AUSTRALIAN MANUFACTURING WORKERS' UNION
AND
LABOR ENVIRONMENT ACTION NETWORK

JOINT SUBMISSION TO THE
NATIONAL ENERGY PERFORMANCE STRATEGY CONSULTATION PAPER

February 2023

The Australian Manufacturing Workers' Union (AMWU), in collaboration with Labor Environment Action Network (LEAN) welcomes the opportunity to make a joint submission to the National Energy Performance Strategy consultation paper.

For 170 years, the AMWU has organised and represented workers in every city and region of the country. Our members make and repair Australia's trucks, trains, aircraft, and ferries. They process the food our farmers grow and create environmentally sustainable packaging to export them all around the world. Looking forward, it is our members who will build the green energy infrastructure Australia requires for the 21st century. They will build and maintain the medical equipment that we use in our hospitals and the electric buses that will get us where we need to go. And it is AMWU members who will build the defence equipment used by our armed services.

LEAN is a grassroots network of ALP members and supporters, all concerned for the health of the planet and developing policy responses that can drive environmental protection, build sustainable communities, and place these values at the centre of Labor's policy. This means placing concern and care for the environment at the centre of manufacturing industry policy.

At present, the Australian manufacturing sector is battered but resilient. Despite decades of policy negligence by the previous government manufacturing remains a major employer in this country. But that neglect has left Australia as one of the world's least self-sufficient industrialised nations when it comes to manufactured goods. As Australia looks to build its sovereign manufacturing sectors, it must look to initiatives being deployed in major economies around the world and develop co-ordinated industry policy to ensure that our supply chains are resilient and able to successfully transition this country to a new economy.

Our submission outlines how a household appliances manufacturing industry, supported by government industry policy to transition to electrification, presents a major opportunity to develop Australian sovereign capability and a foundation of our economy's decarbonisation. This policy would be strengthened by social housing procurement policy, strengthening our communities, addressing cost of living pressures, and creating sustainable private and commercial markets and export competitiveness.

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With the development of dedicated, strategic policy for manufacturing that aims for high performance standards, our manufacturing industries can become more innovative and competitive. By doing so, the manufacturing sector can become a major driver of a just energy transition in Australia.

Once again, thank you for the opportunity to make a submission. If you require any further information, please contact Mark Dean (mark.dean@amwu.org.au) in the first instance.

Yours Sincerely,

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Electrifying Household Appliance Manufacturing in Australia: Industry Policy for Social Procurement

Proposal overview

Over the next decade, Australia will need to electrify millions of household appliances in a shift from fossil fuel (gas) energy to renewable energy sources. To address medium-term cost of living pressures, and long-term climate change adaptation, higher efficiency standards will also be needed for refrigerators and ovens, and energy appliances like heat pumps will be in huge demand as alternatives to gas-fired hot water and heating systems.

Australia makes many different types of household appliance and should continue to make them in Australia to meet the aims of a shift from gas to renewable energy sources by retooling factories, reskilling workers and redeveloping industrial capabilities to meet these transition targets. This will require that governments at federal and state level drive the transition through both supply side interventions and demand-driven strategy which taken together have broader market and regulatory implications:

Supply side intervention: Supporting the appliances manufacturing sector to retool facilities and reskill workers to develop local industrial capabilities to supply energy efficient electrical appliances.

Demand-driven approach: Guaranteeing a local market for these Australian-made goods through public procurement policy. This would be directed at high-efficiency Australian-made appliances being retrofitted into existing social housing stock, and rolled out in new social housing stock.

This would also create the conditions for demand from home owners and landlords in the private sector. Social procurement would develop industrial scale; private sector purchasing in Australian supply chains could be mandated to meet regulatory standards for electrical appliances by purchasing Australian-made products and this would ensure a sustainable demand pipeline beyond socially procured appliances.

Market outcomes: This policy will stimulate jobs and industry growth in the household appliances manufacturing sector and grow local trades jobs in areas of retrofitting old homes, and fitting-out new homes with newly installed electrical appliances.

