Norwegian cheque
Who profits from oil in the Bight?

Potential drilling in the Great Australian Bight by Norwegian company Equinor would see the Norwegian Government receive profits up to 27 times greater than tax revenues to the South Australian Government, oil industry modelling has shown.

Rod Campbell
Tony Shields
November 2019
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Summary

Norwegian oil company Equinor is planning exploratory drilling for oil and gas in the Great Australian Bight beginning in late 2020. Equinor is 67% owned by the Norwegian Government via its sovereign wealth fund.

We have used modelling commissioned by the oil and gas lobby to estimate the payments the Norwegian Government would receive if this oil source was developed. We then compare that to the tax payments that would be received by the South Australian and Australian Governments.

The Norwegian Government will receive estimated profits (in present value terms) of $8.1 billion from the Bight project. This is 27 times more than the South Australian Government will receive in payroll tax of $0.3 billion and more than the $7.4 billion the Australian Government will receive in company tax and Petroleum Resource Rent Tax (PRRT).

The forecast tax revenues take decades to materialise. Oil development in the Bight may also be found to be economically unviable and not proceed. The project could also become unviable after it starts producing oil. Events that would render the project uneconomic include competition from lower cost oil produced elsewhere and reduced oil demand (eg because of the development of electric cars).

The $0.3 billion in present value payroll tax revenue the South Australian Government is forecast to receive over the 40-year life of the project is negligible compared to the South Australian Budget. In 2018-19 alone the South Australian Government’s total expected revenue is $20.2 billion.

The $7.4 billion in present value company tax and PRRT the Australian Government is forecast to receive over the 40-year life of the project is negligible compared to the Australian Government Budget. In 2018-19 alone the Australian Government’s total expected revenue is $485.2 billion.

All this comes before considering the subsidies that governments are likely to have to pay to establish an oil industry in the Bight.

Economic modelling of oil and gas projects has been found to notoriously over-estimate how much tax revenue oil and gas projects will pay compared to what the projects actually pay. The forecasts of Bight oil tax revenue are also highly likely to be over-optimistic.
The Australian Government is significantly more generous to the petroleum industry than the Norwegian Government. The marginal tax rate on the Norwegian petroleum sector is a very high 78%. The Norwegian Government also receives significant revenues from its direct ownership in oil and gas fields. In 2019 the Norwegian Government is forecast to receive $46 billion from the petroleum industry. In contrast, in 2017-18 the Australian Government only received $1.2 billion in PRRT while rivalling Qatar as the world’s largest LNG exporter.

As a result of the Australian Government’s decision to raise little revenue from the exploitation of its oil and gas resources, drilling in the Bight is effectively a no-win proposition for Australia and the communities along its south coast. While Australians are being asked to shoulder all of the economic and environmental risk of the project, a foreign government is likely to enjoy much of the financial gain.
Introduction

Norwegian oil company Equinor is planning exploratory drilling for oil and gas in the Great Australian Bight beginning in late 2020.

The Great Australian Bight makes up a large part of Australia’s southern coast. Remote from Australia’s main cities, the area has significant environmental values and hosts a range of industries. The waters of the Bight are home to a range of marine life, such as tuna, sea eagles and albatross. It is an important breeding ground for great white sharks, southern right whales and sea lions.

The depth of water in the Bight means that specialised ultra-deepwater equipment would be required to produce oil. One of the world’s worst oil disasters, the Deepwater Horizon oil spill occurred in water of similar depth in the Gulf of Mexico, waters which are generally much calmer than the Bight. A major oil spill in the Bight could impact industries on the coasts of South Australia, Victoria and Tasmania such as fishing, aquaculture and tourism, which are major industries for many coastal towns. Previous Australia Institute research estimates that 27,000 jobs could be put at risk in these states by a major oil spill in the Bight.¹

Economic modelling of potential oil development in the Bight was commissioned by Australian Petroleum Production and Exploration Association (APPEA) and conducted by consultants ACIL Allen in August 2018.² ACIL Allen make it clear that developing the Bight will be difficult and expensive:

