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Department of Climate Change, Energy, the Environment and Water
<https://consult.dcceew.gov.au/developing-a-national-framework-for-recycled-content-traceability>

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Dear Minister

Re: A national framework for recycled content traceability: Discussion paper

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. Today's aluminium industry contributes around \$15B¹ a year to the economy in export value. The industry includes six large 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 21 Mt per annum of alumina. Australia is the seventh largest producer of aluminium, with four aluminium smelters and additional downstream processing industries including more than 20 extrusion presses. Aluminium² is one of the commodities most widely used in the global transition to a clean energy future. It is also recognised for its importance to both economic development and low emissions transition. Aluminium is Australia's top manufacturing export. The industry directly employs more than 19,000 people, including 6,600 full time equivalent contractors. It also indirectly supports around 60,000 families predominantly in regional Australia.

The Council welcomes the opportunity to provide feedback on the A national framework for recycled content traceability: Discussion paper (the Paper).

Aluminium and Recyclability

Aluminium can be recycled again and again, almost infinitely, making it an incredibly sustainable material. Around 75% of the almost 1.5 billion tonnes of aluminium ever produced is still in productive use today as it can be recycled endlessly. Aluminium's life cycle provides significant benefits through recycling, saving 95% of the energy it would take to make primary aluminium metal. Every year, more than 30 million tonnes of aluminium scrap is recycled globally, ensuring its status as one of the most recycled materials on the planet³. The global Recycling Efficiency Rate (RER) of aluminium is currently 76%⁴. The RER defines how efficiently aluminium is recycled throughout the value chain. It is an indicator used to estimate the amount of recycled aluminium produced annually from scrap, as a percentage of the total amount of available scrap sources. This rate includes collection, processing and melting losses, but internal scrap is not included. Today more

¹ <https://www.industry.gov.au/publications/resources-and-energy-quarterly-june-2023>

² <https://www.worldbank.org/en/topic/extractiveindustries/brief/climate-smart-mining-minerals-for-climate-action>

³ https://international-aluminium.org/work_areas/recycling/

⁴ <https://international-aluminium.org/resource/aluminium-recycling-fact-sheet/>

than 70% of the material used in aluminium cans is recycled into new products – almost double that of glass (34%) and plastic (40%)⁵, which makes the aluminium can the most recycled drinks container on the planet

Global Collaboration

The Council, as part of the International Aluminium Institute (IAI), contributes to the global effort to increase aluminium recycling rates and improve sustainability as well as enhancing transparency for products using aluminium scrap. For more information visit the International Aluminium Institute⁶. The Council together with the IAI is currently working on a range of aluminium recycling related projects including the public review of a Reference Document on Carbon Footprint Calculations of Aluminium Scrap⁷ and is currently conducting a study looking at aluminium can recycling across Australia, Asia and the Middle East which complements work undertaken in Brazil, China, Europe, Japan and the US in 2022⁸.

Global Demand

Aluminium is one of the commodities most widely used in the global transition to a clean energy future⁹. It is also recognised for its importance to both economic development and low emissions transition. Aluminium use is highly correlated with GDP, so as countries urbanise, per capita use of aluminium increases. It is expected that by 2050, global demand for aluminium is expected to nearly double. While an increasing proportion will be met through recycled aluminium, there will still be increased production of primary aluminium requiring a comparable increase in global bauxite mining and alumina refining rates.

Australia's Current Aluminium Recycling Capability

However, despite having an integrated primary aluminium sector, the closure of Australia's car industry a decade ago was accompanied by a closure in the two aluminium rolling mills¹⁰ which also provided aluminium remelt capabilities. Australia has lost this manufacturing capability.

As aluminium smelters cannot safely accept general contaminated scrap, specialist metal recyclers currently collect and export both pre and post-consumer scrap for recycling. There are currently some small scale recycling initiatives within the domestic industry:

