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A Future Made in Australia: Unlocking Australia's green metal opportunity

AGL Energy (AGL) welcomes the opportunity to make a submission in response to the *Green Metals - A Future Made in Australia: Unlocking Australia's Green Iron, Steel, Alumina and Aluminium Opportunity - Consultation Paper* (Consultation Paper).

Proudly Australian since 1837, AGL delivers around 4.3 million gas, electricity, and telecommunications services to our residential, small, and large business, and wholesale customers across Australia. We operate Australia's largest electricity generation portfolio and have the largest renewables and storage portfolio of any ASX-listed company, having invested \$4.8 billion in renewable and firming generation over the past 20 years and added more than 2,350 MW of new generation capacity to the grid since 2003.

In September 2022, AGL released its inaugural [Climate Transition Action Plan](#) (CTAP) under the Say On Climate initiative, which states AGL's updated ambition for decarbonisation, including the following commitments:

- Targeting a full exit from coal-fired generation by the end of FY35 (up to a decade earlier than previously announced).
- Ambition to meet customer energy demand with around 12 GW of new firming and renewable assets by 2036.
- An initial target of 5 GW new firming and renewables by 2030.

AGL has also committed to repurposing its large thermal generation sites into low carbon integrated energy hubs, designed with circular economy principles, bringing together industries that can make a positive contribution to the energy transition.

Achieving Australia's emissions reductions targets will require significant emissions reductions across all sectors of the economy. AGL supports the Australian Government's focus on growing new industries that will benefit communities and workers while playing an important role in the transition to net zero. Access to sufficient firming renewable electricity and green hydrogen will be vital to the production of green metals at scale, in addition to an enduring green certification scheme and supporting policy to incentivise and build trust in green metal products.

The need for firming low carbon energy

Manufacturing iron, steel, and aluminium is energy intensive. As noted in the Consultation Paper, decarbonisation pathways for these metals will require significant amounts of firming renewable electricity and green hydrogen. Building the green metals industry is therefore highly depending on building and scaling renewable electricity and the green hydrogen industry.

The Capacity Investment Scheme (CIS) is an important policy lever to help accelerate the required renewable electricity to support green hydrogen production and the production of green metals. While the CIS is focused on helping reduce the financial risks faced by investors in the energy transition, there are still several non-market barriers that sit outside the scope of the CIS design, which need to be addressed concurrently. These



include planning approvals, connection processes, and supply chain constraints including workforce availability affecting the construction of new projects and social license issues, as identified in the Draft ISP¹.

We also note and support work underway to incentivise and scale green hydrogen production, including the Commonwealth's Government's Hydrogen Headstart program. Green hydrogen has potential to decarbonise sectors where electrification is difficult, such as steelmaking, and is a critical element to realising the green metal export opportunity. As noted in a report by the Institute for Energy Economics and Financial Analysis (IEEFA), there is an apparent move towards countries importing green iron instead of importing green hydrogen and iron ore². Therefore, Australia could benefit from shifting its focus to green hydrogen production for domestic use and production of green iron for export.

Circular economy opportunities

As the world strives to decarbonise and reach net zero ambitions, nations are looking for ways to reduce greenhouse gas emissions and reduce environmental impact while also maintaining a strong and prosperous economy. Building a circular economy will be central to this. Adopting circular economy principles of avoiding, reducing, reusing, and recycling of materials and resources now will not only reduce emissions and environmental impact, but may also reduce costs in the long run.

AGL notes that the Australian Government is developing a National Circular Economy Framework in the context of Australia's net zero transition, incorporating manufacturing and trade-based objectives. AGL applauds this work and urges the government to focus on incentivising end-of-life recovery in the green metals industry to improve circularity and sustainability of critical raw materials such as aluminium.

Recycling of scrap metals will be a significant decarbonisation tool going forward for the green metals industry. Incorporating scrap metals has many benefits including reduced waste to landfill, and lower energy intensity and emissions. Directing funding and policy focus towards technology and infrastructure that improves sorting and purification of aluminium scrap will be vital to improving recycling rates.

