

# The Economic Impact of Petroleum Development in the Great Australian Bight

## A PRELIMINARY ASSESSMENT



### About the study

ACIL Allen was engaged by APPEA in 2018 to undertake a preliminary assessment of the economic potential of successful petroleum exploration and production in the Great Australian Bight.

As a preliminary assessment, a number of assumptions have necessarily been used to derive the overall results, including the potential size of a hydrocarbon discovery in the Great Australian Bight. Because of this uncertainty, ACIL Allen has modelled two plausible scenarios — with a Base Case Development Scenario of a resource of 1.9 billion barrels of oil equivalent liquids (based off the 2015 report by Wood Mackenzie, *Great Australian Bight Exploration Basin*), and a High Case Development Scenario of a resource of six billion barrels of oil equivalent liquids (based off an industry view that the resource could have the production potential of the Bass Strait). For each scenario, it is assumed that the resource is commercialised by a number of ventures, all of which use an FPSO that is tied to multiple subsea wells.

The **Base Case Scenario** assumes that there are 3 projects developed in the Great Australian Bight — Project 1 with a resource of 1,000 million barrels of oil equivalent liquids, Project 2 with a resource of 700 million barrels, and Project 3 with a resource of 200 million barrels. Overall, it is estimated that the investment required across all projects will total A\$70 billion, with production commencing in 2028 at 9 million barrels, increasing to a maximum of 62 million barrels per annum between 2032 and 2054.

The **High Case Scenario** assumes that there are 4 projects developed in the Great Australian Bight — Project 1 and 2 both with a resource of 2,300 million barrels of oil equivalent liquids, Project 3 with a resource of 1,000 million barrels, and Project 4 with a resource of 400 million barrels. Overall, it is estimated that the investment required across all projects will total A\$170 billion, with production commencing in 2028 at 3 million barrels, increasing to a maximum of 199 million barrels per annum between 2034 and 2054.

The economic impacts of the successful petroleum exploration and production in the Great Australian Bight has been estimated over the period from 2020 to 2060, with the results generated using ACIL Allen's *Tasman Global* computable general equilibrium model.

This preliminary assessment highlights the significant economic benefits that would be realised in South Australia and for Australia overall, should a petroleum industry develop in the Great Australian Bight.

### Key findings — BASE CASE



1,361 FTE workers employed in South Australia during construction will be more **people employed each year than there were employed at Holden's Elizabeth plant prior to its closure.**



\$3.2 billion increase in Australia's real income per annum translates to an average **7.5% increase for every South Australian full-time worker.**



\$5.8 billion in total output per annum equates to a **6% increase in the size of the South Australian economy in 2016-17.**



Average annual output of \$5.8 billion per annum would **transform the Mining and Resources Industry into South Australia's 2nd largest industry.**



At peak production, oil from the development would be easily South Australia's largest export, and be **larger in value terms than the State's top five exports combined in 2016-17.**



\$1.7 billion in Commonwealth and State taxation payments per annum from the development is equivalent to the cost of **three Adelaide Oval redevelopments every year.**

### Key findings — HIGH CASE



2,116 FTE workers employed in South Australia during construction will be **equivalent to the number of people employed during peak construction of the Royal Adelaide Hospital.**



\$12.6 billion increase in Australia's real income per annum translates to an average **29.5% increase for every South Australian full-time worker.**



\$18.4 billion in real output per annum equates to an **18% increase in the size of the SA economy in 2016-17.**



Average annual output of \$18.4 billion per annum would **increase the size of the Mining and Resources Industry five-fold, making it South Australia's largest industry.**



At peak production, oil from the development would make it easily South Australia's most valuable export, and would be **25% larger than total exports from the State in 2016-17.**

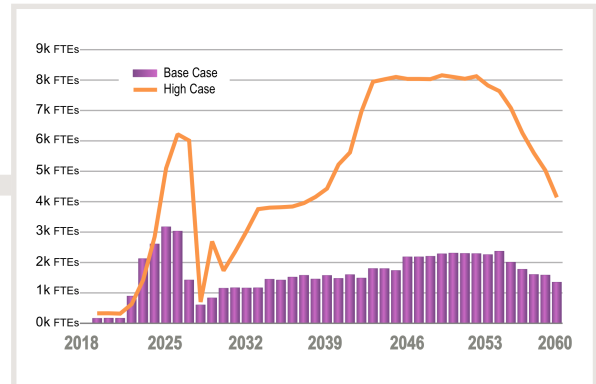


\$7.7 billion in Commonwealth and State taxation per annum is equivalent to the cost of **three new Royal Adelaide Hospital developments every year.**

