

Independent Expert Report

Carmichael Coal and Rail Project

Acknowledgement

I acknowledge that I have read and complied with the Federal Court of Australia's Expert Evidence Practice Note and the Harmonised Expert Witness Code of Conduct and agree to be bound by them.

My opinions in this report are based wholly on specialised knowledge arising from my training, research and work experience.

For many years, I was a managing director and head of equity research at Citigroup. I was a top-rated equity research analyst and have covered most sectors of the Australian economy. I have 30 years of financial market experience covering the Australian, Asian and global equity markets from both a buy and sell side perspective. I co-managed, and was director of, Arkx Investment Management P/L, a global listed clean energy investment company that was jointly owned by management and Westpac Banking Group.

Since 2013 I have been Director of Energy Finance Studies for the Institute for Energy Economics and Financial Analysis (IEEFA) covering energy finance issues in Australia, India and the wider Asian market. I have been specifically analysing and reporting on the Galilee Coal Basin and Carmichael Coal and Rail project since 2013. The numerous reports and analyses I have published on the Carmichael Coal and Rail project can be found on my author archive page on the IEEFA website.¹

For this report, I was asked to provide my expert opinion in response to three questions set out in the attached letter of instruction. In responding to these questions in this report, I have made all inquiries which I believe are desirable and appropriate. I confirm that, to my knowledge, there are no relevant matters of significance that have been withheld from the Court.



Tim Buckley,
IEEFA Director of Energy Finance Studies, Australia and South Asia
31, Inverallan Avenue
West Pymble, NSW 2073

¹ <https://ieefa.org/author/tim/>

A) What coal mining projects are currently proposed in the Galilee Coal Basin in Queensland?

A summary of all the proposed coal mining projects in the Galilee Basin is shown below in Table 1. For those projects where the Environmental Impact Statement (EIS) has been approved by the Queensland State Co-ordinator General, the annual output shown is the approved maximum yearly output. Where projects are yet to submit their EIS for assessment, the median intended annual output is shown.

The total output of these ten mega-proposals is 315 million tonnes per annum (Mtpa). If all of these high ash low energy (HALE) thermal coal proposals were to come to fruition, this would represent a 30% expansion of global seaborne thermal coal supply at a time when coal demand is already well beyond its peak due to technological, policy and economic developments.

Table 1: Proposed Galilee Basin Coal Mining Projects and Annual Output

Owner	Project	EIS Status	Approved/Intended Output (Mtpa)
Adani Enterprises	Carmichael Coal	Approved with conditions	60
GVK Hancock	Alpha	Approved with conditions	30
GVK Hancock	Alpha West	Pre EIS	20
GVK Hancock	Kevin's Corner	Approved with conditions	30
Waratah Coal	Galilee Coal Project (China First)	Approved with conditions	40
Waratah Coal	Alpha North	Pre EIS	40
AMCI Group	South Galilee Coal	Approved with conditions	17
Macmines Austasia	China Stone	Approved with conditions	38
Vale	Degulla	Pre EIS	30
Resolve Coal Ltd	Hyde Park Coal	Pre EIS	10
Total for Galilee Basin			315

Source: Australian Government, Queensland Government

Adani Mining Pty Ltd's Carmichael project is the largest of all those in the Galilee Basin with an approved output of 60Mtpa.² Adani Mining Pty Ltd (Adani) have scaled down their initial phase to 10Mtpa with a targeted second phase aiming to reach 27Mtpa.³ However its EIS approval allows them to scale up to 60Mtpa whenever the company makes the internal decision to do so.

