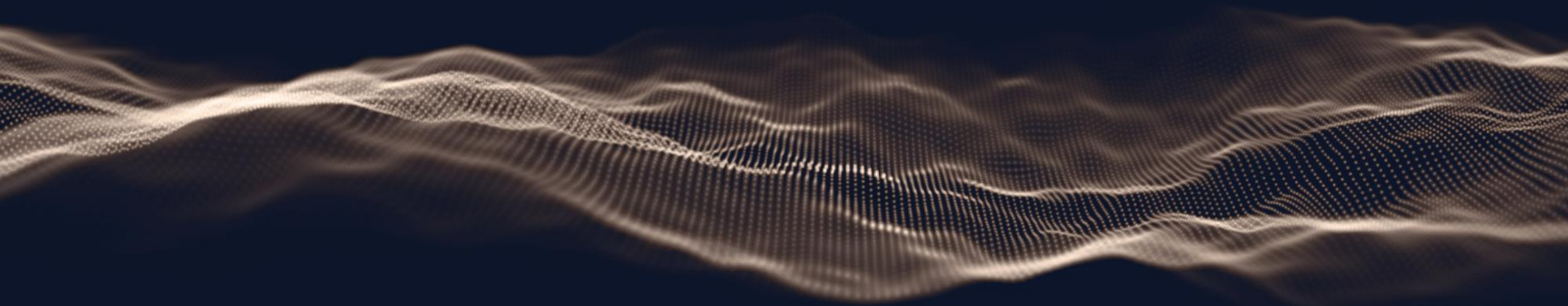


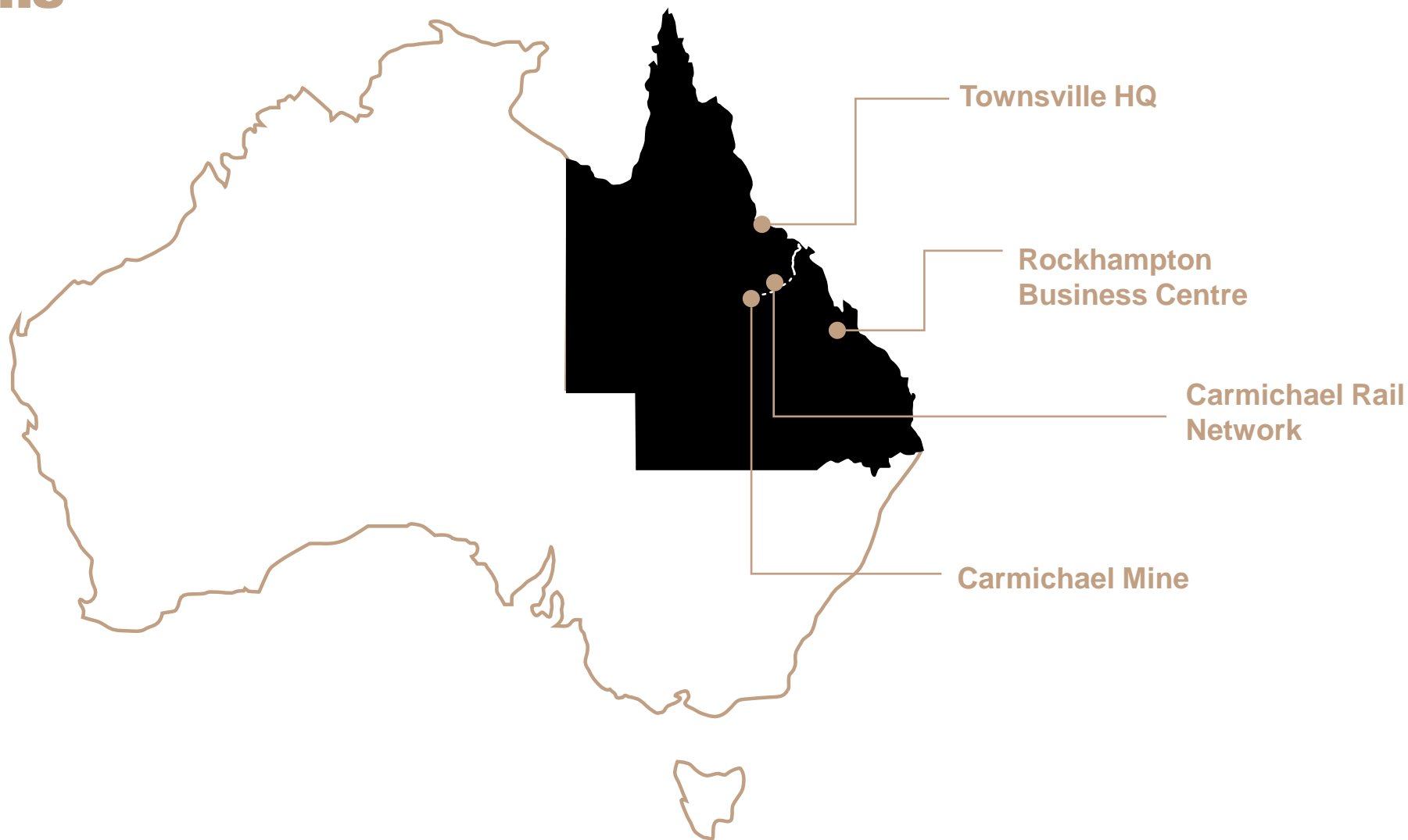
# **BRAVUS**

**MINING & RESOURCES**

## **The Carmichael Project**



# Our operations



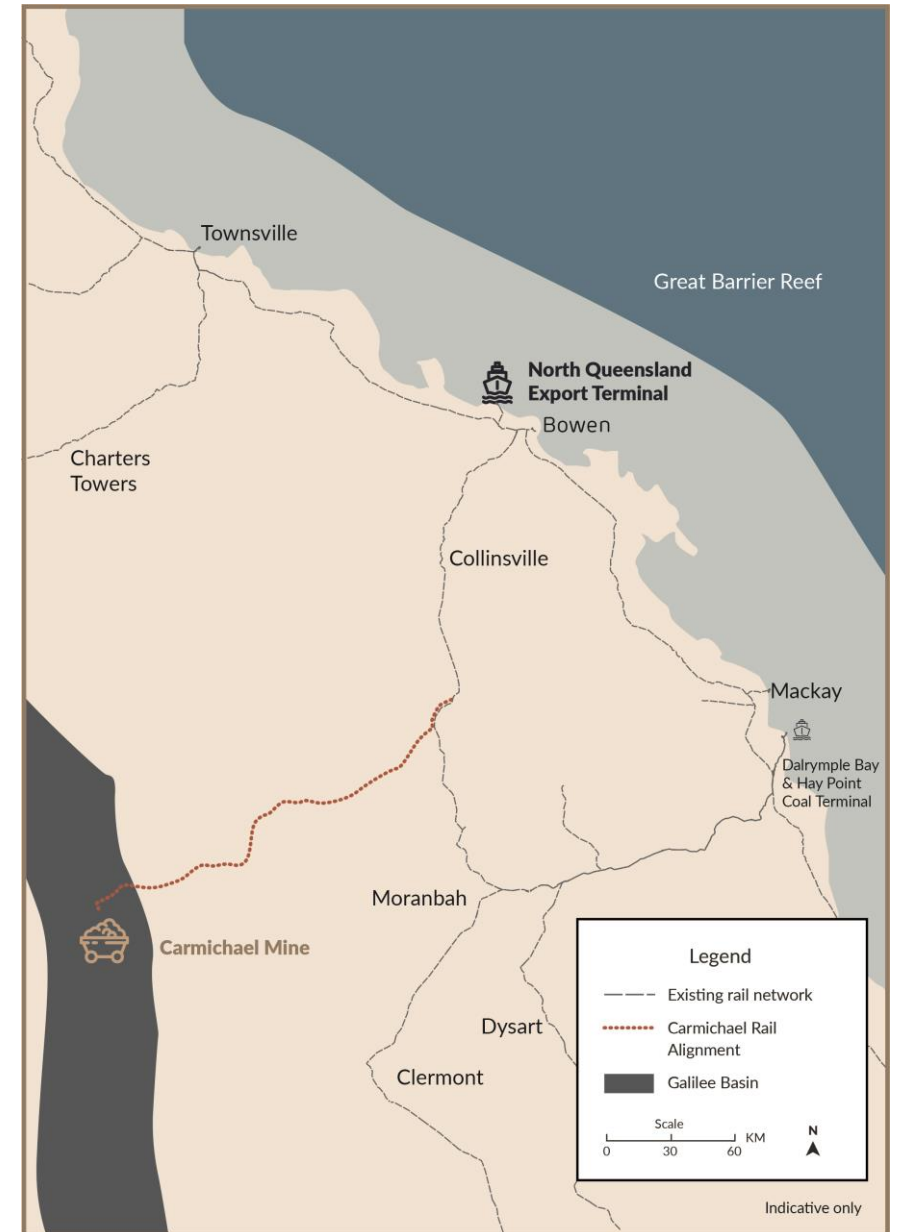
# The Carmichael Project

## Mine

- 10mtpa open-cut mine
- Thermal coal – 5,000kcal/kg (GAR)

## Rail

- 200km greenfield line from Carmichael Mine connecting to the existing Newlands system owned by Aurizon network
- Newlands system connects to North Queensland Export Terminal at Abbot Point
- No upgrades required to the Newlands system for the initial 10mtpa



# We're getting on with the job



- Construction has passed the 18-month mark.
- \$1.5 billion+ in signed contracts.
- 30,000-hectare conservation area secured.
- 2,000+ workers engaged on the project.



# Carmichael Mine



- 450+ bed mine camp.
- 17 x CAT Trucks
  - 7 x CAT 796
  - 7 x CAT 789
  - 3 x CAT 777
- 4 x Liebherr excavators.
- We have begun digging toward the coal seam.
- First coal on track for 2021.



# Carmichael Rail



- 1,200 beds in 3 x temporary rail camps.
- 27,500 tonnes of steel rail produced.
- 319,000 concrete sleepers built.
- 22 bridge crossings underway.
- 460 culverts.

# Working with local communities

## Infrastructure upgrades

- \$10 million paid to Whitsunday Regional Council for maintaining and upgrading local roads with a further \$5 million to come.
- \$20 million of road maintenance in the Isaac Regional Council area complete.
- \$100 million of road maintenance in IRC ready to commence.

## Regional employment

- 2,000+ people employed on site.
- Rockhampton and Townsville FIFO hubs.
- Bravus Mining & Resources HQ – Townsville.
- Bravus Mining & Resources Business Centre – Rockhampton.

