# We’ll pay tax ….one day

## Submission to Senate Inquiry into Corporate Tax Avoidance

***Oil and gas companies often commission economic reports to claim future tax revenues will be large. These forecasts are based on modelling that is unreliable and not transparent.***

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# Introduction

The Australia Institute welcomes the opportunity to make this submission to the Senate Inquiry on Corporate Tax Avoidance. The issue of tax avoidance by multinational companies has been a research focus of the Institute for some time. While issues of declining PRRT payments and low company tax payments are becoming widely known, particularly due to this committee's work, another important part of public discussion is the claims by corporations that they are actually large tax payers.

Often these claims are based on reports the companies or their lobby groups commission from economic consultants. These reports use various methods to calculate future tax payments by companies, or future tax revenues that governments could receive from wider economic activity based on clients' projects. Invariably, the consultants' work is presented as being certain, precise and scientifically derived by the use of economic models.

However, the future is not certain, economic models are unscientific and often "precisely wrong rather than vaguely right''. They depend on a huge number of assumptions that are inherently subjective. These assumptions are routinely not disclosed in the modelling reports, let alone the company media statements that follow. In some cases, the modelling reports themselves are not made public, meaning no scrutiny can be given to these claims. Furthermore, the claims in commissioned reports are rarely compared to real world data on recent tax payments by the companies to ascertain whether the models are producing realistic results.

These reports often receive media coverage with little scrutiny and weaken the public's understanding of tax issues. In this submission we outline some of these reports, their key results and their key flaws.

A driver of this problem is the lack of professional standards in the economics consulting industry. The Australia Institute has long advocated for a code of conduct for economic modellers that would assist with transparency and reporting of commissioned economic modelling. We would be happy to expand on this submission further, either in writing or before a hearing of the committee.

# Economic models, tax, oil and gas

Table 1 below summarises reports commissioned by the oil and gas industry that have been used in public debate, official submissions and media articles, that give the impression oil and gas companies are large tax payers.

### Table 1: Oil and gas industry commissioned economic reports

| 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[1] | 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[2] | 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[3] | Prelude will start production in 2018. 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. |
| **Onshore Projects** | | | | |
| **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)[4] | 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. |

[1] 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

[2] 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

[3] Validaris (2013) *Prelude project will inject $45bn to Australian economy: Shell* https://www.australianmining.com.au/news/prelude-project-will-inject-45bn-to-australian-economy-shell/

[4] ACIL Allen (2016) *Narrabri Gas Project – Economic Impact Report*, p30

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|---|---|---|---|---|
| **Coal seam gas development in Qld** | ACIL Tasman (2012) | Yes | $228 billion in federal taxes to be paid from 2011 to 2035[5] | 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[6] | 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[7] | Later report for NT Fracking Inquiry by ACIL Allen found "very high" probability of "failure to commercialise".[8] |

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

Table 1 is not an exhaustive list of such reports. Many other examples exist from the oil and gas industry and project proponents from other industries and interest groups.

A key point from Table 1 is that claims of hundreds of billions in tax revenues are based on modelling reports that are not available to the public. In the case of Inpex, our repeated requests to the company and the consultants for a copy of the report were acknowledged, but the report was never provided.[9]

It is important to realise that the 'key tax claims' in Table 1 do not estimate the tax that would be paid by the companies that commissioned the reports.[10] Instead, they are modelled estimates of how much extra tax all industries in the economy might pay as a result of indirect economic activity due to the proponent's project. These estimates are still less transparent and reliant on still more assumptions than simple estimates of

[5] ACIL Tasman (2012) *Economic significance of Coal Seam Gas in Queensland,* p101 http://www.acilallen.com.au/cms_files/ACIL_CSG_Queensland_2012.pdf

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

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

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

[9] Personal correspondence between Australia Institute, ACIL and Inpex in July 2017. Available on request.

[10] The exception appears to be the Shell Prelude study. While the Chevron and Inpex studies are not available, their summary documents suggest this is the case when read carefully.

future tax liabilities. This is a key reason why there is a large difference between tax claims in commissioned reports and the actual taxes paid by oil and gas companies.

Some estimates in these reports do refer to tax payments by the commissioning company. For example, Chevron's 2015 ACIL report estimates the company would pay around $300 million in federal taxes in 2016, 2017 and 2018. Clearly, these forecasts have not been met, with Chevron paying no federal tax in recent years.

While it may be expected that tax revenues will increase later in the project period due to the design of Australian company tax and Petroleum Resource Rent Tax (PRRT), no updates are issued to the media or authorities to inform discussion. Ongoing reports that kept the public abreast of changes to forecast tax revenues would be useful, but have never been written in our experience. Australia's slow progress on implementing the Extractive Industry Transparency Initiative further erodes trust in this discussion.

Furthermore, the inherent assumption in these reports is that the methods used to reduce tax paid by companies at present will not be used in the future. Companies that are currently not paying PRRT or company tax due to legitimate deductions and various avoidance mechanisms, are likely to continue using such methods to significantly reduce tax payments. The economic modelling reports invariably assume this will not be the case, but without clearly stating this assumption.

