BRIEFING NOTE

Adani: Remote Prospects

Institute for Energy Economics and Financial Analysis
IEEFA.org

September 2015

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Galilee Coal Basin: Carmichael – A Stranded Asset?

In November 2013 IEEFA released a review of the Adani Group's proposed coal mine and associated rail and port infrastructure project in Central Queensland, Australia. The report, "The Adani Group: Remote Prospects: A financial analysis of Adani's coal gamble in Australia's Galilee Basin"[i] is still largely current. The key financial and operational risks identified in the report remain, or have deteriorated further.

This report incorporates new developments and is prompted by the Federal government considering allocations from its proposed Northern Australia Infrastructure Fund. IEEFA's view is that such a move would be ill-advised, with the underlying financial fundamentals of the project rendering it unviable and likely to become a stranded asset.

We highlight the main feedback from the financial markets being that the project is unbankable and lacks commercial viability, particularly relating to the move by the seaborne thermal coal market into structural decline. Two years on, the Carmichael project is far from financial close and first commercial coal remains a remote prospect.

Executive Summary

- The seaborne thermal coal markets remain oversupplied and demand has weakened globally for the second year in row. Structural decline of demand is evident.
- The remote location and lack of any commercial infrastructure gives the greenfield Carmichael proposal of Adani Enterprises a prohibitively high capital cost.
- The thermal coal deposit of Carmichael is low energy and very high ash relative to Australian export grades. This makes the project economics extremely challenging.
- The strategic logic of the Galilee that attracted Indian power conglomerates in 2010/11, during the height of the coal boom, has been reversed. The Indian Energy Minister, Piyush Goyal, has made it his clear priority to cease thermal coal imports near term, and is pursuing a range of domestic solutions to India's energy security needs.
- The Adani Group is increasingly accepting this strategic shift in India, moving rapidly to align its new project pipeline to include Indian grid transmission, domestic Indian coal and an up-scaling of increasingly competitive solar infrastructure investment.
- The Adani Group has announced US$35bn of new strategic project proposals in 2015 alone, all in India. The Group is already highly geared, and the Carmichael coal mine require billion dollars of equity funding. The tension between newly announced projects of Adani's Indian expansion undermines the financial capacity for the Carmichael coal project, and brings into question the Group's commitment to the project.
- With the Carmichael coal proposal commercially unviable at current or forecast thermal coal prices, the project is increasingly unbankable. Fifteen of the world's largest financial houses have either ceased working on this proposal or ruled out involvement, including both CBA and Standard Chartered, where advisory mandates have expired.
- Continued momentum in technological developments underpins the scaled up commercial rollout of renewable energy and energy efficiency globally. As such, the strategic 'moment' for large-scale export-focused greenfields coal mines has passed.

Seaborne Thermal Coal has Entered Structural Decline

In conjunction with Carbon Tracker, IEEFA published a major global thermal coal study in September 2014.[ii] The conclusion of this study was that the Chinese domestic demand for thermal coal would peak by 2016, plateau and then steadily decline thereafter. With China being 50% of global thermal coal consumption, this in turn lead to the second key conclusion, that world seaborne demand would peak concurrently with China in 2016.

Major global investment banks have increasingly come to a similar conclusion. Bernstein Research in June 2013 called for a peak in China's coal consumption by 2016 in their seminal Blackbook: "China: The beginning of the end of Coal." Morningstar in April 2014 published "Burned Out: China's Rebalancing Heralds the End of Coal's Growth Story." Citigroup published their "Energy Darwinism" and Goldman Sachs concluded thermal coal has reached retirement age. UBS, Merrill Lynch, Deutsche Bank, HSBC and Morgan Stanley have likewise massively downgraded their demand and price expectations for coal.

The November 2014 China-US Climate Change Agreement strongly supports the IEEFA projection. This agreement commits to building upon a number of significant actions to move aggressively away from fossil fuels and transition towards a lower carbon energy mix. China's imports of coal declined a record 32% year-on-year in the first eight months of 2015,[iii] and China's coal consumption in 2015 year-to-date is reported to be down 7.7% year over year (yoy). As such, it is looking increasingly likely China coal peaked in 2013.

India is the third largest domestic thermal coal market in the world. India's Energy Minister Piyush Goyal in November 2014 said he plans for India to cease importing thermal coal in 2-3 years. [iv] Mr Goyal has subsequently elaborated and repeated this target monthly since,[v] and the progress to-date is impressive. This is a part of a well conceived and ambitious development of the Indian electricity sector, something IEEFA has examined in detail.[vi]

Minister Goyal's comments raise significant questions over any remaining strategic rationale of the plan by Adani to export the majority of the Carmichael coal back to India. India's Minister is making it clear India can't afford to solve energy poverty using expensive imported coal, and will also increasingly diversify the electricity sector away from coal. Imported coal fired power plants are not commercial.[vii] "Our aim is to have zero import of coal, and manage with the coal from Coal India sources or our own mines. You can say in the next five years." NTPC MD Arup Roy Choudhury said April 2015.

A greater reliance on energy efficiency and improved grid efficiency, plus a plan to install 175GW of run-of-river hydro, biomass, wind and solar in the next five years alone, combined with an acceleration in domestic coal mining and nuclear power in India will all facilitate this transition.[viii]

