

National Reconstruction Fund Taskforce  
Department of Industry, Science and Resources  
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3 February 2023

**Re: National Reconstruction Fund consultation paper**

Thank you for the opportunity to comment on the Consultation Paper on the National Reconstruction Fund (NRF).

The Energy Efficiency Council (EEC) strongly supports the establishment of the NRF, its priority areas for investment, and its aim to drive investments that add value and develop capability for Australia.

The attached submission sets out the EEC's comments and responses to the Consultation Paper.

The EEC is particularly keen that the National Reconstruction Fund supports businesses and investment that are compatible with a net zero future. A core strategy for reducing emissions, accelerating the clean energy transition, and reducing energy costs for businesses is the implementation energy efficiency and energy management technologies. Energy efficiency and smart energy management:

- Underpin sustainable, competitive industry through critical cost savings and improved energy productivity;
- Support Australia's net zero transformation through industrial decarbonisation; and
- Represent a significant investment opportunity for the NRF, with substantial existing local capability to build on.

Additionally, the NRF should:

- Invest in new and expanding businesses producing energy efficiency technologies and other products and inputs critical to net zero transformation;
- Consider investments in all businesses that improve energy productivity to enhance long term competitiveness and prospects; and
- Seek opportunities for government to value add to the investment, such as through the provision of advice, resources and expertise on improving business energy productivity.

Investments and projects should be considered through a lens of compatibility with achieving net zero by 2050 to ensure the NRF complements and reinforces our long-term climate commitments. Projects and investments that strategically *accelerate* the decarbonisation of industry should be prioritised.

The EEC congratulates the Government for its commitment to support, diversify and transform Australia's industry and economy through the NRF and the Government's agenda to support competitive, sustainable manufacturing in Australia.

If you require any further information relating to this submission, please don't hesitate to contact me at [alex.stjohn@eec.org.au](mailto:alex.stjohn@eec.org.au) or on 0413 698 181.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Alex St John', written in a cursive style.

Alex St John  
Acting Head of Policy  
Energy Efficiency Council



**energy efficiency**  
**COUNCIL**

**Submission on the  
Consultation Paper on  
The National Reconstruction Fund**

**3 February 2022**

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## Energy efficiency and sustainable, competitive industry

As the world is gripped by an energy crisis, business as usual may not be enough for many Australian manufacturers.

Fluctuating prices have caused acute pain for industry in the last several years. In August 2022 the RBA noted wholesale electricity prices were around four to five times higher in June and July than at the start of the year<sup>1</sup>. Although prices are expected to come down over time, they'll remain higher relative to those enjoyed in past<sup>2</sup>. Due to multi-year contracting arrangements, increases may be slower to filter through industry, however when they do, they are likely to have a further indirect effect on inflation<sup>3</sup>.

The cost of energy has seen some Australian businesses close down, move offshore or delay plans for expansion. In addition to struggling to profitably operate or compete with international competitors, extreme energy costs have also reduced the ability of these businesses to invest in jobs, skills and innovation.

Energy efficiency and smart energy management can play an important role in helping to reduce the burden of high energy prices on Australia's sovereign manufacturing capabilities. In fact, investment in energy productivity can increase annual profits for businesses by between two to ten percent<sup>4</sup>. These efficiency gains can reduce pressure and provide critical cost savings for businesses. Additionally, greater energy efficiency means increased productivity and competitiveness. This is why more and more businesses are using energy efficiency upgrades along with energy management systems to achieve vital cost savings<sup>5</sup>.

NRF investments that encourage energy productivity, whether directly or indirectly, help to cut costs and enhance the competitiveness of industry, while delivering additional benefits such as:

- Enhanced sovereign capability and strengthened supply chains for products used in residential rehabilitation and climate proofing;
- Added support for demand flexibility; and
- Acceleration of electrification where feasible

Accelerated electrification for industry is particularly important when considering the capability and employment Australia is at risk of losing due to high costs, including energy prices, along with an industrial reliance on gas, which is extremely costly, and likely to stay that way. Although not all industrial gas use is amenable to electrification, those processes that can be electrified can benefit from using cheaper renewable energy sources.

Investment by the NRF in projects that support greater energy efficiency would be a sound use of public resources as it not only helps to deliver critical cost savings, fight inflation and support competitive local industry – it also helps to decarbonise industry, which fits in with Australia's long-term commitment to achieve net zero by 2050.

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<sup>1</sup> ['Statement on Monetary Policy - Recent Developments in Energy Prices,'](#) Reserve Bank of Australia, 2022.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> ['Energy Productivity Price Index for Companies,'](#) Climateworks Centre, 2016.

<sup>5</sup> ['Energy Efficiency 2022,'](#) International Energy Agency, 2022, p.62.

## The NRF and industrial decarbonisation

Industrial decarbonisation requires changes to production processes -in some cases re-designing them from scratch - as well as costly site rebuilds and retrofits. Businesses that make these changes and adopt low-carbon production processes will suffer short-to mid-term increases in cost, disadvantaging them in a competitive global market<sup>6</sup>. This is a significant but not unique challenge for Australian businesses.

