



CLIMATE ENERGY FINANCE

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NEW REPORT: Failure to act now to decarbonise & electrify Pilbara puts at risk Australia's \$250bn future green iron industry

A new report released today by independent public interest think tank Climate Energy Finance (CEF), [SUPERPOWERING-UP](#), with a [foreword](#) by former chief scientist Dr Alan Finkel, finds that failure to act now to electrify and decarbonise WA's Pilbara region – Australia's resources engine room and the world's biggest exporter of iron ore – risks Australia's biggest single future export opportunity: to potentially double our iron exports to \$250bn pa by producing green iron.

A single common-user electricity grid infrastructure (CUI) is the critical key to decarbonising the region and reaping the huge economic benefits for Australia of the green transition.

A CUI would unlock >\$50-100bn of new investment in renewables, battery firming and transmission, so the Pilbara's vast reserves of critical minerals, strategic metals and energy transition materials – including green iron – can be processed and value-added onshore using zero-emissions power. As the world races toward net zero, this is Australia's key opportunity to reposition as a green superpower, by “embodying decarbonisation” in our exports.

This challenge is urgent to ensure Australia's economic security. Global competition in value-adding strategic metals and minerals is escalating, fossil fuels are entering inevitable terminal decline, and carbon border tariffs are expanding. These developments signal we must pivot at speed and scale from our risky exposure as a global top-3 coal and gas exporter, and end our reliance on zero-value-add digging and shipping of fossil fuels.

Based on extensive new modelling of energy demand in the Pilbara, the report finds that:

- **The mining majors rely on burning a massive 2.4bn litres pa of heavily subsidised, high-emissions imported diesel and on fossil gas for energy demand in the Pilbara.** Replacing this requires 16.66 terawatt hours (TWh) pa of electricity, equivalent to 7.8% of Australia's National Electricity Market (NEM). This could be increasingly supplied by locally-generated, zero-emissions firmed renewable energy.
- **The Pilbara currently sources only 2% of its electricity from renewables.** Fragmented corporate energy production and grid transmission structures undermine progress on comprehensive energy supply decarbonisation in the region.

- **CUI in the Pilbara would enable multiple stakeholders to efficiently and cost-effectively electrify and decarbonise their operations**, superpowering-up by using firming renewables to mine, process and refine pre-export.

THE REPORT'S [KEY RECOMMENDATIONS](#) INCLUDE:

- All stakeholders should centre social licence and **First Nations equity participation** in Pilbara decarbonisation by prioritising consultation and agreement with First Nations peoples on energy infrastructure.
- State and Federal governments should introduce **Overriding Public Interest** principles into environmental approvals processes for renewable energy, infrastructure, storage and green manufacturing projects, to overcome barriers and delays, and expedite approvals.
- The Federal Government should urgently prioritise the Pilbara for strategic national-interest public investment under its **Future Made in Australia Act**, to crowd in private finance.
- The WA and Federal Governments should work to urgently deploy the **\$3bn Clean Energy Finance Corporation (CEFC)** concessional financing committed to WA under **Rewiring the Nation – a full year ago in August 2023** – to unlock private capital financing of a Pilbara CUI.
- The WA Government should prioritise development of a comprehensive single **Common-User Grid Infrastructure Plan** and drive its implementation near-term, collaborating with its Federal counterparts and key mining industry stakeholders.

[FULL KEY RECOMMENDATIONS CAN BE FOUND HERE.](#)

Co-author TIM BUCKLEY, CEF Director & former MD of Citigroup, said:

“The threat of our key Asian trade partners progressively decarbonising their steel industries is absolutely clear for Australia’s major exports of iron ore from the Pilbara and coking coal from Queensland. These two powerhouses have served Australia exceptionally well. But now is the time to invest in both new technology developments and the enabling grid and renewable energy infrastructure needed to facilitate the export of ‘embodied decarbonisation’ in the form of green iron.

“The Pilbara is strategically challenged by low-grade high-impurity haematite. It is critical that West Australia embrace this challenge and turn it into a massive value-add opportunity.

“A common-user infrastructure grid in the Pilbara would enable investment at speed and scale, and encourage collaborative efforts to value-add our iron ore ‘rivers of gold’ whilst they are still world-leading. The opportunities for West Australia to lead and accelerate the development of a green steel global supply chain are huge. But the current 2% renewables grid shows Australia is lagging, stuck in the dig-and-ship mentality of the last century.

