



German Creek 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 45 megawatt (MW) German Creek 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 German Creek 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 uses them to fuel a 45MW power station and in the process displaces mostly coal-fired generation

At a glance

Project name:

German Creek Power Station

Builder, Owner, Operator:

Energy Developments Pty Limited

Location:

200km west of Rockhampton,
Queensland Australia

Generating capacity:

45MW

Primary fuel:

Waste Coal Mine Gas (WCMG)

Production:

340 GWh pa

Equivalent cars off the road:

350,000 pa

Abated & Avoided Emissions:

1.2 million tonnes CO₂-e pa

Start of operation:

2006



Aerial view of German Creek Power Station.





The project generates revenue from the sale of electricity. The WCMG captured and burnt at the German Creek WCMG Power Project abates and displaces about 1.2 million tonnes of CO₂-e pa each year

“The environmental impact of the German Creek WCMG Project is equivalent to planting five million trees or taking 350,000 cars off the road in a full year.”

The environmental impact of the German Creek WCMG Power Project is equivalent to taking about 350,000 cars off the road.

The power station consists of sixteen 2MW power generation modules using Caterpillar 3520C generator sets and four 3.3MW power generator modules using Jenbacher J620 generator sets, both capable of generating up to about 340 gigawatt hours (GWh) of electricity each year, which is enough to power approximately 53,000 homes.

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.



German Creek Gas Processing Plant



2 MW Power Generation Modules