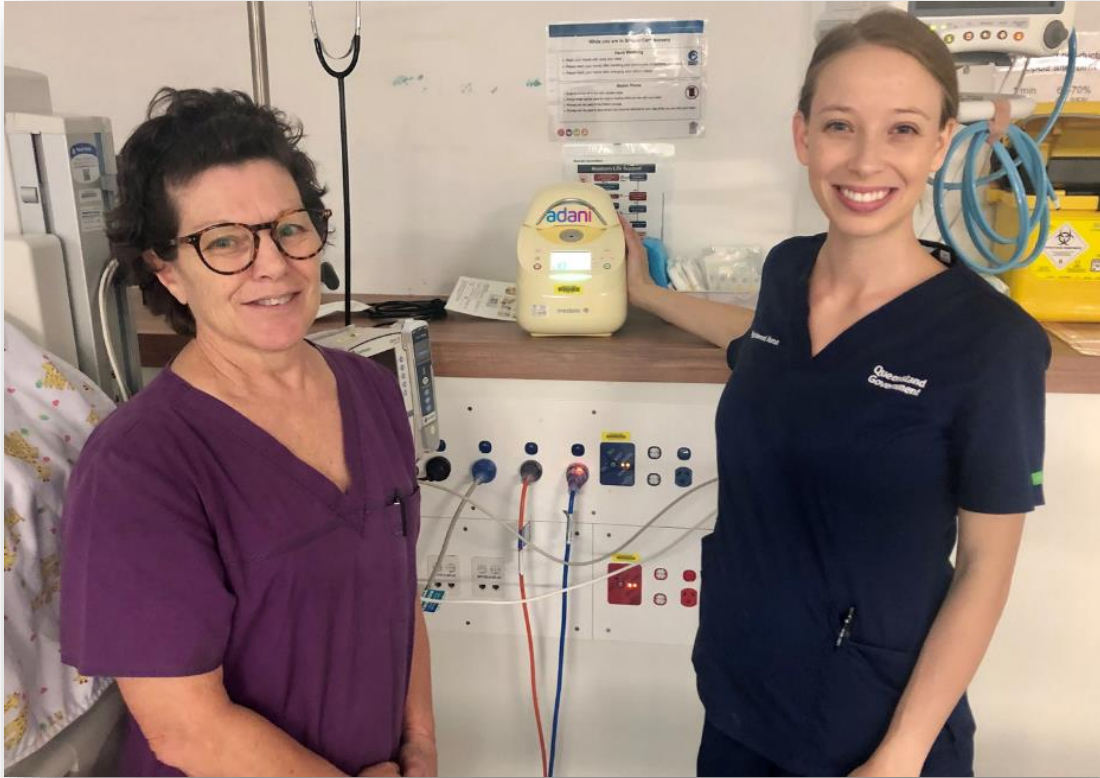
## Contracts awarded

- \$1.5B+ in contracts awarded.
- 88% of contracts being delivered in Queensland.
- Includes Mendi Group (Townsville), DRA / G&S (Mackay), Stresscrete (Rockhampton), Bennetts (Clermont).



# Community investment

- \$1.5M+ awarded through brand sponsorships and community grants since 2018.
- Platinum Partner of North Queensland Cowboys.
- Naming sponsor of Rockhampton Basketball stadium.



Mackay Base Hospital – Neonatal Intensive Care Unit



All Abilities Summer House Mackay



F1 in Schools Event – Mackay North State High



# Indigenous engagement



- Woongal Environmental Services, a Wangan and Jagalingou certified business engaged to deliver environmental services.
- The contract includes the delivery of Management Plan actions including weed and feral pest management, installing finch watering points, fencing and fire management.

