

Pleasant Dreams Submission on the Mount Pleasant Optimisation Project economic assessment

Claims of around \$1 billion in benefits from the Mount Pleasant coal proposal are based on an assumption that large volumes of low quality coal can be sold at today's prices out to 2048. This is unrealistic as it ignores recent write downs, the 11 other new coal projects recently proposed in NSW and the world's efforts to tackle climate change. A 17% change in coal price would erode the financial case for the Mt Pleasant project.

1

Submission

Rod Campbell Tony Shields March 2021

ABOUT THE AUSTRALIA INSTITUTE

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

OUR PHILOSOPHY

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

OUR PURPOSE - 'RESEARCH THAT MATTERS'

The Institute aims to foster informed debate about our culture, our economy and our environment and bring greater accountability to the democratic process. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. As an Approved Research Institute, donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at https://www.tai.org.au or by calling the Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

2

Level 1, Endeavour House, 1 Franklin St Manuka, ACT 2603 Tel: +61 2 61300530 Email: <u>mail@australiainstitute.org.au</u> Website: www.australiainstitue

Summary

The economic assessment of the Mount Pleasant project overstates the benefits of the project and understates its costs. This assessment should not be used as the basis for a recommendation of approval by the Department of Planning, Industry and Environment (DPIE).

The assessment is based on strong demand for low quality coal, that would see the project sell 15 million tonnes of coal to the year 2044 and smaller volumes to 2048. It is an unrealistic assumption that such volumes of low quality coal will be saleable for decades at roughly today's coal prices.

This view is strengthened by BHP's recent write down of its much larger Mt Arthur mine to \$387 million, while the Mt Pleasant assessment claims \$1.1 billion in present value producer surplus. In fact, the numbers in the economic assessment suggest it would only take a detrimental change of 17% in the coal price, volume produced, or production costs to make the project marginal.

The economic assessment should have considered a scenario in line with the Paris Agreement, where traded coal volumes decline substantially in the coming years, as recommended by the Independent Planning Commission and analysts commissioned by the DPIE. Mt Pleasant's analysts note that their modelling framework "is not well suited to capture the impacts of material shocks" like this.

The assessment does not consider the cumulative impact of the other eleven new NSW coal projects that were added to the Major Projects list in 2020. The claimed economic benefits of all these projects will not be realised, and it is unclear why Mt Pleasant should stand out from these other projects.

The economic assessment understates environmental costs by assuming that management and mitigation measures are perfectly effective. This is clearly not the case – the Upper Hunter has the worst air quality in NSW, causing major health impacts. Greenhouse gas emissions are also downplayed, with no discussion of scope 3 and the full value of scope 1 & 2 emissions, up to \$354 million, is listed only on p37, rather than featuring prominently in sections likely to be noticed by decision makers.

Company tax payments are likely to be overstated and indirect impacts are estimated by using discredited input-output modelling.

The Mt Pleasant economic assessment is not unique in overstating its benefits and understating its costs. There is an extensive literature on systemic biases in project

3

assessment, particularly around strategic misrepresentation, optimism bias, planning fallacy and principal-agent problems. Numerous studies highlight how common cost over-runs and revenue shortfalls are in mining assessments.

Recent comments by DPIE officials to the Independent Planning Commission were that the Department's consideration of economic assessment is focused not on whether it is accurate or based on robust data, but whether it complies with guidelines. In our view, this explains the Department's long record of basing recommendations of coal project approval on misleading economic analysis. It also means that public submissions that point out flawed assessment are likely to be ignored by the Department, but we are hopeful of a 'Pleasant' surprise.

Introduction

The Australia Institute welcomes the opportunity to make a submission to the NSW Department of Planning, Industry and Environment on the Mount Pleasant Optimisation Project (the Project). This submission focuses on the economic assessment (the Assessment) of the Project, prepared by consultants AnalytEcon, Appendix O of the Environmental Impact Statement (EIS).¹

Like all commissioned economic assessments of coal mines in NSW, AnalytEcon's assessment overstates the benefit of the project and understates its costs. It presents an unrealistic estimate of the net benefit of the project, principally by ignoring the likely future of the coal market if the world is to avoid dangerous climate change, as NSW and Australian Governments have committed to do.