Regulatory outcomes: This sectoral strategy for appliance manufacturing will need to be measured in terms of its impact on emissions reductions, and benchmarks established for its regulation and broader manufacturing industry emissions regulation.

The demand-driven growth of a high-efficiency appliance manufacturing sector in Australia will drive the scale and scope of local capabilities that make the sector economically sustainable. Beyond public procurement contracts, initial government support to help transition the sector through investment support and market creation will then support the sector to tailor products that meet differentiated markets for products such as new homes, home owners and landlords, and including commercial, luxury and export orientations.

Australian manufacturing opportunities

Research by LEAN shows that there are approximately 30 commercial and household appliance manufacturing facilities in Australia, forming the bulk of a robust commercial and household appliance manufacturing industry sector. This sector is estimated to directly employ 5,000 people and indirectly support as many as 37,000 jobs throughout supply chains and local communities. Around 15 large manufacturing facilities in the sector employ more than 100 people. Most facilities and factories produce gas appliances, with around one quarter producing exclusively gas appliances (see Table 1 attached).

As Australia transitions to a zero-carbon economy over the next decade this manufacturing sector will need to both decarbonise and meet growing demand for electric appliances in Australian homes. It is important that Australia retain its commercial and household appliance manufacturing sector for several strategic reasons:

- to support (and grow) local Australian manufacturing jobs and employment in related supply chains;
- to maintain and grow Australian manufacturing share in markets for products designed to service specific Australian customer needs and cultural requirements[1];
- to develop higher energy efficiency standards in our manufacturing industries;
- to spur manufacturing product innovations that safeguard consumers against high energy costs;
- to protect and expand sovereign manufacturing capability and potential export opportunities; and
- to meet growth in demand for household appliances with the supply of locally made Australian products as Australia's economy decarbonises.

Meeting Australia's emissions reduction targets will in part mean electrifying household appliances (i.e., water heating, stovetops, cooking, barbecues etc.). This will have important energy cost-reduction implications for Australian households. There is also a need to electrify the appliance manufacturing sub-sector so it adapts with technological change and grows as part of an expanded Australian manufacturing industry.

Without transitioning gas-powered appliance manufacture to electrification, this Australian manufacturing sector risks becoming locked into the manufacture of products that are inefficient and expensive to operate. This will have social consequences in a lower socio-economic consumer market that traps many people in cycles of poverty through higher energy costs; and economic consequences in the loss of industrial capabilities, skilled jobs and resulting higher unemployment.

An industry policy for the Australian appliance manufacturing sector

Presently, government policy for improving appliance efficiency standards across Australia is shaped by supply side mechanisms that encourage greater flows of high efficiency appliances into consumer markets. Often this results in the purchase of imported goods that have already had to meet high energy efficiency benchmarks in overseas jurisdictions (like the EU), with consumers receiving subsidies for purchasing them. Overseas producers seize the opportunity to supply high-efficiency products to consumer markets, whereas many Australian manufacturers cannot compete on efficiency terms. Supply side policy does not control for where these products originate, thereby minimising any local manufacturing opportunities to compete.

[1] For example, Australian kitchens are larger than many of their Asian and European counterparts; therefore, Australian manufacturers are best positioned to respond to local market needs.

A policy lever that works together with supply-side approaches to decarbonising household appliances is needed to support Australian made household appliance manufacturing. Alongside supply side interventions, a demand-driven approach can help to rapidly transition the manufacture of gas appliances in Australia to the manufacture of only electrified products with high energy efficiency ratings. This will advantage both gas appliance manufacturers by updating their product offerings, and electrical appliance manufacturers by raising the bar on the efficiency of their products.