AGL sees potential for integrated end-to-end manufacturing facilities, or multi-stage facilities, to be established where cost savings are achieved through establishing an end-to-end supply chain at a single factory.

Enduring certification and investment signals

Establishing a clear long-term vision for the green metals industry, through long-term policy settings and guidelines, and enduring demand signals, will be critical to providing a stable environment for investment in the industry. Interaction with existing incentives and schemes such as the Powering the Regions fund and Safeguard Mechanism will need to be considered to ensure additionality of action taken and most efficient allocation of funding.

AGL considers that a range of different mechanisms may be required to incentivise production of green metals given that industry participants will be of various size and maturity, with different commercial requirements. For example, up-front capital may be required by start-ups while production credits may be more appropriate for established international entities. We would recommend that flexibility is retained to offer support either through production linked credits or capital grants.

It is essential that rules for funding and incentives, such as eligibility criteria for funding and certification, are clear, transparent and applied consistently, to support investment in infrastructure and capital. Eligibility criteria for incentives should reflect the different needs of industry participants e.g. for some, there will be a reliance on securing funding prior to establishing commercial arrangements and locking in sites. A phased approach

¹ See: AEMO, [Draft 2024 Integrated System Plan](#), section 8.3

² <https://ieefa.org/resources/australia-faces-growing-green-iron-competition-overseas>



may be required whereby the criteria for funding and certification is more flexible in the beginning to establish the industry, becoming more progressive to fully zero emissions green metals as production costs decrease.

To aid the establishment of a green metals industry, the government should proactively look for ways to minimise the approvals and regulatory burden whilst maintaining measures that are in the long-term interests of the industry. We recommend that consideration be given to application and ongoing reporting requirements under any potential incentives scheme and streamline these where possible to reduce time spent and costs incurred by industry participants.

There is growing demand for green products and services, and for emissions to be assessed and accounted for across the whole supply chain. Regulations and product standards such as the Aluminium Stewardship Initiatives (ASI) Performance Standard 3 can help boost demand by providing transparency and standardisation to the ESG performance of aluminium products. Adherence towards a globally recognised and standardised definition of what constitutes a 'green metal' will be necessary to boost transparency and demand signals.

Transparency around emissions and sustainability criteria will be key to building trust in green metal products and ensuring that emissions reductions are real. AGL supports the Federal Government's intention to utilise the Guarantee of Origin (GO) Scheme as a basis for tracking and verifying the emissions and sustainability profile of green metals. AGL has been very supportive of the development of the GO Scheme, with certification of renewable electricity through Renewable Electricity Guarantee of Origin certificates (REGOs) a key element not only of driving decarbonisation in the electricity sector, but also supporting decarbonisation of other products and services that use electricity as an energy input³. Given that the existing certification scheme for renewable electricity—the Large-scale Renewable Energy Target—is due to end in 2030, and much of the demand for green metals is expected to come after 2030, it is critical that an enduring green certification scheme is established. Certification through this scheme will provide the necessary signals and transparency to market participants to make informed choices. It will also provide assurance that purchases of green products is leading to real sustainable outcomes.

We are also supportive of aligning certification arrangements with international schemes such as the Guarantees of Origin scheme in the European Union, which has been operational for years. International schemes and experiences provide a valuable source of information and learnings for developing a domestic certification scheme. This will become increasingly important to remain competitive in the global context as nations introduce stricter sustainability standards and introduce carbon border adjustment mechanisms (CBAMs). These need to be complemented by transparent and fair carbon accounting standards.

Consideration should also be given to the work that the Australian Government is undertaking with the Australian Sustainable Finance Institute (ASFI) to develop a sustainable finance taxonomy. This piece of work will be important in supporting the flow of capital into sustainable activities and ensuring market integrity, transparency, and fairness. This piece of work may also highlight Australia's comparative advantage in an ESG context, having high standards in terms of environmental, social and governance.

Should you have any questions in relation to this submission, please contact Casey Barkla-Jones cbarkla@agl.com.au or Aleks Smits (asmits@agl.com.au).

Yours sincerely,

AGL Energy

³ See [AGL's submission](#) to the Guarantee of Origin (GO) consultation paper Feb-23