¹ AnalytEcon (2021) *Appendix O: Economic Assessment,* https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef =SSD-10418%2120210201T004517.605%20GMT

Future coal production

AnalytEcon's estimates of the economic value of the Mount Pleasant project are based on an assumed production schedule that sees the project producing 15 million tonnes of coal to the year 2044 and smaller volumes to 2048. Much of this coal is low quality, with the bulk of production assumed to be 5,500 kilocalories per kilogram (kcal/kg) and around two million tonnes per annum (mtpa) just 5,000kcal/kg. The Newcastle Benchmark specifications for thermal coal are above 6,000 kcal/kg.

It is an unrealistic assumption that such volumes of low quality coal will be saleable for decades at roughly today's coal prices. AnalytEcon's estimate that the project would generate present value producer surplus of \$1,110 million should be seen in the context of the Hunter coal industry, where major companies are selling out, or in the case of BHP's Mt Arthur mine, struggling to sell out. Mt Arthur is a much larger mine than Mt Pleasant, yet BHP recently revised its value down by US\$1.2 billion to around US\$300 million (A\$387 million).²

AnalytEcon are silent on the fact that Hunter coal mines are now fighting for a share of a smaller market and a market that is expected to decline dramatically if climate policies are implemented in line with the Paris Agreement. The Project is competing against other Hunter coal mines. Its expansion will, to some extent, come at the expense of existing Hunter mines.

Figure 1 below shows the International Energy Agency (IEA)'s estimates for global coal demand under its three modelled scenarios. The green line labelled "SDS" represents the sustainable development scenario' in line with the Paris Agreement.

² BHP (2021) *BHP operational review for the half yearended 31 December 2020*, https://www.bhp.com/-/media/documents/media/reports-and-

 $presentations/2021/210120_bhpoperational review for the half year ended 31 december 2020. pdf? la=ended 31 december 2020. pd$





Figure 1 shows that under the SDS scenario coal demand declines significantly in the years ahead, reducing by two thirds by 2040. This would have a major effect on the Project's volume of coal sold and the price received as the IEA expects the volume of traded coal to decline from over 1,100 million tonnes per annum (Mtpa) in 2017 to 815Mtpa in 2025 and 518Mtpa in 2040.³

We note that in its decision regarding the Bylong Coal Project, the Independent Planning Commission "considers that the SDS represents a market scenario which should have been considered" and that "the Commission considers that the Applicant should have tested the SDS".⁴ In the Department's commissioned review of the Tahmoor project economic assessment, BIS Oxford Economics wrote:

³ IEA (2018) World Energy Outlook 2018, table 5.1, <u>www.iea.org</u>.

⁴ Independent Planning Commission (2019) *Statement of reasons for decision: Bylong Coal Project,* p139. <u>bylong-coal-project-ssd-6367--statement-of-reasons-for-decision.pdf (nsw.gov.au)</u>

Figure 2: Extract from BIS Oxford Economics review of Tahmoor coal project on future coal markets

As indicated, and although not mentioned in the Guidelines, an additional risk is obviously the question of global demand for coal (and justification for the export of Australian coal) given increasing concerns about global warming impacts. These concerns have been rising in recent years and may well sharpen during the lifetime of the project (2020-2035). Obviously this would affect the financial viability of the TSCP itself, however to the extent that this would also impact on NSW this is also a relevant issue. In short, there is arguably a risk that costs of mine development impact the State but the full benefits (e.g. taxation benefits) are never realised. This may be an issue the Department could further examine.

Source: BIS Oxford Economics (2020) page 15

Echoing this sentiment from BIS Oxford Economics, AnalytEcon note that the approach taken in economic assessment of coal mines in NSW "not well suited" to consider the impacts on a project valuation of a change such as a major shift in coal demand:

It should be noted, however, that the CBA model framework is not well suited to capture the impacts of material external shocks. In such circumstances, management would be expected to respond, for instance, by changing production or cutting expenses. In contrast, the CBA model takes the production profile, as well as operating, capital, and labour costs as fixed, so that royalty payments to the NSW Government would continue to be made while the producer surplus would turn negative.⁵

AnalytEcon deserve credit for noting this fact. No other economic analysis of a coal mine in NSW that we are aware of has ever acknowledged the possibility that financial considerations could stop or scale back a project, reducing claimed economic benefits. We disagree, however, that it is beyond economic analysts' capability to inform decision makers of the chances of such changes and the magnitude of their impacts. AnalytEcon have been provided with sufficient data to estimate what cost and revenue changes would be required for returns to the proponents to reach levels that would see production cut back or halted. It is their choice, or perhaps their client's instructions, that has prevented this information being made available to decision makers.