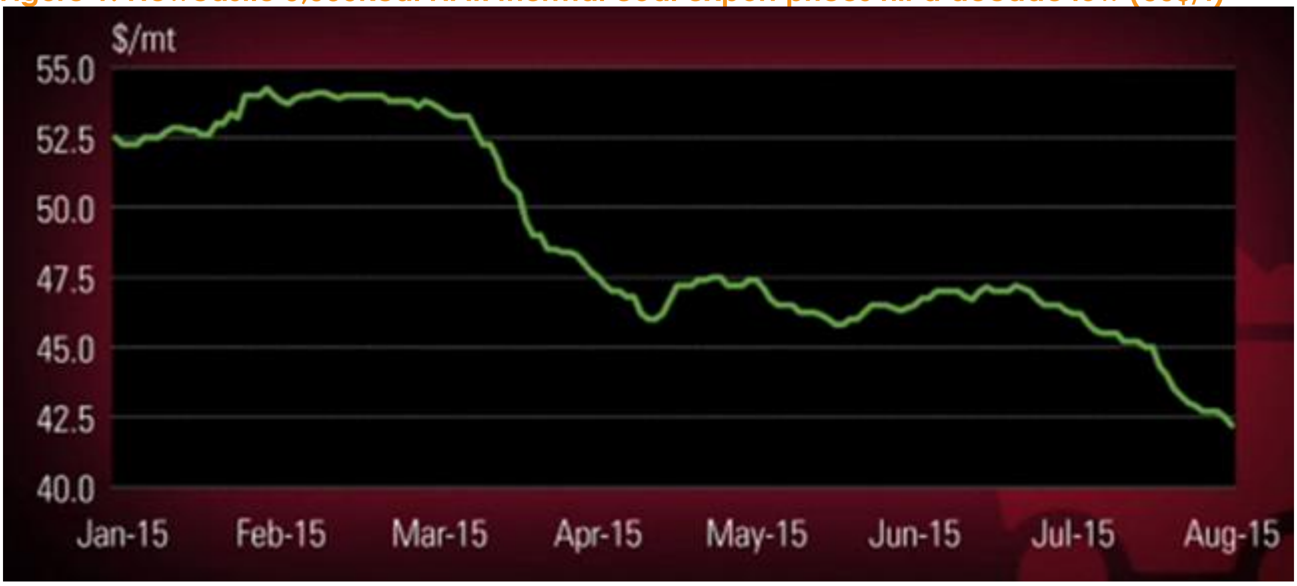
Citigroup Research in May 2015 said that thermal coal was in *"structural decline as a result of increasing environmental pressures and improving competitiveness of alternative power sources, including renewables and natural gas."*

Thermal Coal Price Decline

The seaborne thermal coal market has entered structural decline. Having peaked in 2009, the seaborne price has fallen over 60%. The Australian export benchmark is the Newcastle 6,000kcal net as received (NAR) free on board (FOB) index. In September 2015 this coal index price is US$58/t, and the Newcastle coal forwards factor in coal prices remains below US$55/t through to October 2021.

The thermal coal price has fallen more than 40% since the "Remote Prospects" report was published in November 2013, underlining the increased market acceptance for the proposition that seaborne thermal coal has entered structural decline. The lower energy content 5,500kcal thermal coal export price has fallen 20% over just 2015 – Figure 1.

Figure 1: Newcastle 5,500kcal NAR thermal coal export prices hit a decade low (US$/t)



Source: Platts, August 2015

Global Listed Coal Companies Wealth Destruction

IEEFA also notes the average 70% decline in average global coal listed company share prices in the last five years. Coal India Ltd is one of the few exceptions to this trend, protected by its entirely domestic orientation and exceptional balance sheet strength.

For example, Peabody Energy, the largest pure-play western coal producer has seen US$17bn shareholder wealth destruction over the last five years. Peabody stock is down over 95% in this period, whilst the US Equity market index is up 80%. With three major US coal firms entering Chapter 11 in mid 2015, investing in coal companies is increasingly accepted by the financial markets as a wealth hazard.

The Galilee is Remote and lacking Infrastructure

Adani's Australian Project Costs Total A$16bn

Having borrowed over A$3bn to fund the initial investment of some A$3.2bn, Adani will need to raise equity and debt financing for the remaining A$14bn that IEEFA estimates is still required to get this 40Mtpa 60 year life coal mine, rail and port project operational.

Jeyakumar Janakaraj, Australia country head, Adani Mining, said the project would have a debt-equity ratio of 60:40:

> *"The initial capex is $7.5bn. Initial funding has been tied up. The total financial closure will be achieved by end of next year,"'*[ix]

We question the accuracy of this capex claim, given it seems to ignore the full project costs, particularly that relating to the new 70Mtpa export facility at Terminal 0 at Abbot Point. IEEFA estimates the Adani Group faces a total investment in Australia of A$16bn to get this project fully established, inclusive of the A$3.2bn invested to-date to acquire the proposal and to acquire Abbot Point Coal Terminal T1 – refer Appendix A.

IEEFA's A$16bn estimate reflects the key strategic hurdle of the Carmichael project – the location is extremely remote and lacks commercial infrastructure. The Adani proposal requires the funding and construction of greenfield water infrastructure, roads and airports, power generation and / or electricity transmission lines, as well as rail and port infrastructure.

Adani's Australian Project: Downsized by Half, Twice

Adani's latest proposal is for a two stage development of the Carmichael coal project.

Originally Adani's Environmental Impact statement (EIS) announced the Carmichael proposal would be a 60Mtpa, 90 year project life proposal.

In November 2013 the Supplemental Environmental Impact statement (SEIS) detailed that Adani had implemented a halving of the project scale. This reduced it from a 90 year to a 60 year project life, and from a 60Mtpa average product coal to a 60Mtpa peak product coal (40Mtpa average).

In Late 2014 Adani disclosed it had downsized the project by more than half, a second time. The stage I proposal halved the life to 30 years and is based on an average output of product coal of 34Mtpa.

Adani now proposes building Abbot Point T0 in two stages, the first at 40Mtpa and the second to take it to 70Mtpa. Adani announced a A$1bn port construction contract award to POSCO E&C,[x] but we would note that even a 40Mtpa coal facility would cost multiples of the A$1bn figure, again raising questions over the clarity of cost disclosures.

Commercially Unviable

Carmichael Coal is Low Quality … Expect a 30% Price Discount to Benchmark

The Carmichael coal is low quality when compared to the Newcastle 6,000kcal, 12-14% ash export benchmark index and as a result will be valued at a significant discount. The energy content of ~5,200-5,300kcal Gross as Received is ~17% lower and the raw 25-30% ash content double than this index. IEEFA estimates the Carmichael coal is likely to be valued at a 30% discount to the Newcastle benchmark 6,000kcal NAR unless considerable coal washing is undertaken, which will come at a higher cash cost due to water constraints and cost of processing.

