The Facts
about offshore oil and gas exploration in South Australia
How offshore exploration is regulated

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) was established on 1 January 2012.

NOPSEMA is Australia’s first national regulator for health and safety, well integrity and environmental management for offshore oil and gas operations.

LEGISLATION & REGULATIONS

NATIONAL:
- Environment Protection and Biodiversity Conservation Act 1999
- Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009
- Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009

SOUTH AUSTRALIAN:
- Petroleum (Submerged Lands) Act 1982 (SA)
- Petroleum and Geothermal Energy Act 2000 (SA)

Holders must meet requirements for safety, well integrity and environmental management in accordance with relevant industry standards.

Regular maintenance, sampling, monitoring and reporting.

Sufficient financial assurance to meet the costs, expenses and liabilities that may arise.

REGULATORY COMPLIANCE AND ENFORCEMENT

- Prohibit specific operations
- Planned inspections for compliance
- Mandatory reporting
- Improvement notices
- Directions and infringements
- Withdrawal of permissioning documents
- Investigate and prosecute
- Cancel permit (powers lie with Joint Authority)
The history of offshore exploration in South Australia

Since 1966, offshore exploration in South Australia has been conducted safely, without harm to social, natural or economic environments.

1966

Offshore exploration has been undertaken safely in South Australia since 1966, when the first seismic survey was conducted by Shell.

To date, 24 wells have been drilled in offshore South Australia waters. Half of these were drilled in the Great Australian Bight.

No offshore oil and gas activity is allowed to be undertaken without detailed assessment and approval by the expert independent regulator.

50+ Years

of offshore exploration in South Australia

Water resources

Marine vegetation and fauna

Tourism

Culture and heritage

Fisheries

Aquaculture

Since 1966, offshore exploration in South Australia has been conducted safely, without harm to social, natural or economic environments.
The last well drilled in the Great Australian Bight was Woodside’s Gnarlyknots 1A. It was drilled to a total depth of 4736 metres in 2003.

Offshore areas in Commonwealth waters are released annually for competitive work program or cash bidding.

So far, 130 seismic surveys have been conducted in offshore South Australia waters – 148,841 km of 2D and 45,039 km² of 3D surveys.
Offshore titles in the waters off South Australia

Offshore Petroleum Tenements
(current January 2018)

- Great Australian Bight Basin
- Exploration permit for petroleum (EPP)

Exploration permit – Western Australia

1. Murphy Australia Oil, Santos Offshore
2-3. Equinor
4-5. Chevron Australia New Ventures
6. Karoon
7-8. Bight Petroleum
9. Santos, JX Nippon Oil and Gas

Proven Oil & Gas Plays

10. Otway Basin

Infrastructure

- Gas
- Liquids
- Processing plant

North

0 50 100 150 Kilometres
Offshore exploration would create jobs in:

- Transport and logistics
- Fuel supply
- Food services
- Construction

Base of 1,361 jobs in SA created during development and construction phase & average of 826 jobs per year over the next 40 years*

If Bight resources are comparable with Bass Strait, this rises to 2,116 SA jobs during construction and an average 1,521 jobs per year over the next 40 years*

Development in the Bight could see creation of additional 821-3,442 jobs nationwide over the life of the projects*

*A C I L Allen Consulting, Petroleum Development in the Great Australian Bight, August 2018

A unique $20 million science research program will provide information to support sustainable development in the Great Australian Bight, and monitor possible future impacts.
How is offshore exploration approved?

Under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, and associated regulations, approval will only be granted once the Commonwealth regulator, NOPSEMA, is satisfied that all impacts and risks to the environment are acceptable and will be reduced to as low as reasonably practicable.

No offshore petroleum activity is allowed without stringent assessment. Titleholders must revise and resubmit their Environment Plans for assessment if new information reveals a significant new or increased risk to the environment.

In light of the Bight Basin’s sensitive natural environments, marine industries, and cultural elements, special conditions relating to technical requirements for well design, environment, health and safety can be attached by the South Australian and Commonwealth Ministers when granting a permit.
The offshore exploration approval process

National Offshore Petroleum Titles Administrator (NOPTA) + Joint Authority ( Relevant Federal and State Government Ministers)

Work together to release, grant and administer offshore petroleum exploration permits

- Petroleum companies submit detailed bids for each exploration area
- Bids assessed by NOPTA who provides advice to the Joint Authority who then awards a permit based on merit

OBTAINING APPROVALS

- Safety case for the offshore facility (Occupational Health & Safety) – drilling only
- Well operations management plan – drilling only
- Environment plan

Once relevant approvals are gained, exploration may begin

COMPLIANCE

- Inspections
- Investigations
- Enforcement

Exploration activities subject to ongoing regulation by NOPSEMA, and community consultation is ongoing throughout the life of the activity

If a discovery is made the titleholder may apply for a Retention Lease or Production Licence

Environment plan covers:

- Seismic exploration
- Site surveys
- Exploration drilling
- Appraisal drilling
- Oil Pollution Emergency Plan

Consultation

Submit consultation report and environment plan to NOPSEMA

Regulatory decision

YES  NO
How does offshore drilling work?

-1,000 to -2,000m

Supply Boat

100 to 300 kms offshore

Helicopter

-2,000 to -10,000m

Reservoir

Sea bed

Support Vessel

Company Supply Base

Local Business

Not to scale
Offshore drilling in Australia

3,800+ offshore wells have been drilled in Australian waters.

There are currently more than 400 petroleum titles in offshore Commonwealth waters including exploration permits, retention leases, production licences, pipeline licences and infrastructure licences.

- The first Australian offshore exploration permit was granted in 1959 in Gippsland.
- 250+ offshore regulatory submissions have been approved by NOPSEMA since its establishment on 1 January 2012.
- $200 billion contributed to GDP.
- $3.5 billion invested in offshore petroleum exploration in Australia in 2013-2014.
- Recent analysis of the economic impact of discovery of petroleum in the Bass Strait shows oil and gas production has contributed more than $200 billion to Australia’s GDP in the past four decades.

1959

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Is offshore drilling safe?

In 2010, the Commission of Inquiry into the 2009 Montara oil spill incident strongly recommended that a single, independent regulatory body be responsible for safety, well integrity, and environmental management.

Australian regulations take account of lessons learnt from all significant incidents, worldwide. NOPSEMA superseded the National Offshore Petroleum Safety Authority (NOPSA), with the added responsibility of offshore environmental management.

The combination of safety, well integrity, and environmental management under a single regulator standardises Australia’s offshore petroleum regulation to a trustworthy, leading practice model.

The South Australian Government has the ability to respond to any potential threats in State waters through its South Australian Marine Spill Contingency Action Plan (SAMSCAP).

The regulatory framework for offshore oil and gas is objective-based and encourages continuous improvement rather than minimum compliance.
NOPSEMA regulates Commonwealth waters, which comprise areas beyond the first three nautical miles of the territorial sea, and in State and Territory coastal waters where powers and functions have been conferred. South Australia plans to confer its regulatory powers and functions to NOPSEMA.

NOPSEMA requires offshore titleholders to demonstrate all impacts and risks are managed to levels that are acceptable and as low as reasonably practicable.

The Regulations administered by NOPSEMA requires consultation with relevant persons by petroleum titleholders.

NOPSEMA undertakes assessment, inspection, investigation, enforcement, and advisory activities.

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