The Assessment (p55) indicates that coal prices would have to fall 48% for the project to have a zero NPV. However, the Net Producer Surplus calculations (Table A-1)

⁵ AnalytEcon (2021) *Appendix O: Economic Assessment*, p55

indicate it would take much smaller negative changes to make the Net Producer Surplus negative and uneconomic. In NPV terms, total revenue is \$10,620 million and total costs (\$9,526 million) less company tax (\$630 million) is \$8,896 million. A detrimental change of around 17% in the coal price, volume produced, or production cost is all that is needed to make the net producer surplus negative, ie the project runs at loss. Moreover, a detrimental change of over 17-19% in a combination of all three factors that will result in the project being uneconomic is *highly* likely as discussed below in *'Project assessment literature and over-estimation of net benefits'* (eg coal price 15% lower than forecast, coal production 10% lower than expected, production cost 5% better than expected). On this basis alone, the project should not be approved as it is highly likely that it would be abandoned over its life.

Related to the potential future slump in coal demand is the current surge in NSW coal project applications. As the reality of a low-carbon future begins to clarify the risk of stranded assets, there has been a rush for proponents to push projects towards development. Eleven new coal projects in NSW were added to the federal Office of Chief Economist's Major Projects list in 2020, far more than in any other recent year. These projects have a combined capacity of almost 70 mtpa, as shown in Figure 3 below:



Figure 3: New NSW coal projects added to Major Projects list by year

Source: Office of Chief Economist (Various years) Resource and Energy Quarterly, https://www.industry.gov.au/publications/resources-and-energy-quarterly

If all the new coal projects proposed in 2020, and in earlier years, are assessed without consideration of the future coal market conditions, or of their cumulative impacts, then their benefits will certainly be overstated.

Environmental costs

AnalytEcon assumes that all environmental costs (aside from greenhouse gas emissions) of the project are perfectly offset by mitigation and management measures. This is an inappropriate assumption, particularly given the poor air quality seen in the Upper Hunter in recent years.⁶ We note comments that:

Doctors for the Environment.... calculated that over the last five years pollution from PM10 alone has caused at least 160 more deaths in the Upper Hunter than would otherwise have occurred......

"Exposure to particle pollution from coal mining also adds an increased burden on the community in terms of the cost of health care. So in the town of Singleton we're looking at approximately \$47 million of an increased burden on the health care system and \$18.3 million in Muswellbrook.⁷

NSW Guidelines (p8) require that the cumulative effects with existing projects in the area should be assessed. This has not been done, instead it is assumed that air quality problems will be ameliorated. This seems absurd given Mt Pleasant and the neighbouring Bengalla mine are within three kilometres of Muswellbrook and another three mines are also nearby.⁸ (We note that one of those three, Bengalla Mine has applied to extend its operations). In 2019 there were more than 1000 air quality alerts in the Upper Hunter. While bushfire smoke was a significant factor, 'even in ideal weather conditions, the PM10 levels, predominantly due to dust from open cut mining operations, continue to exceed national standards.⁹

Perhaps the most important aspect of the Mt Pleasant project is its impact on greenhouse gas emissions. As the world attempts to keep carbon out of the

⁶ ACF (2018) The dirty truth: Australia's most polluted postcodes,

https://www.acf.org.au/stronger_air_pollution_standards_needed_to_protect_poorer_australians; ⁷ Nichols (2021) Benefits of Mangoola mine extension questioned, https://www.singletonargus.com.au/story/7158923/benefits-of-mangoola-mine-extension-

questioned/?cs=1534&utm_source=website&utm_medium=story&utm_campaign=sidebar ⁸ AnalytEcon (2021) Table 2-2

⁹ Nichols (2020) *Record air quality alerts for the Upper Hunter in 2019 prompt renewed calls for a clean air strategy*, <u>https://www.singletonargus.com.au/story/6791773/calls-for-the-implementation-of-a-clean-air-strategy/</u>

atmosphere, this project is designed to take tens of millions of tonnes of carbon out of the ground and into the atmosphere.

