



July 2024

To the Department of Industry, Science and Resources,

Response to the Green Metals consultation paper

The Investor Group on Climate Change welcomes the opportunity to provide a submission on accelerating investment in green metals industries, as part of the Future Made in Australia agenda. This submission will highlight barriers and opportunities for investors, and for green metals industries.

These include the following barriers:

- **Green metals investments must offer the right risk-return profiles.** Superannuation funds have a duty to act 'in the best financial interests' of their members. This fiduciary duty prevents some superannuation funds from investing in projects that offer below-market returns.
- **A secure and skilled workforce is required to develop new green industries.** Getting the incentives right for workers to do apprenticeships in industries that support the transition must include more than financial support. Fair wages, safe working conditions and social infrastructure in surrounding communities are all critical elements to durable industries, which improve investor certainty.
- **Renewable energy generation and capacity must be massively scaled to support decarbonised industry.**

Government can accelerate investment by:

- **Ensuring a consistent policy approach in the transition to net zero emissions.** Significant work is underway on the sector decarbonisation plans, the Net Zero Plan and on the Sustainable Finance Taxonomy, and potentially more under the sector assessments via the proposed Future Made in Australia bill. Ensuring work is harmonised and not duplicative is critical, to ensure a consistent policy approach that sends amplified market signals to investors.

- **Establish durable policies that secure markets of demand and address the green premium,** which are crucial elements of industry policy to improve investor confidence. IGCC provides options below.

Introduction

The Investor Group on Climate Change welcomes the opportunity to respond to the Department's consultation on unlocking investment for green metals in Australia.

IGCC is a collaboration of Australian and New Zealand institutional investors focused on the impact of climate change on investments. IGCC represents investors with total funds under management of over \$3 trillion in Australia and New Zealand and \$30 trillion around the world. IGCC's members are the custodians of the retirement savings of around 15 million Australians.

As the long-term custodians of trillions of dollars in retirement funds, investors have a fiduciary duty to deliver long-term returns for their beneficiaries that are commensurate with the level of risk taken. Our members have identified climate change-related damages as one of the greatest risks to their ability to deliver strong returns for their members. They have also identified climate mitigation and adaptation as among the largest investment opportunities to deliver good risk adjusted returns over coming decades.

IGCC members see green metals as an investment and decarbonisation opportunity within the global move to net zero as they are a necessary component in realising the transition to a net zero economy, stabilising global warming to 1.5 degrees in line with the Paris Agreement.

On the Future Made in Australia agenda

IGCC welcomes the *Future Made in Australia bill*, which is due to coordinate a package of reforms and initiatives that will support the growth of vital industries and their communities. The bill should have the sector decarbonisation plans embedded within it, to ensure policy consistency across government. IGCC supports the prioritisation of green iron, green alumina and green aluminium within the bill's agenda, as their production will enable Australia to export decarbonisation to the world, drawing on the country's natural advantages and resources. Creating new export opportunities via green commodities, value-adding with low-cost renewable energy and facilitating the transition of local economies dependent on emissions-intensive industries are critical priorities for a *Future Made in Australia*.

The Bill recognises that good outcomes for communities and the workforce are integral components of thriving new industries – but is currently light on the detail surrounding how these outcomes will be delivered. In response to DISR’s consultation paper, IGCC has recommendations to ensure that a fast transition goes hand in hand with the development of the necessary social infrastructure, training and workplace standards that support these industries.

It is important that the funds delivered under *Future Made in Australia* are coordinated and targeted, using public funds strategically to unlock significant private investment. Undertaking sector assessments to identify the value (economic, social, security) of public investment is an appropriate method of controlling for risk, ensuring that capital injected into the economy does not invertedly raise inflation without increasing real productivity. As such, IGCC supports the sector assessments under the National Interest Framework of the bill but cautions that they may be a bottleneck to deploying capital should they not be timely. The sector decarbonisation plans should act as the frameworks from which these assessments are conducted.