Cash Breakeven at Current Thermal Coal Prices

IEEFA estimates the gross cash cost of coal production from the proposed Carmichael mine is greater than the current price that this thermal coal would trade at. On IEEFA's estimates, the fully-costed transportation to the main target market of India is prohibitively high, being in the order of $15-20/t for the rail, $5-6/t for the port and $5-10/t for the seaborne shipping.[xi] This is significantly higher than average existing Australian export thermal coal export costs of transportation.

Given the low coal quality, the likely 30% discount to the current benchmark price of US$58/t means Carmichael coal would need to be delivered to Abbot Point FOB at a cost of US$40/t just to be gross cash breakeven, and even then this leaves no capacity to fund the likely significant interest costs nor mine rehabilitation.

As testified to in the Queensland Land Court as expert financial witness, IEEFA's financial modeling of the Carmichael coal mine proposal is US$42/t (real) free on board (FOB) including royalties (adjusted for the current US$0.71/A$ and decline in coal forwards).

Commercial Viability Is In Question

Mainstream financial analysts in Australia have said this project is not commercially viable:

> "On a standalone basis, the economics just don't stack up - I'm talking about costs and return on capital. You'd need a price of about $100-$110 a tonne for it to stack up,"
>
> Daniel Morgan, global commodities analyst at UBS[xii] on 12 Nov'2014.

> "Right now with thermal coal at $60/t and the Galilee coal 500km from port, funding these projects doesn't seem viable. What is unknown is whether the Indian companies are prepared to take a long-term view and put a lot more of their own equity into these projects."
>
> Mark Pervan, ANZ Bank commodities analyst, March 2015[xiii]

Financially Challenged

Adani Enterprises Ltd's Market Capitalisation Down 90% to US$1.1bn

As a natural consequence of the Adani Enterprises Scheme of Arrangement that took effect on 4 June 2015, Adani Enterprises did a US$8bn capital distribution in the form of distributing its entire shareholdings in each of Adani Ports, Adani Transmissions and Adani Power – refer IEEFA's May 2015 report.

The result was that Adani Enterprises share price adjusted downwards almost 90% in the first week of June 2015 to Rs110 per share, such that the residual market capitalisation of Adani Enterprises declined to US$1.9bn post capital distributions. The Carmichael proposal becomes one of the key remaining 'assets' in this dramatically downsized but still listed coal trading and mining entity.

Subsequent to the Scheme, concurrent with the continued decline in seaborne thermal coal markets, the Adani Enterprises share price has declined 45% to Rs68.40/share.

Figure 2 details the significant underperformance of Adani Enterprises Ltd's share price (in blue) in recent months. Adani Enterprises saw a significant positive rerating around the January 2015 Restructuring Scheme announcement through to its implementation at the start of June 2015. In contrast, shares in Adani Ports & SEZ (green) continue to outperform the Indian equity market (red), whilst Adani Power (brown) continues to lag all three.

Figure 2: Adani Enterprises Share Price – Continued Underperformance

Source: Yahoo Finance

Consequently any development of the Carmichael coal proposal requires substantial new external sources of debt and equity financing.

The Adani Group Has Substantial Gearing

The Adani group reported consolidated net debts as at 31 March 2015 of US$11.3 billion across the consolidated listed Adani entities, plus US$1bn from the Udupi coal power acquisition in April 2015 plus US$1-2bn debt associated with AAPCT T1 which it is somehow not consolidating more than two years after it failed to complete the sale of this asset.

IEEFA estimates Adani Enterprises has US$2bn net debt post the completion of the capital distribution Scheme of June 2015. This represents considerable existing financial leverage against Adani Enterprise's equity capitalisation at US$1.1bn.[1]

Like many Indian power infrastructure firms, Adani Power Ltd shares are down 85% over the last five years (refer Figure 2). Adani Power has massive financial leverage with net debts post recent acquisition actions approaching an estimated US$8bn.[xiv] IEEFA notes that two major Adani Power subsidiaries in May 2015 undertook a US$2.3bn debt deferral under the Reserve Bank of India's new 5/25 distressed infrastructure project finance rules. Debt maturity was doubled to 19 years and an interest moratorium established for 18 months. Adani Power can't cover its interest costs, let alone afford to help borrow another $10bn still required to complete stage I of the proposed Australian project. Adani's new Udupi Power Corp likewise entered a 5/25 restructuring in June 2015.

