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Billionaire Adani Being Subsidised for Carmichael Thermal Coal Mine

Adani's Thermal Coal Mine in Queensland Will Never Stand on Its Own Two Feet

Executive Summary

- Although Adani Australia claims its Carmichael thermal coal mine is 100% self-funded, Indian billionaire Gautam Adani is relying on Australian taxpayer dollars in the form of subsides to both construct and operate its recently approved mine in the Galilee Basin in Queensland, Australia.

- The Adani Group is being supported by subsidies from the Australian and Queensland governments exceeding $4.4 billion in total over the 30-year project life of the Carmichael thermal coal mine.

- The project is also reliant on a number of subsidies being provided to Adani Power Ltd in India, including decade long, dedicated special economic zone tax concessions, government capital finance subsidises and special treatment on coal-price pass-through, locking in energy poverty for the poor in the Indian state of Gujarat, and the country of Bangladesh.

- Australian government subsidies will increase further if Adani moves the Carmichael coal mine beyond the 27 million tonne per annum (Mtpa) stage II proposal. While Adani references their regular downsizings of this proposal over the last eight years to "just" 10Mtpa now, this stage I is especially sub-economic for the dedicated 200 kilometre rail link, as well as leaving surplus port capacity. All government approvals are for to 60Mtpa, so this is a foreign mega-mine proposal, despite the pretence of being a 'little Aussie battler'.

- The subsidies have been provided in an effort to get Adani's thermal coal mine up and operating for the sake of a handful of jobs and a bag of royalties, payable in a decade or so.

- Adani Mining Pty Ltd has current liabilities of more than $1.8bn versus current assets of less than $30m as of 31 March 2019.

- **In IEEFA's view, the Adani Carmichael thermal coal mine project would not open nor survive without billions of dollars in subsidies.**
- Thermal coal (used for electricity) provides only 13% of royalties to Queensland's budget compared to coking coal (used for steel manufacturing) which provides 87% in royalties.
- Thermal coal, which peaked back in 2014, is being progressively replaced by alternative technologies and is forecast for terminal decline by 2050.
- **The Coordinator General will be calling on the Queensland Treasurer to sign off on Adani's royalty agreement by 30 September 2019. IEEFA recommends the 7-year royalty subsidy not go ahead.**
- Adani's Carmichael thermal coal mine is already well subsidised by taxpayers despite the company's claim of self-funding.
- Stage I does not facilitate other coal mines in the Galilee Basin, a requirement of the subsidy.
- IEEFA recommends that both the Queensland and Australian governments withdraw their special subsided support of the Adani thermal coal mine.
- IEEFA considers the precedent of the Adani Abbot Point Port reporting gross profits of up to $200m annually but being structured financially so as to pay next to no corporate tax over the last 8 years as justification for our view that Adani Australia is unlikely to pay any material Australian corporate tax in the coming decade or beyond.
- **Australia is better placed implementing a just transition for existing coal mine workers and communities in regional Australia.**
- With global warming putting the world on a trajectory of well above 2 °C, opening a massive new thermal coal mine will increase global emissions and ensure Australia does *not* meet its Paris Agreement commitments.

Figure 1: Capital and Operating Subsidies for the Carmichael Coal Mine

Timeframe	Subsidy offered to Adani	Value
7 years	A 7-year Royalty Holiday	$900,000,000
30 years	Fuel Tax Credit Scheme	$2,400,000,000
30 years	22 Billion Litres of Water Annually	$19,000,000
Upfront	A 90km Private Road	$100,000,000
End of mine life	Rehabilitation	$1,000,000,000
30 years	Corporate Tax Shields (open-ended)	unquantifiable
	TOTAL	**$4,419,000,000**

Adani Announces Self-funding

Adani Australia's Carmichael thermal coal mine is proposed by Adani Mining Ltd, a wholly owned, indirect subsidiary of India's Adani Enterprises Ltd, which in turn is majority owned and founded by Gautam Adani, now one of India's richest men.

In November 2018, Adani Australia – part of the Adani Group - announced its proposed Carmichael thermal coal mine in Queensland will stand on its own two feet - without any subsidies:[1]

> *Adani Mining chief executive Lucas Dow said the scaled-back project would be "100 per cent financed" from within the Adani conglomerate… "Today's announcement removes any doubt as to the project stacking up financially... We will now deliver the jobs and business opportunities we have promised for north Queensland and central Queensland, all without requiring a cent of Australian taxpayer dollars."*[2]

IEEFA notes this statement that the Carmichael project is 100% financed by Adani without any subsidies is *not* even remotely true.