What are the key barriers to investing in green metals?

Investment mandates

Investors are seeking access to investment opportunities with exposure to growth, like green metals, however very few ASX-listed organisations present pureplay exposures to climate solutions or opportunities. Fiduciary duties (and, in the case of superannuation funds, the Best Financial Interest Duty) prevent most institutional investors from accepting below-market capital returns, which means that to invest in emergent technologies, investors must see them delivering long-term returns.

New companies have often found it challenging to find equity and debt financing as they move from R&D and start-up to the scaling and growth phase, making it unlikely that these entities will successfully grow into larger scale commercial enterprises. Targeted policies that address all parts of the capital stack are critical for investors to access new opportunities and increase their exposure to climate solutions in their Australian portfolios.

Investment and enabling infrastructure

Policy Consistency

Policy consistency is a critical factor in setting an enabling environment to catalyse investment, as investors need clarity around what risks and returns they may expect from an investment. It is also

important when engaging in stewardship activities, as investors advocate on decarbonisation activities to their investee companies.

IGCC members engage companies on how they can reduce emissions in their facilities and increase their allocation to climate solutions via the CA100+ initiative.¹ When policy is inconsistent or sends mixed signals about the energy transition, it undermines the case to advocate for decarbonisation.

Emissions-intensive infrastructure and machinery is expensive to replace, so companies must have a strong business case to do so – which includes the right policy signals encouraging action. The accessibility of renewable fuels and electrified equipment powered by renewable energy will be critical; another barrier that policy must address.

Policy consistency and coherence across the sector decarbonisation plans and between different Departments and levels of government is critical to not sending mixed signals. IGCC also recommends alignment with the Sustainable Finance Taxonomy, which has utility for green metals policy in its distinction between ‘green’ and ‘transition’ activities.

While policy inconsistency has become less of a concern for investors², given the significant progress the Government has made in developing what could become a green industry policy, there is still the potential for fragmentation to undermine these efforts.

Non-grid connected industry will need coordination to decarbonise, particularly in the case where facilities share infrastructure. A coordinated transition from fossil fuels will provide certainty to suppliers and consumers on costs. Investors price additional regulator risk without a clear market for companies to supply to. A fossil fuel reduction timeline will provide a strong business case for domestic and international capital to invest in renewable fuels like green hydrogen.

Fostering a secure and skilled workforce

IGCC welcomes the consultation paper’s position that improving outcomes for workers and communities is an important part of developing new green industries. Ensuring that communities benefit from good jobs and social infrastructure like affordable housing, childcare and education, will mean that more people can live and work in areas hosting new green industries. Community opposition and lack of social licence for the renewable energy transition has created delays in the development of projects that would contribute to the government reaching its 82% renewables

¹ IGCC Net Zero Survey, 2024. [\[link\]](#).

² Ibid.

share of electricity by 2030 goal. Avoiding this same issue by securing positive community sentiment is critical for investors to confidently allocate capital.

IGCC makes the following points to establish good industry policy that delivers a just transition for communities:

- A fast transition cannot outweigh a fair transition – a systematic drop in labour conditions will jeopardise the social license required to deliver major industrial development. Governments must work with companies to ensure that working conditions are safe, and that standards are not watered down because of massive demand for skilled labour.
- Social infrastructure needs to be in place so that communities can thrive around industrial precincts, which includes education, childcare and healthcare. It will take more than well-paying jobs to attract and retain a local workforce.
- Getting the incentives right for workers to do apprenticeships in industries that support the transition must include more than financial support. Fair labour conditionality must be attached to all net zero investment and policy support vehicles and funding. This includes conditionality on fair wages, fair labour conditions and a focus on securing jobs and apprenticeships for unrepresented groups – particularly for First Nations peoples.

IGCC poses additional recommendations in its Investing in *Australia's Vital Regions* report³ which can help foster the enabling environment required for a fast and fair transition to green metals industries.