Adani's Australian Investment … Almost Entirely Debt Funded

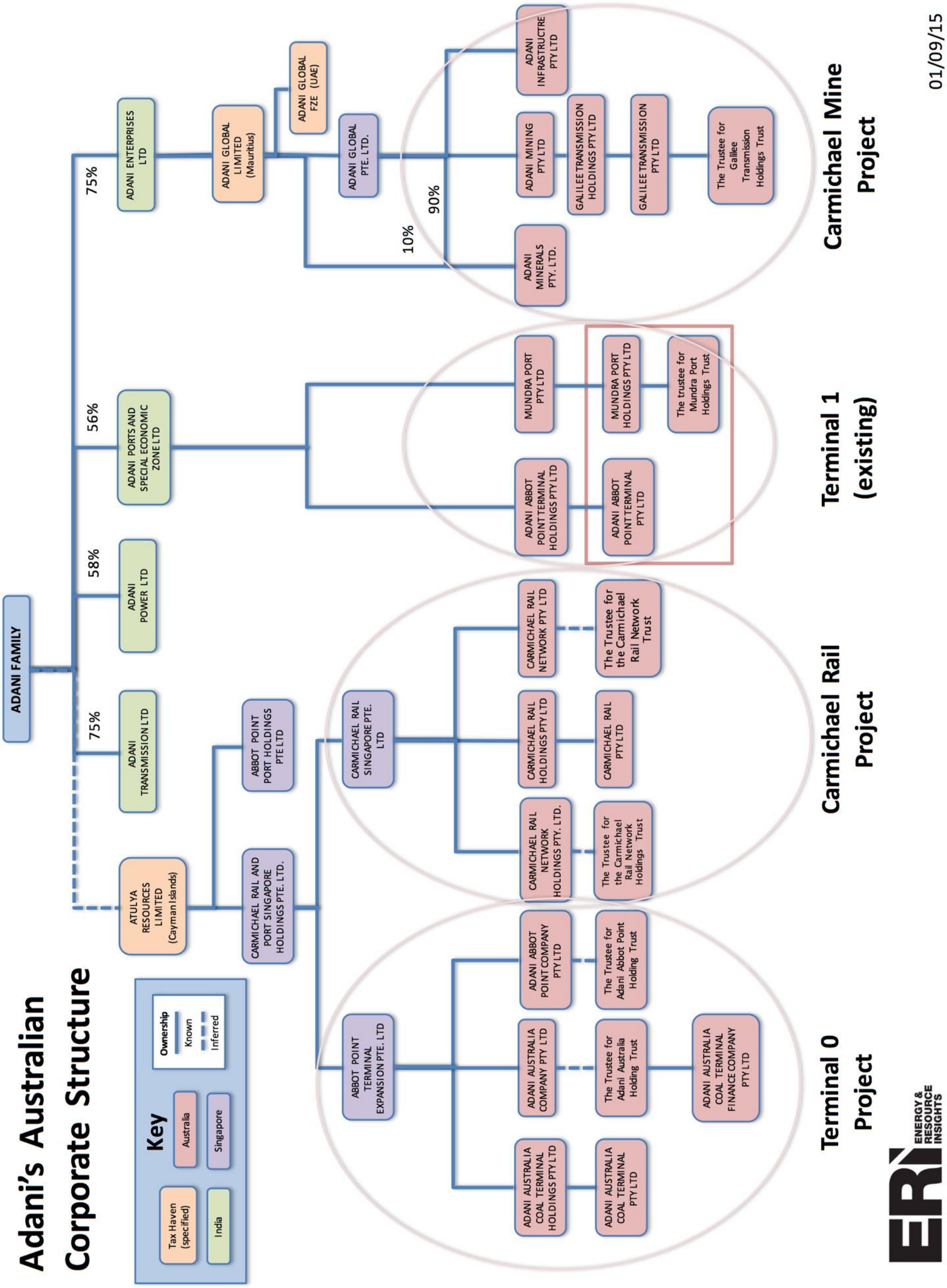
Adani has little equity invested in Australia. The company's claim of over A$3bn of assets need to be expanded to also read that Adani also has almost A$3bn of debts in Australia.

- Adani Mining Pty Ltd has net debts of A$1.34bn as at 31 March 2015 and negative shareholders funds of $230m, and has been loss-making for the last three years.
- The A$2bn Abbott Point Terminal (AAPT T1) has A$1.25bn of senior debt arranged by Westpac and CommBank. Above the Australian syndicate in the complicated legal structure is a partly repaid US$800m subordinated loan from State Bank of India, but this has been largely replaced with new borrowings of A$0.3bn. AAPCT likewise has been loss-making in each of the last two years due to excessive financial leverage. APPT T1 / Mundra Port Pty Ltd have reported currency losses of $241m in the last two years alone.

Figure 3 details our understanding of the complex legal hierarchy of the Adani Family's corporate structure. IEEFA notes the significant number of entities in various tax havens globally, and the interspersing of private family units relative to those vehicles relating to the Adani Mining Ltd, a 100% owned subsidiary of the public listed Adani Enterprises Ltd.

IEEFA notes the ownership of T1 coal port remains suspended in the ether (notionally owned but not consolidated by the Indian listed Adani Ports), while T0 coal port is to be funded by the Adani private family group. Notwithstanding Adani Mining was the proponent for the Carmichael Rail project, this appears to now be a private family asset.

[1] Adani Enterprises share price as of 8 September 2015 is Rs68.40 per share, converted at Rs66.6/US$.


Adani's Australian Corporate Structure
Key
Tax Haven (specified)
Australia
India
Singapore
Ownership
Known
Inferred
ADANI FAMILY
ATULYA RESOURCES LIMITED (Cayman Islands)
75%
ADANI TRANSMISSION LTD
58%
ADANI POWER LTD
56%
ADANI PORTS AND SPECIAL ECONOMIC ZONE LTD
75%
ADANI ENTERPRISES LTD
ADANI GLOBAL LIMITED (Mauritius)
ADANI GLOBAL FZE (UAE)
ADANI GLOBAL PTE. LTD.
10%
90%
ADANI MINERALS PTY. LTD.
ADANI MINING PTY LTD
GALILEE TRANSMISSION HOLDINGS PTY LTD
GALILEE TRANSMISSION PTY LTD
The Trustee for Galilee Transmission Holdings Trust
ADANI INFRASTRUCTRE PTY LTD
MUNDRA PORT PTY LTD
MUNDRA PORT HOLDINGS PTY LTD
The trustee for Mundra Port Holdings Trust
ADANI ABBOT POINT TERMINAL HOLDINGS PTY LTD
ADANI ABBOT POINT TERMINAL PTY LTD
ABBOT POINT PORT HOLDINGS PTE LTD
CARMICHAEL RAIL AND PORT SINGAPORE HOLDINGS PTE. LTD.
CARMICHAEL RAIL SINGAPORE PTE. LTD
CARMICHAEL RAIL NETWORK HOLDINGS PTY. LTD.
The Trustee for the Carmichael Rail Network Holdings Trust
CARMICHAEL RAIL HOLDINGS PTY LTD
CARMICHAEL RAIL PTY LTD
CARMICHAEL RAIL NETWORK PTY LTD
The Trustee for the Carmichael Rail Network Trust
ABBOT POINT TERMINAL EXPANSION PTE. LTD
ADANI AUSTRALIA COAL TERMINAL HOLDINGS PTY LTD
ADANI AUSTRALIA COAL TERMINAL PTY LTD
ADANI AUSTRALIA COMPANY PTY LTD
The Trustee for Adani Australia Holding Trust
ADANI AUSTRALIA COAL TERMINAL FINANCE COMPANY PTY LTD
ADANI ABBOT POINT COMPANY PTY LTD
The Trustee for Adani Abbot Point Holding Trust
Terminal 0 Project
Carmichael Rail Project
Terminal 1 (existing)
Carmichael Mine Project
ERI ENERGY & RESOURCE INSIGHTS
01/09/15

Strategically Challenged

Adani Enterprises acquired Carmichael coal in 2011, when the Indian government was keen for leading Indian power conglomerates to secure global coal assets; a time when the Indian coal sector was in disarray and corrupt, the global coal market was booming and prospective proposals were being acquired for record high prices.[xv] Adani acquired Carmichael for a total of A$680m – refer Appendix A.

