

National Reconstruction Fund Taskforce
Industry House, 10 Binara Street
Canberra ACT Australia

2 February 2023

Labor Environment Action Network Australia (LEAN Australia) submission to the National Reconstruction Fund consultation 2023.

To the Taskforce,

On behalf of the Labor Environment Action Network (LEAN), I am pleased to provide this submission to the National Reconstruction Fund consultation process.

The establishment of the National Reconstruction Fund (NRF) is an ambitious and smart approach to securing Australia's future prosperity, creating good quality jobs and driving sustainable economic growth.

LEAN commends the Government for the strong focus on renewable energy and low-emission technologies, as well as the circular economy and sustainability, within the fund. Establishing and expanding a competitive sustainable industrial and manufacturing sector is essential for Australia to secure an edge in global markets and create high-value business opportunities and secure, well-paid jobs.

While LEAN supports the direction and high-level intent of the fund, some specific additional areas of investment will be needed to support an orderly transition of the workforce, prevent the loss of existing manufacturing jobs and capacity, and take advantage of new export opportunities.

1. NRF's first priority must be strengthening and protecting existing manufacturing

The NRF will fail unless it includes support to existing manufacturing to respond to the demands of the 21st century. Creating new industries is hard. It would be counter productive to allow the NRF to focus on establishing new industries or on areas where there is need for technological innovation, while existing capability is lost due to shifts in demand, particularly those driven by the global decarbonisation task. Ensuring existing manufacturers survive through innovation should be the first priority in our race to a future made in Australia.

2. LEAN recommends that the NRF specifically identify appliance electrification as a commercial opportunity to pursue in the Renewable and low-emission technology stream.

Electrifying Australia's households is an essential task in meeting our emission reduction goals. Households produce 11% of Australia's GHG emissions, over 20% if private vehicle use is included. State and Federal Governments are committed to assisting this shift across our 9 million households.

LEAN recommends the NRF include a focus on the electrification of the appliance manufacturing sector in order to retain the 5,000 existing appliance manufacturing jobs and the more than 36,000 jobs which depend on the sector¹. A specific focus on appliance electrification will enable Australia

¹ Calculated using the Economic Policy Institute's jobs multiplier for durable manufactured goods. See - <https://www.epi.org/publication/updated-employment-multipliers-for-the-u-s-economy/>

to upgrade the nation's 30 plus appliance manufacturing factories so they produce the high efficiency electric appliances local and global consumers are demanding. A clear investment priority will also attract new manufacturers to open facilities to capitalise on booming demand for heat-pumps and induction cooktops. Investing in local facilities will ensure Australia stays abreast of the latest technology, will mitigate ongoing supply chain backlogs to ensure Australian householders can access the technology they need to get off gas and cut living expenses.

Increasing energy efficiency standards, while critical, risk sending manufacturers offshore without a dedicated NRF investment stream to upgrade local facilities. We need to retain what existing manufacturing capabilities and pivot them to the zero emissions needs of the future.

While LEAN's focus is the manufacture of highly efficient, electrical household appliances, there is also significant opportunity to improve efficiency and competitiveness in the broader equipment manufacturing sector – especially items such as truck trailers, pumps, conveyors, and boilers – as Australia shifts its manufacturing base to capitalise on the zero-emissions paradigm shift.

3. LEAN recommends that the NRF specifically identify plantation establishment and management, forest management and land restoration technology as a value-adding commercial opportunity in the agriculture and forestry stream, as well as an essential tool in the renewable and low-emission technologies stream.

3a. Testing all agriculture and forestry investments against Government policies. The land sector – agriculture and forestry – are currently large contributors to Australia's greenhouse gas emissions profile. The land sector is currently responsible for 16% of Australia's carbon emissions. Government investment should support the delivery of policy to deliver net zero by 2050, an end to extinctions and delivery of obligations under the Convention on Biological Diversity. All proposals should be tested against these.

3b. Supporting the expansion and sophistication of the plantation sector, ending native forest logging and increasing value adding. In order to deliver on its climate change and biodiversity commitments, and deliver the volume of carbon credits that the Safeguard mechanism and the voluntary market demand, the Australian Government must shift the timber industry to 100% plantation timber and end native forest logging, during this term of parliament. Ending native forest logging is the single most important measure to address the extinction crisis and save an average 15.5 million tonnes of CO₂e from being emitted each year.²

This transition will require significant investment to establish plantations to replace native forests (88% of all timber production already comes from plantations³) and to shift the industry from a low value, low profitability sector to a secure and plantation based, high value add industry. A large proportion of our plantation estate delivers pulp for paper and cardboard, we need to expand the percentage of industry that requires higher value processing. This will include innovation to address substitution of the small volume of high value products delivered by the native forest sector.

3c. Supporting the establishment of a globally significant land sector carbon sink The NRF should play an integral role, with other parts of government, in the transition from 'climate negative' land management to climate positive by investing in advanced technology solutions to remotely manage and restore large land areas. Australia can build a globally significant land carbon sink, which, as the

² ANU, <https://www.canberratimes.com.au/story/7940088/this-is-the-only-way-australia-can-meet-its-net-zero-targets/>

³ Australian forest and wood products statistics - March and June Quarters 2022, ABARES

world moves to net zero emissions, has the potential to be a significant export industry employing thousands in regional Australia.