Globally, it is estimated that that energy efficiency will deliver 25 per cent of the cuts needed to achieve net zero, which is equal to the abatement expected from renewable generation<sup>7</sup>. However, it is clear that tremendous public and private investment will be needed to decarbonise industry through energy efficiency upgrades, electrification and more. Additional to this investment, significant foresight, planning, and policy and regulatory synergy is also required. To that end, the NRF should view all investments and projects with a clear expectation that all investments will be compatible with achieving net zero by 2050.

At minimum, only projects and investments which are deemed compatible with Australia's net zero future should be considered for investment by the NRF. Furthermore, projects and investments that strategically *accelerate* decarbonisation and net zero transformation should be given priority, as they underpin our long-term commitment to net zero. This ensures that public resources deliver commercial objectives sustainably.

## Investment in existing capability

While investment in new and innovative businesses and projects is certainly desirable, the NRF should not overlook support for upgrades, improvements and expansion of existing capability.

Australia already manufactures a range of energy efficient and other products and inputs critical to net zero transformation. Some obvious examples of these include insulation, smart controls, and heat pumps. Many of these manufacturing businesses have significant scope to scale up and/or diversify. In addition to the jobs, capability and growth aspects represented, the items being manufactured locally are needed for climate proofing the nation, so growing sovereign capability in this area delivers both commercial and strategic benefits to Australia.

Finally, it is worth noting that Government policy and financing arrangements contribute to an ecosystem which can both help and hinder businesses in access to capital, particularly in terms of foreign investment. Domestic investment by the NRF can have flow on effects for existing local industry aiming to scale up, and can play a role in helping Australian businesses compete for a strong share of global investment approvals.

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<sup>6</sup> ['Decarbonizing industry will take time and money—but here's how to get a head start,'](#) McKinsey Sustainability, 2018.

<sup>7</sup> ['World Energy Transitions Outlook 2022,'](#) IRENA, 2022.

## Response to consultation questions

### The seven priority areas of the Australian economy

- **What types of projects or investments should the Government direct the NRF to focus on, or not invest in, within each of the seven priority areas to achieve the NRF's purpose?**

Most relevant to the *renewables and low emissions technologies* priority area, there are significant opportunities to lift the capability of Australian manufacturers in the production of energy efficient and other products and inputs critical to net zero transformation. These include but are not limited to smart controls, insulation and heat pumps. Projects and investments by the NRF in this space can strengthen supply chains for products that are essential to Australia's net zero transformation and climate proofing, while creating local opportunities for innovation and employment.

All projects and investments in the NRF should be considered through a net zero by 2050 lens, in support of Australia's wider decarbonisation goals. Projects and investments that *accelerate* net zero transformation should be given priority, while those that prove inconsistent with our net zero and decarbonisation goals should not be considered for investment at all.

- **How much detail should be provided on each of the priority areas? How should greater detail and the need for flexibility be balanced?**

More detail in the priority areas can be complemented and/or balanced by more flexibility and big picture thinking in the approvals. An investment mandate that is clear on intended outcomes is essential, but should be backed in with a pragmatic approach to administration that accounts for supply chain and industry realities.

The approach previously taken in the *Modern Manufacturing Initiative* (MMI) grants process is worthy of consideration. Similar to the seven priority areas of the NRF, the *Modern Manufacturing Strategy* incorporated six priority areas which informed eligibility criteria for MMI grants. The priorities were clear; however, flexibility was provided in consideration for applicants that did not explicitly operate within a priority area, but had a product or service that demonstrably supported a priority area.

### Investment needs and opportunities

- **How can the NRF help build or encourage stronger pathways for Australian developed innovation and research, and encourage additional private investment in priority areas?**

Australia is known globally for high-quality research, and despite having only 0.3% of the world's population, Australia has contributed to over 4% of world research publications<sup>8</sup>. Despite these strong results, we are lagging in terms of the commercialisation of research and partnerships between research institutions and businesses.

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<sup>8</sup> ['Partnering with Australia on Innovation, Science and Research,'](#) Department of Industry, Science, Energy and Resources, 2020, p.9.

Industry has reported that there is not enough government support for local participation in R&D<sup>9</sup>. There are also reported challenges to businesses collaborating with universities given cultural differences such as overvalue of IP by research institutions, and the differences between a fast-paced business environment and the traditionally slower moving academic process<sup>10</sup>.

The NRF alone cannot resolve these cultural differences and the friction reported between research institutions and businesses, however it can promote Australian innovation and research through the provision of attractive incentives for businesses to engage more with research.

The design of the NRF should examine how it can maximise its value by linking with successful existing programs, such as the Australian Renewable Energy Agency, the Clean Energy Finance Corporation and the Cooperative Research Centres program. These programs have a long history of strong outcomes in moving clean technologies long the innovation chain, and could provide opportunities for investment that will back Australian innovation and deployment.

- **How could the NRF consider Government policy priorities in performing its investment function?**

A key example discussed earlier in this submission is the application of a net zero by 2050 lens to investment, ensuring investments made by the NRF support delivery of our commercial interests, sustainably.

### **Returns, financial instruments and working with other investors**

No comment at this time.

### **Complementary reforms**

No comment at this time.

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<sup>9</sup> [‘The Australian Manufacturing Industry: Submission to the Economics References Committee Inquiry,’](#) Australian Industry Group, 2021, p.3.

<sup>10</sup> Ibid.