



# **Agnew Hybrid** Renewable Microgrid

EDL owns and operates the Agnew Hybrid Renewable Microgrid, a ground-breaking energy solution for Gold Fields' Agnew Gold Mine in Western Australia.

The power station provides the mine with more than 50% renewable energy over the long term, without compromising power quality or reliability.







tonnes of carbon dioxide equivalents avoided p.a.





Equivalent to removing

cars off the road p.a.



Equivalent to powering

# At a glance

#### Site name

Agnew Hybrid Renewable Microgrid

Owner/operator

FDI

# Customer

Gold Fields

#### Location

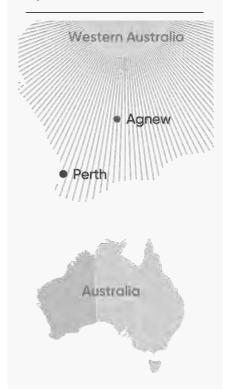
Leinster, Western Australia, Australia

Installed generation capacity

56MW

#### Primary fuel

Hybrid



# About the hybrid renewable microgrid

EDL delivered this innovative project under a 10-year agreement with Gold Fields. The Australian Renewable Energy Agency (ARENA) provided the project with \$13.5 million in funding under ARENA's Advancing Renewables Program.

"We are proud to be able to showcase this project with EDL as an outstanding example of the capacity of the hybrid renewable energy model to meet the dynamic power requirements of remote mining operations.

"This is a very clear demonstration of our commitment to reducing our carbon footprint whilst strengthening our security of supply, and paves the way for the industry as a whole to implement renewable solutions."

# Gold Fields Executive Vice President Australasia Stuart Mathews

Completed in 2020, the Agnew Hybrid Renewable Microgrid is Australia's largest hybrid renewable energy microgrid and the first in the country to utilise wind generation on a large scale at a mine site.

The new microgrid comprises four key components managed by an advanced control system:

- five 110m wind turbines, each with a rotor diameter of 140m, delivering 18MW
- a 10,710-panel solar farm generating 4MW
- a 13MW/4MWh battery system
- off-grid 21MW gas/diesel engine power plant.

In favourable weather conditions, the power station has delivered up to 85% of the mine's power requirements with renewable energy.





The Agnew Hybrid Renewable Microgrid comprises wind, solar, gas and diesel generation and battery storage.

### **Project suppliers**















EDL owns and operates a global portfolio of power stations in Australia, North America and Europe.

We are committed to energy diversity and providing innovative, sustainable solutions to meet and exceed customer needs.



Renewables



Waste coal mine gas





LNG/CNG



Landfill aas

