



A tradition of innovation

From humble beginnings more than 30 years ago, EDL has grown into a leading global producer of sustainable distributed energy.

EDL's success is fuelled by our commitment to continually innovate and our ability to leverage and integrate different technologies to deliver reliable, cost-effective clean energy outcomes.

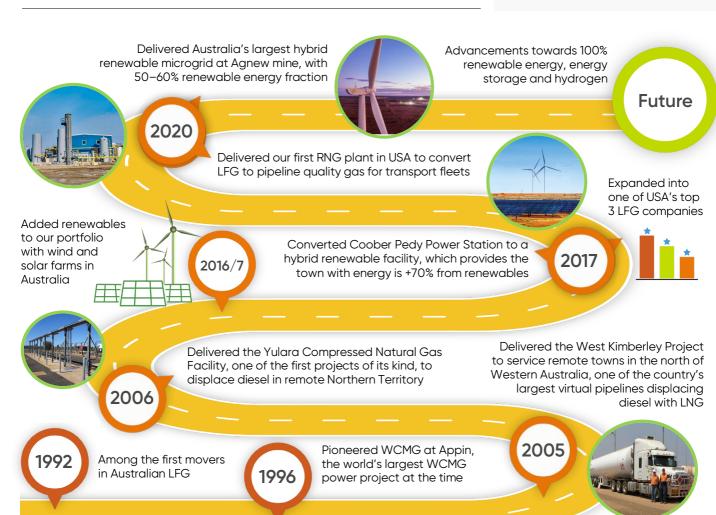
Awards & accolades

2018 – Coober Pedy project: **South Australian Premier's Awards in Energy & Mining**, Excellence in Innovation: Productivity Improvement

2019 – Coober Pedy project: **Asia Power Awards,** Environmental Upgrade of the Year

2020 - Agnew project:

- Australian Engineering Excellence Awards
- Asia Power Awards, Innovative Power Technology of the Year
- Global Energy Awards, Engineering Solution of the Year



The journey to sustainable energy

Landfill gas (LFG) & renewable natural gas (RNG)

EDL was established in 1988 with a gas-fired power station at Pine Creek in remote northern Australia.

Soon after, EDL leveraged this expertise in gas and power generation to venture into the infant Australian clean energy market, generating electricity from methane emissions at landfills.

Our first LFG project in 1992 was a success, and led to a rapid expansion of LFG projects over the decade across Australia, the United Kingdom and USA. Since then, EDL has remained a leading player in the LFG power generation markets in these countries.



In a natural progression, EDL is developing RNG projects at several of our LFG power stations in the USA. Our Indy High BTU RNG Plant (pictured above) was commissioned in 2020. It is the largest in Indiana, USA with capacity to convert LFG to approximately 8 million gallons of pipeline-quality RNG each year.

EDL is investing more in our growing RNG portfolio in the US and has plans to introduce RNG to the Australian market.

Waste coal mine gas (WCMG)

EDL's experience with reciprocating engines and waste methane in LFG power generation launched our WCMG business in 1996, with the development of the world's largest WCMG project of its time, 95MW at BHP Billiton Illawarra Coal's Appin and Tower Colliery.

Despite the original equipment manufacturer's assertions it could not be done, EDL successfully modified 1MW gas engines to burn a mixture of gas from three sources.

Today, EDL is Australia's leading WCMG energy producer, with installed capacity of 287MW across eight power stations.

Renewables and hybrids

In 2013, EDL saw the opportunity to leverage hybrid renewables to assist an existing customer. Like many remote Australian communities, Coober Pedy relied on diesel generation for electricity and was subject to the volatility of fuel prices.

Taking advantage of the abundant sunshine and wind at Coober Pedy, EDL combined wind and solar generation, a battery and integration technologies with our existing diesel power station to seamlessly transition the off-grid community from 100% diesel to up to 100% renewables. The Australian Renewable Energy Agency (ARENA) funded about 50% of project costs.

In 2016/7, EDL acquired two grid-connected wind farms and a remote solar farm in Australia, deepening our renewables knowledge base.

Since commissioning in 2017, our Coober Pedy Hybrid Renewable Power Station has supplied the town with more reliable electricity at an average of >70% renewable energy penetration. The record for 100% renewable energy supply is 97 continuous hours in December 2019.

Coober Pedy's success led to the development of a 3MW solar farm for Cannington Mine in Queensland in 2018. Through this project, EDL is playing a key role in assisting our customer to reduce carbon emissions.



Learnings from these projects enabled EDL to embark on an ambitious greenfield hybrid renewable microgrid for Gold Fields' Agnew Gold Mine in remote Western Australia. ARENA contributed approximately 10% of project costs.

Delivered in two stages and fully commissioned in 2020, the project (pictured above) is Australia's largest hybrid renewable microgrid, and the first in the Australian mining industry to harness wind energy on a large scale.

Integrating five energy technologies, the microgrid provides the mine with electricity that is 50-60% produced from renewable energy sources, with improved power quality and 99.99% reliability.