- Boyne Smelters Limited (BSL) recycles around 156 million aluminium cans¹¹ every year and is Australia's largest aluminium can recycling facility. BSL took part in Australia's first Circular Economy Lab in 2019 – a Queensland Government initiative designed to launch innovative projects. One of the outcomes is a collaboration between BSL and Container Exchange which runs Queensland's Containers for Change scheme. Through this partnership, BSL is exploring ways to recycle even more of Queensland's aluminium cans. This would reduce aluminium cans sent offshore for recycling and, in doing so, retain value in Queensland.
- In 2022, Capral Aluminium and Tomago Aluminium¹², announced a partnership to remelt 550 tonnes of pre consumer scrap annually. This industry leading arrangement is the first of its kind within Australia, paving the way toward access to low carbon aluminium for Australian manufacturers.
- It is challenging for primary producers to ensure scrap re-processing is commercially viable due to supply chain/logistics costs as well as scrap recovery rates when remelting. However, within the existing industry, pre consumer scrap offers a simpler, more cost-efficient feedstock for recycled billet product and may offer an initial entry point into increased recycled content for Australian supply chains and the industry is exploring this further in 2023.

⁵ <https://international-aluminium.org/resource/aluminium-beverage-can-study/>

⁶ <https://www.international-aluminium.org/>

⁷ <https://international-aluminium.org/resource/public-review-guidelines-on-transparency-aluminium-scrap/>

⁸ <https://international-aluminium.org/resource/aluminium-beverage-can-study/>

⁹ <https://www.worldbank.org/en/topic/extractiveindustries/brief/climate-smart-mining-minerals-for-climate-action>

¹⁰ <https://news.alcoa.com/press-releases/press-release-details/2014/Alcoa-to-Close-Point-Henry-Aluminum-Smelter-and-Rolling-Mills-in-Australia/default.aspx>

¹¹ <https://www.riotinto.com/en/operations/australia/boyne-smelters-ltd>

¹² <https://www.capral.com.au/blog/news/capral-and-tomago-aluminium-agreement-to-local-aluminium-remelting/>

Australia's Potential Recycling Capability

Recent work¹³ undertaken by the Council in conjunction with Deloitte and Coreo found that significant opportunities in manufacturing and recycling can be unlocked by cross-value chain coordination, including with Government and its agencies. There are clear opportunities for value-added manufacturing enabled by the existing integrated aluminium industry. This includes an opportunity for Australia to redevelop its recycling capability as part of an integrated circular industry policy^{Error! Bookmark not defined.}. This new manufacturing capability would fit with Australia's need to transition some regional economies, providing the potential for a new manufacturing base not linked to the location of a mineral deposit. This would cut across multiple commodities as well as a circular industry approach to the development of Australia's emerging clean energy industries, where these could be established with circularity in their design. The work identified three flagship projects which the Council believes would present a different approach to industry policy, two of which are relevant to Australia's future capability in a circular economy.

1. Increase recycling capacity - Global demand for recycled aluminium is growing rapidly, driven by emerging minimum content requirements from governments and corporate demand for low carbon products. A circular industry policy could lower cost and risk for domestic pre- and post-consumer scrap reprocessing.
2. A closed-loop mine-to-panel solar value chain - Aluminium is the second largest input by weight, and domestic extruders already have the capability to produce frame and rail for the sector. Solar panels, and other new renewable manufacturing should be designed with recyclability in their design.

Response to the Paper

The Council supports the development of a national framework for recycled content traceability to guide businesses in recycled content supply chains to improve traceability of recycled materials. In doing so, the Council urges consistency with international frameworks and traceability standards, as aluminium is a globally traded commodity at all points in its life cycle. The Council will respond to the Paper at a high level.

1. Do you currently participate in traceability? If so, please tell us how. If not, how likely are you to adopt or participate in recycled content traceability in the next 2 years?

Within the industry, the Aluminium Stewardship Initiative (ASI) provides a global certification scheme which includes not just carbon content – but the full range of Environmental, Social, and Governance issues for all parts of the value chain¹⁴ including recycling. Many of Australia's mines, refineries, smelters and chains of custody supply chains are certified. Additionally, the global industry is differentiating products on the basis of the carbon credentials¹⁵. Additionally, the aluminium industry¹⁶ uses blockchain technology to provide provenance traceability and transparency.

However, this is done voluntarily on a site by site (ASI) or product by product basis for traceability, and the Council believes it should remain voluntary.

2. Do you support the framework adopting a technology-agnostic approach? Please tell us the reasons for your answer.

The Council would not support the requirement of the use of a specific traceability system or development of a government platform. For this reason, the framework should adopt a technology agnostic approach.

4. Should the framework include requirements to share data with government to support reporting, for example progress reporting against national recycling targets? Please tell us the reasons for your answer.