As detailed in IEEEFA's Indian Electricity Sector Transformation, the Government of India has accepted that almost every global coal expansion by Indian firms has to-date failed to deliver a commercial return, and that the landed cost of imported thermal coal fired power generation is prohibitively expensive relative to both domestic coal and domestic renewable energy. The Indian Energy Minister Piyush Goyal in May 2015 said: "We are confident that in the next year or two, we will be able to stop imports of thermal coal."[xvi]

Mr. Gautam Adani, Chairman, Adani Group, said, "The Adani Group remains committed to helping India on its path to attaining energy sufficiency."[xvii] Adani continued: "We have embarked upon a mission of becoming a world leader in renewable power generation technologies, with a special focus on solar. Adani Group, a global infrastructure player, has set a target of 10,000 MW of solar power by 2022." Adani has also separately listed an Indian transmission company to further leverage the development of the national electricity grid, and to invest in domestic Indian coal mines. All suggests a strategic shift to align with the Energy Ministry of India, suggesting Carmichael is increasingly redundant.

The Adani Group has planned US$35bn of strategic initiatives in 2015 to-date: Figure 4. It is noteworthy that all are in India, and this likewise suggests Adani has moved on from the Carmichael coal to take advantage of domestic opportunities unlocked by the new Modi administration. Given capital constraints, these projects directly compete with Carmichael.

Figure 4: Corporate Expansion Plans

Entity	Target or Project	Date	Cost	Status
Adani Enterprises Ltd	Chhattisgarh coal-to-ammonia	Aug-15	US$4.0bn	Adani will invest Rs 25,200 crore in Chhattisgarh to develop a coal to poly-generation facility that consists of ammonia/urea and substitute natural gas (SNG) complex via gasification of Indian high ash domestic coal. The project includes coal to urea, coal to SNG plant and coal-based thermal power plant.
Adani Ports & SEZ	Gangavaram Port in AP	Jul-15	US$2.1bn	Adani is reported to be in exclusive talks to acquire this Eastern port, the deepest in India. D V S Raju family and has private equity major Warburg Pincus as a shareholder. The Raju family owns a 58% stake, Warburg Pincus has 31% and the government of Andhra Pradesh holds 11% in the port.
Adani Ports & SEZ	Vizhinjam Port, Kerala	Jul-15	US$0.6bn	letter to Adani Ports. The Rs.4,000-crore first phase of the Rs 7,525 crore Vizhinjam deep sea port project is due to be ready by 2019.
Adani Ports & SEZ	Kattupalli port, Tamil Nadu	Aug-15	US$0.8bn	L&T is in talks with Adani Group to sell its stake in the Kattupalli International Container Terminal. The total cost of the project would be Rs.5,000 crore, he said.

Figure 4: Corporate Expansion Plans (Continued)

Entity	Target or Project	Date	Cost	Status
Adani Ports & SEZ	Kattupalli International Container Terminal, Tamil Nadu	Jul-15	Rumour	Larsen & Toubro Shipbuilding's Kattupalli port in Tamil Nadu has a 1.2Mpa containers capacity. Built at a cost of Rs4,000 crore and opened in Feb 2013, but underutilised and hence loss-making.
Adani Ports & SEZ	Capex on existing ports	n.a.	n.a.	APSEZ has rated capacity in place across its ports portfolio of 339Mt, and has capex expansion plans across facilities at Mundra, Tuna, Dahej, Hazira, Mormugao, Dhamra, Kamarajar, Visakhapatnam and Ennore of 240Mt - a 60%
Adani Ports & SEZ	LNG terminals at Dhamra, in Odisha and Mundra, Gujarat	n.a.	US$0.7bn	Adani had announced plans to set up two LNG terminals at Dhamra, in Odisha, and Mundra in Gujarat. The Mundra terminal, to be set up with Gujarat State Petroleum Corporation (GSPC) at a cost of R4,500 crore, is expected to
Adani Ports & SEZ	Dhamra Port in Odisha	Jul-14	US$1.6bn	Acquired Dhamra port on the east coast in Odisha acquired from Tata / L&T, with the aim to spend US$1.6bn expanding this port capacity to 100Mtpa by 2020.
Adani Transmission Ltd	Power transmission tenders	Jul'2015	US$0.6bn	Adani won three projects tendered by Power Finance Corporation - Sipat, Chhattisgarh A and B.
Adani Group	Solar Project development	Jul'2015	US$0.7bn	Adani Group announced it has won a 648MW solar project at a fixed 25 year tariff of Rs7.01/kWh in Tamil Nadu.
Adani Enterprises	Solar Module Manufacturing	Aug'2015	US$3.0bn	Adani Group is in talks with Japan's Softbank and Foxconn to secure investment in a $3 billion project to make solar cells and panels in India after the proposed US$4bn JV with SunEdison was reported as falling over.
Adani Group	Solar Project development, Uttar Pradesh	Sept'2015	US$1.0bn	Adani won a 50MW solar park tender in Uttar Pradesh as the first step in a 1GW solar park proposal from Feb'2015.
Adani Group	Solar Project development, Tamil Nadu	Jul'2015	US$0.7bn	Adani won a 648MW solar project tender in Tamil Nadu on a 25 year fixed rate PPA of Rs7.01/kWh.
Adani Group	Solar Project development, Rajasthan	Feb'2015	US$10.0bn	Adani signed a MoU with Rajasthan Renewable Energy Corp to develop a JV for a new solar park facility with a target to warehouse up to 10GW of solar with a potential investment totaling Rs60,000 crore (US$10bn) by 2022.
Adani Group	Indian Fertilizer manufacturing	Jul'2015	US$4.0bn	Adani is carrying out due diligence of at least three defunct urea manufacturing units, including Sindri in Jharkhand, on the premise India imports 30% of its 30Mtpa of urea needs.
Adani Group	JV with Foxconn in electronics manufacturing assembly	Aug'2015	US$4.0bn	Adani Group and Foxconn are planning a JV for the purpose of making electronics in India in a bid to promote a government's 'Make In India' program.
Adani Group	Adani Defence Systems & Technologies Ltd	Sept'2015	n.a.	Adani is evaluating setting up a greenfield Gujarat warship yard.
Adani Group	Adani Defence Systems & Technologies Ltd	Jul'2015	n.a.	Adani is evaluating options to manufacture military helicopters.
Adani Power	1.6GW new coal fired power plant at Udupi	Sep-15	US$1.3bn	After acquiring **Udupi Power Corporation Ltd** from Lanco Infratech in April 2015 for US$800m, Adani now aims to expand the plant's capacity by 1600 MW at a US$1.3bn cost.