Accelerating deployment of renewable energy

The 2024 Integrated Systems Plan⁴ outlines the pace and scale of renewable energy deployment required to support grid-connected industry in realising net-zero ambitions. Access to renewable energy will underpin the growth of new green industry, and barriers outlined in the ISP must be addressed.

Investment in renewable energy and green industries are interconnected issues, and the ongoing lack of political consensus on the pathway Australia should pursue in achieving a net zero energy sector is causing confusion and has introduced a lack of policy certainty in the market.

Government policy intent is to develop green industries, and so there must be a demonstrated commitment to delivering the requisite energy systems pathway. Aligning industry policy with energy policy will be critical in maintaining this investor confidence. Avoiding misalignment between

³ IGCC, 2023 Vital Regions Report [\[link\]](#).

⁴ AEMO, 2024 Integrated Systems Plan. [\[link\]](#).

energy as a resource (resources sector plan) and as an electricity source (energy and electricity sector plan) will improve policy clarity. IGCC recommends that the Department develop a portfolio-wide coherent industry and energy policy that affirms investor confidence for transitioning and green industries. This should cover the development of renewable energy zones, vital transmission corridors and the phasedown of natural gas for industrial processes.

What would accelerate the decarbonisation of metals?

Securing markets of demand

Investors seek to ensure that their investee companies have customers and a market for their product. Government has a role in establishing markets and engaging off-takers for green commodities, building on the compacts and bilateral agreements that were mentioned in the consultation paper.

This may include green metals content requirements for publicly funded infrastructure projects, and Government agencies seeking tenancies constructed with green metals and reduced embodied carbon.

IGCC is pleased to see that several of the options below are already being considered by the Department. A combination of these measures will be required to stimulate investment in green metals industries, to reduce production costs and create markets of demand.

On underwriting tenders

The consultation specifically identifies underwriting tenders as an option for green metals producers. Underwriting can be an effective means of securing appropriate risk-return profiles for investors on a project, whereby a shortfall in expected returns is made up by the government. There are limitations to these agreements though, particularly when offered in a reverse auction. For example, successful bidders may not have any incentive to deliver product in a timely manner once they are awarded a contract. This can be controlled by having contracts expire once capacity targets are met if adequate progress has not been made on the project.⁵

⁵ IEEFA 2024 review of the Capacity Investment Scheme [[link](#)].

Push mechanisms include:

- Public-private partnerships
- Funding workforce development and education – e.g. tying apprenticeships to PPAs
- Funding research facilities to develop early-stage innovations
- Public financing mechanisms to mobilise private capital – e.g. bridging the capital gap between ARENA and the CEFC (which operates closer to commercialisation).

Pull mechanisms include:

- Targets and standards including sustainable investment schemes and taxonomies
- Targeted subsidies and direct public funding that leverage private investment
- Product standards – e.g. zero-emissions product certifications⁶
- Sustainable public procurement
- Local content requirements for upstream products, creating markets of demand for green metals
- International markets are increasingly pricing carbon, and other countries are establishing green industries to take advantage of this global trend. A scheme that more fully prices carbon to accelerate decarbonisation and level the playing field (addressing the green premium) for low-emissions product would reduce uncertainty around returns for investors.

Enabling conditions for decarbonisation – critical junctures and innovation

As the consultation paper also noted, decarbonisation pathways for established industries already exist, it is now about creating the right push and pull mechanisms to accelerate change. With innovation quickly displacing the need for natural gas and delivering more efficient electrification processes, it is less about the government picking winners as it is about establishing the right macro conditions for industries to decarbonise. Avoiding locking-in emissions intensive technologies when machinery needs replacing or refurbishing is a clear juncture for action – government financing support must be focused on achieving genuine abatement. Displacing emissions-intensive processes will take a coordinated approach that levels the playing field, making renewable alternatives an attractive option for decarbonising established facilities.

