

Climate Council: climate, health and economics are against Carmichael mine

Written by Will Steffen, Emeritus professor, Fenner School of Environment and Society, Australian National University



Many banks are worried that coal investments could be left stranded on their asset books. Rasta 777/Shutterstock.com

Despite the overwhelming evidence that fossil fuels are [killing the Great Barrier Reef](#) and making many

[extreme weather events worse](#)

; despite the

[emphatic thumbs-down](#)

from the finance sector; and despite the growing awareness of the serious health impacts of coal, the proposed Carmichael coal mine staggers on, zombie-like, amid

[reports it has been offered a deferment of A\\$320 million in royalty payments](#)

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A new Climate Council report, [Risky Business: Health, Climate and Economic Risks of the Carmichael Coalmine](#), makes an emphatic case against development of the proposed mine, or of any other coal deposits in Queensland's Galilee Basin, or indeed elsewhere around the world.

Burning coal is a major contributor to climate change. Australia is already reeling from the escalating impacts of a warming climate. Heatwaves and other extreme weather events are worsening. The Great Barrier Reef has suffered consecutive mass bleaching events in 2016 and 2017. Climate change is likely making [drought conditions worse in the agricultural belts of southwest and southeast Australia](#). Our coastal

regions are increasingly exposed to [erosion and flooding as sea level rises](#)

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If we are to slow these disturbing trends and stabilise the climate at a level with which we might be able to cope, only a relatively small amount of the world's remaining coal, oil and gas reserves can actually be used.

The majority must be left unburned in the ground, without developing vast new coal deposits

such as those in the Galilee Basin.

On budget

The amount of fossil fuels we can burn for a given temperature target (such as the 1.5°C and 2°C targets of the [Paris climate agreement](#)) is known as the “ [carbon budget](#) ”.

To give ourselves just a 50% chance of staying within the 2°C Paris target, we can burn only 38% of the world’s existing fossil fuel reserves. When this budget is apportioned among the various types of fossil fuels, coal is the big loser, because it is more emissions-intensive than other fuels. [Nearly 90%](#) of the world’s existing coal reserves must be left in the ground to stay within the 2°C budget.

When the carbon budget is apportioned by region to maximise the economic benefit of the remaining budget, [Australian coal in particular is a big loser](#) . More than 95% of Australia’s existing coal reserves cannot be burned, and the development of new deposits, such as the Galilee Basin, is ruled out.

The health case

Exploiting coal is very harmful to human health, with serious impacts all the way through the process from mining to combustion. Recently the life-threatening “black lung” (coal workers’ pneumoconiosis) has [re-emerged in Queensland](#) , with 21 reported cases. Across Australia, the estimated costs of health damages associated with the combustion of coal amount to [A\\$2.6 billion per year](#) .

In India, the country to which coal from the proposed Carmichael mine would likely be exported, coal combustion already takes a heavy toll. An [estimated 80,000-115,000 deaths](#) , as well as 20 million cases of asthma, were attributed to pollutants emitted from coal-fired power stations in 2010-11. Up to 10,000 children under the age of five died because of coal pollution in 2012 alone.

Compared with the domestic coal resources in India, Carmichael coal will not reduce these health risks much at all. Galilee Basin coal is of poorer quality than that from other regions of

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Australia. Its [estimated ash content of about 26%](#) is double the Australian benchmark.

This is bad news for children in India or in any other country that ends up burning it.

The economics

The economic case for the Carmichael mine doesn't stack up either. Converging global trends all point to rapidly reducing demand for coal.

The cost of renewable energy is [plummeting](#), and efficient and increasingly affordable storage technologies are emerging. Coal demand in China is [dropping](#) as it ramps up the rollout of renewables. India is [moving towards energy independence](#), and is eyeing its northern neighbour's push towards renewables.

All of these trends greatly increase the risk that any new coal developments will become [stranded assets](#). It's little wonder that the financial sector has turned a cold shoulder to the Carmichael mine, and Galilee Basin coal development in general. Some 17 banks worldwide, including the "big four" in Australia, have ruled out any investment in the Carmichael mine.

From any perspective – climate, health, economy – the proposed mine is hard to justify. And yet the project [keeps on keeping on](#).

Hilary Bambrick has previously received funding from the National Health and Medical Research Council, the Victorian and NSW Governments, the United Nations Development Programme, and the World Health Organization. She sits on the research committee of The Australia Institute.

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beyond the academic appointment above.

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