Unbankable

13 Major Global Banks Have Ruled out Financing

Thirteen major global banks key to most global coal mining investments have moved away from providing finance for the Galilee proposals, particularly as it relates to building a new coal export facility adjacent to the Great Barrier Reef (GBR). Concerns also extend to the dredging in the Great Barrier Reef World Heritage Area and dredge spoil dumping. The 13 banks include: Deutsche Bank; HSBC; Royal Bank of Scotland; Barclays; Morgan Stanley; Citigroup; Goldman Sachs; JP Morgan Chase, State Bank of India (SBI) and more recently Societe Generale, BNP Paribas and Credit Agricole.[xviii] [xix] In September 2015 National Australia Bank ruled out its involvement in any financing of Galilee coal projects.[xx]

In May 2015 Bank of America announced it would move to exit coal lending entirely and AXA (of France) likewise announced it would cease investing in coal related equities and the Norwegian Sovereign Wealth Fund is to divest all coal-related investments.

BankTrack has published a list of the world's biggest financiers to the coal industry. The bank statements are detailed in Appendix B.

State Bank of India Finance "Commitment"

The Adani Group has made significant claims of financial support for the project. However, the reality is somewhat less substantial.

Adani released a press release on behalf of SBI in November 2014, claiming a US$1bn loan commitment. SBI Chairwoman Arundhati Bhattacharya then clarified that SBI has already extended a US$800m loan to AAPT T1 in 2010. SBI offered a total exposure of US$1bn, so this new offer was for a net US$200m increase.[xxi] SBI clarified that full due diligence hadn't been done, so this loan proposal was not legally binding. The SBI has also been attacked in the Indian parliament for partaking in "crony capitalism" with relation to the project.[xxii] In March 2015 it was reported that the credit team had denied the Adani Mining loan, a report immediately denied by the Chairwoman,[xxiii] who subsequently said no loan application had even been made. In May 2015 a member of SBI was reported as stating: "We have informally conveyed to the company that SBI would abstain from the proposal."

Standard Chartered and Commonwealth Bank of Australia … No Longer Advisors

In May 2015 Standard Chartered's Chairman said the bank would review its involvement and that it would go "no further" with the Carmichael mine until it had looked at the project's environmental credentials. In August 2015 the bank said: "As a result of this ongoing review by Standard Chartered and the delays experienced by Adani in receipt of its project approvals, both parties have agreed to end the bank's role in the Carmichael project."[xxiv] Standard Chartered also rejected Adani's claims it had provided any finance for Carmichael. This followed Commonwealth Bank also ceasing its advisory mandate. This takes to 15 the number of global banks who have ruled out an involvement in total.

Stalled Momentum

Lots of Non-Binding Deals Announced

In a flurry of announcements over 2014/15, Adani announced POSCO E&C would build and help fund the proposed railway line, SBI would take a lead in funding the overall project, the Newman government would fund $455m of subsidies for the rail project, that POSCO would build and help fund the Abbot Point coal port,[xxv] that offtake agreements for most of the coal were in place, and that Downer EDI had won the $2bn mine development contract, and subsequently also the A$400m 150MW Moray power station contract.

While the wording of these announcements suggested legally binding transactions and deadlines are in place, the reality is that most of these announcements are non-legally binding proposals:

1. In November 2014 POSCO distanced themselves from the project. Both POSCO E&C and potential funding partner South Korea's Export-Import Bank said any agreements were at early stages. "It is hard to predict when a contract will be signed."[xxvi] POSCO have subsequently repatriated their workforce from Queensland.
2. In December 2014 SBI clarified their additional loan proposal was still pending subject to due diligence and was in fact only for a proposed loan top-up of a net US$200m.[xxvii] [xxviii] SBI subsequently claimed in March 2015 that they are not evaluating any loan proposal (refer below).
3. In December 2014 Downer EDI reported “Adani Mining advising of its intention to enter into contracts for the provision of mining services.”[xxix] “Both Letters of Award are subject to the parties executing binding contracts which would be followed by pre-production and planning in early 2015 with mine infrastructure construction commencing in the fourth quarter of 2015,” Downer said.
4. LG signed a non-binding letter of intent coal off-take agreement in July 2014, but in September 2015 LG stated: “The LOI (letter of intent) concluded by and between LG International Corp and Adani Mining Pty Ltd was non-binding and is invalid as of July 21, 2015 in accordance with the expiration of the LOI.”

Project Delays Continue

At the time of acquiring the Carmichael Coal project proposal in 2011, Adani expected to have first coal by 2014. Adani said 12 Nov’2014 that financial close is not due till end 2015. Four years on, first coal is now not commercially feasible until 2018 at the earliest.