Other projects which have Queensland State EIS approval are two GVK Hancock mine projects – Alpha⁴ and Kevin's Corner⁵ – which both have approved output of 30Mtpa. Waratah Coal has EIS approval for its Galilee Coal Project (previously known as China First) with an approved output of 40Mtpa.⁶ AMCI's South Galilee

² <http://statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/completed-projects/carmichael-coal-mine-and-rail-project.html>

³ <https://www.afr.com/companies/mining/gautam-adani-doubles-down-on-his-2-8b-carmichael-investment-20190709-p525eu>

⁴ <http://statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/completed-projects/alpha-coal-project.html>

⁵ <http://statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/completed-projects/kevin-s-corner-project.html>

⁶ <http://statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/completed-projects/galilee-coal-project.html>

project is approved for output of 17Mtpa⁷ and Macmines Austasia's China Stone project is approved for output of 38Mtpa.⁸

In addition to the EIS approved projects, there are four other coal mining proposals in the Galilee Basin in the pre EIS stages of development. This includes another GVK Hancock development – the Alpha West project with an indicated output of between 16 and 24Mtpa.⁹ Waratah Coal also have a pre-EIS project called Alpha North with an expected output of 40Mtpa.¹⁰ Also in the pre-EIS phase of development are Vale's Degulla project (20-40Mtpa)¹¹ and Resolve Coal's Hyde Park project, the latter having signed an agreement with Adani to rail 10Mtpa of coal on the latter's rail link to Abbot Point Coal Terminal.¹²

Due to increased technological, economic, financial market and policy challenges to thermal coal developments globally, most of the Galilee Basin projects have been subject to slow or stalled development and Vale has reportedly been attempting to sell its Degulla Galilee Basin project since 2013.

However, in my opinion, the development of a new low quality (lower than benchmark energy content and higher than benchmark ash content) thermal coal basin hundreds of kilometres from port facilities and with no infrastructure in place would be expected to be slow. The development of Adani's Carmichael project has itself been slow - Adani acquired the proposal back in 2010 and initial physical construction has only been underway since 2019 despite an initial forecast by the firm that first coal would be shipped in 2014. Once a coal mine proponent makes the decision to proceed with a project the pace of development could quicken.

Queensland has seen significant turnarounds in the status of seemingly stalled coal projects before. An example is the Blair Athol mine which was formerly owned by a consortium led by global mining giant Rio Tinto. The mine ceased production and was put into care and maintenance in 2012. At this point it appeared to have little or no future as an operating coal mine. However, in 2017 the Blair Athol mine was sold to Terracom for \$1 and the mine is now producing coal again.¹³

In May 2019, it was revealed that Macmines Austasia had relinquished its bid for a mining lease for the China Stone project in the Galilee Basin. However, as Ian Macfarlane, Chief Executive of the Queensland Resources Council (QRC) stated,

⁷ <http://statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/completed-projects/south-galilee-coal-project.html>

⁸ <http://statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/completed-projects/china-stone-coal-project.html>

⁹ <https://www.bioregionalassessments.gov.au/assessments/12-resource-assessment-galilee-subregion/12319-alpha-west-coal-project>

¹⁰ <https://www.bioregionalassessments.gov.au/assessments/12-resource-assessment-galilee-subregion/12317-alpha-north-coal-project>

¹¹ <https://www.bioregionalassessments.gov.au/assessments/12-resource-assessment-galilee-subregion/123113-degulla-coal-project>

¹² <https://www.bioregionalassessments.gov.au/assessments/12-resource-assessment-galilee-subregion/123114-hyde-park-coal-project>

¹³ <https://www.afr.com/companies/mining/the-comeback-mine-outfit-at-centre-of-court-claims-20200224-p543t8>

"MacMines haven't stopped. They're still doing their exploration, they're still proving up the resource." Mr Macfarlane added "They just didn't proceed to a mining application because once you get a mining lease, you actually have to start mining within a certain time period".¹⁴

Previously slow moving coal mining projects can suddenly hasten procedures once the owner makes a decision to move forward or a project is sold to a new owner who wishes to proceed at a faster pace. As such, in my opinion it is possible for all of the Galilee Basin coal mining proposals in Table 1 to move forward into coal production given the right circumstances and suitable financial backing.

B) Would the development of the 189 km rail link to service the proposed Carmichael Coal Mine, authorised under EPBC Approval 2010/5736 for the Carmichael Coal Mine and Rail Infrastructure Project, facilitate, to a major extent, the development of any of the other proposed coal mining projects in the Galilee Basin in Queensland?

