The Carmichael mine.



The Carmichael mine is a thermal coal mine in Queensland's North Galilee Basin, approximately 160 kilometres north west of the town of Clermont.

Carmichael produces in the order of 10 million tonnes per annum (mtpa) of high-quality coal. All of the product coal is for export, and much of it will be used to generate reliable and affordable electricity for people in the developing world.

Coal from the mine is railed more than 300 kilometres along the Carmichael Rail Network (CRN) and Newlands Rail System for export via the North Queensland Export Terminal (NQXT), which is approximately 25 kilometres north of Bowen.

The CRN is an approximately 200 kilometre narrow gauge railway connecting Queensland's Galilee Basin to existing rail infrastructure and the NQXT – Australia's most northerly coal export port. Carmichael mine was the railway's foundation user.



The Carmichael mine in the North Galilee Basin is more than 300km from the Queensland coastline and 160km north west of Clermont. NQXT is 25km north of Bowen.







Helping to responsibly meet global energy demand

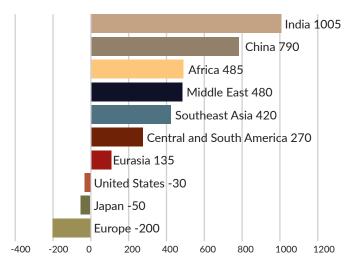
Carmichael is one of more than 100 coal mines in Australia. At around 10mtpa, Carmichael produces just a fraction of both Australia's coal production and export which in 2020–21 totalled 363 million tonnes, of which 192 million tonnes were thermal product.

International demand for thermal coal is increasing, not decreasing, as developing nations that are determined to lift their people out of poverty, electrify energy systems and replace burning wood and biomass with coal-fired power and renewable power.

High-quality Australian coal, like that mined at Carmichael, has an important role to play both in meeting this demand and in reducing global emissions by displacing lower quality, higher emission, coal from jurisdictions that do not operate with the same tight workplace health and safety, environmental, or social regulations we do.

Carmichael mine is supplying high-quality Queensland coal to nations determined to lift millions of their citizens out of energy poverty while creating local jobs and economic prosperity in Queensland communities.

Increase in energy demand 2016-2040 (Mtoe)



Source: IEA, 2019, change-in-primary-energy-demand-in-selected-countries-2016-2040.



"I am 36 years old, and I have power for my family—it has changed my life. My children can study at night with light." Shevamta Prakesh Umbarsade, Aarey Milk Colony, Mumbai, India.



The Run Of Mine stockpile at Carmichael.















Fast Facts

Production 10mtpa

Thermal coal – 5,000-5,400 kcal/kg (GAR)

(OF

■ Mining Open cut truck and shovel

Location Central Queensland

160km north west of Clermont and 300km from the Queensland coast

Approvals
Up to 60mtpa

Outcomes More than 2,600 construction jobs

on the mine and rail projects and more than 9,000 indirect jobs

More than AUD \$1 billion in contracts awarded for the mine and rail projects to regional Queensland

contractors and businesses

Reserve 880 Mt (JORC compliant)

Strip Ratio ~4 (bcm:t)

Coal Handling Processing Plant Bypass circuit

(crushing and screen 1,500 tph)

Wash plant (single module 1,250 tph with dense medium cyclone, spirals and dry co-disposal technology)

and dry co disposa

■ Train loadout

3,500 tph