## Literature on major project economic assessment

Economic models, including those used in reports listed above, almost invariably over-estimate the future benefits of a project because of two motivations. Firstly as Nobel Prize Winner, Daniel Kahneman, and Amos Tversky highlighted, humans have an over-optimism bias. People involved in a project have a poor ability to foresee what could go wrong and base their forecasts of the future on the best case rather than the likely case – this is referred to as the planning fallacy.[11]

The second motivation is less innocent. Project proponents exaggerate the benefits (including tax revenues) and understate the costs of a project because there are incentives for them to do so. Bent Flyvbjerg, the world's leading expert on megaprojects has written extensively on this 'strategic misrepresentation'.[12]

[11] Kahneman, D. & Tversky, A. (1979a) *Prospect theory: An analysis of decisions under risk*, Econometrica, 47, pp. 313–327. Kahneman, D. & Tversky, A. (1979b) *Intuitive prediction: Biases and corrective procedures,* in: S. Makridakis & S. C. Wheelwright (Eds) Studies in the Management Sciences: Forecasting, vol. 12 (Amsterdam: North Holland).

[12] Flyvbjerg (2008) *Curbing Optimism Bias and Strategic Misrepresentation in Planning: Reference Class Forecasting in Practice*, European Planning Studies 16:3-21, p9

Because the reports focus on the future and what the future will bring is unclear there is a chance that the scenarios they paint will come true but it is a slim chance as we detail below, there are often clear problems with the assumptions the models use and the modelling methods employed.

## Modelling assumptions - garbage in, garbage out

The economic modelling reports often highlight a single figure number such as the $330 billion in tax Chevron claims its Gorgon and Wheatstone projects. This gives an air of certainty and precision that is almost always totally unwarranted. Oil and gas prices are notoriously volatile. For instance the world oil price fell from over $90USD barrel in July 2014 to $55USD a barrel a year later. The tendency to optimism highlighted by Kahneman and Tversky leads to an over-estimation of oil and gas revenues and taxes and an underestimation of the costs required to extract them.

Combine notoriously volatile oil and gas prices with an over-estimation of oil and gas reserves and an under-estimation of costs and then add the incentive for strategic misrepresentation on top of that and the forecast benefits (including tax benefits) of projects are often out not by a few per cent but by several factors. As Flyvbjerg writes:

> When cost and demand forecasts are combined, for instance in the cost-benefit analyses that are typically used to justify large infrastructure investments, the consequence is inaccuracy to the second degree***. Benefit-cost ratios are often wrong, not only by a few percent but by several factors***. As a consequence, estimates of viability are often misleading, as are socio-economic and environmental appraisals, the accuracy of which are heavily dependent on demand and cost forecasts. These results point to a significant problem in policy and planning: ***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***."[13]

Research highlighting over-optimism in project modelling in the oil and gas industry includes work by:

- Westney, a Houston-based engineering and risk consultant to the oil and gas industry. Whitney estimated that the probability of oil and gas projects running on time and on cost is only between 5% and 25%.[14] Westney also quote

[13] Flyvbjerg (2008) *Curbing Optimism Bias and Strategic Misrepresentation in Planning…*, p5, emphasis added.

[14] Briel, Luan and Westney (2014) *Built-in Bias Jeopardises Project Success, p2,* http://www.westney.com/wp-content/uploads/2014/04/Built-in-Bias-article-SPE-as-published.pdf

Independent Project Analysis who found only 22% of large oil and gas projects were on time and on budget.[15] Both these estimations leave aside the question of whether the projects also achieved their stated benefits (i.e. revenue including tax revenue). To help answer this question Westney quote a PricewaterhouseCoopers study that found only 2.5% of megaprojects met their objectives of scope, cost, schedule *and* benefits.[16]

- Consulting firm EY analysed 365 oil and gas megaprojects and found 65% were over-budget and 73% over time. The budget overruns were not small – current project estimated costs were, on average, 59% above the initial estimate. EY noted these estimates were likely to understate poor performance as a substantial amount of the projects were still underway. Once again, EY only looked at cost performance and did not cover revenue performance.[17]

Most of the studies discussed in these reviews are aimed at investors, who arguably have greater interest in and ability to demand transparency around companies' analysis. Economic modelling studies released for public relations purposes are likely to be more optimistic still and should be treated with scepticism.

## Conclusion

While this inquiry's key focus is on the adequacy of Australia's tax laws, debate around multinational companies and tax payments is also playing out in state planning systems and the court of public opinion. Commissioned economic assessments often play a role in this wider context.

These economic assessments are unreliable and non-transparent. A key problem is the lack of professional standards in the economics profession. Unlike actuaries, accountants and any number of other professions, there are no professional bodies that enforce standards on economists. The Australia Institute has long argued for a code of conduct for economic modellers.[18]

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[15] Boschee (2012) *Panel Session Looks at Lessons Learned from Megaprojects*. SPE Today, 10 October 2012. Quoted in Briel, Luan and Westney (2012).

[16] PricewaterhouseCoopers (PwC) (2009) *Need to know: Delivering capital project value in the downturn*. Quoted in Briel, Luan and Westney (2012). Note this study refers to all megaprojects, not just oil and gas megaprojects.

[17] EY (n.d.) *Spotlight on oil and gas projects*, p4-5, http://www.ey.com/Publication/vwLUAssets/EY-spotlight-on-oil-and-gas-megaprojects/$FILE/EY-spotlight-on-oil-and-gas-megaprojects.pdf

[18] Denniss (2016) A code of conduct for economic modelling: Ensuring transparency, quality and consistency,
http://www.tai.org.au/sites/defualt/files/Brief%20-%20Code%20of%20Conduct%20for%20Economic%20Modelling.pdf