



CLIMATE ENERGY FINANCE

WA Government Pilbara Energy Transition Plan to Accelerate Electrification and Decarbonisation with Priority Common User Infrastructure Corridors

16 September 2024

In a landmark for accelerating electrification and decarbonisation of the Pilbara, Australia's resources engine room, the WA Government's [Pilbara Energy Transition](#) (PET) Plan has announced the development of priority common user infrastructure (CUI) corridors in the region.

CEF applauds the fantastic step-up of ambition from the WA Government to recognise the incredible value-added opportunity for Australia that is enabled by CUI, including significant deployment of renewable energy, reducing environmental impacts by minimising infrastructure duplication, supporting energy security and reliability, driving investment, unlocking the state's \$3bn allocation of the Rewiring the Nation, and enabling collaboration with Traditional Owner groups and local communities to ensure meaningful and lasting benefits from the energy transition.

The PET Plan has identified four priority corridors for the accelerated, and coordinated development of high voltage common user electricity transmission infrastructure, that will connect existing energy-intensive industries in the Pilbara, of which is primarily powered by fossil fuels, to strategic regions of high renewable energy resources and land that can unlock future-facing industries and enable embedded decarbonisation in our exports.

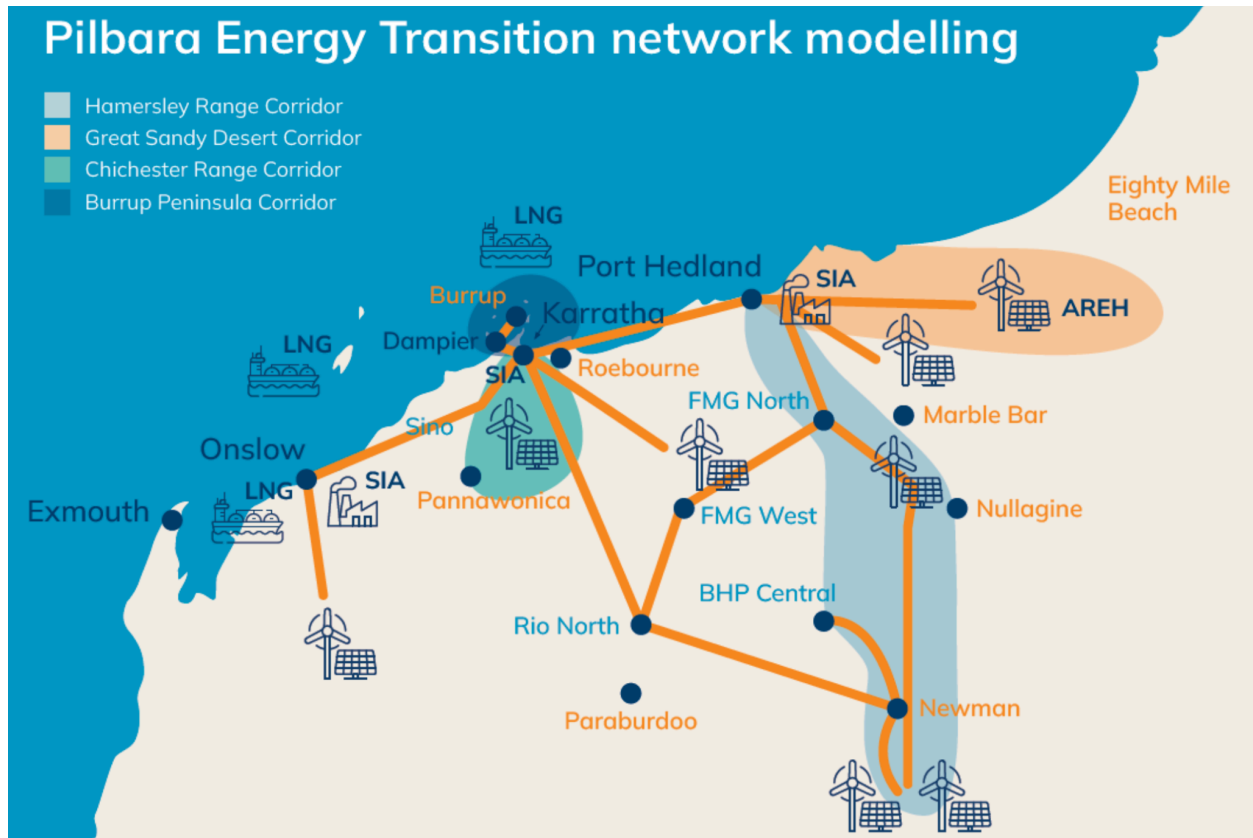
The **Burrup (Murujuga) Corridor** will connect the Burrup Strategic Industrial Area (SIA), which houses large-scale gas liquefaction facilities (Pluto LNG and Karratha Gas Plant), and one of the world's largest ammonia production facilities in the world (Yara Pilbara Fertilisers), with the Maitland SIA, southwest of Karratha. This can enable significant electrification and decarbonisation of hydrogen production to manufacture green ammonia.

