

Carmichael mine

60

Full production
(saleable coal mtpa)

128.4

Estimated
max CO₂ from
combustion (mtpa)

Adani

Adani is an Indian resources, logistics and energy company with big expansion plans. It is developing coal mining interests in India, Indonesia and Australia and plans to construct a series of massive coal power stations (resulting in 20,000 MW total capacity) in India by 2020.¹⁶ The company also has interests in ports. It owns and runs Mundra, the largest privately owned port in India. In Australia, Adani leases the existing coal terminal at Abbot Point and has expansion plans there and at the port of Hay Point. Adani plans to integrate these business interests: burning Australian coal in its Indian power stations, transported through its Australian ports.¹⁷

Carmichael

Owner: The Carmichael project was purchased in 2010 by Adani Group in a deal worth up to \$3 billion.¹⁸

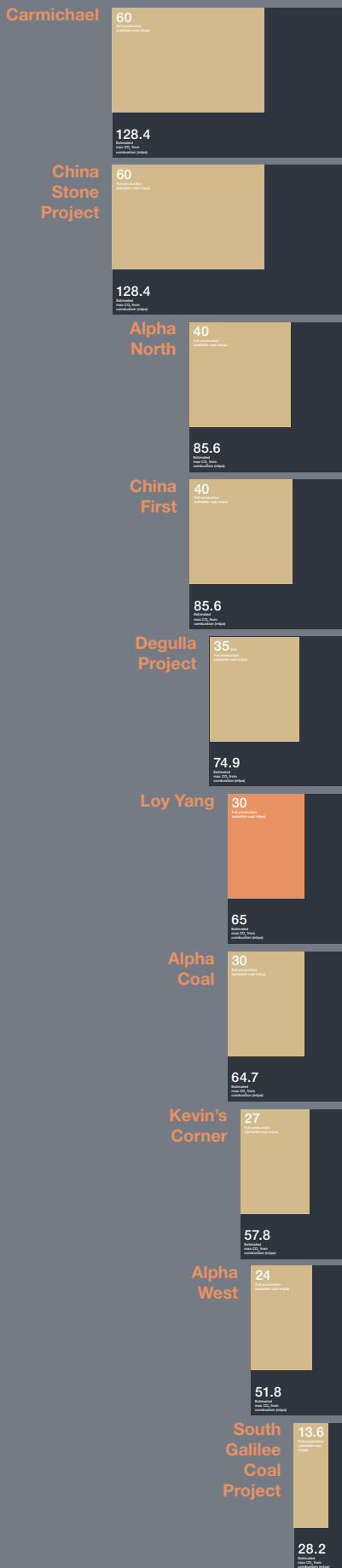
Description: Carmichael, comprising both open cut (a third) and longwall operations (two thirds), would be Australia's largest coal mine, producing 60 million tonnes of coal per year during its 90 year lifespan.¹⁹ Most of the mine's workforce would be flown directly to an airstrip at the mine site.²⁰

Global environmental impacts:

The mine would have a maximum production capacity of 60 mtpa. This amount of coal, when burnt for electricity generation, would produce 128.4 million tonnes of CO₂, greater than the 2009 CO₂ emissions from fuel combustion in Sweden, Norway and Denmark combined.

Environmental impacts:

The Carmichael project's 40 km long open-cut mine²¹ would destroy approximately 10,000 ha of land including most of the Bygana West Nature Refuge (approximately 1,100 ha) – a highly diverse area supporting two endangered regional woodland ecosystems and containing habitat suitable for a variety of animals including koalas.²²



Five of these projects would each be larger than any coal mine currently operating in Australia.

Loy Yang Current largest mine in Australia

The massive Loy Yang mine, feeding Loy Yang Power Station in Victoria's Latrobe Valley, produces 30Mt of brown coal per annum.⁶⁹

The Galilee Basin: Frontier of the coal rush

Mega mines in the Galilee Basin would need hundreds of kilometres of new rail lines to transport nearly 330 million tonnes of coal each year to ports in the Great Barrier Reef World Heritage Area. At what cost?



Adani Enterprises Gautam Adani

Adani is a large Indian conglomerate with vertically integrated plans for coal mines, rail, ports and coal power stations in India.

- Carmichael mine (60 mtpa)
- Dudgeon Point coal terminal (180 mtpa)
- Rail line to Dudgeon Point
- T0 coal terminal at Abbot Point (35 mtpa)
- Existing T1 coal terminal at Abbot Point (50 mtpa)



Hancock / GVK

Gina Rinehart & Dr GVK Reddy

The most advanced project in the Galilee Basin is by Indian conglomerate GVK, which bought most of Gina Rinehart's Galilee coal projects in 2011.