Indian Subsidies Provided to Adani Group

Headquartered in the Indian state of Gujarat, the Adani Group receives many coal and coal-fired power subsidies in India, including:

- a proposed government capital subsidised US$1.5bn loan for its expensive, otherwise unbankable, new import coal-fired power plant proposal at Godda in the eastern state of Jharkhand, India;
- 30% tariff uplifts for 30 years on (previously) legally binding power purchase agreement (PPA) contracts for the otherwise stranded 4.6 gigawatt (GW) Adani Mundra import coal-fired power plant in Gujarat;
- the gifting of unique, single beneficiary corporate tax/cess/import duties-free entity thanks to a new free special economic zone (again for Godda); and,
- the ability to garnish ancestral property, with fair compensation rarely delivered as promised.

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[1] Adani Mining, Media Release: Adani: we have finance and we are ready to start, 29 November 2018.

[2] Sydney Morning Herald, Adani announces coal mine construction will begin, 29 November 2018.

Australian Subsidies Offered to Adani Group

> *"I'm very, very surprised that the Australian government, for whatever reason, has seen it fit, to all along handhold Mr Adani." Jairam Ramesh, India's former Environment Minister.*[3]

The Queensland and Australian governments have offered the Adani Group a number of subsidies since Adani acquired the project proposal in 2010. This is despite Adani Group's inarguable wealth and success in India, and the company executives' ongoing assertions that the mine does not need a taxpayer bailout.

The Adani Group have been offered various subsidies exceeding $4.4 billion in total over the 30-year project life of the Carmichael thermal coal mine, with this figure rising should Adani move beyond the 27Mtpa stage II proposal to the full 60Mtpa approval.[4]

The Queensland and Australian governments have offered the Adani Group a number of subsidies since Adani acquired the project.

IEEFA notes these taxpayer funded subsidies have been provided in an effort to get the thermal coal export mine up and operating for the sake of a handful of jobs and a bag of royalties – yet these are just a fraction of what coking coal brings to the Queensland coffers – in a decade from now.

Australia's Coal Billionaire Largesse

IEEFA notes Australia has been extremely generous to the owners of mines which use Australian public resources for private gain, knowing they are mostly overseas, tax-haven based coal billionaires. (IEEFA notes many of the Adani Carmichael subsidies are also available to other coal billionaires e.g. AMCI and Glencore).

Coal lobbyists are well paid to argue definitional issues to dismember and distract, but the facts are clear. The Australian based coal industry is given a $1bn diesel fuel subsidy every year for the past five decades, despite many of the foreign coal majors paying little to no corporate tax in Australia.

On behalf of Australian taxpayers, our politicians collectively are providing a very substantial level of ongoing generosity to generally overseas tax-haven based billionaires, in direct contradiction of our legally binding commitment to the critically important Paris Agreement.

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[3] The Conversation, Why are we still pursuing the Adani Carmichael mine? 4 October 2017.
[4] Queensland Government, Carmichael Coal Mine and Rail Project

We detail some of the financial subsidies available to the Adani Carmichael proposal below, including:

- A 7-year Royalty Holiday ($900 million),
- Fuel Tax Credit Scheme ($2.4 billion),
- 22 Billion Litres of Water Annually ($19 million+),
- A 90km Private Road ($100 million),
- An Airport ($30 million) – withdrawn for now due to Adani's ongoing delays,
- Rehabilitation ($1,000 million ++), and
- Corporate Tax Shields (open-ended).

A 7-year Royalty Holiday ($900 million)

Queensland Premier Annastacia Palaszczuk has offered Adani a 7-year royalty 'holiday'. This royalty holiday equates to a huge capital subsidy - with taxpayers footing the bill. At some A$5/tonne on 27Mtpa, this is estimated at $135m annually that the Queensland government and community will *not* see for another decade, less any minor concessional payment. Despite the government's commitment to full transparency, this deal has been shrouded in secrecy.

In total, the royalty holiday would reduce Adani's capital employed by some $900m by year 7. This is a massive financial subsidy. Given the three-year construction timeline, it would mean zero royalties are likely to be paid by the Adani Group in the coming decade.

We understand the Queensland government has provided some conditions to this gift:

- It would be payable at some stage in the future with a notional 2-3% pa interest;

- Further, the royalty holiday may *not* be triggered by the 10Mtpa stage I (it was reported that the requirement was that the first mover in the Galilee Basin would build the enabling infrastructure for other new coal projects). Instead, the royalty holiday may have to wait until Adani starts the stage II of 27Mtpa and/or upgrades the rail and port capacity to meet this condition; and

- Additionally, we understand Adani must offer security for the deferred royalty payments. However, Adani Mining has no material Australian tangible assets and owes about $1.6bn to its Indian parent, amongst others. Given the Queensland has yet again deferred signing of this proposal until 30 September 2019 without explanation, we would surmise that it likely that Adani has still been unable to provide the required financial assurance for this subsidy.