The biggest issue facing any new coal mine proposal in the Galilee Basin is its isolation from coal export terminals on the North Queensland coast. Any first mover in the Basin faces the additional cost of constructing a railway to transport coal to suitable ports.

As such, in my opinion, once a first mover constructs such a railway, other proposed coal mining projects in the Galilee Basin will have their development facilitated to a major extent as some other proposals will be able to utilize the railway, thus avoiding the need for the additional capital expenditure required to build their own. This then solves other mining proposals key issue – their isolation from coal terminals on the coast.

The Adani Group's planned railway link is to have an initial capacity of 40Mtpa with potential for expansion.¹⁵ Adani's Carmichael project phase I will start with 10Mtpa leaving plenty of capacity available for other coal mining projects to potentially utilize. In my opinion, it is very much in the Adani Group's interests to fully utilize the railway and have other miners pay them to access its railway.

The existence of an operating railway can directly facilitate the development of the two other northern Galilee Basin coal projects in the vicinity of the Carmichael project – the Hyde Park and China Stone developments.

Resolve Coal, owner of the Hyde Park coal mining project in the Galilee Basin has signed an agreement with Adani for 10Mtpa of Hyde Park coal to be transported on the Adani Group's rail link.¹⁶

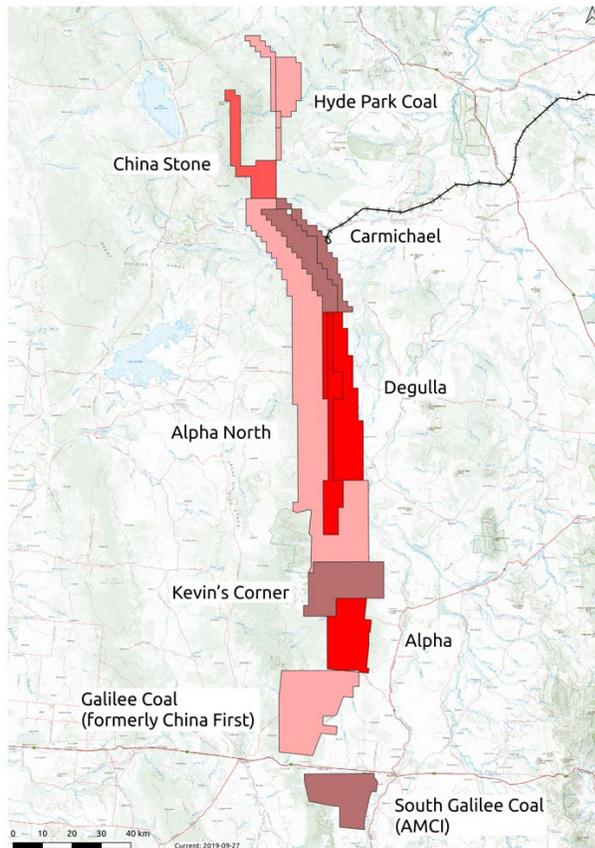
¹⁴ <https://www.abc.net.au/news/2019-06-12/adani-approval-could-be-galilee-basin-ice-breaker/11194510>

¹⁵ https://www.adaniaustralia.com/-/media/Project/Australia/Fact-sheets/ADI0018_MarketingBrochure_Rail_v513.pdf

¹⁶ <https://www.bioregionalassessments.gov.au/assessments/12-resource-assessment-galilee-subregion/123114-hyde-park-coal-project>

The China Stone project is also in the vicinity of Adani's Carmichael mine and could utilize the Adani Group's rail link upon development (Figure 1).

Figure 1: Galilee Basin Coal Projects



Source: IEEFA

Even if Adani scales up to its phase II 27Mtpa as planned there will be spare capacity on the railway for other mines in the Basin. And importantly, Adani has made it clear the capacity of the railway can be expanded to meet further mining capacity in the Galilee Basin.

The Adani Group's rail plan is for a railway linking the mine to the existing Aurizon rail network. Although the Aurizon network is transporting coal from existing mines, any potential capacity constraints from the addition of Galilee Basin coal to the network could be resolved by upgrades to the Aurizon network to increase capacity.