Most of the (Great Australian Bight) Basin is in deep water, and around half is in water depths of over 3,000 metres. The Bight contains three sub basins, the Ceduna, Duntroon and Eyre sub basins. Between 1972 and 2003, 12 exploration wells were drilled in the Basin, with no petroleum discoveries made during that time.³

³ ACIL Allen Consulting (2018), p2
The deep depths of the Basin make drilling not only expensive but also make the project riskier. These factors make many experts question the viability of developing the Bight. The Australian Department of the Environment and Energy write that:

For example, in the Great Australian Bight there is still limited knowledge of the scale of undiscovered oil ... if exploration goes ahead and these reserves are confirmed, it would not reach full production until after 2030 given the complexity of infrastructure installation. With a globally competitive oil market, there may be more accessible and lower-cost reserves elsewhere in the world, which could mean global companies choose other reserves outside Australia for development.4

Given such uncertainty and environmental risk, the supportive attitude towards Bight drilling shown by the South Australian and Federal Governments is difficult to understand. Perhaps they expect significant revenue to flow to their treasuries. If so, the economic modelling commissioned by oil lobby group APPEA and conducted by ACIL Allen suggests that they are mistaken. In fact, based on APPEA’s estimates, the Norwegian Government looks to enjoy greater benefits than the State and Federal Governments, while bearing none of the environmental risk.

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ACIL Allen’s modelling covers two scenarios of Bight oil development: a base case where 1.9 billion barrels of oil equivalent is produced and a high case where 6.0 billion barrels is produced, both over the period 2028 to 2060. Figures 1 and 2 below show ACIL Allen’s estimated tax payments by year under both scenarios:

**Figure 1: Base case scenario, tax paid by year**

![Graph showing tax payments by year for the base case scenario.](source)

**Figure 2: High production scenario, tax paid by year**

![Graph showing tax payments by year for the high production scenario.](source)

Figures 1 and 2 show that the vast bulk of tax payments from Bight oil development would be through company tax and Petroleum Resource Rent Tax (PRRT). Both of
these taxes accrue to the Federal Government. Payroll tax is almost invisible in Figures 1 and 2. Payroll tax is the only payment that would accrue directly to the South Australian State Government under APPEA and ACIL Allen’s assumptions.

Figures 1 and 2 show that aside from small payroll tax payments, Bight oil development would pay no tax at all until 2033, when small amounts of company tax revenue would commence. PRRT would not be paid until 2047 under the base case and 2040 under the high production scenario.

These two points bear repeating – payments to the SA State Government are minimal and most payments to the Federal Government are decades away. Even then, they are not significant amounts, as discussed further below.

Figures 1 and 2 show no royalty paid to either the State or Federal Governments. Royalties are not a tax, but a payment by companies to the owners of the resource they are extracting. All mining, oil and gas extraction onshore in South Australia pays a royalty to the State Government, because the State Government owns all resources in the ground. While not stated explicitly in the ACIL Allen report, it appears that the Bight’s oil lies in Commonwealth waters, rather than in an area where the State Government can charge a royalty. APPEA and ACIL Allen assume that the Commonwealth Government will not charge a royalty – that is, the Commonwealth will give away Australia’s oil for free. This assumption is not unrealistic as the North West Shelf Project is the only Australian offshore petroleum project that pays oil and gas royalties.5

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PAYMENTS TO SOUTH AUSTRALIAN STATE GOVERNMENT

Table 1 below sets out ACIL Allen’s estimates of the tax payments that the South Australian Government would receive under APPEA and ACIL Allen’s scenarios of developing oil in the Bight:

**Table 1: Estimated tax paid to the South Australian Government**

<table>
<thead>
<tr>
<th></th>
<th>Average annual payment</th>
<th>Present value</th>
<th>Total 2020 to 2060 payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base</td>
<td>High</td>
<td>Base</td>
</tr>
<tr>
<td>SA payroll tax ($m)</td>
<td>41.7</td>
<td>147.2</td>
<td>300</td>
</tr>
</tbody>
</table>

Source: ACIL Allen Consulting (2018), p iv, vii

Table 1 shows that the South Australian government will receive some $41.7 million in annual revenue over the 40 years of the project. To put this in context, In the 2018-19 year alone the South Australian Government will receive $1,200 million in payroll tax revenue and total revenue of $20,200 million. The $40 million in annual average revenue predicted in the base case scenario by ACIL Allen represents 3% of South Australia’s 2018-19 payroll tax revenue and a fifth of 1% of total revenue.