Development of a framework should support the development of commercially sustainable recycling in Australia, creating jobs and manufacturing opportunities. However, given the context of the current lack of capability to recycle considerable volumes of either pre or post-consumer scrap in Australia the system

¹³ <https://aluminium.org.au/news/aac-deloitte-and-coreo-cast-anew-project/>

¹⁴ <https://aluminium-stewardship.org/asi-standards/performance-standard>

¹⁵ For example: <https://www.riotinto.com/-/media/Content/Documents/Products/Aluminium/RT-Aluminium-RenewAl-fact-sheet.pdf?rev=f89b8d105e15400fa053d58a364c3be8>, <https://www.alcoa.com/sustainability/en/pdf/EcoSource.pdf>

¹⁶ <https://www.startresponsible.com/>

framework needs to recognise that this may need to include offshore recycling of domestically collected scrap for some time to come.

7. Would you adopt a voluntary framework? Please tell us the reasons for your answer.

9. Do you support recycled content traceability being initially voluntary? Please tell us the reasons for your answer.

10. Should recycled content traceability become mandatory for everyone over time? Why/why not?

The Council believes that parts of the industry would adopt a voluntary framework, as evidenced by existing application. However, given aluminium is globally traded and large amounts of manufactured aluminium goods consumed in Australia are imported, the framework needs to be internationally consistent and remain voluntary.

18. Does the defined scope of recycled material and recycled content cover all the types of recycled materials that should be traced? If not, what other recycled materials should be in scope?

The Council supports consistent definitions with ISO 14021:2016. But further clarifications need to be added to the ISO standard in order to avoid different understandings between different producers and different industries, to ensure there is consistency in recycled content claims. When supplying products with recycled content, producers should declare the calculated (or estimated) typical % of aluminium input from post-consumer scrap¹⁷.

The Council would like to understand the application of this framework for an intermediate, business to business product. An example of this would be aluminium billet which is produced by a smelter and sold to an aluminium extruder, which could then be used to produce consumer goods. The billet could contain an increased recycled content, noting that for safety and quality reasons this would be pre-consumer scrap.

ISO 14021:2016 does not define in sufficient detail internal scrap, that is scrap which is pre consumer and is remelted in the same company where it was generated. Further definitions would be required.

19. Are the supply chain steps in Figure 2 and descriptions in Table 1 sufficient to capture all types of recycled content supply chains (for example, glass, paper, plastics, metals and construction materials)? If not, what additional steps or descriptions should be included?

The Council agrees that the frameworks should apply, on a voluntary basis, to consumer goods, including packaging, as well as construction materials. For Australian aluminium, supply of construction materials such as extruded products, is one area where this brand could apply in the future.

20. Should imported recycled materials be within scope of the framework once they enter Australia? If not, why not? If so, should the framework requirements apply in the same way to imported recycled materials? Please tell us the reasons for your answer.

If imported materials make claims as to their recycled traceability, then this should be required to be to the Australian framework (noting that making the claim should remain voluntary). Additionally, it should be clear as to what recycling was carried out domestically versus outside Australia to provide transparency to domestic consumers. In doing so, it will be important to differentiate between recycled content that is imported but then further manufactured and recycled content which is truly “remade” in Australia.

39. Should the framework define the mass balance accounting period, allocation of attributes, credit units and other mass balance requirements? If so, what should be the minimum requirements?

Where industries are being established and weights are large, such as in the construction materials sector there should not be a minimum threshold as the percentage is displayed.

¹⁷ <https://international-aluminium.org/resource/guidelines-on-transparency-aluminium-scrap/>

Conclusion

Aluminium can be recycled again and again, almost infinitely, making it an incredibly sustainable material. that significant opportunities in manufacturing and recycling can be unlocked by cross-value chain coordination, including with Government and its agencies.

There is an opportunity for Australia to redevelop its recycling capability as part of an integrated circular industry policy^{Error! Bookmark not defined.}. In conjunction with this, the Council supports the development of a national framework for recycled content traceability to guide businesses in recycled content supply chains to improve traceability of recycled materials. In doing so, the Council urges consistency with international frameworks and traceability standards, as aluminium is a globally traded commodity at all points in its life cycle.

The Council is happy to provide further information on any of the issues raised in this submission and looks forward to continuing to work with the Government on the development of circular industry policy.

Kind regards,



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