⁶ IGCC supports the accelerated Renewable Guarantee of Origin program, which will begin with green hydrogen but will extend to other green commodities, including metals [\[link\]](#).

Supporting more companies to take on clean projects, such as Rio Tinto's green iron pilot⁷, will foster an innovation ecosystem as companies learn from each other's experiences with novel technologies.

Green premiums for low-emissions products

One of the best examples of reducing the green premium on a commodity has been for Sustainable Aviation Fuels (SAF).⁸ The US has introduced production tax credits to support investment into renewable fuels and reduce the "green premium" associated with the higher cost of SAF relative to conventional fuels. The Inflation Reduction Act includes tax credits for SAF (US\$0.46/ litre tax credit for SAF produced in the US) and these are expected to bring the wholesale market price of SAF down by more than 25 per cent by 2027. This creates pricing clarity for the market and signals to investors that there will be a market of demand for this commodity. A similar approach could be deployed for green metals, as it has for green hydrogen under the expanded Hydrogen Headstart program, which would be particularly useful for industries in early-stage development with significant competition from emissions-intensive counterparts.

Many Australian institutional investors and large retail funds are exposed to carbon prices in other jurisdictions. Green premiums may be addressed on an ad hoc basis via the tax credit method above, but an alternative option may be an Australian Carbon Border Adjustment Mechanism, particularly as international markets continue to develop theirs. Carbon Border Adjustment Mechanisms may impact green metals industries in Australia by levelling the playing field (addressing the green premium) for low-emissions products. This could improve clarity for investors and companies on how green commodities may perform in the market. The mechanism could be designed in such a way where highly emissions-intensive trade exposed products are excluded, targeting a narrow band of products that would benefit from a levelled playing field. The sensibility of this mechanism as part of the Australian Carbon Leakage Review is being assessed by the Department of Climate Change, Energy, the Environment and Water. IGCC would urge DISR to consider how green metals industries would be impacted by an AU CBAM.

⁷ See [\[link\]](#).

⁸ IFM Investors 2023, Energy Superpower report [\[link\]](#).

Coherent policy from Government has delivered a significant shift in investor behaviour

IGCC undertakes an annual review of the entire investment sector and takes stock of what opportunities and challenges investors are experiencing⁹. This year, results have shown a 30% drop in the number of investors citing policy inconsistency as a barrier to investment. Government policies like the Capacity Investment Scheme, the Hydrogen Headstart Program and the Future Made in Australia Budget, can further improve investor confidence in the market by defining the direction of travel and creating the risk-return profiles that investors need.

IGCC's recent discussion paper on sector decarbonisation pathways sets out the qualities of investible green industry policy needs.¹⁰ Recommendation 6 is most pertinent in the case of green metals, which lack appropriate funding across the capital stack, leading to a dearth of investment opportunities:

An action-orientated approach that identifies R&D and capital investment needs, as well as social capital and just transition requirements, and supporting government policy requirements. Pathways should take a realistic view on sources of capital, which is cognisant of the purpose of the investment institutions from which capital is to be sourced, and the return expectations of these institutions.

Government should identify points along the capital stack wherein investment for green metals industries are targeted to each stage of development.¹¹ IGCC is aware that more funding for green metals development may be announced over the coming year, with the most recent budget having focused on critical minerals. Additional to budget announcements, investors need durable industry policy to send a clear signal promoting the development of new green industries. Enduring policy solutions will be required to give companies and investors the confidence they need to commit multi-decades worth of capital to a nascent sub-sector.

For more information

Please contact Policy Manager, Bethany Richards (bethany.richards@igcc.org.au) for further discussion on any comment made in this submission.

⁹ IGCC Net Zero Survey, 2024. [[link](#)].

¹⁰ IGCC discussion paper on investible sector plans [[link](#)].

¹¹ IGCC 2023, Driving Climate Innovation paper [[link](#)].