26 July 2024

To: Senate Economics Legislation Committee

RE: Inquiry into the Future Made in Australia Bill and related bills

Thank you for the opportunity for the Institute for Energy Economics and Financial Analysis (IEEFA) to provide input on the *Future Made in Australia* legislation. IEEFA is an energy finance think tank that examines issues related to energy markets, trends, and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.

IEEFA has provided insights into developing green iron and steel in Australia, highlighting the nation's competitive advantages and its potential to be a major player in the green iron and steel transition. IEEFA has also examined the potential to accelerate the decarbonisation of Australian ammonia production, which could drive large volumes of short-term demand for green hydrogen and kickstart the sector.

Australia possesses all the essential ingredients to become a global leader in those sectors, especially green iron and steel in a net zero world, but swift and decisive action is needed to stay ahead of competitors vying for a larger share of the emerging green iron and steel market. In this context, IEEFA supports the *Future Made in Australia Bill* as government support will be critical to kick-start those new industries.

Below are some recommendations for consideration by the Senate Economics Legislation Committee based on our research.

Conduct of sector assessments

1. Include an assessment of specific technology solutions

In certain cases, it will be necessary to go beyond the sectoral level and consider the prospect of various technology solutions in the transition to net zero emissions. For example, IEEFA recommends excluding support for Carbon Capture and Storage (CCS) solutions, which have a poor track record and present material risks for Australia's transition to net zero emissions.

2. Include timing considerations

Some sectors will have different levels of technological and economic readiness for the transition, including whether there is existing demand for their outputs. This will be important to consider in choosing when and how to deploy public funding. For example, existing domestic ammonia production presents a great opportunity to scale up green hydrogen production with immediate application within existing assets.

3. Consider the scale of the opportunity

The criteria don't explicitly mention the scale of the economic risk/opportunity for Australia. It would be important to capture this to properly prioritise where to spend public funds. For example, iron ore is Australia's largest export, and is at significant risk if Australia doesn't adapt to the global steel transition. Green iron has frequently been identified as the largest economic opportunity for the country in the global transition to net zero emissions.

Community benefit principles

4. Include contribution to domestic emissions reduction targets

The principles should include the positive or negative contribution of the projects to Australia's emissions reduction targets. It should exclude projects that could materially increase Australia's emissions – for example through transition measures such as the temporary use of gas in Direct Reduced Iron (DRI) plants or through potential technology underperformance as is likely with the use of CCS. It should also reward material reductions in domestic emissions, such as decarbonising domestic ammonia production and, in particular, <u>preventing the construction of new gas-based assets</u>.

5. Include contribution to Australia's energy security and affordability

It is possible that the development of new economic sectors could either improve or worsen Australia's energy security and affordability. For example, shifting from gas to green hydrogen for ammonia production could help alleviate the upcoming gas market tightness. Green hydrogen production could support the domestic electricity system by providing a large source of flexible electricity demand. However, it will be important to ensure the nascent industry does not compete with the Australian electricity transition and increase prices for domestic users. If poorly managed, it could, for example, raise renewable equipment and workforce costs, and create shortages of skills and resources. Considering the impact projects will have on the domestic energy system is critical to capturing the potential benefits, and avoiding negative impacts.

Regards,

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