Is this the world’s last greenfield coking coal mine?

Peter Ker *Resources reporter*

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Big miners like BHP will not build new coking coal mines [https://www.afr.com/companies/mining/betrayed-coal-miners-warn-royalty-hike-puts-jobs-at-risk-20220622-p5avml] while Queensland enforces super-sized royalties [https://www.afr.com/companies/mining/ghosts-of-the-super-profits-tax-past-haunt-qld-coal-miners-20220621-p5avfh], and the likes of Glencore cannot get Canadian regulators to approve new mines, which makes Pembroke Resources boss Barry Tudor an outlier.

His billion-dollar plan to build a 79-year, greenfield coking coal mine at Queensland’s Olive Downs passed the halfway mark on Wednesday with the installation of a bridge across the Isaac River, and he increasingly feels like Robinson Crusoe.

Pembroke Resources CEO Barry Tudor at Olive Downs in Queensland.

“I believe the Olive Downs complex may be the last of its kind in the world,” Mr Tudor told *The Australian Financial Review.*

“I say that with some credibility because I got it off the ground and I know how difficult it is to get a major project like this off the ground on all sorts of layers.”

Regulatory pushback against new coking coal mines now goes beyond the traditional complaints about long permitting times in many of the jurisdictions that have traditionally been major producers.
The Canadian province of Alberta has effectively banned [https://www.afr.com/companies/mining/rinehart-hits-mine-roadbock-in-canada-20210622-p583a4] new coking coal projects, and Glencore found late last year it was no easier in neighbouring British Columbia when the Canadian government stepped in to block its proposed Sukunka mine.

The world’s biggest coking coal exporter, Queensland, is still willing to approve projects but much of the industry has vowed to cease investment in the state after the government last year raised the royalties charged on coal [https://www.afr.com/companies/mining/betrayed-coal-miners-warn-royalty-hike-puts-jobs-at-risk-20220622-p5avm1].

“If you look around the world you have got various jurisdictions who have made various decisions which are not particularly friendly to coal mining,” Mr Tudor said.

“I think the Bowen Basin is the best basin in the world, it is going to be very strong, but if you look at financing, ESG [environmental, social and governance], the standards that need to be applied and the length of time it takes, it may well be that others may not be prepared to go that path.”

‘Grief to income ratio’

South32 is one miner that appears unwilling to attach its reputation to new coking coal projects.

The company spent $US133 million buying half of Baowu’s Eagle Downs coking coal project in 2018, but within three years it had lost interest, even though the project offered rates of return that traditionally warranted investment in mining projects.

Coking coal prices have tripled to $US363.25 a tonne, according to Platts, since South32 decided in 2021 that the “grief to income ratio” at Eagle Downs was too high [https://www.afr.com/companies/mining/esg-noise-has-raised-the-hurdle-on-coking-coal-investments-s32-20210518-p57svb]. But there is no sign the Perth-based company will change its mind as it pivots toward the metals [https://www.afr.com/companies/mining/s32-aims-to-make-a-swan-from-copper-s-ugly-duckling-20211014-p58zxg] needed for decarbonisation.

"Usually when you have got prices this high ... one can say there are six or seven major new developments around the world which will come online and provide a supply side reaction," Mr Tudor said. "At the moment, I can't see those, they are not there."

The comments echo the concerns of Indian steel giant Tata [https://www.afr.com/companies/mining/steel-giant-wants-australian-coking-coal-beyond-its-2045-carbon-target-20220810-p5b8l9], which told the *Financial Review* last year that it was worried nations such as Australia were not building the new mines needed to underpin India's plan to double steel production by 2030.

Not all miners have given coking coal the cold shoulder – Whitehaven Coal is still keen to build a greenfield mine very close to Olive Downs at Winchester South, and Stanmore Coal and Bowen Coking Coal are also eager to expand in the industry.

But Mr Tudor still reckons supply will struggle to meet demand.

"There is very strong demand for steel making coal for decades to come, it is evidenced by the extra capacity that is being brought on in markets such as India," Mr Tudor said.

"There is strong demand, but there is not the typical supply side reaction. You have got this naturally depleting resource ... mines can't go forever.

"So I don't ever lose sleep about the strength of steel making coal and its place in the world economy and I feel very strongly now that supply will remain constrained going forward."

Green steel push

BHP and China's biggest steel maker, Baowu, have vowed to trial the use of hydrogen [https://www.afr.com/companies/mining/bhp-invests-in-hydrogen-and-carbon-capture-for-chinese-steel-20201108-p56cit] in steel blast furnaces as part of investigations into whether hydrogen can be a carbon-free substitute for coking coal in future.

Swedish company SSAB has vowed to be selling commercial volumes [https://www.afr.com/policy/energy-and-climate/how-sweden-s-dash-for-green-steel-could-trigger-a-pilbara-revolution-20221202-p5c34v] of carbon-free steel made from hydrogen by 2026.

But the likes of BHP and Tata believe coking coal will remain the dominant reductant in steel blast furnaces for decades, and Mr Tudor said he also believed it would be at least decades before a viable substitute for coking coal was available on mass scale.

“There is nothing greener than a greenfield because we are starting with a blank sheet of paper,” he said, in defence of Olive Downs’ environmental impact.

“We are fortunate to have very low inherent fugitive emissions for this coal ... we are on the lowest quartile on a worldwide basis for steel making coal.”

The Queensland royalty changes were announced just two months after state resources minister Scott Stewart visited the Olive Downs site to mark the start of construction.

Pembroke has no special deal in place for royalties and will have to pay the same rates as all other Queensland miners.

“Obviously we would have preferred the royalties to have stayed as they were, but we are just focused on getting the job done, my goal is to start earning revenue so we can pay a royalty,” Mr Tudor said.

“We have great confidence in the Queensland Resources Council and the other major mining groups to take that discussion ahead on behalf of the industry.”

Olive Downs was expected to cost about $450 million when Pembroke went looking [https://www.afr.com/companies/mining/pembroke-starts-project-finance-push-for-coal-mine-20200522-p54vo3] for lenders in 2020.

Mr Tudor conceded it would now cost more than that. He did not offer a precise construction cost, but said capital spending had already topped $350 million.

“We have put half a billion dollars into the project already if you count the acquisition of the asset,” he said, in reference to the $120 million purchase price in 2016 [https://www.afr.com/companies/mining/the-new-faces-of-coal-are-actually-the-old-ones-20161014-gs275u].

“It is a billion-dollar project if you take into account all the investment, the capital, the start-up costs etcetera.

“We are not immune from inflationary pressures, but we have been able to contain those costs very well through hands-on management and clever engineering.”

The mine is permitted to produce 20 million tonnes of coal a year, but will be built in stages, with the first stage producing 4.5 million tonnes a year.

For context, the biggest mine in BHP and Mitsubishi’s giant Queensland coking coal division is Goonyella, which produced 8.3 million tonnes in the 2022 financial year.

The first stage of Olive Downs will be bigger than the last two greenfields coking coal mines built by BHP in Queensland a decade ago, Daunia and Caval Ridge.

The new concrete bridge unveiled on Wednesday is 120 metres long and will be a critical enabler for the project because it will make it easier and swifter to get staff and equipment across the Isaac River.

Pembroke hopes to start selling coal next year and will export via the railways that connect Olive Downs to Dalrymple Bay Coal Terminal.

Peter Ker covers resource companies for The Australian Financial Review, based in Melbourne. *Connect with Peter on Twitter. Email Peter at pker@afr.com*