The mine projects to the south of the Galilee Basin (Figure 1) are further away from the Carmichael project and may need their own rail link. However, a commercially operating coal mine and rail link at, and from, Carmichael could enable another rail development by demonstrating the feasibility of such infrastructure linking up an isolated coal basin to coal terminals at the coast and providing rail haulage services

that could be shared or duplicated. This indirect benefit can facilitate all the projects in the Galilee Basin that are to the south of the Carmichael project – Alpha, Alpha West, Kevin’s Corner, Galilee Coal, Alpha North, South Galilee Coal and Degulla.

There is also spare capacity at North Queensland’s coal ports for additional Galilee Basin coal mines, with the option for port expansion if required.

The Adani Group’s port at Abbot Point has a total capacity of 50Mtpa but only operated with throughput of 29Mt in financial year 2018-19 (58% capacity utilization), having averaged around 55% utilization over the last five years.¹⁷ Clearly Adani wishes to use some of the spare capacity itself but with an initial operating capacity of 10Mtpa for the Carmichael mine, there would be spare capacity left over. It is in the Adani Group’s interests to run Abbot Point close to full capacity, in my opinion. In addition, Abbot Point in 2018 drew up plans for expansion of capacity to 60Mtpa. Although on hold at the moment, these could easily be revived if demand for more capacity prompted it.

Furthermore, the fact that the Adani Group’s rail project now links to the existing Aurizon rail network, rather than going direct to Abbot Point, means further Galilee Basin mines can gain access to other coal ports in addition to Abbot Point. The total coal export capacity at Hay Point, including Hay Point Coal Terminal and Dalrymple Bay Coal Terminal, is 140Mtpa but throughput in financial year 2018-19 was 118Mt leaving spare capacity that could be utilized by further Galilee Basin mines.¹⁸

The QRC, the key lobby group for the state’s coal industry, has made it clear that it believes the Carmichael Mine and Rail project development will make it much easier for up to six other Galilee Basin coal projects to proceed if the rail line was built and environmental approvals established.

QRC Chief Executive Ian Macfarlane stated in June 2019 that the Carmichael coal project was "actually the ice-breaker that will lay down those baselines and will provide the infrastructure", further adding that "The first proponent always has the most difficult run."¹⁹

C) Would the development of the 189 kilometre rail link and associated infrastructure to service the proposed Carmichael Coal Mine, authorised under EPBC Approval 2010/5736 for the Carmichael Coal Mine and Rail Infrastructure Project, facilitate, to a major extent, the development of any of the other proposed coal mining projects in the Galilee Basin in Queensland?

As is to be expected, Adani is building other important infrastructure for its Carmichael mine that will enable the progression of other coal projects in the Galilee Basin. This is the lot of the first mover in a new coal basin and is one reason why

¹⁷ <https://nqbp.com.au/our-ports/abbot-point>

¹⁸ <https://nqbp.com.au/our-ports/hay-point>

¹⁹ <https://www.abc.net.au/news/2019-06-12/adani-approval-could-be-galilee-basin-ice-breaker/11194510>

Adani have been offered a royalty holiday by the Queensland Government.²⁰ The Queensland Government is happy to provide such an incentive to the first mover, knowing that they can pave the way for other coal projects.

Adani is upgrading roads to give year-round access to the Carmichael mine.²¹ This will clearly be beneficial to other new mine project proposals in the vicinity.

Adani is also constructing a commercial airstrip that could be similarly useful for other mine projects and will enable fly in-fly out (FIFO) workforces to access other mine sites in the Northern Galilee Basin.²²

Adani would also need to build a local power generation and transmission capacity, given the absence of existing power infrastructure. This again could provide the base for an expanded electricity generation capacity that other mine proposals in the Galilee could leverage.

This physical infrastructure that Adani will need to construct in addition to the rail link can directly facilitate the other coal projects in the locality of Carmichael, namely the Hyde Park and China Stone projects.

