

21st June, 2020

Department of Industry, Innovation and Science

Submitted via online form: <https://consult.industry.gov.au/>

Submission regarding the Technology Investment Roadmap discussion paper

Thank-you for the opportunity to comment on the Technology Investment Roadmap discussion paper.

Manufacturing Australia (MA) is led by the CEOs of some of Australia's largest manufacturing companies: AdBri, BlueScope, Brickworks, Capral, Cement Australia, CSR, DuluxGroup, Incitec Pivot, Orora, Rheem and Tomago Aluminium. MA's members provide direct and indirect employment to more than 100,000 Australians, operate some 500 plants or smaller facilities around Australia and support more than 25,000 downstream suppliers.

Several MA members are providing submissions in response to this discussion paper, either in their own right or via industry or technology-specific associations. Some of these include the nomination and proposal of specific technologies for consideration.

Since many of these proposed technologies are industry-specific or, in some cases, facility-specific, this submission does not seek to replicate them or propose technologies in its own right. Rather it proposes key principles and themes raised by members of MA, and establishes MA, and the manufacturing sector more broadly, as interested stakeholders for future consultation about the Technology Investment Roadmap.

Introduction:

Manufacturing Australia supports the Federal Government's emphasis on accelerating and encouraging adoption of low emissions technologies as a core part of Australia's emissions reduction strategy.

Australia has world leading capabilities in several energy and emissions-intensive manufacturing industries, including aluminium, steel, chemicals, cement, building materials, pulp & paper and glass manufacturing.

Preserving and strengthening those capabilities through the adoption of lower emissions technologies presents enormous opportunities for Australia, but must be approached in a way that maintains international competitiveness.

Manufacturing Australia urges a "bottom up" approach that seeks to retain and build upon Australia's existing capabilities in energy and emissions intensive manufacturing, while encouraging adoption of new technologies and helping to overcome capital investment hurdles as technologies mature and approach cost competitiveness with existing technologies.

Retaining manufacturing capabilities, at globally competitive scale, will be essential if Australia is to seize the opportunities of newer technologies as they mature. Many of the capabilities required to leverage the technologies of tomorrow are the same capabilities we use to leverage the technologies of today.

Our emphasis should therefore be on ensuring a carefully managed and realistically timed transition that sees Australia adopt new technologies and processes without sacrificing global competitiveness and manufacturing capability.

The following is a set of principles that should underpin the Technology Investment Roadmap and decisions about what and how technologies are incentivised by governments.

Global competitiveness is paramount

In a manufacturing context, particularly where goods are traded internationally, investment in emissions reduction must be made in a way that maintains international competitiveness. Australia is, rightly, a very open economy with no or very low tariff and non-tariff barriers to imports. As such, the costs associated with investment in decarbonisation must usually be absorbed by companies in order to remain price-competitive against imports. For Australian manufacturing firms to be sustainable and viable over the long term they should be encouraged to invest in emissions reduction technologies at a pace that is aligned with that of major competitors, but which does not place them at competitive disadvantage globally.

Cost-benefit analysis and lowest-cost abatement

MA favours an approach to emissions reduction that incorporates cost-benefit analysis and seeks to achieve emissions reduction, at commercial scale, via the lowest cost pathway. The criteria for assessing these opportunities should be broad and technology-agnostic, should emphasise the importance of being able to commercialise at scale and should acknowledge that emissions reduction opportunities will come from many areas, including:

- process changes and input substitution;
- electrification of industrial processes using low or no emissions generation;
- alternative reductants or feedstocks;
- demand response;
- storage applications;
- capital equipment modernisation;
- energy efficiency investment; and/or,
- digitalisation and software integration for energy and emissions intensive industrial processes.

Competitively priced energy enables investment in low emissions technology

Most emissions-intensive manufacturing industries are also energy intensive. In addition to being Australia's largest greenhouse gas emissions source, energy is key input into Australia's manufacturing sector. Secure and competitively priced energy – ideally 1st quartile of global energy costs – is necessary to enable manufacturing firms to allocate the necessary capital to investment in lower emissions technologies. Currently, high energy costs and lack of contracting certainty for energy in Australia are key impediments to manufacturing, including investment in low emissions manufacturing technology. Overcoming the burden of high energy costs is an essential pre-requisite to attracting future manufacturing capital.

Broader capital investment hurdles should be considered

Investment in Australian manufacturing, whether it is greenfield, expansion & modernisation or essential maintenance, must satisfy broader hurdles for capital allocation by both domestic and global firms. While not a principal concern of the Technology Investment Roadmap, the following should be taken into account when considering the drivers of long term investment decisions by manufacturing firms:

- Competitiveness of tax rates at Federal and State government levels.
- Labour and non-labour productivity.
- Construction costs for new plants and major expansions.
- Transport costs associated with movement of product by road, rail and sea throughout Australia.

Alignment with global initiatives

Several of Australia's emissions intensive manufacturing firms are part of global initiatives to reduce emissions in their respective industries. Given Australia's relatively small scale in global manufacturing, it is reasonable to expect that Australia is more likely to be a "fast follower" than a "first mover" in applying new technologies to reduce emissions in manufacturing. Supporting and encouraging participation by Australian manufacturers in global emissions reduction initiatives is important, as is ensuring Australian manufacturers remain financially strong and globally competitive so as to be able to quickly adopt and embed new technologies once they are proven at scale and commercially viable.

Balance of export and domestic interests

Several technologies under consideration, including the use of hydrogen in various contexts, present significant export opportunities for Australia. As Australia pursues these opportunities, careful policy consideration should be given to domestic industry impacts. It is now broadly accepted that the establishment of an LNG export on Australia's East Coast, while itself a valuable industry for Australia, has brought unintended consequences that have damaged the competitiveness of domestic manufacturing. This planning failure should not be repeated in the context of other technologies under consideration.

Thankyou again for the opportunity to comment. I would be very pleased to discuss this submission if it is valuable.

Yours Faithfully,



Ben Eade
Chief Executive Officer