

# TOWARDS A RENEWABLE ENERGY SUPERPOWER

## Industry opportunities for Australia to embrace the clean energy revolution

Australia is a global leader in renewable energy research and development (R&D) and has access to the best renewable energy sources in the world. We have a significant opportunity to become a renewable energy superpower, creating a good jobs boom in cities and towns across the country while taking decisive steps for a clean energy future.

Right now, we are being left behind – if not going backwards – as other major economies around the world make massive investments in manufacturing renewable energy infrastructure. The time to change this, through focused policy action and investment by government, is now.

## Australia's clean energy opportunities

By moving away from our 'dig and ship' mindset and investing in more downstream value-adding activities, we can build capacity in our domestic manufacturing sector and create the jobs of the future.

Five key opportunities have been identified that align with existing core industry capabilities, fill in a supply chain gap, shore up domestic demand or unlock significant export potential.



### Diversified battery supply chain

Develop domestic production capability for the manufacturing of battery cells and pack assembly for both domestic and export markets and incorporate recycled materials in a circular supply chain.



### High voltage cable manufacturing

Domestic production of high voltage cables for renewable energy transmission domestically and to connect Australia to regional neighbours and unlock our potential as a net exporter of clean energy.



### Wind tower manufacturing and offshore wind port infrastructure

Develop wind tower manufacturing capacity and the local steel supply chain for the \$20 billion-plus domestic on- and offshore market.<sup>1</sup>



### Solar supply chain expansion

Building solar manufacturing based on Australian innovation to achieve Australia's net zero targets could create up to 60,000 jobs in the manufacturing sector.<sup>2</sup>



### Electric heavy vehicle manufacturing

Support the production of electric heavy vehicles for domestic market and explore feasibility of developing for export.

Mapping these technologies and sectors highlights the possible inter-dependencies that each have that can create a compounding value proposition.

Three things stand out from this mapping:

- Critical mineral refinement and green hydrogen are 'keystone' upstream opportunities, as they unlock several downstream sector opportunities.
- A concurrent focus on multiple clean energy sectoral pathways will speed up domestic ability to meet local clean energy demand and hasten speed to market for key components of global supply chain, creating significant export potential.
- Rapid development of clean energy increases capacity to create green hydrogen, accelerating decarbonisation efforts in global manufacturing supply chains, with Australia playing a lead role.

# Priority actions for government

To realise the potential of these opportunities, five priority actions for government have been identified.



## Comprehensive industry policy

Develop coherent industry policy platforms for each target sector to provide a clear roadmap for growth. There should be a spatial dimension to provide states with a clear sense of their roles and reduce excessive competition for investment.<sup>3</sup> This should include updates to the Australian Industry Participation Plans.



## Finance and incentives

Establish a fund which can provide targeted capital to Australian companies, innovations and technologies that are able to scale into internationally competitive exporters. Design, which could include production tax credits, grants or co-investment, will be important to enable scaling and certainty for the most prospective opportunities whilst managing budget exposure.



## Local content requirements

Work with state and territory governments to implement a nation-wide approach to local content requirements to maximise impact and enable new production capacity, including definition specificity regarding materials and components and registers of business providers and their level of domestic versus foreign ownership.



## Government procurement

Use government procurement to underwrite offtake agreements for producers to provide market demand through the establishment phase of business or new production capacity.



## Coordinated workforce development

Work with the state VET sector, universities and industry to embed workforce development and training to build the skilled labour required to develop opportunities.

The scale of benefit available to us is evident, but transformational industry development carries with it inherent risk, upfront investment and the need for market certainty.

**An Australian equivalent of the US Inflation Reduction Act level of funding is essential if Australia is to fulfil its aspirations to be a renewable energy superpower.**

<sup>1</sup> UTS Institute for Sustainable Futures, 2023.

<sup>2</sup> SunDrive, *Australian Solar Manufacturing Net Zero Industry Policy*, 2023.

<sup>3</sup> J Gill, *Sectoral, Systemic and Spatial: Rethinking Australia's Approach to National Industry Policy*, SGS Economics and Planning, 2023.