In addition, Adani will need to have approved water use plans in place for its Carmichael mine. Although these plans and associated infrastructure may not be of direct use by other mine projects in the Basin, they will nonetheless set approval precedents for other projects which can then expect similar water use agreements to be approved for their own consumption. Other mine developments can also expect faster approval processes given such approvals would have already been assessed and approved for the Carmichael project.

Adani has approval to use groundwater to meet part of its water consumption needs at the Carmichael mine. QRC Chief Executive Ian Macfarlane has specifically noted that approval for Adani's groundwater plan provides a baseline that other coal projects in the Basin can work from in getting their own approvals.²³

The company also has the Northern Galilee Water Scheme under assessment.²⁴ This scheme involves infrastructure development to transfer floodwater from the Suttor River to Belyando Junction Dam, expansion of the dam, and a water pipeline from the dam to the mine site. Approval of this scheme will provide a template for other mine projects for approval of their own water plans.

²⁰ <https://www.abc.net.au/news/2017-05-18/queensland-government-gives-adani-royalties-holiday/8536560>

²¹ <https://www.adaniaustralia.com/-/media/191221%20-%20Adani%20partners%20with%20Mendi%20Group>

²² <https://www.abc.net.au/news/2019-06-13/adani-carmichael-coal-mine-approved-water-management-galilee/11203208>

²³ <https://www.abc.net.au/news/2019-06-12/adani-approval-could-be-galilee-basin-ice-breaker/11194510>

²⁴ https://www.adaniaustralia.com/-/media/Project/Australia/Fact-sheets/ADI0046_North-Galilee-Water-Scheme.pdf

The precedent set by Adani's water scheme approvals can facilitate every other coal project in the Galilee Basin. In addition, although the projects further south than Carmichael (Alpha, Alpha West, Kevin's Corner, Galilee Coal, Alpha North, South Galilee Coal and Degulla) wouldn't directly benefit from physical infrastructure such as the airstrip and road upgrades, Adani's approvals set the precedent for these other projects to receive approvals of their own and hence facilitate these mine proposals.

In my opinion, the Adani Group's development of a rail link to transport its Carmichael mine coal, along with other associated infrastructure it is building to run its mine, will facilitate the development of other mine projects in the Galilee Basin to a major extent. This will happen via direct use of that infrastructure by other mine projects or by providing precedent for other mine projects to apply for and receive their own environmental approvals.

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

About the Author

Tim Buckley

Director Energy Finance Studies, Australia/South Asia Tim Buckley has 30 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. For many years, Tim was a managing director, head of equity research at Citigroup, 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.

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Curriculum Vitae – Timothy Alister Buckley

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Employment History

Director, Energy Finance Studies, Australasia Institute for Energy Economics and Financial Analysis (IEEFA) (June 2013 – present)

- Publishing of financial analysis into energy projects that impact on the global transition to a low carbon economy, analysis of energy efficiency and renewables and evaluation of the associated risks to stranded assets in the fossil fuel sector, particularly the seaborne coal market for Australia.
- Presenting on global energy transformation at numerous energy finance conferences across China, India, Bangladesh, Singapore, Japan, U.S., Germany and Australia.

Arkx Investment Management - Managing Director (Jan 2010 – Aug 2013)

- Co-founder, Head of Equity Research and Joint Portfolio Manager for the *Arkx Global Clean Energy Fund*, Australia's first wholesale listed equities fund dedicated to low carbon. Arkx was part owned by Westpac Banking Group.
- Undertook investment research analysis into global listed company stock selection through to portfolio construction and maintenance. Maintained financial models on 100 of the world's leading firms most leveraged to the move to a low carbon future.

Shaw Stockbroking – Head of Equities (Feb 2008 –Jan 2010)

- Headhunted from Citi to take on a newly created position, Head of Equities. Responsible for oversight of Shaw's Research, Institutional Research Sales and Corporate Finance arms, leveraging an excellent retail equities advisor business.
- The role was designed to provide Shaw a leadership transition to allow the CEO to retire on a 3 year timeframe. The GFC's onset meant this transition did not eventuate.