Fuel Tax Credit Scheme ($2.4 billion)

While the vast majority of Australians have for many decades paid a general duties fuel tax, the Australian government understandably provides a billion-dollar annual subsidy to Australia's struggling agricultural community. This subsidy has also been garnered by the booming, often tax-haven based, largely billionaire-owned mining industry. This subsidy is titled the Fuel Tax Credit Scheme.

Australia's federal budget 2017/18 costs the Fuel Tax Credit Scheme at $6.8bn annually. Half of this, or $3bn per annum, goes to the mining industry, and within this, coal mining receives the biggest share, at $1.01bn annually.

IEEFA would suggest that the $1.01bn annual coal mining subsidy is primarily garnered by the open cut thermal coal mining sub-sector. Our logic? The strip ratio - representing the amount of waste material that must be moved in open cut mining in order to extract a given amount of coal – for open cut coal mining is huge, and moving billions of tonnes of overburden annually is both unprecedented and relatively unique to the Australian thermal coal mining sector, and it is extremely energy intensive. Being a remote operation, mining is largely fuelled by imported diesel. Perversely, lower domestic cost solar power is crowded out by imported diesel subsidies.

Figure 2: Fuel Tax Credits Scheme 2017–18

2017/18	Value of claims (A$)
Mining	2,999,166,653
Transport, postal, warehousing	1,321,753,817
Agriculture	834,618,638
Construction	430,694,418
Manufacturing	281,051,027
Electricity, gas, water	157,429,029
Everything else	771,674,949
Total	**6,796,388,531**

Source: Australian Tax Office, Fuel tax credits – business and Excise – Table 4, The Australia Institute.

In Australia, the average open cut coal mine strip ratio of 15 tonnes (t) per tonne of coal compares to iron ore which operates at a strip ratio often below 1t:1/t (and we note Fortescue uses 600m litres p.a. of diesel, a subsidy of $240m p.a.). Coking coal by comparison is primarily sourced from underground mines that avoid massive strip-mining efforts, with all the additional, associated rehabilitation problems this involves – refer below. So in this context, IEEFA estimates the Australian open cut thermal coal mining sector receives the majority of the $1bn annual coal sector subsidy, or A$750m per annum.[5] On open cut coal mining production of 250Mtpa in Australia, that 40c/litre subsidy equates to A$3/t. Therefore, on a 10Mtpa mine, it equates to a $30m annual subsidy, rising to $80m pa on 27Mtpa.

In sum, that is an Australian taxpayer funded subsidy for Adani Carmichael of $2.4 billion over the initial 30-year life.

22 Billion Litres of Water Annually ($19 million+)

Adani may pay a one-off $18-20m for access to up to 12.5bn litres per annum of flood water harvested from rivers but will also be able to access up to 9.5bn litres per annum of ground water, for the life of the project.[6] Such access is invaluable, especially in harsh periods of drought which Queensland is currently experiencing.

City residents pay $2/1000 litres. At this price 22bn litres is worth ~A$45m pa ($1,350m over the first 30 years of this 90-year project life).

Using the coal industry consultants' benchmark of A$2,000/megalitre (Ml), the 9,500Ml is worth $19m.[7]

A 90km Private Road ($100 million)

Council records of meeting show that the Queensland government had offered to build a special purpose, sole use tarred 90km road for Adani to access their Moray Downs property at a reported cost to ratepayers of $100m. Given Adani's multiple downsizings and delays, this subsidy offer may have lapsed. Adani states that our understanding this government funding of their Moray Downs entrance is incorrect.[8]

An Airport ($30 million)

By definition a capital subsidy, two Queensland councils have offered to build a special purpose, sole use airport for Adani to use fly-in, fly-out workers at a cost to ratepayers of $30m or more.

This subsidy is reported to have been cancelled as Adani has failed to deliver on their staffing commitments in any timeframe acceptable to the councils involved, and also in repeatedly downsizing the mine, the associated workforce has likewise been diminished.

