The Facts
about offshore oil and gas exploration in South Australia
South Australia has decades of experience exploring for oil and gas in the Great Australian Bight. While that history has been short of major discoveries, I hope that situation will change with the renewed interest in the Bight Basin.

Since the 1960s, exploration activity has revealed large oil and gas prospects in the Great Australian Bight. Between 1972 and 1993, 12 exploration wells were drilled offshore in South Australia’s Bight Basin.

These wells provided valuable information that has led to the upgrading of the prospectivity of the Bight Basin. With the latest technology and advances in deep water drilling, explorers are again showing interest in the Bight.

In May 2012, BP completed one of Australia’s largest offshore 3D seismic surveys. Working in a joint venture with Norway’s Statoil, BP is seeking approval for further exploration in the Bight. Chevron Australia, Murphy Australia, Santos Offshore and Bight Petroleum are also proposing significant exploration programs in waters off the coast of South Australia.

These exploration programs will provide jobs and supply-chain opportunities for South Australians and their businesses. Discoveries will build on this initial investment, opening the door for more jobs, onshore infrastructure and supply-chain opportunities. Together this investment will further diversify our State’s economy.

Together, the guaranteed investment in the search for oil and gas across the Bight is worth about $1.2 billion. It is timely then that the South Australian public is aware of the facts about the risks and opportunities.

The Facts provide essential information about the nature of offshore exploration and the role of the regulator, NOPSEMA. The Facts seek to provide South Australians with confidence in the ability of the regulator to identify, assess and effectively manage all significant risks.

Australia is no stranger to offshore oil and gas production. Energy companies have been operating in Bass Strait and Northwest Shelf for many years.

What is new is that since 2012, the National Offshore Petroleum Safety and Environmental Management Authority has been established as Australia’s expert regulator for health and safety, well integrity and environmental management for offshore oil and gas operations.

By ensuring exploration can be safely conducted in the waters off our State we can set out on a pathway to discovery that can unlock the full potential of our energy resources.

Hon Tom Koutsantonis MP, Minister for Mineral Resources and Energy
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
- Offshore Petroleum and Greenhouse Gas Storage (Regulatory Levies) Regulations 2004

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.

Early engagement and ongoing targeted consultation throughout the lifetime of the operation.

PERMIT

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

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.

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

50 Years of offshore exploration in South Australia

Water resources  Marine vegetation and fauna  Marine reserve
Culture and heritage  Fisheries  Aquaculture
Investment in our economy

Collectively, oil and gas companies have guaranteed to spend about $1.2 billion from 2011 to 2018.

The first well in the Great Australian Bight was drilled in 1972.

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.
THE FACTS ABOUT OFFSHORE OIL AND GAS EXPLORATION IN SOUTH AUSTRALIA

Offshore titles in the Great Australian Bight

PETROLEUM TENEMENTS
(current March 2016)

- Exploration permit for petroleum (EPP)
- Gazetted offshore release block – bids closed 21 April 2016
- Exploration permit – Western Australia

1. Murphy Australia Oil, Santos Offshore
2-5. BP Developments Australia, Statoil Australia Theta B.V
6-7. Chevron Australia New Ventures
8-9. Bight Petroleum
10. Santos, JX Nippon Oil and Gas

Kilometres

0 50 100 150

NORTH

SOUTH AUSTRALIA

PORT LINCOLN

PORT PIRIE

CEDUNA

BIGHT BASIN

POLDA BASIN

OTWAY BASIN

WESTERN AUSTRALIA

NEW SOUTH WALES

VICTORIA

MOUNT GAMBIER

ADELAIDE

Mount Gambier
In 2013, three permits were granted by the Joint Authority – two to Chevron and one to Murphy/Santos with a primary work commitment valued at $536 million.

In 2011 six permits were granted – four to BP (Statoil joined BP in its four permits in 2013) and two to Bight Petroleum guaranteeing a more than $670 million investment.

BP/Statoil plan to drill in 2016/17 using a $755 million ultra-deepwater rig.

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.

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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.

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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

Successful bidder required to obtain relevant approvals from the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)

Once relevant approvals are gained, exploration may begin

Environment plan covers:
- Seismic exploration
- Site surveys
- Exploration drilling
- Appraisal drilling
- Oil Pollution
- Emergency Plan

Safety case for the offshore facility (Occupational Health & Safety) – drilling only

Well operations management plan - drilling only

Environment plan

OBTAINING APPROVALS

Consultation

Submit consultation report and environment plan to NOPSEMA

Regulatory decision

YES

NO

Inspections

Investigations

Enforcement

COMPLIANCE

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
How does offshore drilling work?

Sea bed
-1,000 to -2,000m

Support Vessel

100 to 300 kms offshore

Helicopter

Supply Boat

Company Supply Base

Local Business

Reservoir
-2,000 to -10,000m

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.

$3.5 billion invested in offshore petroleum exploration in Australia in 2013-2014.

$200 billion contributed to GDP.

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.

250+ offshore regulatory submissions have been approved by NOPSEMA since its establishment on 1 January 2012.
How is it regulated?

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.

The regulatory framework for offshore oil and gas is objective-based and encourages continuous improvement rather than minimum compliance.

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).
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.

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

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

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.
“By embracing the world’s leading practice to ensure that exploration can be safely conducted in the waters off our State, we can then set out on a pathway to discovery that can unlock the full potential of our offshore basins.”

Hon Tom Koutsantonis MP,
Minister for Mineral Resources and Energy