

MEDIA RELEASE



Australian Aluminium Council Welcomes Mission Possible Partnership's Aluminium Transition Strategy

The Australian Aluminium Council (the Council) has joined with its Members and other industry leaders in welcoming the Making Net Zero Aluminium Possible: A Transition Strategy for a 1.5°C-compliant Aluminium Sector (the Strategy) developed by the Mission Possible Partnership in collaboration with the International Aluminium Institute, released today at the New York Climate Week. The Strategy is an ambitious but achievable decarbonisation roadmap for the global aluminium industry.

Aluminium is a critical material in the context of the global energy transition. It is anticipated that global demand will increase by almost 80% (from 2020 levels) to 179 million tonnes per year by 2050. The Council's CEO Marghanita Johnson said "This work has brought together companies across the global industry, including those operating across the value chain in Australia. The Strategy recognises that it is possible to meet rising aluminium demand, reduce emissions from the sector to net zero by 2050, and align with a 1.5°C target."

The Strategy highlights that a global investment of approximately US\$1 trillion will be required for the aluminium sector transition, including significant investment to supply the required zero-emissions electricity. Ms Johnson added "The Strategy outlines not only actions the industry needs to take, but also actions required by Governments to support this. In particular, developing policy which is predictable, stable and transparent will enable businesses to confidently plan for this substantial investment." Governments also have a vital role to play designing electricity markets to support the transition and minimising the risks of carbon leakage.

Decarbonising electricity supplied to aluminium smelters globally by 2035 is a key milestone for the industry in the Strategy. Ms Johnson observed "The owners of Australia's four smelters have signalled their desire to recontract renewable electricity at the end of their current terms (2025-2029)." Over the longer term, smelters play a key role in being more flexible users of power to help balance variable generation grid systems. The Strategy notes that aluminium smelters in Australia are providing a leading role in already delivering this flexibility.

Ongoing collaboration within the sector and partnerships with government will be a key enabler for the Strategy. "While Australia's alumina industry already has some of the lowest emissions in the world, new technologies will be needed to decarbonise the alumina refining process. Alumina research headquarters for Alcoa, Rio Tinto and South32's Worsley Alumina are all based in Australia, helping develop new technologies for the global industry". We welcome the support already shown by the federal and state governments for that research, while noting the scale of the challenge ahead. The Strategy indicates that for the "digestion" phase of the refining process, while a range of solutions will likely become commercially available in the late 2020s, their suitability depends on local conditions, particularly the availability of zero-emissions electricity. Access to this zero-emissions electricity could be the rate-limiting step for deployment of these new technologies.

"As noted in the Strategy, the deployment of inert anodes in smelters and electric or hydrogen calcination at refineries, are not expected to be ready for large-scale deployment before 2030. Both also remain contingent on sufficient supply of zero emissions electricity and green hydrogen. "Decarbonisation of Australia's electricity supply is the single biggest opportunity to decarbonise the vertically integrated domestic aluminium industry in the coming decade."

LINKS TO LAUNCH MATERIALS

Please note these are under embargo until 0900 hrs EST on September 21 2022:

Cross Sectoral Media Release: <https://missionpossiblepartnership.org/industry-leaders-back-plan-for-zero-emissions-aluminium-ammonia-and-steel/>

Aluminium Media Release: <https://missionpossiblepartnership.org/wp-content/uploads/2022/09/Aluminium-STS-Press-Release-White-Label.docx>

Report - Making Net-Zero 1.5°C-Aligned Aluminium Possible: <https://missionpossiblepartnership.org/wp-content/uploads/2022/09/Making-1.5-Aligned-Aluminium-possible.pdf>

ABOUT THE COUNCIL

The Australian Aluminium Council (the Council) represents Australia's bauxite mining, alumina refining, aluminium smelting and downstream processing industries. The aluminium industry has been operating in Australia since 1955, and over the decades has been a significant contributor to the nation's economy. It includes five large (>10 Mt per annum) bauxite mines plus several smaller mines which collectively produce over 100 Mt per annum making Australia the world's largest producer of bauxite. Australia is the world's largest exporter of alumina with six alumina refineries producing around 20 Mt per annum of alumina. Australia is the sixth largest producer of aluminium, with four aluminium smelters and additional downstream processing industries including more than 20 extrusion presses. Aluminium is Australia's highest earning manufacturing export. The industry directly employs more than 17,000 people, including 4,000 full time equivalent contractors. It also indirectly supports around 60,000 families predominantly in regional Australia.

NOTABLE AND RELEVANT MEMBER ACTIVITIES IN AUSTRALIA

Activity	Link
Electric Calcination Study	https://arena.gov.au/projects/alcoa-renewable-powered-electric-calcination-pilot/
Gladstone Renewable Request for Proposals	https://www.riotinto.com/news/releases/2022/Rio-Tinto-calls-for-proposals-for-large-scale-wind-and-solar-power-in-Queensland
Hydrogen Calcination Study	https://arena.gov.au/projects/rio-tinto-pacific-operations-hydrogen-program/
Hydrogen Pilot Plant	https://www.riotinto.com/news/releases/2021/Rio-Tinto-and-Sumitomo-to-assess-hydrogen-pilot-plant-at-Gladstones-Yarwun-alumina-refinery
Mechanical Vapour Recompression Study	https://arena.gov.au/projects/mechanical-vapour-recompression-for-low-carbon-alumina-refining/
Memorandum of Understanding between Tasmania and Rio Tinto	https://www.stategrowth.tas.gov.au/_data/assets/pdf_file/0010/334558/TAS-RIO_TINTO_MOU_Feb_2022.pdf
Refinery of the Future	https://www.alcoa.com/global/en/stories/releases?id=2021/11/alcoa-to-design-an-alumina-refinery-of-the-future
Spinifex Wind Farm	https://www.spinifexoffshore.com.au/#/

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