Forest management and restoration is a major growth sector for Australia and has the potential to create 18,600 new jobs in regional and rural areas.⁴ The future of the industry will be increasingly high tech and presents a growth and export opportunity through the development of advanced technology solutions to remotely manage and restore large land areas. Australia's remaining forests store 22 billion tonnes of carbon and require increasingly sophisticated management to track carbon retention and enable Australia to meet its climate commitments. Additionally, at least 13 million hectares of degraded land will need to be restored over the next 30 years and requires a step change for the industry from current volunteer and labour-intensive models for propagation, planting and feral pest management to the development and deployment of sophisticated technology that will define the future of forest management and regeneration.

Financing for this industry will come from ACCUs and the demand for carbon off-sets. It will also be a focus for financing innovation as corporations increasingly are expected to fund Taskforce on Nature-related Financial Disclosures. Companies pursuing their own net zero targets, and seeking to minimise their nature-related risks, will be looking at innovative ways to achieve this. Meeting these obligations with high quality, high integrity credits subject to rigorous governance, such as ACCUs or credits generated in the Government's proposed Nature Repair Market, will be attractive to both Australian and international companies, and will foster financial innovation.

Opening up the NRF for investment in the forest management and regeneration technology sector will send a clear industry signal and help position Australia at the forefront of this growth sector.

LEAN thanks the taskforce for this opportunity to make a submission and support this unique opportunity to rebuild Australia's manufacturing and innovation capabilities while turbocharging the transition to a zero emissions economy and securing good quality jobs for Australian workers.

Ensuring the investment mandate supports both the establishment of new industries as well as the transition of existing sectors, like the appliance manufacturing workforce, is critical for its success and to underpin government objectives to reduce carbon emissions, electrify household, reduce household bills and exposure to volatile gas prices, and create long term local skilled jobs.

Yours Sincerely,

A handwritten signature in black ink that reads "Felicity Wade". The signature is written in a cursive, flowing style.

Felicity Wade
National Co-Convenor
Labor Environment Action Network (LEAN)

⁴ Department of Agriculture and Water Resources 2018, *Growing a better Australia – A billion trees for jobs and growth*, Canberra. CC BY 4.0. ISBN 978-1-76003-174-9 (printed), <https://www.agriculture.gov.au/agriculture-land/forestry/publications/growing-better-australia>

What is the Labor Environment Action Network

The Labor Environment Action Network (LEAN) is a group of Labor members and supporters that works to influence environmental policy making within the Australian Labor Party.

Responses to the NRF Taskforce questions

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?

LEAN supports the proposed investment focus detailed in the National Reconstruction Fund Consultation Paper and encourage the addition of **appliance manufacturing electrification, transition to value-adding, 100% plantation-based forestry industry and forest management and regeneration industry development** to the investment mandate.

LEAN strongly recommends that the NRF **not invest** in any technology which will support further fossil fuel development including discredited carbon capture and storage processes or 'clean gas or coal' technologies.

All NRF investment should **support the delivery of policy to deliver** net zero by 2050, an end to extinctions and delivery of Kunming-Montreal Global Biodiversity Framework obligations. All proposals should be tested for alignment with the Government's existing commitments and policy priorities.

What are the opportunities for value-add, growth and diversification in each of the priority areas?

Renewables and low-emission technologies stream

Appliance manufacturing electrification

- Diversify Australia's existing appliance manufacturing base from gas appliances such as hot water systems, heaters, and cooktops across to appliances with rapidly growing demand such as heat pump hot-water systems, high efficiency ovens and whitegoods, split system air-conditioning, and induction cooktop technology for domestic and commercial customers.
- Australia has more than 30 appliance manufacturing facilities that directly employ 5000 workers, however most are dependent on gas appliance production and need to transition in order to stay competitive.
- There are 12.6 million household gas appliances in Australia alone that need to be upgraded to electric solutions in order to reduce gas use and meet our climate targets. Household electrification at a global scale represents a new growth market Australia can supply if we build manufacturing capacity early to meet the demand.

Value-add in the agriculture, forestry, and fisheries stream

Transition to 100% plantations, forest management and regeneration industry development

- Invest in expansion of nursery sector to manufacture sufficient tube stock for plantation expansion and regeneration project growth.

- Invest in value adding in the plantation timber industry, such as the establishment of Cross Laminated Timber facilities, to diversify the sector from high dependence on low value products like paper and cardboard production.
- Invest in development of drone technology for forest management and mechanised technology to enable regeneration planting and management to be undertaken at scale.
- Australia needs to improve management of the 46 million hectares of protected native forest and integrate more of the remaining 86 million hectares of native forest into official systems of protection for biodiversity and carbon retention. This is a growth opportunity for forest management technology industries.
- Researchers from the University of Queensland and the Wentworth Group of Concerned Scientists have identified that Australia needs to restore 13 million hectares (out of the total 52 million degraded hectares) over the next 30 years.⁵ The plantation industry must also expand by 400,000 hectares over the next decade. Meeting this demand will require nursery production to expand from roughly 70 million trees per year to 270 million per year – a significant market expansion opportunity.