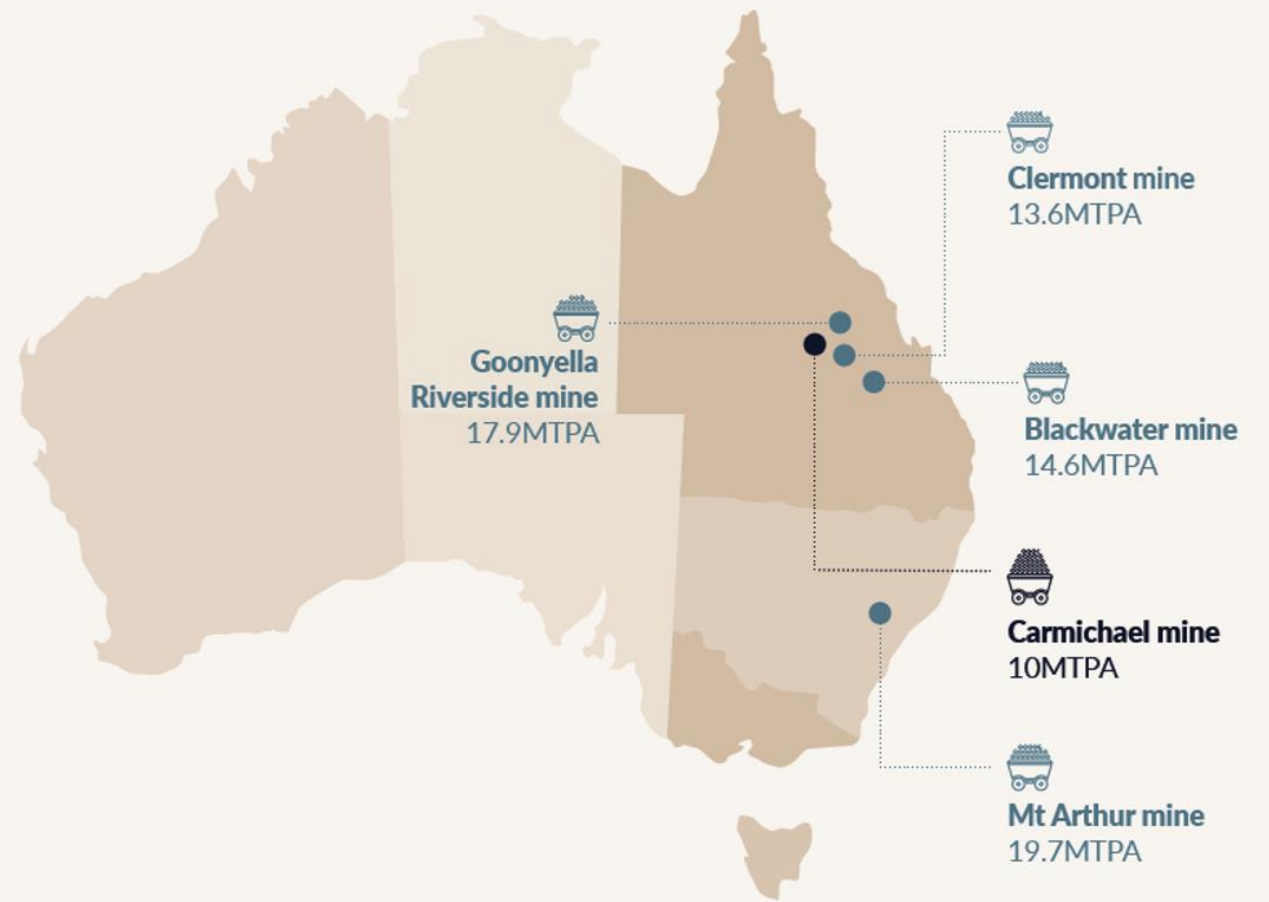
# Not a mega mine: myths v facts

## Myth:

The Bravus mine is a 'super mine' or 'mega mine' which will produce more coal than all other Australian coal mines.

## Fact:

The Carmichael Mine will produce 10 million tonnes of coal per annum in stage one. This is only a small fraction of the total coal produced in Australia and a minor percentage of the coal used in the world each year.





# Not a mega mine

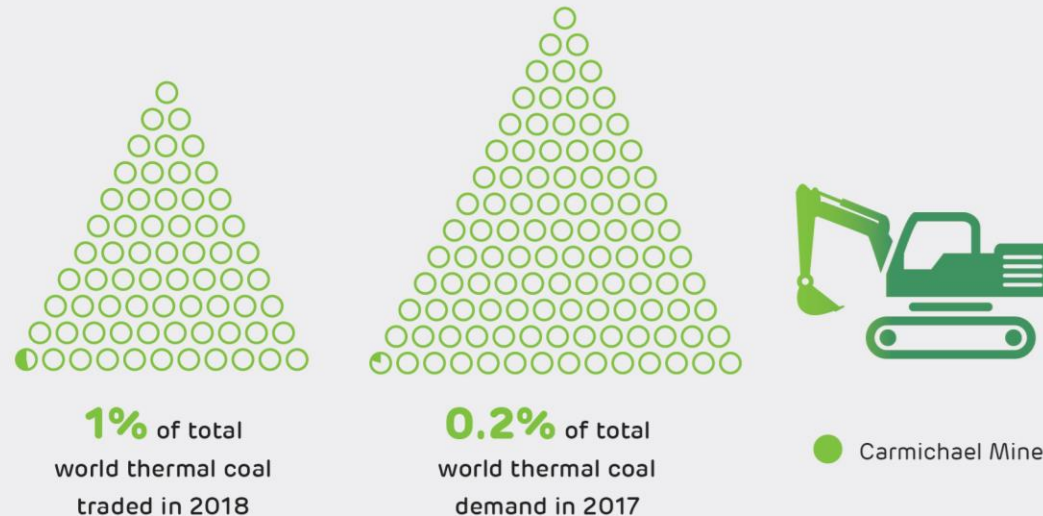
## MYTH:

The Adani mine is a 'super mine' or 'mega mine' which will produce more coal than most others in the world.

## FACT:

The Carmichael Mine will produce 10 million tonnes of coal per annum in stage one. This is only a small fraction of the total coal produced in Australia and a minor percentage of the thermal coal used in the world each year.