Basic economic theory is that increasing the supply of a good reduces its price and, all other things being equal, increases its consumption. To some degree, this project would decrease the price of coal and result in more coal being burned in the world. AnalytEcon entirely ignore this discussion and fail to even mention scope 3 emissions.

AnalytEcon disclose the full value of scope 1 and 2 emissions at a range of social costs of carbon, something many analysts in NSW coal assessments fail to do. This cost ranges between \$124 million and \$354 million. These major social costs should be prominent in consideration of the project, rather than being only found on p37.

AnalytEcon multiply the social cost of climate impacts by the ratio of NSW GSP to global GDP. NSW's GSP represents 1% of the world GDP, so the cost benefit analysis includes a value of just 1% of the \$227 million cost, approximately \$700,000.

From a strict cost benefit analysis perspective, this approach is appropriate. The scope of the analysis is costs and benefits to the NSW community, so costs to the rest of the world are omitted. Consistent with this approach, the analysts exclude profits of the project from its analysis as these accrue to non-NSW residents. However, it ignores the cumulative effect of the many NSW coal mines and also the inter-generational impact of climate change. Both cumulative and inter-generational impacts are required to be assessed by NSW Guidelines (p8 and p19).

However, this approach serves to hide a significant cost of the project from decision makers. It should have made it clear in the introductory text of their report that an impact of this magnitude exists, even if only a fraction of it is included in the final estimate of net present value. This would provide decision makers and the community with a proper understanding of the climate impacts of the project.

Project assessment literature and over-estimation of net benefits

The over-estimation of benefits, and underestimation of costs, seen in the Mt Pleasant economic assessment is typical of project assessment generally. There is an extensive literature on systemic biases in project assessment. These biases mean a project will rarely provide the benefits estimated in assessment documents and will often underestimate costs and risks. These biases are:

- Strategic misrepresentation project promoters over-state benefits and understate the costs in order to get a project approved;
- Over-optimism proponents are, on average, naturally over-optimistic;
- Planning fallacy humans often fail to imagine all the ways a project could go wrong;
- Principal-agent problem the incentives faced by management are not necessarily to make profits. Often managers are incentivised to pursue growth or other goals rather than investors' interests, and management often leave a company before the consequences of poor project selection and development are felt.

These biases have been highlighted by: economics Nobel Prize winner Daniel Kahneman and colleague Amos Tversky; and the world's most cited mega-project scholar, Bent Flyvbjerg.¹⁰ Flyvbjerg explains why project modelling should be treated sceptically:

Success in megaproject management is typically defined as projects being delivered on budget, on time, and with the promised benefits. If, as the evidence indicates, approximately one out of ten megaprojects is on budget, one out of ten is on schedule, and one out of ten delivers the promised

¹⁰ Kahneman & Tversky (1979) Prospect theory: An analysis of decisions under risk, Econometrica, 47, p 313–327; Kahneman & Tversky (1979) Intuitive prediction: Biases and corrective procedures, in Makridakis & Wheelwright (eds) Studies in the Management Sciences: Forecasting, vol 12. Flyvbjerg (2008) Curbing Optimism Bias and Strategic Misrepresentation in Planning: Reference Class Forecasting in Practice, European Planning Studies 16:3-21, p9

https://www.researchgate.net/publication/233258056 Curbing Optimism Bias and Strategic Misre presentation_in_Planning_Reference_Class_Forecasting_in_Practice

benefits, then approximately **one in one thousand projects is a success**, defined as "on target" for all three. Even if the numbers were wrong by a factor of two—so that two, instead of one out of ten projects were on target for cost, schedule, and benefits, respectively - the success rate would still be dismal, now eight in one thousand. This serves to illustrate what may be called **the "iron law of megaprojects**": **Over budget, over time, over and over again. Best practice is an outlier, average practice a disaster** in this interesting and very costly area of management.¹¹