In March 2015 the Labor government proposed capital dredging with onshore dumping on the site of the former T2 Abbot Point proposal, but ruled out tax-payer subsidies for this proposal.[xxx] State Development Minister Dr Lynham referred his dredging decision to the Federal government April’15, stating: “mine proponents - not taxpayers - would meet dredging and approvals costs …. Unlike the Newman government, we won’t be expecting taxpayers to pay for the environmental assessment.”[xxxi]

As a reference to cost, the Cairns dredging and dumping in the Reef was costed at $100m to move 4.4 million cubic metres, vs $365m for onshore dumping.[xxxii]

Greg Hunt made a decision on 14 May 2015 that the capital dredging and onshore dumping required a full Environmental Impact Statement (EIS). August 2015 saw the release of the draft EIS, open for public comment until the 18 September 2015,[xxxiii] at which point the EIS will be submitted to the Federal government for review.

Adding 10,000 Queensland Jobs – False Advertising?

The Adani Group has been advertising in Queensland TV that they will create 10,000 Queensland jobs. Adani Mining's own SEIS states that construction jobs will average 2-3,000 over the first three years. Adani has appointed POSCO of Korea and Parsons Brinckerhoff of the US as key partners – two foreign firms. EDI Downer as contractor for the mine itself is the main Australian firm proposed.[xxxiv] Ex-Deputy Premier Jeff Seeney went further in claiming that spending up to $455m of Queensland taxpayer money to subsidise Adani's projects through his "Infrastructure Enabling Agreement" would bring 28,000 jobs to Queensland.[xxxv] Adani's own economist, Dr Jerome Fahrer testified to the Queensland Land Court in May 2015 that the number of net cumulative new jobs over the mine and rail project life (inclusive of indirect job creation) would average only 1,464, and that these would be 100% fly-in, fly-out (FIFO).

The Queensland government in May 2015 confirmed the T0 port dredging development will involve only 120 jobs for four months. Post the temporary construction boost, T0 would add 200-250 jobs once stage I and stage II are both fully operational.[xxxvi]

To reinforce this point, in June 2015 Adani disclosed they plan to use driverless automated trucks as part of their drive to minimise costs. Driverless trains are also planned.

This issue has been examined in detail by the Australia Institute.[xxxvii]

The Increasing Call for New Taxpayer-Funded Coal Subsidies

In direct contradiction of the conclusions of the G20 Economic Summit held in Brisbane Australia in November 2014, the ex-Queensland Premier Newman attempted to prop up the Adani project with offers of taxpayer subsidies, free water, royalty holidays, and "purchase" of dredge spoil, to offset growing investor concerns over the commercial viability of the project. He went as far as offering taxpayer finance of up to $455m[xxxviii] to support the development of the dedicated rail line for Adani's Carmichael Coal project proposal. The Queensland government has now clarified it will not be providing taxpayer funded subsidies for this private, foreign, commercially challenged project.[xxxix][xl]

With the Queensland government's subsidies withdrawn, Prime Minister Tony Abbot has proposed to subsidise the Galilee projects via the Northern Australia Infrastructure Fund. Only open to "uncommercial projects," Carmichael clearly fits this requirement.

Carmichael Proposal Fully Approved … Almost

Adani in December 2014 stated: "We reject in its entirety the suggestion that any aspect of Adani's project is not fully approved."[xli] This claim downplays the fact that a Land Court challenge heard in April 2015 questioned the draft approvals given, with a decision not to be handed down till the end of 2015 at the earliest. Adani's claims also overlooks the facts that the project doesn't actually have a final mining lease approval or environmental authority (required under Queensland law), that dredging was not done in the four month window to June 2015 before the cyclone season started, and that the mine does not have Traditional Owner consent – refer below.

Questions Raised About Corporate Governance

The Fairfax press has raised a number of allegations about potential corporate governance breaches, plus disclosure and transparency issues relating the Adani Group and associated directors and related party transactions. Well over two years after Adani Ports & SEZ Ltd deconsolidated the Abbot Point Terminal 1 Port inclusive of US$1-2bn of debt, Adani reports that the ownership of T1 is incomplete.[xlii] IEEFA views that the Australian government does not know who is the owner of one of the largest ports in the country a national security risk.

Australian Senator Larissa Walters in March 2015 raised these issues in the Senate, and again in a letter to the Chairman of ASIC on 10 March 2015. Any due diligence into Carmichael and the associated T0 port proposal would in IEEFA's view require resolution of these allegations and the appropriateness of the proposed new owner and the nature and source of their funding.

In an unrelated incident, Korea's National Assembly in February 2015 raised an inquiry into POSCO E&C for operating multi-million dollar overseas slush funds.

Adding New Supply to an Oversupplied Seaborne Coal Market

If Adani is successful in developing open access rail, water, transmission, power, air and road infrastructure for the Galilee, this will ironically further undermine the project's commercial viability. There are nine Galilee Basin thermal coal projects being promoted. The combined proposed output of these projects is up to 282Mtpa of new thermal coal, a 30% increase in global seaborne supply. This output would flood the seaborne traded market with ever more supply at a time when prices have already collapsed, serving to drive seaborne coal prices down further for longer at a time when the average Australian and global coal mine is barely operating at a cash breakeven position before funding.

Global Carbon Budget

The University College of London published a report in January 2015 saying that 95% of Australian coal reserves need to stay in the ground for the world to have a 50% chance of staying within 2 degrees C. Developing the Galilee Basin flies in the face of this logic.[xliii]

Indigenous landowners, the Wangan and Jagalingou (W&J) people, reject Adani

In March 2015 indigenous land owners rejected Adani's mine, rail and port projects. The Wangan and Jagalingou (W&J) people rejected the indigenous land-use agreement with Adani to build a coal mine in the area. Adani has now sought for the Queensland government to overrule the W&J, compulsorily acquire the land and issue a lease for the Carmichael mine. The Adani Group has also sought to ignore and misrepresent the position of the W&J people. In May 2015 the W&J people have lodged a legal bid in the Federal Court to overturn the mine approval.