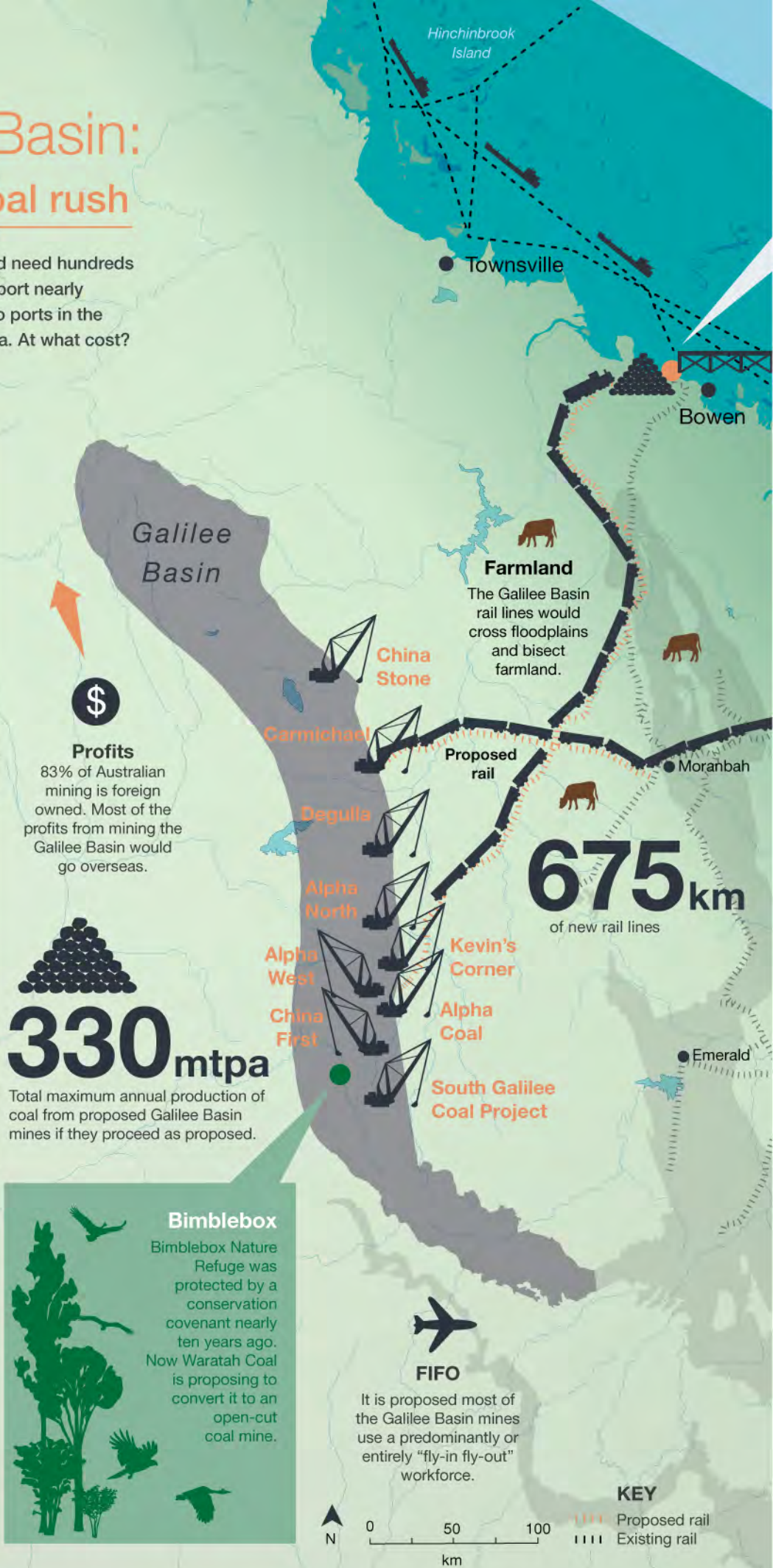
- Alpha coal mine (30 mtpa)
- Kevin's Corner mine (27 mtpa)
- Alpha West mine (24 mtpa)
- Alpha rail line to Abbot Point
- T3 coal terminal at Abbot Point (60 mtpa)



Waratah Coal Clive Palmer

Waratah Coal is owned by Clive Palmer's company Mineralogy. The controversial China First mine is proposed to be built on top of Bimblebox Nature Refuge.

- China First mine (40 mtpa)
- Alpha North mine (40 mtpa)
- Rail line to Abbot Point
- Coal terminal at Abbot Point (240 mtpa)



Abbot Point Coal Terminals

There are at least four new coal terminals proposed for Abbot Point that would together multiply its output more than five-fold and would make it one of the biggest coal export ports in the world.

Humpback whale aggregation area

In the waters from Bowen south to Shoalwater

Whitsunday Islands

Great Barrier Reef World Heritage Area

The World Heritage Reef is one of the greatest natural treasures on the planet. Its majestic coral reefs support an astounding diversity of marine life, as well as 50,000 jobs.

705 Mt CO₂ emissions

total CO₂ emissions from burning coal mined from all proposed Galilee Basin mines at maximum production.

Hay Point Coal Terminal Dudgeon Point Coal Terminal

The proposed new Dudgeon Point coal terminal could bring an additional 2000 ships through an area recently identified as an important wintering area for humpback whales.

Coral Sea

11,400

The potential total number of coal ships passing annually through the Reef if the proposed expansions, terminals and ports go ahead.

Balaclava Island Coal Terminal Fitzroy Island Coal Terminal

The fragile and pristine Fitzroy Delta at the southern end of Keppel Bay is the site of two proposed new coal export ports – the Fitzroy Terminal project by the Mitchell Group, and Xstrata's Balaclava Island Coal Terminal.

Coal dust

There are serious concerns over the health impacts of coal dust on local residents.

Gladstone Harbour

The impact of massive LNG developments in and around Gladstone Harbour prompted intervention from UNESCO and the World Heritage Committee. Authorities have yet to identify the cause of widespread disease of fish in the harbour, but local fishermen blame the suspension of sediments from dredging millions of cubic metres of sea floor to make way for the LNG and coal terminals. In addition to LNG developments on Curtis Island, Gladstone Harbour is the site of the 70 mtpa Wiggins Island coal export terminal, approved in 2008, and the proposed Yarwun coal export terminal.

Bowen Basin

Surat Basin