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[5] IEEFA notes that the Minerals Council of Australia lobby group has long lobbied the Australian government to exempt fuel tax rebates from the Australian definition of what constitutes a subsidy. Like IEEFA, the OECD takes the opposite view.
[6] In Queensland, most groundwater users do not currently pay for extraction, whereas in New South Wales, both farmers and miners now pay for groundwater.
[7] The Australia Institute, Like water for cho-coal-ate, October 2016.
[8] Adani Mining, FACT CHECK: Adani responds to IEEFA paper on subsidies, 28 August 2019

Rehabilitation ($1,000 million ++)

Australia is littered with over 50,000 unrehabilitated, abandoned mines, including many that will be releasing polluting toxic chemicals into the downstream water-supply for decades to come. Final voids - the huge mine pits remaining after the coal has been extracted – create water catchments that become toxic over time due to acid mine drainage. They are regularly considered too expensive to fill in by coal mining firms.

For instance, Rio Tinto testified in the NSW Land Court that the final void in its Mount Thorley Warkworth mine would cost $2bn to fill. More recently, Glencore claimed the final voids at their United Wambo mine in NSW's Hunter Valley would could cost $777m on a discounted net present value basis. Like Rio Tinto, Glencore testified that the thermal mine proposal was not viable absent this subsidy of being able to extract the coal without being required to back-fill the final void.

Adani has approval to leave six final voids – it does not intend to fully backfill even a single one of its six open cut final pits to return it to a natural landform, and the largest of the voids that it plans to leave will be 200m deep.[9]

Historical precedent suggests Adani's rehabilitation efforts are unlikely to be any more successful than others in the Australian mining industry over the last two centuries.

IEEFA conservatively estimates this subsidy is worth A$1-2bn to Adani depending upon how large the project eventually gets.

Corporate Tax Shields (Open-ended)

Australia notionally has thin-capitalisation rules for foreign investors, but these are set so loosely that overseas tax-haven-based multinationals operating in Australia can freely exploit Australia's public resources with only a modicum of corporate tax ever required.

The Adani Group is yet to pay any material corporate tax in Australia.

Overseas mining firms are required to invest some equity into their Australian subsidiaries. However, the definition of 'equity' includes intangible asset revaluations by directors, and the debt to equity allowance is set at multiples of the rate used by Australian businesses generally. Along with transfer pricing, offshore tax-haven based marketing hubs et al, this is a clear loophole, all at the Australian taxpayers' expense.

We note that the Adani Group has owned and operated the $2.4bn Abbot Point Coal Terminal for 8 years, earning gross profits of up to $200m annually. However, as per

[9] EMGA Mitchell McLennan, Carmichael Coal Mine Closure and Rehabilitation Strategy, March 2014.

our analysis of the partially available ASIC records, the Adani Group is yet to pay any material corporate tax in Australia.

Similarly, Glencore is the largest mining firm in Australia, yet the Australian Tax Office records suggest it paid (almost) zero corporate tax in the last 4 years.

Adani's Current Financial Position Poor

A recent report asserts the company responsible for the Carmichael mine has 'all the hallmarks of a big corporate failure' with more than $1.8 billion in liabilities due over the next 12 months, compared with less than $30m in assets.[10] [11]

Adani unsuccessfully spent years and years trying to secure financial backing for the Carmichael mine project before the extraordinary move of announcing self-funding last year, although we note this has still not materialised. IEEFA would also speculate that significant vendor finance of equipment and/or multi-year pre-purchases of coal ahead of delivery are likely to be involved.

It is unclear whether the group have secured the necessary insurance beyond 2020.

Adani's current accumulated losses mean that, when the mine is built, Adani Mining will *not* pay company tax for many years in Australia. In fact, they may never do so if one is to look at the example of another Adani asset – the Abbot Point Coal Terminal, which has paid little or no company tax to date.

Adani Mining also already has access to carry forward its losses to-date, meaning the first $1.3 billion of pre-tax profit will be corporate tax free.

Thermal Coal Adds Little to Queensland's Budget

Adani's Carmichael thermal coal mine will provide high ash, low energy (HALE) thermal coal for little return to the State.

Coking coal export royalties contribute seven times more than thermal coal royalties to the Queensland budget, estimated at $3,626m versus just $538m from export thermal coal. In other words, exported coking coal provides a significant 87% of Queensland's royalties from coal, with just 13% provided by thermal coal. [12]

Existing and new coking coal mines, like the Olive Downs coking coal mine near Moranbah approved in April 2019, will boost Queensland's coffers with an extra $600m annually – more than the total contribution of thermal coal. The Olive Downs coking coal mine leverages existing infrastructure and will provide jobs and royalties without any royalty holiday period.

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[10] ABC, Adani's Carmichael coal mine surviving on lifeline from Indian parent company, 24 July 2019.
[11] IEEFA Australia: Contracting with Adani Australia entails counterparty risks, 16 August 2019
[12] IEEFA, Conflating Queensland's Coking and Thermal Coal Industries, June 2019.