Table 1 shows that the total value of payments received by South Australia out to 2060 will total $1.7 billion under the base case scenario, or up to $6.0 billion under the high case scenario.

ACIL Allen present their results in present value (PV) terms, using a discount rate of seven per cent. Discounting future payments is important because payment now is usually preferred to payment later, particularly when uncertainty is involved. Events that make future tax payments uncertain include: oil production being lower and more costly than planned; competition from lower cost oil produced elsewhere; and reduced oil demand (eg because of the development of electric cars). Adjusting for the time value of money and uncertainty, ACIL Allen estimates the value of these payments at $0.3 and $0.9 billion. Even if the SA budget did not grow in size at all, over this period its total revenue would be $269 billion in PV terms.

To be clear, South Australia is being asked to risk some of its most important environmental and economic assets for 40 years and in return it would improve its

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budget position by one tenth of 1% (base scenario, PV basis) and one third of 1% (high scenario, PV basis).

AUSTRALIAN FEDERAL GOVERNMENT

As discussed above, payments to the Australian Federal Government through company tax and PRRT make up the vast bulk of the ACIL’s estimated payments generated by Bight oil development. These payments are detailed in Table 2 below:

Table 2: Estimated tax paid to the Australian Government

<table>
<thead>
<tr>
<th></th>
<th>Average annual payments</th>
<th>Present value</th>
<th>Total payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base</td>
<td>High</td>
<td>Base</td>
</tr>
<tr>
<td>PRRT ($b)</td>
<td>0.6</td>
<td>4.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Company tax ($b)</td>
<td>0.9</td>
<td>2.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Total Federal Government tax ($b)</td>
<td>1.5</td>
<td>6.7</td>
<td>7.4</td>
</tr>
</tbody>
</table>

Source: ACIL Allen Consulting (2018), p iv, vii

Table 2 shows that the Federal Government would receive an average of $1.5 billion each year in PRRT and company tax payments under ACIL Allen’s base case scenario and $6.7 billion under the high case scenario. The present value of these payments is just $7.4 billion (base) and $35.3 billion in the high scenario. The reason the present value is so much lower than the total value is that the payments are modelled to occur far in the future, so are heavily discounted to reflect uncertainty and time value of money.

These tax payments are very small compared to the Australian Government’s total estimated tax revenue. In the base case, the average annual payment to the Federal Government is $1.5 billion, less than a third of 1% of the Australian Government’s total estimated tax revenue of $514 billion in 2019/20. In the high case, the payment amounts to 1.3% of Australian Government revenue.7

PAYMENTS TO NORWEGIAN GOVERNMENT

The Norwegian Government owns 67% of Equinor. If we assume Equinor is the sole developer of ACIL Allen’s Bight scenarios, we can use the ACIL Allen’s modelling to estimate income that the Norwegian Government would receive if the development proceeds.

In Table 3 we use ACIL Allen’s calculation of the company tax payments to calculate in turn what profits Equinor would make from the project. From this, profits to the Norwegian Government can be derived:

Table 3: Estimated Norwegian Government profits from oil development

<table>
<thead>
<tr>
<th></th>
<th>Average annual payment</th>
<th>Present value</th>
<th>Total payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base</td>
<td>High</td>
<td>Base</td>
</tr>
<tr>
<td>Direct company tax ($b)</td>
<td>0.9</td>
<td>2.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Company tax rate</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Equinor profits after tax and after PRRT ($b)</td>
<td>2.1</td>
<td>6.1</td>
<td>12.1</td>
</tr>
<tr>
<td>% owned by Norwegian Government</td>
<td>67%</td>
<td>67%</td>
<td>67%</td>
</tr>
<tr>
<td>Profits to Norwegian Government ($b)</td>
<td>1.4</td>
<td>4.1</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Sources: ACIL Allen Consulting (2018) and The Australia Institute calculations.