What are the manufacturing capabilities needed to support each priority area?

Appliance manufacturing electrification

- Retooling of existing product lines to enable production of high efficiency appliance models as well as integration of electric appliance production in gas appliance production facilities.

Forest management and regeneration industry development

- Support innovation in value adding, particularly high value building products, for both the hardwood and softwood plantation sector.
- Commercialisation of autonomous technology used by research institutions and universities for industrial deployment in the forest management sector.
- Customisation of commercial crop planting technology for use in the native forest regeneration sector and deliver further efficiency improvements in the plantation sector.

What are the strategic priorities for supply chains / enabling inputs in each priority area?

Appliance manufacturing electrification

- Design or licencing of new appliance high efficiency and electric models.

Forest management and regeneration industry development

- Expansion of the native and plantation forestry seed collection supply chain. Current carbon credit industry states this as one of their key barriers to growth.

What are the gaps in or barriers to private sector investment in each of the priority areas?

⁵ <https://theconversation.com/australia-could-green-its-degraded-landscapes-for-just-6-of-what-we-spend-on-defence-168807>

Appliance manufacturing electrification

The primary barriers to private sector investment are the relative cost of retooling one of Australia’s existing appliance factories compared to offshoring production. The status quo business case firmly favours offshoring all new manufacturing capacity. Investment from the NRF would change this calculation and help make domestic retooling an attractive investment proposition and keep manufacturing capacity in Australia.

The other primary barrier to private sector investment is uncertainty about future demand for electric and high efficiency household appliances. The government’s commitment to provide support for households and business to electrify is an opportunity to grow demand.

Australian households generate 11% of Australia’s emissions⁶ and need to electrify if we are to meet our carbon emission targets. Clear government policies are needed to accelerate home electrification. This includes lifting energy efficiency standards for all appliances covered by Equipment Energy Efficiency (E3) program under the Greenhouse and Energy Minimum Standards Act as well as a establishing a social housing electric appliance procurement program with local procurement requirements. These initiatives and unlock private capital investment when coupled with joint NRF investment potential.

Plantation establishment and value adding, forest management and regeneration industry

Australia needs:

- A clear policy framework for transition of remaining native forest logging and clearing operations to plantation-based industry, including investment certainty.
- A coordinated approach to carbon and biodiversity markets that includes a focus on industry innovation. As well as regional development plans and goals.
- A clear industry plan that identifies what products we want to make/supply and make sure the trees are the right ones.

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

In principle, NRF investment decisions should align with legislated mandate and government policy priorities.

For example, the following two areas align and enable the following government policy commitments.

Appliance manufacturing electrification

The Federal Government has enacted a range of policies designed to significantly reduce emissions, cut methane emissions, and reduce household energy bills. Investing in the scale up of high efficiency electric appliances aligns and enables the achievement of these policy objectives.

Key policies which underpin this intent include the signature *Climate Change Bill 2022* which legislates a target of 43% emissions reductions by 2030, the signing of the *Global Methane Pledge* which commits Australia to reduce methane emissions by 30% by 2030, and the recently passed

⁶ DCCEEW (2020) National inventory by economic sector: data tables and methodology

Energy Price Relief Plan which has a goal of reducing energy bills and investing in cleaner, cheaper and more reliable energy for the future

Forest management and regeneration industry development

The Federal Government has enacted a range of policies that demand the protection of remaining native forests in Australia as well as increase land regeneration and plantation expansion. Achieving these policy objectives will require investing in the establishment of a sophisticated forest management and regeneration industry.

Key policies which underpin this include the signing of the *Leaders Pledge for Nature* which commits Australia to reverse biodiversity loss by 2030 and signing of the *Glasgow Leaders Declaration on Forests and Land Use* which commits Australia to halt and reverse forest loss and land degradation by 2030.

Complementary reforms

Are there non-financial mechanisms that could support priority areas and the objectives of the NRF?

Appliance manufacturing electrification

Yes, a coordinated policy approach to electrifying the appliance manufacturing sector is required to capitalise on the investment opportunity and deliver the best outcome for Australian households and the local manufacturing sector.

Complementary non-financial mechanisms should include:

- a) A joint commitment from federal and state governments for the electrification of all social housing;
- b) the introduction of local procurement targets for social housing appliances to stimulate demand and give industry confidence to invest in retooling facilities;
- c) the progressive lifting of Mandatory Energy Performance Standards for appliances;
- d) and, support for worker retraining programs where required.

Forest management and regeneration industry development

Yes, a joint commitment from federal and state governments to end native forest logging would provide a strong non-financial mechanism.

Additionally establishing a native forest and land clearing method in order to facilitate generation of ACCUs would help the market identify the carbon value of native forests, and better allocate land for agricultural production, forest protection and restoration and plantation establishment.

Regional planning to facilitate workforce will be important to ensure the skill sets match regional attributes.