"It is encouraging to see the WA and Federal governments release an [assurance over the weekend](#) that work to unlock the Pilbara's green energy future is "underway" with "plans progressing" for CUI to link renewable energy generation in the Maitland Strategic Industrial Area south of Karratha to major industry in the Burrup Peninsula region, with the potential to decarbonise ammonia and LNG production. Planning now needs to turn into concrete implementation, which requires the WA Government to expedite confirmation at long last of the state's first priority project for the \$3bn in Federal concessional Clean Energy Finance Corporation financing allocated to WA a full year ago under Rewiring the Nation. And urgent attention is needed to CUI farther north around Port Hedland, which is the epicentre of the iron ore industry.

"We critically need leadership, cooperation, enabling public investment and concrete action on deployment of grid and renewables. An 'Overriding Public Interest' framework like the EU's should be put in place to accelerate approvals of our critical decarbonisation infrastructure projects of national significance."

Lead author MATT POLLARD, CEF Net Zero Transformation Analyst, said:

"The Pilbara has a significant challenge in building out large-scale infrastructure such as the transmission grid and renewable energy capacity given its harsh conditions, isolated location and high-cost labour market.

"We call on the Federal and WA Governments to work collaboratively with industry to accelerate a Pilbara CUI and unlock the deployment of firmed renewables in the region, creating our green resources export industries of the future.

Our recommendations include strategic national-interest public investment under the Future Made in Australia Act to catalyse private capital investment into a CUI and create economies of scale; streamlined approvals for grid and clean energy infrastructure; and First Nations equity participation in energy project developments.

"The world is rapidly transitioning, including our key export markets. Failure to invest now in grid buildout and renewables capacity to value-add our minerals and metals resources onshore with clean energy is a significant threat to our competitiveness in a world economy increasingly pricing carbon.

"Common-user electricity grid infrastructure will enable us to leverage the opportunities the global transition to net zero offers for renewables-intensive processing of green iron and critical minerals – the foundation of our potential as a zero-emissions trade and investment leader."

Former Chief Scientist DR ALAN FINKEL said in his foreword:

"A key goal for Australia is to become an electrostate of the future, a green energy superpower exporting decarbonised, value-added strategic metals and critical minerals that will simultaneously be income earners and contribute to global decarbonisation.

“Much must be done to speed up the deployment of solar and wind power in the Pilbara to economically decarbonise the mining of our existing exports, and produce value-added, decarbonised derivatives.

“... First, and foremost, in the context of the impact on land use required for transmission lines and solar and wind farms, is to work closely with Traditional Custodians of the land for mutual benefit.

“Possibly the biggest problem is that our regulatory systems are too complex, unbalanced, and slow. We need the kinds of changes recommended in this report, including the Overriding Public Interest (OPI) requirement adopted in Europe, to ensure faster solar, wind, storage and transmission approvals.

“The consequences of acting too slowly or inefficiently will be severe... Brazil, South Africa and other countries can dig and ship their iron ore to countries in the Middle East that will use their low-cost, zero-emissions electricity to convert the crude iron ore into refined green iron. If we follow a business-as-usual trajectory... we will suffer from a decline in our mineral resources exports at the same time that our fossil fuel exports start a slow but terminal decline. This is a major risk to Australia’s economic security.”

Interim CEO of the [Clean Energy Investor Group](#), MARILYNE CRESTIAS, representing renewables investors with >11GW installed capacity across ~70 power stations & a portfolio value of ~\$24bn said:

“The key findings presented by Climate Energy Finance in its latest report highlight the immense opportunities within the Pilbara region of Western Australia to drive the decarbonisation of Australia's export economy.

“Measures such as a Pilbara common-user electricity grid infrastructure, an Overriding Public Interest test for renewable energy developments, and First Nations' equity participation will address barriers to investment in large-scale firming renewables in the region and offer greater certainty to investors, signalling that Australia is committed to transforming its economy and capitalising on global export opportunities.

“Failure to embrace these measures risks positioning Australia as a laggard in the global race to decarbonise, potentially missing out on crucial strategic export opportunities.”

Joanna Kay, GM, [Zero Carbon Hydrogen Australia](#) & [Smart Energy Council](#), said:

"Hydrogen represents a monumental opportunity for Australia, particularly in transforming our iron ore exports into high-value green iron, including in the Pilbara. We support the report's recommendation that the federal government provide strategic capital support for green hydrogen-based metals refining in the region through programs such as Hydrogen Headstart.

By leveraging our abundant renewable energy resources, we can lead the global market in green hydrogen production, enhancing our export economy while contributing significantly to global decarbonisation efforts. This strategic move not only solidifies Australia's position as a renewable energy superpower but also ensures a robust and prosperous economic future."

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MEDIA:

TIM BUCKLEY IS AVAILABLE FOR INTERVIEW

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