Citigroup – Managing Director, Head of Equity Research (1998-2007)

- 2006-2007: Managing Director, Equity Research - Equity Capital Markets – Investment Banking co-ordination and transaction vetting. A member of the five person Australasian Commitments Committee (CC). Evaluation and approval of all initial public offering and equity market issuance roles of Citigroup. A key project in this time was the \$15bn bid for Alinta (jointly with Macquarie).
- 2002-2006: MD, Head of Research with a equity research staff of 100; Citigroup Australasia Executive (a management board of 8 covering Citibank, Diners Club, GCIB, Private Clients, Research & Insurance); Australasian CC; Equities Executive.
- 1998-2001: Deputy Head of Research, Appointed Managing Director in 2000.
- 1998-2003: Equity Market Research in the Diversified Industrials and Beverages sectors. Key stocks included Wesfarmers, Foster's, Pacific Dunlop, Southcorp, Lion Nathan, CC Amatil and BRL Hardie.

Deutsche Morgan Grenfell Asia – Director, Head of Equity Research (1996-98)

- Singapore based, Tim was co-head of DMG Singapore Equities, and worked closely with our retail equity partner, DMG & Partners (Singapore), a top 10 institutional and retail broker covering Singapore and Malaysia.
- Equity Market Research in the Asia Region Pulp & Paper (P&P) Sector.
- Singapore Equity Strategist / Head of Research with a team of 20.

County Natwest Securities – Director, Senior Equity Analyst (1992-1996)

- Equity Market Research in the Diversified Industrials, Beverages and P&P sectors. Key stocks under coverage included Foster's, BTR Nylex, Pacific Dunlop, Southcorp, Lion Nathan, Amcor, Fletcher Challenge, Carter Holt Harvey, Spicers Paper, Howard Smith, Wesfarmers and FIF.
- Career highlights: consistently ranked Top 3 in the Diversified Industrials, Beverages and P&P categories; and being ranked by BRW as Australia's top analyst in 1994/5.

Macquarie Equities – Senior Industrial Analyst (1988-1991)

- Equity Market Research in the Diversified Industrials sector. Key stocks covered included: Elders IXL, BTR Nylex, Pacific Dunlop, Southcorp, AFP and Wormald.
- Career highlights included being black-banned by Elders IXL's CEO John Elliott, and achieving Top 3 rankings in the Diversified Industrials category of the BRW and ABM analyst polls.

Education

HSC achieved at Barker College Hornsby (graduating in 1984, Top 1% in NSW)

Bachelor of Business, University of Technology, Sydney (1985-87)

- Graduated with Distinction
- Double Major in Accounting and Finance, Minors in Marketing and Computing

Lecturer in Finance and Accounting, University of Technology, Sydney – 1988

Post Graduate studies in Finance at Macquarie University – 1988

Lecturer in SIA – Advanced Equity Market Analysis 1990-1991

American Securities Exams Series 7 Financial Analysts – 1998
Series 24 General Securities Representative Exam- 2003

ASIC required PS146 Registered Representative – 2003-2010

ASX Responsible Executive exam – 2008

A Selection of Recent Major Reports Published

- [*“Stranded: A Financial Analysis of GVK’s proposed Alpha Coal project in Australia’s Galilee Basin”*](#) in June 2013.
- [*“Remote Prospects: A Financial Analysis of Adani’s coal gamble in Australia’s Galilee Basin”*](#) in November 2013.
- [*“Shenhua Watermark Coal: A Stranded Asset”*](#), November 2014.
- [*“A Better Way Forward for Electrification in Bangladesh”*](#), November 2016
- [*“Japan: Greater Energy Security Through Renewables”*](#), March 2017
- [*“SOE Utility NTPC Takes a Lead Role in India’s Electricity Transition”*](#), May 2017
- [*“Hume Coal Update 2017: Superior Alternatives Are Available”*](#), July 2017
- [*“Winners and Losers Among Big Utilities as Renewables Disrupt Markets Across Asia, Europe, the U.S., and Africa”*](#), October 2017
- [*“India’s Electricity Sector Transformation”*](#), November 2017.
- [*“China in 2017 Positioned for Global Clean Energy Dominance”*](#), Jan 2018
- [*“Tamil Nadu’s Electricity Sector Transformation”*](#), February 2018
- [*“Adani Godda Project: Too Expensive, Late and Risky for Bangladesh”*](#), April 2018
- [*“Solar Energy Advances Accelerate Global Shift in Electricity”*](#), May 2018
- [*“Marubeni’s Coal Problem: A Japanese Power Business Is at Risk”*](#), July 2018
- [*“Karnataka’s Electricity Sector Transformation”*](#), July 2018
- [*“India’s stranded asset risk in thermal power sector underestimated”*](#), Dec 2019

