be sought.

3. An expert board with the knowledge and vision for industrial transformation

Ai Group welcomes the decision to establish an independent NRF Board, which will administer the NRF at arm's length to government within the parameters of the investment mandate. Allowing independent investment decisions and portfolio management is critical for the NRF to have the capability to realise its objectives of genuine industrial transformation.

It is equally important that the NRF Board is composed with the right knowledge and vision. The NRF has a unique purpose – catalysing a qualitative transformation within Australian industry – which demands unique expertise. It will need to identify new industries, some which have never been Australia before, and design bespoke investment packages to aid them to market. It will need to evaluate many emerging technologies, and make strategic choices regarding which are

best aligned to our economic capabilities. To achieve this, it will need to be more risk tolerant, and take a longer-term perspective, than comparable government or commercial entities.

The NRF requires a Board with the right expertise for this challenging task. It should include individuals with a mix of financial, industrial and technology expertise that can collectively grapple with these complex considerations. They should have experience in future-focused technologies, and have cross-cutting knowledge across different industrial verticals. Most importantly, they will need to embody the NRF's vision for industrial transformation.

4. A flexible approach to defining NRF priority sectors

The seven NRF priority sectors are appropriately aligned. Each identifies an area where Australia presently has industrial capabilities, has the potential to competitively develop new capabilities, and doing so would offer positive spillovers for other industrial sectors. Potential cross-cutting linkages – such as between low-emissions technology and transport – demonstrate the priority areas function as a cohesive whole.

It will be important to take a flexible approach in defining what falls within these priority areas. Given the pace of technological change, what constitutes transformative value-add will change significantly during the life of the NRF. The renewables and enabling capabilities areas are particularly subject to technological disruption. A flexible approach to defining the priority areas will ensure that projects meeting the transformative and value-adding criteria can obtain support, irrespective of their specific technologies.

5. Include international orientation and competitiveness as an NRF criterion

Innovative technologies usually require scale to earn back their development costs. Given the relatively small size of the Australian market, it is common for our successful industrial innovators to also be successful exporters. Trade-exposed industries are some of the most competitive, as they are exposed to world-leading competitors that drive productivity and innovation. Industries with foreign investment can transfer overseas-developed technology into the Australian market, filling gaps in our knowledge base.

International orientation should be considered a strength for projects under NRF consideration. This includes both the export orientation and foreign investment attributes.

6. Aligning NRF activities with complementary state government programs.

Most state governments maintain programs to support the development of industrial capabilities. These programs complement Commonwealth initiatives, by taking a geographic focus (on regions or local hubs), and/or targeting sectors where the state has distinctive capabilities. State government programs will be an important complement for NRF by supplying a pipeline of investment ready businesses.

There is benefit in a degree of alignment between NRF activities and state government programs. State government programs will, given their distinctive economies, target different priority sectors to those of the NRF. But in areas where there is overlap – such as resource value-add with Western Australia, or medical science with Victoria – there are opportunities for

fruitful alignment. State government agencies' input should also be sought in developing the NRF pipeline during early stages of its development.

7. Support resource-heavy, patent-light innovation.

The type of innovation most common in Australia is 'new-to-the-firm' innovation (i.e., applying high-tech equipment or processes invented abroad to local industrial applications). This is extremely valuable, as it allows the importing of knowledge to upgrade and diversify our industrial mix.

Unlike 'new-to-the-world' innovation, new-to-the-firm innovation rarely generates patents. This poses a problem for investment in R&D, which is often commercially valued based on its ability to generate patents that guarantee a future income stream. New-to-the-firm innovations are undervalued in the absence of patents and fail to attract appropriate amounts of investment.

The NRF could support these types of practical innovation by strategically targeting IP-heavy but patent-light forms of innovation. This would be aligned to its objective of industrial transformation and help fill a gap in the investment marketplace for Australian industry.

8. In-built review of NRF performance against objectives

The NRF is an innovative institution, and will use new types of industry policy to catalyse transformative change in industry. It is by its nature 'experimental' and will need to test different forms of policy support which have not been used widely in Australia before.

It is therefore appropriate for the NRF to be subject to built-in periodic review against its objectives. As a start-up institution, this review should commence early in its life.

Ai Group welcomes the clear focus on 'measurement' – of value-add, transformation and diversification – telegraphed in the NRF Consultation Paper. Measuring these indicators will allow for evidence-based assessment of the results from NRF activities, and their wider benefits to the Australian economy. The NRF should be independently reviewed against these metrics on a five-yearly basis. It should also be subject to independent review at the two-year mark, to evaluate results from initial activities and identify 'lessons-learned' to inform early reforms.

Should you wish to discuss the matters raised in this submission, please feel free to contact me at Louise.McGrath@aigroup.com.au

Sincerely yours,



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