

EU's new Net Zero Industry & Critical Raw Materials Acts dramatically escalate pressure on Australia to seize once-in-a-century cleantech opportunity

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The European Commission released its <u>Net Zero Industry Act (NZIA</u>) alongside its <u>Critical Raw Materials</u> <u>Act (CRMA</u>) overnight, a direct climate and investment strategy response to the landmark US <u>Inflation</u> <u>Reduction Act</u> (US IRA) passed last year. We see this as a significant upping of ambition in the global race to accelerate the energy transition to deliver on the climate science. The opportunities for Australia are enormous, but the pressure is on the Albanese government; leaving it to free markets won't work. From China to the US, to <u>India's PLI</u>, <u>Japan's GX Roadmap</u> and EU, our trade partners are making strategic public interventions at massive scale. Australia needs a new concerted public finance and policy response to crowd-in our \$3.3 trillion private pension capital, and seize this 'once in a century' opportunity. Australia will lose its opportunity to lead the world if we don't move fast and strategically, as highlighted in the <u>Climate Capital Forum blueprint</u>.

The CRMA establishes the policy framework to onshore mineral and metal processing and scale clean energy and battery technology supply chains within the EU. A core focus is to ensure supply chain security, reduce overdependence on any one country, and build regional industrial capacity, to ensure diversity of supply, as well as encourage investment in the massive new capacity to accelerate and deliver on the energy transition.

This is another very significant juncture in global decarbonisation, presenting significant ramifications, challenges and critically, opportunities for Australia. The Commission's policy developments follow President Biden's game-changing IRA. In combination with the Department of Energy's Loan Program, the IRA commits and mobilises >US\$400-800bn to supercharge the energy transition in the US, creating a commanding market signal to onshore cleantech processing and manufacturing, including critical mineral and EV supply chains.

The <u>EU Green New Deal</u>, including the <u>REPowerEU</u>, NZIA and CRMA, in a similar vein, establish comprehensive targets and objectives to onshore the manufacturing of at least 40% of clean technologies in the EU by 2030. It includes measures to reduce red tape on project approvals and

improve access to finance for "strategic technologies", including solar photovoltaic and solar thermal technologies, onshore and offshore wind technologies, battery technologies, heat pumps and geothermal energy, renewable hydrogen technologies and biomethane technologies. The EC president stated that "Europe is determined to lead the clean tech revolution."

The Act supports in particular 8 strategic net zero technologies. These are: i) solar photovoltaic and solar thermal technologies; ii) onshore wind and offshore renewable energy; iii) batteries and storage; iv) heat pumps and geothermal energy; v) electrolysers and fuel cells; vi) biogas/biomethane; vii) carbon capture and storage (CCS, aided by a high and rising carbon price); and viii) grid technologies.

Both these initiatives speak to the rapidly moving global geopolitical dynamics around the energy transition. Major nations and regional blocs are seeking to claim leadership in decarbonisation progress, protect national and regional interests, reduce supply chain vulnerabilities and ensure energy independence – an imperative that came into sharp focus with energy supply chain disruptions triggered by Russia's invasion of Ukraine. This clearly threatens freedom of global trade, and is a challenge to the WTO, but reflects an inevitable sovereign response to the continued widening of the gap between the rest of the world and <u>China's global cleantech leadership</u>.

Capital and production follow policy certainty, ambition and strategic government investment. Last week, German company VW threatened to <u>prioritise a US-based \$16bn battery plant</u> in response to the IRA. Fortescue Metals and Woodside highlighted that they will <u>pursue green hydrogen investments in the US</u> ahead of Australia on the basis of the capital subsidies available there.

All of the above is a wakeup call for Australian policymakers. We need to respond without delay to ensure our access to global energy market export opportunities, secure our energy sovereignty, and build our onshore capabilities in refining energy transition materials. In doing this, we should play to our massive competitive advantage in abundant, low cost firmed renewables to power mining, processing and manufacturing here to export embodied decarbonisation.

As we highlighted in the <u>Climate Capital Forum blueprint</u>, a version of the US IRA customised to the Australian context is an urgent step. This should include dedicated and significant direct federal debt, equity, infrastructure, grant, export credit and venture capital funding, leveraging our existing public institutions, including the Future Fund. It would require a supporting policy framework that accelerates our transition to a zero-emissions economy, putting a clear, rising price on carbon emissions, incentivising green tech development here and bolstering our domestic position relative to our competitors and partners, including the US and the EU.