More often than not the information that promoters and planners use to decide whether to invest in new projects is highly inaccurate and biased making plans and projects very risky.¹²

While Flyvbjerg focuses on 'megaprojects', projects larger than the Mt Pleasant Extension, the systemic biases towards over-statement of profits and understatement of costs and time to completion is widespread in the resources industry. In 2014, Christopher Haubrich, a mining analyst, gave a paper titled "Why Building a Mine on Budget is Rare: A Statistical Analysis".¹³ Haubrich constructed a database of 50 mining projects and found that capital cost overruns are significant and persistent with average cost overruns of 20%–60% recorded since 1965. Many projects run over cost by much greater percentages – as shown in Figure 4 below:

http://www.canadian-german-mining.com/files/events/2014-10-16 CIM MES Rocks Stocks/3 Chris Haubrich Why Building A Mine on Budget is Rare -A Statistical Analysis.pdf

¹¹ Flyvbjerg (2014) What you should know about megaprojects and why: An Overview, p11, emphasis added, https://www.researchgate.net/publication/261411676_What_You_Should_Know_About_Megaproject s_and_Why_An_Overview/link/59fbaad60f7e9b9968bb03ff/download

 ¹² Flyvbjerg (2008) Curbing Optimism Bias and Strategic Misrepresentation in Planning, p5, emphasis added.
¹³ Haubrich (2014) Why Building a Mine on Budget is Rare: A Statistical Analysis, 16 October 2014,





Source: Haubrich (2014), p22.

Figure 4 shows that only one of the mining projects in Haubrich's sample saw capital costs below what had been estimated, three came in on budget, and the vast majority saw cost overruns between 1.1 and 2 times what was estimated. Blowouts past double expected capital costs were not uncommon.

Furthermore, Haubrich found that that marginal projects are likely to have larger cost overruns. Haubrich stated that this was because when projects are marginal, the incentive is to "sharpen your pencils" and reduce cost estimates in order to make the project numbers viable. Interestingly, Haubrich found no relationship between the cost of the project and cost overruns. Other research has made similar findings.

McKinsey found more than four out of five mining projects come in late and over budget, by an average of 43%.¹⁴

KPMG found across seventeen greenfield projects the average cost overrun was 95% above original estimate.¹⁵

¹⁴ McKinsey (2017) Getting big mining projects right: Lessons from (and for) the industry, https://www.mckinsey.com/industries/metals-and-mining/our-insights/getting-big-mining-projectsright-lessons-from-and-for-the-industry#

¹⁵ KPMG (2015) Insights into Mining: Issue #4,

https://assets.kpmg/content/dam/kpmg/pdf/2015/08/insights-into-mining-issue-4-july-2015.pdf

EY found that mining projects run over-budget by an average of 62%, and that 50% of projects report delays. Only 31% of projects came in on budget. EY quoted media coverage of some projects with cost overruns:

A major copper and gold operation in Central Asia: The National Finance Minister had been quoted as saying: "No one understands why the project has gone US\$2b over budget."

A major iron ore project in Brazil: To date, the project has experienced an overrun from the initial estimate of approximately 690%. The chief executive officer of the company has gone on record to say that "they are working very hard" to ensure no more delays or cost overruns on the project.

A Brazilian megaproject: This project saw capital costs escalate from US\$3.6b in 2007 to US\$8.8b in 2013. Media sources have described this investment as one of this organization's "most significant failures of recent years."¹⁶

Notably all these studies just focus on cost over-run rather than revenue shortfall. When the likelihood of a revenue shortfall is factored in, it would be rare that a mining project actually does provide the net benefits it claims.

It is against this background literature on project assessment that the Project should be examined.