This would be further enabled by the **Chichester Range Corridor**, which will connect the Maitland SIA with a high-quality wind zone 50-100km to the south, infrastructure that will enable complementary wind capacity to the Pilbara to that of solar resources, currently the only renewable energy source operating in the region, and accounting for 2% of electricity demand in the Pilbara.

The **Hamersley Range Corridor** will connect the Boodarie SIA and Port Hedland with the Hamersley Range, where Australia's economic powerhouse of iron ore mining predominantly occurs. This Corridor will be critical to the electrification and decarbonisation of mobile mining equipment, the largest source of emissions in Australia's mining sector.

The **Great Sandy Desert Corridor** will connect Port Hedland with the western end of the Great Sandy Desert. This Corridor would then enable Australia’s largest renewable energy proposal, the 26GW Australian Renewable Energy Hub (AREH) to connect to the existing NWIS. There are multiple green metals refining facilities proposed in the Boodarie SIA, which will demand significant renewable energy capacity and hydrogen production. This would also allow AREH to potentially contribute to the decarbonisation of the iron ore mining precincts via the Hamersley Range Corridor.

PET Priority Transmission Corridor Modelling



Source: WA Government

CUI is key to unlocking renewables-powered onshore processing of the region’s vast reserves of critical minerals and strategic metals, including iron ore, opening up the potential for Australia to lead in green exports including green iron.

The announcement reflects the recommendations to the WA government in CEF’s recent report, ‘[Superpowering-Up: Accelerating the Electrification and Decarbonisation of the Pilbara](#)’, in which CEF called for the priority development of a comprehensive single CUI grid infrastructure plan in the Pilbara in collaboration with key industry stakeholders and Federal counterparts to enable a green metals industry future made in Australia.

As part of CEF’s recommendations, we called for the strategic national-interest public investment into CUI, leveraging the [\\$3bn allocation](#) from the Clean Energy Finance Corporation under the [Rewiring the Nation Fund](#), to deploy the necessary capacity of renewable energy

required to power a green metals refining, critical minerals processing, and cleantech manufacturing under the Net Zero Transformation and Economic Security and Resilience Streams of the [Future Made in Australia](#) initiative.

CEF highlighted how CUI will complement the existing initiatives of Australia's green re-industrialisation, and enable the decarbonised onshoring of currently fossil fuel-intensive processing to support the decarbonisation objectives of our key trading partners, as well as crowd-in co-investment and collaboration with international public and private financial institutions and global sector leaders, and support international carbon pricing - a key geopolitical priority that will, once again, play to Australia's comparative advantages.

Through CEF's report on the Pilbara, we showcased how a coordinated and accelerated approach to decarbonisation of the Pilbara is a national strategic priority, and will enable greater diversification, security, and reliability for renewable energy proponents and their energy offtakers, as well as minimising the environmental impact of the energy transition through reduced duplication and developmental envelopes, which will also significantly support the WA Environmental Protection Authority's approvals pipeline. In addition, creating a CUI Plan also creates an environment for equitable and just collaboration and involvement of First Nations communities in the Pilbara.

It is excellent to see the WA Government and the PET Roundtable members recognise these critical issues and opportunities that can emerge with the accelerated electrification of the Pilbara.