Table 3 shows that the Norwegian Government would receive annual average benefits of $1.4 to $4.1 billion, with present value of $8.1 to $24.4 billion. The present values for Norway are higher relative to the totals than benefits to the Federal Government as the Federal Government’s benefits are heavily influenced by PRRT, which gets paid much later in the period of ACIL Allen’s modelling.

Table 3 assumes that the company tax rate is 30% (the current company tax rate) and calculates Equinor’s profits by multiplying ACIL Allen’s estimated company tax payments by 2.33 ((1-30%)/30%). We assume that Equinor is the only developer of oil in the Bight. The profit share to Equinor and the Norwegian Government will decrease

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if other companies share development. We also assume that all profits would be distributed to shareholders and not retained or reinvested in the business.

**COMPARING BENEFITS TO GOVERNMENTS**

Comparing the benefits of Bight oil development to the South Australian, Australian and Norwegian governments, one thing is clear – the SA Government benefits the least. Figure 3 below compares the base case payments to each government:

**Figure 3: Base case benefits by government**

![Graph showing base case benefits by government]

Sources: ACIL Allen Consulting (2018) and The Australia Institute calculations.

Figure 3 shows that regardless of how ACIL Allen’s modelled benefits are presented, the SA Government receives less than 2% of the benefits to governments. The Australian and Norwegian governments split 98% of the benefits. In present value terms, the Norwegian government receives the greatest benefit, $8.1 billion, 27 times greater than the $300 million benefit to the SA Government.

We focus on the base case because it is still unknown whether the development will be economically viable let alone whether production is viable at a higher level. We also focus on the net present value payments because ACIL Allen forecasts that revenues will take decades to materialise. They forecast the project will not pay company tax until 2034 and not to pay PRRT until 2047.

Figure 4 below considers the benefits to governments under ACIL Allen’s high production scenario:
Figure 4: High case benefits by government

Figure 4 shows that under the high production scenario, benefits to the SA government are still a fraction of those to the Federal and Norwegian governments. With earlier PRRT payments, the Australian Government benefits slightly more in present value terms than the Norwegian Government, and substantially more in total.
Other considerations

SUBSIDIES

Beyond environmental risk and payments to governments, another factor to consider around oil and gas developments is the fact that major resources projects often require significant subsidies and support from State and Federal Governments to become financially viable. There is no reason to believe the development of an oil field in the Great Australian Bight will be any different.

The North West Shelf oil field development in Western Australia provides a good case study. The Western Australian state had to incur substantial expenses through infrastructure provision and other forms of subsidy during the development of the oil field, before any revenue was collected. This is made clear by the Western Australian Treasury:

In the 1970s and 1980s the State played a pivotal role in securing the development of the North West Shelf gas project through agreements, financial assistance and infrastructure provision. ... In 2010 net present value terms, the cost of Western Australia’s assistance to the North West Shelf project (e.g. payment of subsidies to the State’s power utility to help cover the losses it initially incurred under crucial ‘take or pay’ gas contracts) is estimated to be around $8 billion.9

The SA Government gave “in-principle support” for royalty holidays to subsidise development while in opposition.10

South Australia already subsidises its extractive sector. $316 million was spent by the South Australian Government on measures that wholly or largely assisted the minerals and fossil fuel industries, including $40 million on gas extraction, between 2008/09 and 2013/14.11

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OPTIMISTIC FORECASTS

We also note that the forecasts of tax revenue are likely to be over-optimistic. Nobel Prize winner Daniel Kahneman and Bent Flyvbjerg (regarded as the world’s leading expert on megaprojects) have documented that forecasts for megaprojects are very often over-optimistic. In contrast Flyvbjerg states that the iron law of megaprojects is that they are “over budget, over time, over and over again”. This implies that the Bight oil production will be much less profitable than forecast and will pay much less tax than forecast.

