



Moranbah North Power Station

Energy Developments Pty Limited (EDL) is an international provider of safe, clean, low greenhouse gas emissions, remote energy solutions and renewables.

EDL has pioneered the collection and combustion of Waste Coal Mine Gas (WCMG), an environmentally-damaging greenhouse gas (GHG), as its 63 megawatt (MW) Moranbah North WCMG Power Project in Queensland, Australia

WCMG is a naturally occurring gas which is often released in large amounts during coal mining. Fugitive emissions from coal mines account for about five percent of Australia's greenhouse gas (GHG) emissions. Further, these gases pose a major safety hazard in underground mines.

At Anglo American's Moranbah North coal mine in the Bowen Basin in central Queensland, the Company is applying its expertise in low calorific fuels to capture and combust WCMG, which is 25 times more damaging to the environment than carbon dioxide (CO₂).

This means EDL not only prevents harmful methane gases escaping into the atmosphere, it used them to fuel a 63MW power station and in the process displaces mostly coal-fired generation

At a glance

Project name:

Moranbah North Power Station

Builder, Owner, Operator:

Energy Developments Pty Limited

Location:

Moranbah, Central Queensland Australia

Generating capacity:

63MW

Primary fuel:

Waste Coal Mine Gas (WCMG)

Production:

400 GWh pa

Equivalent cars off the road:

500,000 pa

Abated & Avoided Emissions:

1.7 million tonnes CO₂-e pa

Start of operation:

2009



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The project generates revenue from the sale of electricity. The WCMG captured and burnt at the Moranbah North WCMG Power Project abates and displaces about 1.7 million tonnes of CO₂-e pa each year

The power station is capable of generating approximately 400 gigawatt hours (GWh) of electricity each year, which is enough to power approximately 63,000 homes

The environmental impact of the Moranbah North WCMG Power Project is equivalent to taking about 500,000 cars off the road.

The power station was built on a turnkey basis using GE Jenbacher 620 3MW generator sets under a separate construction contract with Clarke Energy. By leveraging the established operational capability at the German Creek Power Station, the Moranbah North Plant began full scale operation in late 2008, supplying electricity into National Electricity Market.

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The project delivers significant environmental, community and economic benefits. It is tangible evidence of Energy Developments' ability to design, construct and operate infrastructure that produces cost-efficient, reliable, clean energy for its customers.

About Energy Developments Pty Ltd (EDL)

EDL is an international provider of safe, clean low greenhouse gas emissions, remote energy solutions and renewables.

EDL currently manages an international portfolio of over 980MW of power generation facilities in Australia, North America and Europe, providing energy solutions from a range of fuel sources:

- Remote energy
- Liquefied natural gas (LNG and compressed natural gas (CNG))
- Wind power generation
- Landfill gas (LFG) power generation
- Waste coal mine gas (WCMG) power generation

EDL is involved in project development, finance, design, operation and maintenance of international power generating and energy delivery projects.



GE Jenbacher 620 3 MW Generator Set



3 MW Power Generation Modules