10 million tonnes per annum is equivalent to:

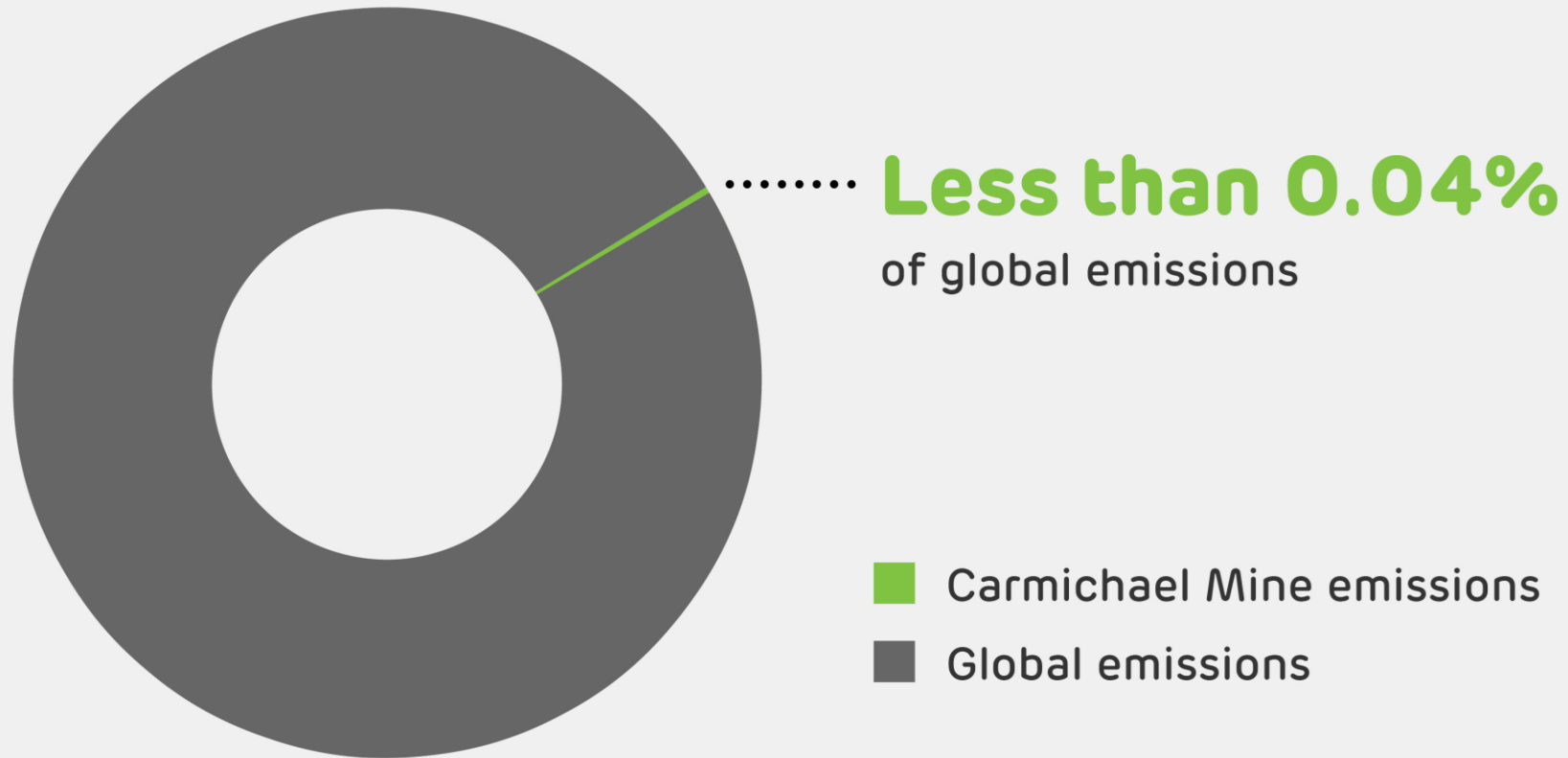


Source:

Department of Industry, Innovation and Science, Resources and Energy:  
Quarterly September 2018, [www.industry.gov.au/REQ](http://www.industry.gov.au/REQ)

CRU Thermal Coal Market Outlook: December 2017, [www.crugroup.com](http://www.crugroup.com)

At a 10 million tonne per annum production rate,  
Carmichael coal burnt overseas to generate electricity will produce:



Source:  
Emissions Database for Global Atmospheric Research:  
[http://edgar.jrc.ec.europa.eu/overview.php?v=CO2ts\\_pc1990-2013](http://edgar.jrc.ec.europa.eu/overview.php?v=CO2ts_pc1990-2013), Carmichael Coal Mine and Rail Project Environmental Impact

