

CASE STUDY AUSTRALIA FORTESCUE DAVE FORREST AIRPORT

PROJECT KEY FACTS

Airport: Fortescue Dave Forrest Airport

Location: Australia

Application: Mining Airstrip

Runway: 2 300 m

Solution: Solar Aerodrome Lighting

Buyer: Fortescue

Year of Installation: 2024



OVERVIEW

Fortescue is a global mining company that operates three mining hubs in the Pilbara, Western Australia. The company aims to decarbonize mining operations by 2030.

As part of this effort, it's been decided to upgrade one of the company's mining airstrips, Fortescue Dave Forrest Airport, with a sustainable solar-powered airfield lighting system.

CHALLENGE

Fortescue faced the challenge of replacing their outdated, wired lighting system, which was not only costly but also posed safety and environmental risks due to heavy reliance on diesel power. The primary objectives were:

- Reducing power consumption and diesel usage.
- Improving safety by removing cables and minimizing electrical hazards.
- Adopting a sustainable solution that aligns with environmental and operational requirements.

SOLUTION

S4GA offered to implement an advanced Solar Aerodrome Lighting. The system was supplied, installed and commissioned by S4GA's local partner in Australia, AMS. S4GA Solar Runway Lighting stands out for its reliability, environmental friendliness, and cost efficiency:

- **20% Reduction of Power Usage:** Conversion of 120 airfield lights to solar power, resulting in a significant 20% reduction in both power usage and diesel consumption. This green solution aligns perfectly with Fortescue's commitment to sustainability.
- **100% Elimination of Electrical Hazards:** The system, designed by S4GA, features solar panels with integrated batteries, eliminating the need for cables. This upgrade not only reduces the risk of electrical hazards but also enhances overall safety at the airfield.
- **Reliable Performance:** The solar-powered lights offer dependable operation without relying on external power sources, making them suitable for Fortescue's operational needs.

The successful implementation of S4GA's Solar Aerodrome Lighting system at Cloudbreak Airport demonstrates how airports, particularly in remote or challenging locations, can meet their lighting needs with a sustainable, green solution.

By leveraging solar technology, Fortescue has not only improved operational efficiency and safety but also set a new standard for environmental responsibility in the mining sector. This initiative paves the way for future upgrades across their network and beyond.



CASE STUDY AUSTRALIA FORTESCUE DAVE FORREST AIRPORT

S4GA PRODUCTS



SOLAR RUNWAY
EDGE LIGHT



SOLAR HOLDING
POINT LIGHT



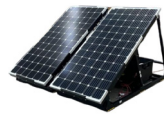
SOLAR RUNWAY
THRESHOLD END
LIGHT



SOLAR TAXIWAY
EDGE LIGHT



LED PAPI LIGHT



SOLAR ENGINE
MAX



UR-7 WIRELESS
CONTROLLER FOR
PAALC



UR-101 HANDHELD
CONTROLLER



ALCMS CONTROL
& MONITORING
SYSTEM



UR-201 CONTROL
& MONITORING
UNIT

APPLICATION PHOTOS

