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Australian Academy of Science submission on the Future Made in Australia Bill 2024 and Future Made in Australia (Omnibus Amendments No. 1) Bill 2024

The Australian Academy of Science has long advocated for the need for Australia and Australian governments to invest in what is important for our future. The Academy supports the Future Made in Australia framework. It has the potential to be a crucial roadmap for the future of our country. However, a future made in Australia is heavily dependent on the breadth and depth of Australian science.

In the 21st century, economic power is intertwined with scientific power. Successful industrial policy is not possible without a productive, innovative and sustainable science system. The effectiveness of investments in the priority areas identified by the Future Made in Australia framework will depend on how well it integrates and utilises science. Scientific research will drive innovation in these areas, science education will provide the trained labour force needed, and science advice will ensure that informed and strategic investments are made.

The Academy:

- recommends scientific evidence and the science sector are explicitly included as critical inputs to both the identification of sectors and the development of sector assessments.
- welcomes the commitment to addressing climate change and decarbonisation through secure funding for ARENA in amendments to the *Australian Renewable Energy Agency Act 2011*.
- recommends that the state of the STEM workforce pipeline, including the Diversity in STEM Review final recommendations and the Women in STEM Decadal Plan, inform the application of the Community Benefit Principles.

Australian science is key to a future made in Australia

There is a fundamental link between science and economic development. Investment in research leads to innovation, which in turn drives productivity and stimulates industry growth. Further, science and technology underpin the sectors and innovations which will be targeted by Future Made in Australia investments.

For the Future Made in Australia framework to have the best chance of succeeding, it must be informed by evidence. Science advice will be critical to ensuring that large public investments made under the framework are not only socially and economically desirable but also scientifically feasible and responsible.

While the Academy is pleased to note that the sector assessments will be conducted using an evidence-based and consultative approach, the explanatory memorandum does not include scientists or research organisations in the list of perspectives to be sought (explanatory memorandum, Future Made in Australia agenda, Sector Assessments, page 8).

Considerations for undertaking sector assessments under the National Interest Framework include economic issues (explanatory memorandum, chapter 1, National Interest Framework, page 17, sections 1.17, 1.19 and 1.27). Scientific issues, such as whether the sector is scientifically and technologically feasible and whether responsible research and innovation are considered, should also be assessed.

Science advice will enhance the framework and ensure that where there are frontier science and technology investments, they come with transparent validation from science advisors. This could be achieved by amendments to explicitly include scientific matters in sector assessments and consideration of an advisory panel with the required scientific representation.

Commitment to addressing climate change and decarbonisation in ARENA

amendments

The Academy welcomes the ongoing funding for the Australian Renewable Energy Agency (ARENA), including the establishment of the Future Made in Australia Innovation Fund to support the technologies we need to address climate change and decarbonisation. ARENA's purpose is also strengthened by the addition of "contribute to the reduction of global greenhouse gas emissions in accordance with the Paris Agreement" to the object of the Australian Renewable Energy Agency Act 2011.

Inclusive workforces

One of the Community Benefit Principles is to develop more inclusive workforces. The Academy recommends that decision-makers consider the <u>Diversity in STEM Review</u> final recommendations and the <u>Women in STEM</u> <u>Decadal Plan</u> when applying this principle.

To discuss or clarify any aspect of this submission, please contact Mr Chris Anderson, Director Science Policy at <u>Chris.Anderson@science.org.au</u>.