Demand-driven policy through public procurement

The AMWU proposes that the federal government develop an industry policy for the commercial and household appliance manufacturing sector that meets dual industrial and social goals. We propose that a procurement-driven industry policy for Australian appliance manufacturing should be implemented to deliver a high-value energy efficient household appliance manufacturing sector. Procurement brings to the economy government's fiscal power to transform labour policy by lifting wages, working conditions and labour standards.[2] Beyond this, procurement delivers economic benefit by stimulating large-scale production and consumption of goods and services, and delivers social benefit by creating further employment opportunities.[3]

Industry policy, when built around public procurement, is a proven market-creating mechanism with evidence from a range of industries. It leads to improved firm performance, fosters innovation, creates economic diversification, and as a result is increasingly being put forward as a means of addressing challenges relating to climate change.[4]

Industry policy for manufacturing with a social procurement objective can drive down energy costs for Australians living in social housing and create certainty and sustainability in domestic appliance manufacturing. Where public investment helps to de-risk the Australian appliance manufacturing sector, businesses can become cost-competitive, making efficient electrical household appliances cheap for all Australian consumers. This would not just sustain the industry but also create a foundation for its expansion into broader consumer markets (i.e., commercial, luxury, and ultimately exports) that will grow as Australia reaches net-zero emissions targets.

Equipping public housing stock across the country with highly efficient electrical appliances can function as both an industrial and social procurement strategy. Industry policy should therefore be linked to a social housing procurement policy that:

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[2] Jim Stanford (2018), *Raising the Bar: How Government Can Use its Economic Leverage to Lift Labour Standards Throughout the Economy*, Centre for Future Work at The Australia Institute (Canberra, Australia).

[3] Maria Mupanemunda (2020), *The promise of social procurement*: Leveraging purchasing power to create inclusive employment opportunities, Parliamentary Library & Information Service, Department of Parliamentary Services, Parliament of Victoria (Melbourne, Australia).

[4] See Mariana Mazzucato (2018), *Mission-Oriented Innovation Policy: Challenges and Opportunities*. Working Paper, Institute for Innovation and Public Purpose (London, UK);
Gunnar Eliasson (2010), *Advanced Public Procurement as Industrial Policy: the Aircraft Industry as a Technical University, Springer (London, UK);*
Elvira Uyarra, Jon Mikel Zabala-Iturriagagoitia, Kieron Flanagan, Edurne Magro (2020), 'Public procurement, innovation and industrial policy: Rationales, roles, capabilities and implementation', *Research Policy*, 49(1);
Bernard Hoekman & Marco Sanfilippo (2021), 'Public procurement as an industrial policy tool', *Industrial Analytics Platform*, UNIDO (Geneva, Switzerland).

- mandates local Australian-made appliances for all government owned or leased[5] social housing;
- sets higher Minimum Energy Performance Standards (MEPS) for the manufacture of their products and would only be eligible for procurement contracts if made in Australia and meeting local content requirements at this higher MEPS level; and
- creates long-term demand for locally made appliances by expanding public housing infrastructure, and building strong supply chains that can diversify into the economy.

Achieving coordination between industry policy for appliance manufacturing and social housing procurement will require federal government funding and regulatory policymaking, plus coordination with the states and territories responsible for administering social housing infrastructure. A social housing procurement-driven industry policy would be driven by several key mechanisms, as outlined below.

'Mandating' Minimum Energy Performance Standards (MEPS) for Australian-made appliances

A review into the Greenhouse and Energy Minimum Standards (GEMS) Act 2012 which regulates Minimum Energy Performance Standards (MEPS) for household appliances describes Australia as highly dependent on imports to supply products covered by GEMS.[6] An updated MEPS should reflect a shift in focus of the regulatory framework that targets growth in local high energy efficiency appliance manufacturing. The objective of this would be to create a technical advantage for Australian manufacturers to compete with imported products.

- The establishment of Mandated (as opposed to Minimum) Energy Performance Standards is an important lever for the electrification of all Australian household appliances, where it sets a target for all Australian appliance manufacturers to meet, plus incentives to exceed.
- Mandated EPS could be applied to targeted products within the household appliances manufacturing sector to begin the process of application to other products in a process of phasing in mandatory higher standards.
- Altogether, the implementation of an updated MEPS that brings Australia up to international standards should be implemented in coordination with demand-driven policy and investment in local manufacturing capacity to supply new products for Australian procurement contracts (and then beyond this into diverse consumer markets).