It should also include dedicated capital to leverage our world-leading critical minerals resources, acting in the wider national interest to ensure majority Australian ownership, so that best practice is applied and corporate tax is paid here. But we must do more than dig and ship. The aim would be to trigger a rapid pivot from our multi-decade history of shipping unprocessed ores to a future of high value-added exports, capturing our share of the clean energy technology and electrification value chain.

Australia dominates global reserves and supply of resources that will power the global pathway to net zero. We are the world's leading producer of unprocessed lithium (46% in 2021). Australia produces 79% of the world's hard rock lithium, with exports forecasted to reach \$16 billion in 2023, up 15 times in two years. We are the world's third largest cobalt exporter, and the fourth largest exporter of mined copper, nickel and rare earths. We have significant opportunities in green ammonia, green aluminium, green iron, and in manufacturing of cleantech such as electrolysers and battery anodes and cathodes. However, we are failing to extract the value of our geostrategic resources here: almost 100% of Australia's critical mineral exports are currently sent to China for refining to supply its dominant battery and EV manufacturing industries. The US IRA will force a strategic pivot at speed. Our key trade partners like <u>South Korea</u> are already pivoting.

Our recent report, <u>A Critical Minerals Value-adding Superpower</u>, notes we have a once in a century, multi hundred billion dollar investment and export opportunity to lead the world in energy transition materials processing and manufacture. But the race is on. Our opportunity, and the challenge to respond nimbly, has now escalated with the EU's NZIA and CRMA.

The CRMA establishes a clear governance structure across the Union and Member States, providing direct mechanisms and benchmarks for scaling the domestic capacities of the EU across the strategic raw material supply chain. The formation of the <u>European Union Critical Raw Materials Board</u> provides a network of national agencies to accelerate financing and streamline permitting of Strategic Projects critical to Europe's roadmap to net zero. Under the CRMA, Strategic Projects will pass through the permitting process in under 24 months for extraction activity, and 12 months for processing.

By 2030, the EU's annual consumption of strategic raw materials must be sourced from a minimum of: 10% domestic extraction, 40% domestic processing, 15% recycled materials; and no more than 65% of total demand may be sourced from a single third country across all stages of the value chain.

Supply chain sustainability and circularity is a paramount concern for the EU policy framework. The CRMA requires sellers to demonstrate full supply chain and ESG traceability. This is good news for Australia, as it will advantage us to the extent we take the opportunity to leverage our zero-emissions clean energy to embody decarbonisation in energy transition materials mining and onshore processing pre-export.

The CRMA establishes a trading bloc and a Joint Purchasing Platform that will aggregate demand for strategic raw materials, negotiating trade with global sellers. The central platform will hold strategic stocks of critical raw materials to mitigate supply shocks and price fluctuations, with strict regulation against withholding stockpiles from the central market.

In its <u>submission</u> to the Commission on the CRMA, the European Automobile Manufacturers Association (ACEA), 14 major automakers called for a number of policy measures that are aligned with Australia's national interest. These include Free Trade Agreements (FTA) with Australia for lithium and rare earths (as well as Indonesia for nickel); and finalising FTAs for minerals supply to the EU with Mexico, Mercosur (trading bloc of Argentina, Brazil, Paraguay, and Uruguay) and Chile. ACEA also urged the Commission to support the trade of R&D, mining and processing expertise.

An EU FTA with Australia, Chile, and Argentina, with sustainability and ESG traceability as clear requirements to receive CRMA benefits, will create a significant, long-term market signal to drive investment into growth projects by Australian companies, both onshore and globally, given that BHP, Rio Tinto and Allkem all have South American critical minerals operations.

Establishing a clear EU-Australia FTA will have considerable spillover benefits beyond the economic value of our exports. Australia's critical mineral industry exposure to European battery producers and chemical processors is critical to scaling our domestic battery and chemical processing capacity via the trade of IP, expertise and workforces.

Further, the CRMA and Net Zero Industry Act will amplify the signal for <u>Australia and India to develop its</u> <u>commitment to partner</u> on critical minerals supply chains, maximising our export opportunity and facilitating the decarbonisation of both economies.

The clock is ticking. With urgent action on targeted, ambitious policy incentives and strategic co-investment, Australia is positioned to emerge in the new world economy as a value-added critical minerals superpower, leveraging the global energy system decarbonisation trend that accelerated dramatically in 2022/23. Our economic, trade, employment, and geostrategic opportunity to take a leadership role in the zero-emissions world is unprecedented.

However, we risk squandering it if we fail to act with the speed and strategic vision that a confluence of global developments such as the NZIA and CRMA in the EU, and the IRA in the US, now demands.

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