¹⁶ EY (2015) Opportunities to enhance capital productivity: Mining and metals megaprojects, <u>http://www.ey.com/Publication/vwLUAssets/EY-opportunities-to-enhance-capital-productivity/\$FILE/EY-opportunities-to-enhance-capital-productivity.pdf</u>

Company Tax payments

The Australia Institute has pointed out many times that economists fail to accurately predict tax payments relating to specific projects.¹⁷ The application of the headline company tax rate to surpluses estimated in cost benefit analysis, as AnalytEcon does in the Assessment, is certain to overstate tax payments that can be reduced by a range of more and less legitimate factors. In 2018 we highlighted how economic modelling of tax payments by Australian oil and gas projects has notoriously over-estimated actual tax payments (Table 1).¹⁸ An analysis of mining projects, including the Project, is likely to be little different.

Company/project	Consultants	Full report available?	Key tax claims	Comments on actual federal tax paid
Offshore Projects				
Chevron - Gorgon/Wheatstone	ACIL Allen 2015	No	\$338 billion in federal taxes to be paid from 2009 to 2040 ¹⁹	Chevron paid no corporate tax in 2013/14, 2014/15 and 2015/16 despite reporting revenue totalling \$9.2 billion for those three years
Inpex - Ichthys	ACIL Allen	No	\$73 billion in total taxes to be paid from 2012 to 2050 ²⁰	Inpex reported revenue totalling \$4.6 billion for 2013/14, 2014/15 and 2015/16 and paid only \$0.1 billion in corporate tax for those three years
Shell - Prelude	Internal	No	\$12 billion in taxes will be paid ²¹	Prelude will start production in 2018. Shell reported revenue totalling \$47.5 billion for

Table 1: Economic assessment of tax payments from oil and tax projects

¹⁷ Campbell (2015) Draft guidelines for economic assessment of mining and coal seam gas proposals Submission, <u>https://www.tai.org.au/content/draft-guidelines-economic-assessment-mining-and-coal-seam-gas-proposals</u>

¹⁸ Campbell and Shields (2018) We'll pay taxone day: Submission to Senate Inquiry into Corporate Tax Avoidance, https://australiainstitute.org.au/report/well-pay-tax-one-day-submission-to-senate-inquiryinto-corporate-tax-avoidance/

¹⁹ ACIL Allen (n.d.) A Snapshot Of Chevron's Realised And Forecast Economic Benefits In Australia http://www.acilallen.com.au/cms_files/ACILAllen_Chrevon2015.pdf

²⁰ ACIL Allen (n.d.) An Economic Impact Assessment: The Ichthys LNG Project :http://www.inpex.com.au/media/2967/2240 acil-allen-brochure-2 web.pdf

²¹ Validaris (2013) *Prelude project will inject \$45bn to Australian economy: Shell* <u>https://www.australianmining.com.au/news/prelude-project-will-inject-45bn-to-australian-economy-shell/</u>

				2013/14, 2014/15 and 2015/16 and paid only \$1.1 billion in corporate tax for those three years.
Onshore Projects				tax for those three years.
Santos - Narrabri	ACIL Allen (2016)	Yes	\$1.4 billion in company taxes to be paid 2017 to 2042 (\$3.1b in total taxes to be paid) ²²	Santos paid no corporate tax in 2014/15 and 2015/16 and only \$3 million in corporate tax in 2013/14. Over those three years it reported revenue totalling \$11.2 billion.
Coal seam gas development in Qld	ACIL Tasman (2012)	Yes	\$228 billion in federal taxes to be paid from 2011 to 2035 ²³	Qld coal seam gasfields have produced less gas than forecast and the three Gladstone LNG have had larger writedowns indicating tax paid will be much less than forecast.
Arrow LPNG plant	AEC Group (2011)	Yes	\$13.1 billion in federal taxes to be paid from 2013/14 to 2029/30 ²⁴	Arrow's parent company, Shell reported revenue totalling \$47.5 billion for 2013/14, 2014/15 and 2015/16 and paid only \$1.1 billion in corporate tax for those three years.
APPEA – Economic impact of shale and tight gas development in the NT	Deloitte Access Economics (2015)	Yes	\$961 million increase in NT Government revenue over the period 2020-2040 ²⁵	Later report for NT Fracking Inquiry by ACIL Allen found "very high" probability of "failure to commercialise". ²⁶

Sources: see footnotes and ATO (2017) *Corporate Tax Transparency*, <u>https://data.gov.au/dataset/corporate-transparency</u>

²² ACIL Allen (2016) Narrabri Gas Project – Economic Impact Report, p30

²³ ACIL Tasman (2012) *Economic significance of Coal Seam Gas in Queensland*, p101 <u>http://www.acilallen.com.au/cms_files/ACIL_CSG_Queensland_2012.pdf</u>

²⁴ AEC Group (2011) *Economic Impact Assessment: Arrow LNG Plant*, p56.