# Key Results — Base Case and High Case Development

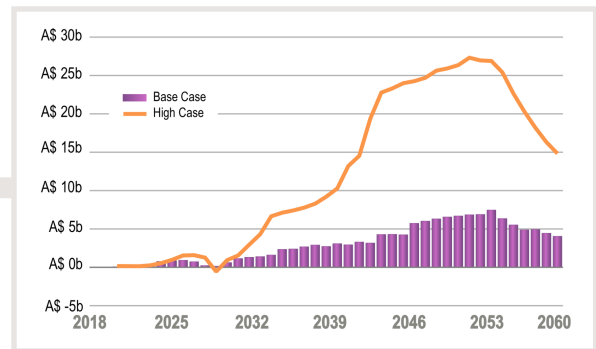
## EMPLOYMENT

- Across Australia, the projects are estimated to generate between 1,648 FTE jobs per year under the Base Case and 4,962 FTE jobs per year under the High Case.
- South Australia will receive the largest share of the jobs created of any State, with an estimated 826 FTE jobs per year created under the Base Case and 1,521 FTE jobs per year created under the High Case.
- Employment will be highest during the construction phases under both scenarios, with the South Australian economy expected to see between 1,361 FTE jobs per year between 2020 and 2028 under the Base Case and 2,116 FTE jobs per year between 2020 and 2030 under the High Case.



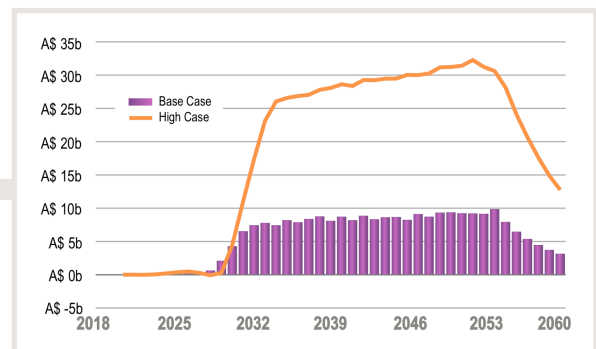
## REAL INCOME

- Australia's real income is estimated to increase by between A\$131.6bn (or A\$3.2bn pa) under the Base Case and A\$515.4bn (or A\$12.6bn pa) under the High Case.
- Real income benefits for South Australia, are expected to range between A\$33.4bn (or A\$0.8bn pa) under the Base Case and A\$113.3bn (or A\$2.8bn pa) under the High Case.



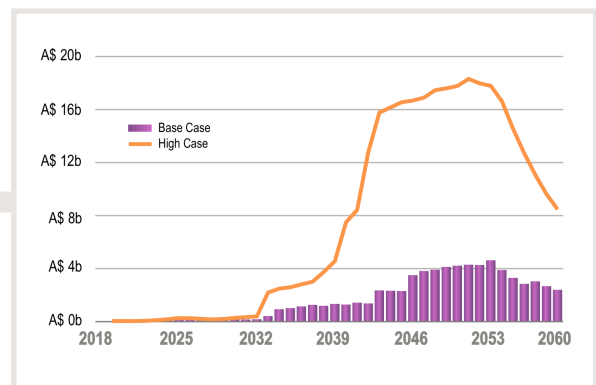
## REAL OUTPUT

- Australia's GDP is estimated to increase by between A\$243.1bn (or A\$5.9bn pa) under the Base Case and A\$791bn (or A\$19.3bn pa) under the High Case.
- Real output benefits will be concentrated in South Australia, which is estimated will see its GSP increase by between A\$237bn (or A\$5.8bn pa) under the Base Case and A\$755.4bn (or A\$18.4bn pa) under the High Case. This will represent a boost to the South Australian economy of between 6% and 18% relative to its GSP in 2016-17.



## REAL TAXATION

- Significant taxation benefits will be generated for the Commonwealth and South Australian Governments as a result of development. Total taxation payments are estimated to range between A\$70.4bn (or A\$1.7bn pa) under the Base Case and A\$314.6bn (or A\$7.7bn pa) under the High Case.
- The Commonwealth Government is expected to be the major beneficiary of the development primarily through Company Tax and Petroleum Resource Rent Tax receipts (between A\$68.9bn and A\$308.6bn).
- The South Australian Government is expected to receive between A\$1.7bn (A\$41.7m pa) and A\$6bn (A\$0.1bn) in payroll tax receipts from development.



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