Flyvbjerg uses the term ‘strategic misrepresentation’ to describe how proponents of megaprojects have an incentive to over-state the benefits of a megaproject in order to gain approval. Proponents of Bight oil development have an incentive to over-state the tax revenues the project will generate.

Last year The Australia Institute documented how economic modelling of Australian oil and gas projects has been optimistic. The development of Bight oil is likely to be similar.12

12 Campbell and Shields (2018) We’ll pay tax … one day: Submission to Senate Inquiry into Corporate Tax Avoidance, https://www.tai.org.au/content/we%E2%80%99ll-pay-tax-%E2%80%A6one-day-submission-senate-inquiry-corporate-tax-avoidance
Table 4: Oil and gas industry commissioned economic reports

<table>
<thead>
<tr>
<th>Company/project</th>
<th>Consultants</th>
<th>Full report available?</th>
<th>Key tax claims</th>
<th>Comments on actual federal tax paid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Offshore Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chevron – Gorgon/Wheatstone</td>
<td>ACIL Allen</td>
<td>No</td>
<td>$338 billion in federal taxes to be paid from 2009 to 2040&lt;sup&gt;13&lt;/sup&gt;</td>
<td>Chevron paid no corporate tax in 2013/14, 2014/15 and 2015/16 despite reporting revenue totalling $9.2 billion for those three years</td>
</tr>
<tr>
<td>Inpex – Ichthys</td>
<td>ACIL Allen</td>
<td>No</td>
<td>$73 billion in total taxes to be paid from 2012 to 2050&lt;sup&gt;14&lt;/sup&gt;</td>
<td>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</td>
</tr>
<tr>
<td>Shell – Prelude</td>
<td>Internal</td>
<td>No</td>
<td>$12 billion in taxes will be paid&lt;sup&gt;15&lt;/sup&gt;</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Onshore Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santos – Narrabri</td>
<td>ACIL Allen</td>
<td>Yes</td>
<td>$1.4 billion in company taxes to be paid 2017 to 2042 ($3.1b in total taxes to be paid)&lt;sup&gt;16&lt;/sup&gt;</td>
<td>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.</td>
</tr>
<tr>
<td>Coal seam gas development in Qld</td>
<td>ACIL Tasman</td>
<td>Yes</td>
<td>$228 billion in federal taxes to be paid from 2011 to 2035&lt;sup&gt;17&lt;/sup&gt;</td>
<td>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.</td>
</tr>
</tbody>
</table>

Table 4 shows that while huge benefits are forecast for decades in the future, even oil and gas companies earning billions in revenue are able to reduce tax bills to zero. There is no reason why oil in the Bight should be any different, particularly as the world begins to move away from fossil fuel, undermining the economics of speculative, risky projects like this.

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Conclusion

Economic modelling done for the oil and gas lobby indicates developing oil in the Bight will generate more profit for the Norwegian Government than it will generate tax for the Australian Government in present value terms, and it will generate 27 times more profit for the Norwegian Government than it will generate tax for the South Australian Government. The tax the South Australian Government would receive is a pittance (one tenth of one per cent) compared to its total tax revenue. In return it is being asked to put some of South Australia’s most important environmental and economic assets at to risk for the next 40 years.

The Australian Government is significantly more generous to the petroleum industry than the Norwegian Government. The marginal tax rate on the Norwegian petroleum sector is a very high 78%. The Norwegian Government also receives significant revenues from its direct ownership in oil and gas fields. In 2019 the Norwegian Government is forecast to receive $A46 billion from the petroleum industry. In contrast, in 2017-18 the Australian Government only received $1.2 billion in PRRT despite rivalling Qatar as the world’s largest LNG exporter.

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21 In NPV terms.