28 February 2020

Tim Buckley
Director Energy Finance Studies, Australia/South Asia
Institute for Energy, Economics and Financial Analysis

By email: tbuckley@ieefa.org

CONFIDENTIAL AND PRIVILEGED

Dear Mr Buckley

Re: Independent expert report

1. We act for Ms Claire Galvin from Cairns, Queensland.
2. Our client wishes to retain your services to provide an independent expert report on matters relevant to your area of expertise.
3. The matter concerns whether new information, if considered by the Minister for the Environment, would have led to them not granting the approval of the Carmichael Coal Mine under the *Environmental Protection and Biodiversity Conservation Act 1999*.
4. The task we would like to ask you to undertake, as an independent expert, is to:
 - review the relevant information contained in the attached Expert Evidence Practice note; and
 - provide your expert opinion, in the form of a written report, in response to each of the questions at paragraph 10 below.

Your duty as an expert

5. Please read the **attached** Federal Court of Australia's *Expert Evidence Practice Note* and Annexure A to it, which is the *Harmonised Expert Witness Code of Conduct* ('**Expert Witness Code of Conduct**'). Please ensure that you prepare your report in accordance with the Expert Evidence Practice Note and that you familiarise yourself with and abide by the Expert Witness Code of Conduct.
6. The manner in which you present the information in your report is a matter for you, provided the material is presented in a form which is clear for a court, should the matter become litigious.
7. In order for your report to be admissible as expert evidence, in the event that this matter becomes litigious, it must comply with the enclosed Expert Evidence Practice note, including the Expert Witness Code of Conduct. Please ensure that your report is consistent with the Expert Witness Code of Conduct and contains each of the items identified in paragraph 3 of that Code.

8. Please include in your report a description of your qualifications and experience, including any relevant publications or research. It is acceptable for this to be done by way of attaching a current curriculum vitae. In outlining your experience we would request that you detail any particular knowledge, experience or qualifications you have in relation to the questions.
9. We request that you provide us with a draft of your report for review before finalising it. We emphasise that the purpose of this is not to influence the conclusions or recommendations you make, but to ensure that the language and expression of the report is clear and complies with the formal legal requirements of an expert report.

10. **Questions**

- a) What coal mining projects are currently proposed in the Galilee Coal Basin in Queensland? In your response, please provide details of the planned coal output per year for each of those projects.
 - b) Would the development of the 189 kilometre rail link to service the proposed Carmichael Coal Mine, authorised under EPBC Approval 2010/5736 for the Carmichael Coal Mine and Rail Infrastructure Project, facilitate, to a major extent, the development of any of the other proposed coal mining projects in the Galilee Basin in Queensland?
 - c) Would the development of the 189 kilometre rail link and associated infrastructure to service the proposed Carmichael Coal Mine, authorised under EPBC Approval 2010/5736 for the Carmichael Coal Mine and Rail Infrastructure Project, facilitate, to a major extent, the development of any of the other proposed coal mining projects in the Galilee Basin in Queensland?
11. Please contact me if you require any further assistance or information for the preparation of your report.
 12. Unfortunately our client is not in a position to offer expert fees. We are hoping you will consider providing this expert report on a pro bono basis.
 13. Our client would like to receive your expert report by **Friday the 13thth of March 2020**. This timing is negotiable based on your availability.

Yours sincerely,



Ariane Wilkinson
Senior Lawyer

Attachment - Expert Evidence Practice Note