²⁵ Deloitte (2015) Economic impact of shale and tight gas development in NT, <u>https://www.appea.com.au/wp-content/uploads/2015/08/APPEA_Deloitte-NT_Unconv_gas_FINAL-140715.pdf</u>

²⁶ ACIL Allen (2017) The economic impacts of a potential shale gas development in the Northern Territory, <u>https://frackinginquiry.nt.gov.au/inquiry-reports?a=465934</u>

Flow-on benefits

The Assessment Report highlights flow-on effects on income and employment (Table 4-1). The use of input-output modelling in project assessment in NSW has been controversial for many years. In the context of uncertainty around the future of the project and the export coal market, the inappropriateness of relying on such estimates is compounded.

Conclusion

The Australia Institute considered not making a submission on the Mt Pleasant project proposal. Even though the economic assessment has clear flaws and overstates the value of the project, topics we have recognised expertise in, recent comments made by Department of Planning, Industry and Environment officials make it unclear whether our submissions, or anyone else's, are worthwhile. At the public hearing into the Mangoola project, Department officials were asked to address criticism of that project's economic assessment. The answer from Executive Director for Assessments Mike Young is worth quoting at length:

Clearly the Australia Institute has a particular view about the calculation of costs-benefits associated with coalmines and presents at all of these hearings that occur in regard to coalmines. Our obligations are to ensure that economic assessments are undertaken in accordance with the relevant guidelines, and we're satisfied that the assessment undertaken in the EIS and presented to the Commission is consistent with those guidelines.

I guess, at the end of the day, you know, different experts can have different views about the technical aspects of how things are assessed in a cost-benefit analysis and the sensitivities around the assumptions to be included in there, around coal price and other things, or local effects and the benefits associated with spending of wages in the local area and all those sorts of things. I guess our role here is to present to you something that's consistent with government guidelines. We are satisfied that the assessment is consistent with those guidelines.

Mr Young's view that it is his obligation to provide analysis that complies with guidelines, rather than analysis that accurate, is astonishing. As long as guidelines have been arguably met, Mr Young is content to take commissioned economic assessment "on its face". Commissioner Cochrane pushed Mr Young and Director of Resource Assessment Matt Sprott on this point in the same public hearing:

MR COCHRANE: But your analysis of that really – hearing Mike's comments, your assessment of that is really whether or not that approach was consistent with the relevant guidelines, not on the actual data that was used. Is that correct?

MR SPROTT: Yes, whether the – sorry, Mike, you go.

MR YOUNG: Go, Matt. You go. You go. That's fine.

MR SPROTT: No. I was just going to clarify that, yes, our consideration has been whether the approach undertaken has been appropriately consistent with guidelines.

According to these senior DPIE officials, the Department is not interested in the accuracy of the data that economic assessment is based on, only if the assessment (arguably) complies with relevant guidelines. Proponents are free to provide optimistic estimates to their consultants, who use these estimates to provide misleading analysis to the Department. Regardless of public submissions pointing out the misleading nature of the data and assessment, the Department is only concerned with guidelines.

The Australia Institute has made submissions on coal mines and other planning issues in NSW for a decade. Courts and planning commissions have sometimes been persuaded by our submissions. But the Department never has and now we know why.

The Mount Pleasant Economic assessment broadly complies with the *NSW Guidelines for the economic assessment of mining and coal seam gas proposals.* In fact, AnalytEcon's analysis is more transparent than that of other analysts and does not include discredited values (such as supplier and worker benefits) in its calculations.

There is nothing in the guidelines that prevents the Mt Pleasant economic assessment from assuming that huge volumes of low quality coal will sell for high prices into the 2040s. We, and doubtless others, have now pointed out the flaws in that assumption. It is now up to the Department to do its job and require a major revision of the economic assessment before making its recommendations. Is this just a pleasant dream?