In contrast, the proposed Adani Carmichael mine will dig up HALE thermal coal at one quarter of the royalties and provide annual revenues of some A$725m, a fifth of that created by Olive Downs.[13] Then, taking into account the three-year construction period and the 7-year royalty holiday being offered by the Queensland government, it is likely to be ten years before the community of Queensland see any royalties from the Carmichael thermal coal mine.

The Future is Renewables

Any claim that Adani's Carmichael project has long term viability in a free market absence ongoing fossil fuel related subsidies is entirely debatable, particularly if the world collectively delivers on the Paris Agreement.

Even with subsidies, IEEFA estimates the Carmichael thermal coal mine will have at best marginal viability against ever cheaper renewable energy in India. And over time, Asia will follow India, China, and America's lead to deflationary, zero emission energy alternatives.

Adani can obviously ignore this reality and use thermal coal from the Carmichael mine to supply expensive fuel to its in-house Mundra, Udupi and potentially Godda import coal-fired power plants in India, leveraging their unique position of being able to negotiate and then re-negotiate fuel price pass through terms in their various import coal-fired power plants' electricity supply contracts with the Indian and Bangladesh governments.

IEEFA has long argued the Adani Carmichael thermal coal mine proposal is unbankable and unviable without subsidies, entirely at odds with the Paris Climate Agreement and is strategically challenged even before the first coal is produced. Despite this, upwards of $4.4 billion in subsidies is being gifted to Adani for its Carmichael thermal coal mine by the Australian and Queensland governments.

Upwards of $4.4 billion in subsidies is being gifted to Adani for its Carmichael thermal coal mine.

For a handful of jobs and only a fraction of the royalties than coking coal provides to the Queensland budget, Adani's thermal coal mine provides the state with so much less than alternative regional renewable energy investments would do.

IF THESE SUBSIDIES WERE NOT BEING PROVIDED, ADANI'S CARMICHAEL THERMAL COAL MINE WOULD BE UNBANKABLE AND UNVIABLE.

[13] Ibid.

In June 2019 Brazil completed a tender for 200MW of solar with a staggering 26GW of proposals tendered. The average price awarded was a record low US1.75c/kWh for 20 years.

In July 2019, California announced a proposed power purchase agreement (PPA) for 8minute Solar Energy's 400 MW Eland solar project at US1.997c/kWh (zero escalator for 25 years) and 200 MW / 800 MWh of energy storage at 1.3¢/kWh. This is a massive new record low - 15% below the previous US record signed a year ago by Warren Buffett's NV Power at US2.3c/kWh (again with no escalator). The Los Angeles Department of Water and Power (LADWP) is the counterparty to this 25 year PPA, further advancing California's unstoppable transition to reach 60% renewable energy by 2030, or better.

And India is consistently awarding renewables at a levelized cost of electricity of ~US3.0c/kWh (without the US 30% ITC subsidy benefit), with year one tariffs of US3.5-4.0c/kWh. India's solar and wind is 20% below the cost of domestic coal-fired power generation, and half the cost of new import thermal power (LNG or imported coal).

Conclusion

Burning coal is still the number one human-made cause of global warming, and renewable alternatives are fast replacing thermal coal.

Largely unsubsidised renewable energy is the dominant least cost source of new power generation investment across India. The Indian government's Central Electricity Authority (CEA) energy plan models a one-third reduction in Indian coal imports by 2024,[14] shifting to a more balanced reliance on domestic renewables and domestic sourced coal power generation.

Given the Paris Agreement requires the world to phase out coal use entirely by 2050, the last thing the world needs is yet another huge new low-quality thermal coal basin. Even if this proposal goes ahead, there is a rising probability that this would only serve to over-supply the seaborne thermal coal market, driving the market equilibrium price down even as import demand progressively dissipates in favour of lower emissions liquid natural gas, wind, solar, hydroelectricity and nuclear power across Asia. The result in all likelihood is yet another Australian stranded fossil fuel asset.

[14] Bloomberg, India, World's No. 2 Coal Buyer, Plans to Cut Imports by a Third, 1 August 2019.

About IEEFA

The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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Tim Buckley, IEEFA's director of energy finance research, Australasia, has over 30 years of financial market experience covering the Australian, Asian and global equity markets from both a buy and sell perspective. Tim was a top-rated Equity Research Analyst and has covered most sectors of the Australian economy. Tim was a Managing Director, Head of Equity Research at Citigroup for many years, as well as co-Managing Director of Arkx Investment Management P/L, a global listed clean energy investment company that was jointly owned by management and Westpac Banking Group.