Legislate infrastructure changes for the retrofitting of existing homes with highly efficient electrical appliances, and legislate mechanisms to measure the contribution of high-efficiency Australian-made household appliances to emissions reduction

- This would commit governments to the long-term purchase of Australian-made electric appliances for social housing and help families and individuals living in public housing with cost-of-living pressures relating to energy costs.

[5] By 'leased' we refer to public housing stock that is serviced by not-for-profit organisations based on state government tenders.
[6] Commonwealth of Australia (2019). *Independent Review of the Greenhouse and Energy Minimum Standards (GEMS) Act 2012*, Canberra: Australia.

Provide fiscal support for appliance manufacturers to upgrade production facilities for highly efficient electric appliances

- This is related to the MEPS mechanism, in that any shift to highly efficient electrification must be accompanied by capital investment and production innovations amongst Australian firms manufacturing within Australia.
- Direct government investment in the form of loans, grants, direct capital investment and even public equity should be considered to avoid the potential offshoring of production if no support is given to the industry to recapitalise, retool and upgrade.
- This can contribute to the growth of sovereign manufacturing capabilities amongst Australian SMEs, enhancing innovation and diversifying the economy.

Worker training and reskilling for electric appliance production lines

- Training and reskilling is essential to ensuring that skilled workers transition with the shift in production processes and innovations.
- Training and reskilling would need to include minimum apprenticeship ratios for appliance manufacturing sector workers and create quotas for local community apprenticeships in social housing construction and retrofitting or installation of electric appliances in social housing dwellings.
- The state and territory TAFE systems would deliver training packages in urban and regional locations. Training packages would be based on industry and union mapping of occupation profiles and competencies relating to new efficiency standards for the sector. These new qualifications would also need to be transferrable across other industries and sectors transitioning to renewable technologies.

Table 1. Appliance manufacturing firms in Australia			
Company	**State**	**Employees***	**Appliance type/s**
Robert Bosch	VIC	740	Water heating
Rheem	NSW	500	Hot water
Stoddart Australia	QLD	415	Commercial cooking and refrigeration
Electrolux	SA	400	Cooktops, ovens
Rinnai	VIC	345	Water heating
Actron Engineering Pty Ltd	NSW	300	Heating/Cooling
Rheem	VIC	300	Hot water
Seeley International	SA	280	Heating, hot water, whitegoods
Brivis (subsidiary Rinnai)	VIC	270	Heating
Daikin	NSW	200	Heating/Cooling
Climate Technologies (subsidiary of Symphony Limited)	SA	200	Heating/Cooling
Temperzone	NSW	150	Heating and cooling
Seeley International	NSW VIC	120	Gas heaters and cooktops
Middleby Australia Group Pty Ltd	NSW	100	Commercial cooking equipment
Dux Manufacturing	NSW	100	Water heating
Roband Australia Pty Ltd	NSW	70	Cooking
LUUS Industries Pty Ltd	VIC	65	Commercial cooking equipment
Cookon (Langford Metal Industries Pty Ltd)	QLD	55	Commercial cooking equipment
Williams Refrigeration Australia Pty Ltd	VIC	50	Commercial Refrigeration
Real Flame (subsidiary of Glen Dimplex)	VIC	50	Heating
Archer Gas Log Fires	VIC	50	Heating
Trent Refrigeration	VIC	40	Commercial Refrigeration
United Refrigeration Pty Ltd	VIC	30	Commercial Refrigeration
IXL Group (Cannon gas heaters)	VIC	30	Heating
Heatlie Barbecues	SA	25	BBQs
Illusion Fires	VIC	25	Heating
Scandia	VIC	10	Heating

*Count of employees is based on publicly available data and confirmation with facilities