Statement:  
<http://statedevelopment.qld.gov.au/assessments-and-approvals/carmichael-coal-mine-and-rail-project.html>



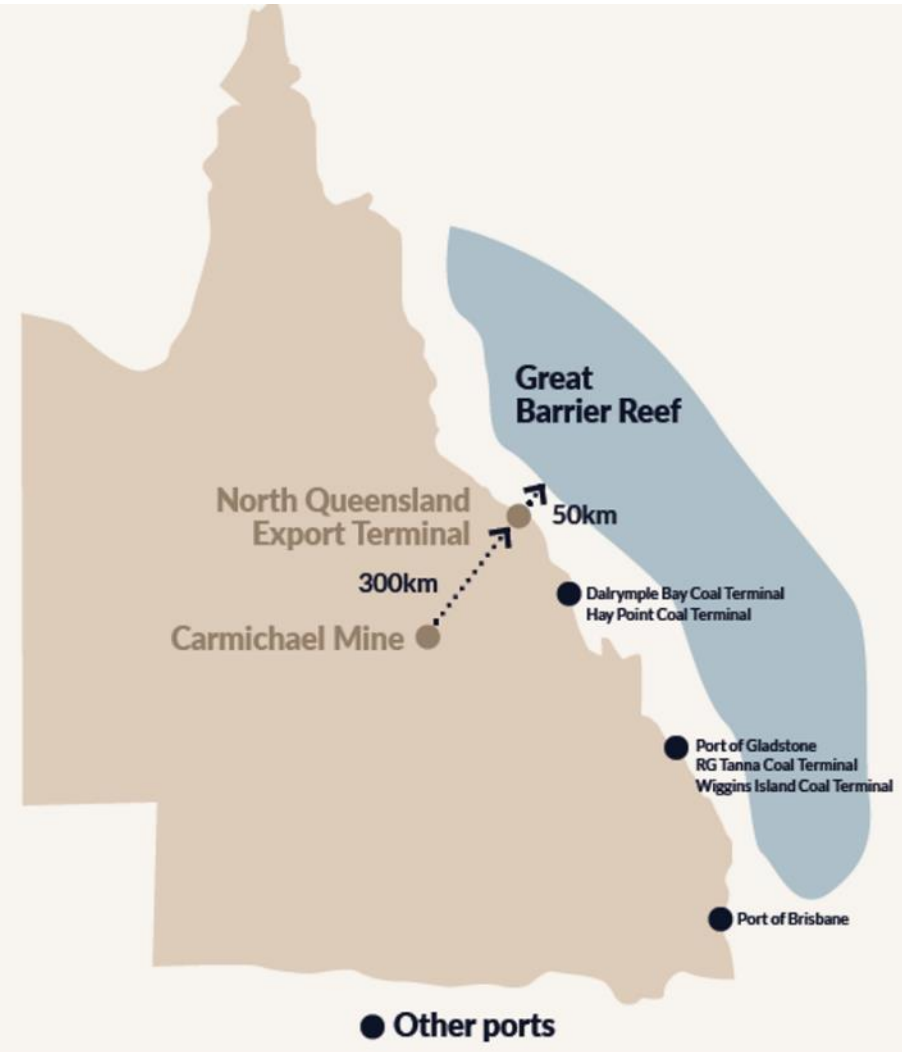
# We're not mining the reef

## Myth:

The Carmichael Mine will be located on the coastline close to the Great Barrier Reef.

## Fact:

The Mine will be located 300km from the North Queensland Export Terminal and The Great Barrier Reef Marine Park is located 50km from the terminal. The mine will therefore be approximately 350km away from the reef.



# Protecting the environment - water



The underground water source aquifer for the Doongmabulla Springs comes from an underground water source that is not connected to the Carmichael Mine.



To protect the Springs and their local species, regulatory conditions state that the water level cannot drop more than 20cm.



The Rewan Formation is a 250-300m underground claystone formation that naturally protects the Springs' water source. It acts as a natural barrier, restricting water from flowing between the underground aquifers.



