

Ensuring a sustainable power future for the region post-mining

CUSTOMER

Rio Tinto

LOCATION

Gove Peninsula,
Northern territory

SECTOR

Mining



KEY FACTS

36.5 MW

Total capacity

10.5 MW

Solar power

13460 tonnes

CO₂ reduction annually

26 MW

Diesel power

5 mln litres

Of diesel savings annually

10 year PPA

Contract term

THE CHALLENGE

Develop sustainable future for the Gove Peninsula

For over 40 years, Rio Tinto's Gove site in the Northern Territory has been a key supplier of high-quality bauxite for the global aluminium industry. As mining activities at Gove wind down, Rio Tinto, in partnership with Aggreko, is focused on ensuring a sustainable energy future for the Gove Peninsula. The transition involves the construction of two 5.25 MW solar farms on Gumatj and Rirratjingu country, in collaboration with local Traditional Owner Groups.

Operating on Indigenous land introduces a layer of complexity that requires respectful engagement, cultural sensitivity, and genuine collaboration with local communities to meet both environmental and social expectations.

THE SOLUTION

Enhancing sustainability of the remote power system

Aggreko has been operating a 26 MW diesel-powered remote power system since 2014, supplying energy to both the Gove bauxite mine and the town of Nhulunbuy under a long-term Power Purchase Agreement (PPA).

This system comprises 26 x 1 MW Cummins KTA50G12 diesel generators, providing reliable power for over a decade. To enhance sustainability, Aggreko has integrated two 5.25 MW solar farms into the existing diesel system. The hybrid power system is significantly reducing the mine and town's dependence on diesel.

The hybrid system now includes 26 MW of diesel power generation and 10.5 MW of solar power, using Canadian Solar panels, Sungrow inverters, and Nextracker tracking systems.



THE IMPACT

Advancing sustainability and community engagement

The Gove hybrid power project marks a significant step in Rio Tinto's decarbonisation journey, delivering long-term, sustainable energy to the region. By integrating solar into the existing diesel system, the project is expected to cut diesel use by 5 million litres annually and lower carbon emissions by 13,460 tonnes.

Aggreko's role extends beyond energy. In the town of Nhulunbuy, our Reconciliation Action Plan is brought to life through direct engagement with Traditional Owner Groups, support for local initiatives like Gayili Yunipingu's women's shelter, and STEM-focused education programs tailored for First Nations students. These include solar powered robotics and hands-on workshops designed to inspire future careers in science and technology.

The Gove solar project is part of our shared vision with Traditional Owners to leave a positive legacy for the Gove Peninsula communities after bauxite mining ceases. We intend for these farms to underpin sustainable power for the region beyond mining.

Shannon Price
Acting General Manager
Rio Tinto Gove Operations