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Institute of Energy Economics and Financial Analysis, September 2015

Appendix A: Adani's Proposed Australian Investment (A$m)

Purchase of Carmichael Coal from Linc Energy			500
Purchase of Carmichael royalty rights from Linc Energy			155
Purchase of EPC 1080 from Mineralogy Pty Ltd			25
Option to Purchase of Moray Downs		60	
Purchase of Moray Downs		50	110
Moray Power Station - 150MW multi-fuel		400	
Coal Handling & Preparation Plant (CHPP)		420	
Mine rehabilitation bond		300	
Mine development		3,668	4,838
Rail development	400	2,821	
Train sets		960	3,781
Purchase of Abbot Point Coal Terminal - T1		1,829	
Estimated T1 Port Capex post purchase		338	2,167
Adani Abbot Point Coal Terminal - T0 stage I		2,800	
Adani Abbot Point Coal Terminal - T0 stage II		1,800	
Dredging		200	4,800
Total proposed investment (A$m)			16,375

Invested to-date	
Purchase of Carmichael Coal from Linc Energy	500
Purchase of Carmichael royalty rights from Linc Energy	155
Purchase of EPC 1080 from Mineralogy Pty Ltd	25
Option to purchase of Moray Downs	60
Estimated Mine Capex post purchase	250
Purchase of Abbot Point Coal Terminal - T1	1,829
Estimated T1 Port Capex post purchase	338
Total To-Date	3,157

Total Mine investment still required - Stage I		
Purchase of Moray Downs		50
Moray Power Station - 150MW multi-fuel		400
Mine rehabilitation bond		300
Mine development	60%	2,753
Total Mine investment still required - Stage I (A$m)		**3,503**
USD / AUD		0.71
Total Mine investment still required - Stage I (US$m)		**2,487**

Total Rail investment still required - Stage I		
Rail development		2,821
Train sets	60%	576
Total Rail investment still required - Stage I (A$m)		**3,397**
USD / AUD		0.71
Total Rail investment still required - Stage I (US$m)		**2,412**

Total Port investment still required - Stage I	
Adani Abbot Point Coal Terminal - T0 stage I	2,800
Dredging	200
Total Port investment still required - Stage I (A$m)	**3,000**
USD / AUD	0.71
Total Port investment still required - Stage I (US$m)	**2,130**

Appendix B: Quotes from Global Banks on Galilee Basin and Abbot Point

Deutsche Bank: "We are currently not involved with this project and will also not be involved with it in the future" -Paul Acleitner, Head of Deutsche Bank's Supervisory Board, May 22, 2014

Citigroup: "Citi is not involved and does not plan to be involved in any financing for the Abbot Point expansion." -Valerie C. Smith, Director, Corporate Sustainability, Citigroup

Morgan Stanley: "Morgan Stanley will not lend to or invest in the expansion of Abbot Point." - Francesco Liberti, Executive Director, Risk Management, Morgan Stanley

JPMorgan Chase: "The issues you raise are captured in our policy commitment. Specifically we do not finance natural resource projects within UNESCO World Heritage Sites unless there is prior agreement between both the government authorities and UNESCO that such operations will not adversely affect the Outstanding Universal Value of the site." - Matthew Arnold, Managing Director, Sustainable Finance, JPMorgan Chase

Goldman Sachs: "In reference to your letter dated September 4th 2014 regarding Australia's Abbot Point port terminal expansion, we appreciate the sensitivity of the issues you have raised. Please note that we take our approach to environmental risk management seriously. As per the guidelines in our Environmental Policy Framework, we will not finance any project or initiate loans where the specified use of proceeds would significantly convert or degrade a critical natural habitat." -Kyung-Ah Park, Head, Environmental Markets Group, Goldman Sachs

Barclays: "I am writing to confirm formally that Barclays has no plans to participate in financing the Abbot Point development or its associated mine/rail infrastructure..." -Philippa Birtwell, Head of Reputation Risk Management, June 26, 2014

Royal Bank of Scotland: "In view of the unusual levels of stakeholder interest in this issue, I can confirm that RBS is not involved… and has no plans to be involved in the future." -Andrew Cave, Chief Sustainability Officer, June 16, 2014

HSBC: CEO Stuart Gulliver said at HSBC's annual shareholder meeting in London that, given UNESCO's position on the risks to the Great Barrier Reef, it "would be extraordinarily unlikely that we would go anywhere near it [the Abbot Point project]", May 23, 2014

BNP Paribas: "BNP Paribas do not intend to be involved in the financing of the development of coal mines projects in the Galilee Basin in Australia, nor of related dedicated infrastructure projects," Laurence Pessez, Corporate Social Responsibility Director, BNP Paribas, March 20, 2015

Société Générale: "Société Générale is not involved and do not intend to be involve in any coal mines projects and related infrastructures of the Galilee Basin, in Australia", Jean-Michel Mépuis, Head of Sustainable Development, Société Générale, March 27, 2015

Credit Agricole: "We confirm that, due to the number and the magnitude of issues relating to the planned coal development projects in the Galilee Basin, Credit Agricole SA does not intend to finance these projects or their associated facilities…", Stanislas Pottier, Head of Sustainable Development, Credit Agricole SA, March 27, 2015

Aviva Investors UK: "The reputational risks inherent in the Carmichael project are grave and many of the major financiers rightly recognise this and have stepped away from the project," head of responsible investment engagement, Abigail Herron said, 13 August 2015.[xliv]

National Australia Bank: was reported in the AFR as stating the bank: "is not involved and has no plans to be involved in any financing of the Carmichael coal mine." NAB has no appetite to finance the project in its current form, even if it were asked to – 2 September 2015

Institute for Energy Economics and Financial Analysis

The Institute for Energy Economics and Financial Analysis (IEEFA) 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 and to reduce dependence on coal and other non-renewable energy resources.

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Tim Buckley has 25 years of financial market experience covering the Australian, Asian and global equity markets from both a buy and sell side 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.

Important Information

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