Over 100 water monitoring bores will be established to observe and protect underground water levels. The information gathered will be reported to regulators and used to ensure our practices are safe and sustainable.



Safeguards have been put in place in case there is seepage from the Great Artesian Basin to the mine site.



Bravus must regularly monitor and report to Australian and Queensland regulators on the Springs' water levels to ensure they are protected.



# Traditional owner consent

## Myth:

Bravus does not have approvals from Indigenous Groups and other landholders.

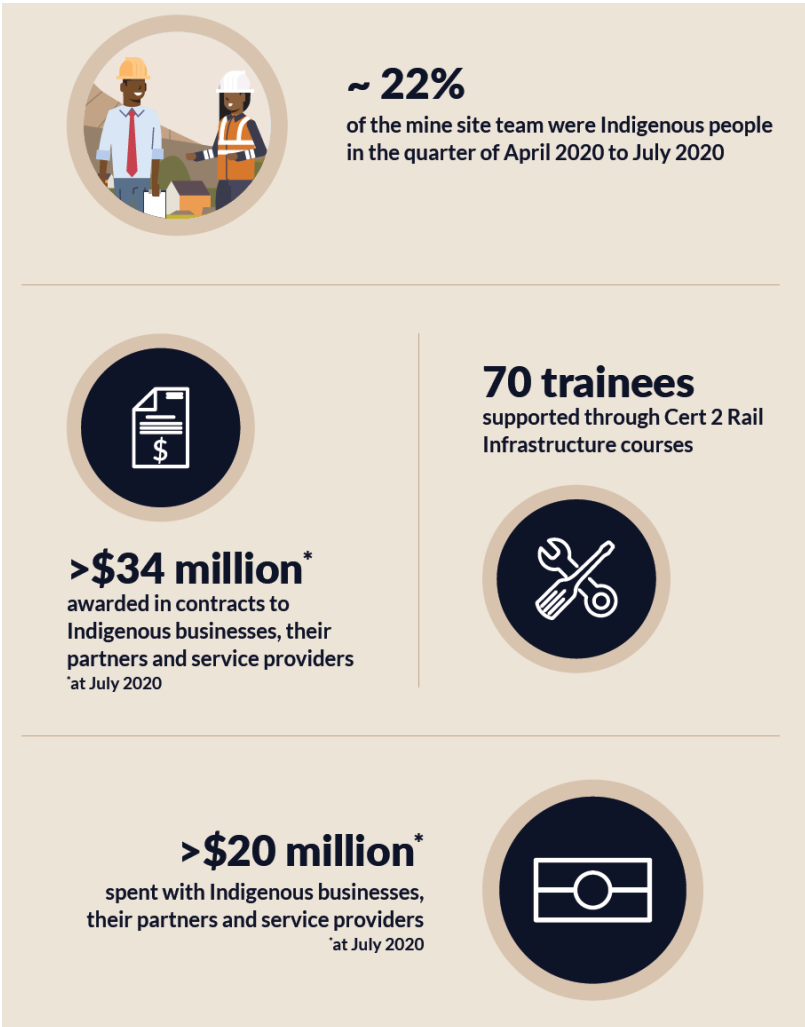
## Fact:

Bravus has been working with the Traditional Owners of the Carmichael Project area, the Wangan and Jagalingou, Juru, Birriah and Jangga people, since 2010. The company has Indigenous Land Use Agreements (ILUA), registered by the National Native Title Tribunal, in place with all four claim groups.

The Wangan and Jagalingou people voted in favour of accepting the ILUA with Bravus



# Indigenous commitments



- Minimum \$7.5 million Indigenous educational / bursaries pre-employment programs
- Minimum \$250 million Indigenous business development and contracting commitment
- Minimum 7.5% Indigenous employment target
- Minimum 10% Indigenous trainee target

# Protecting cultural heritage



- Work underway with Traditional Owners to protect cultural heritage.
- This has included a realignment of the rail corridor after a significant cultural heritage site was identified by Jangga.



# Protecting the environment – Black-throated finch



- Black-throated Finch research commenced in 2012.
- 15+ surveys completed.
- 30,000-hectare conservation area secured to protect species including the finch.
- Ecologists have started a radio tracking program looking at the finch's movement patterns, foraging behaviour, foraging preferences and seed availability.

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