

# Australia's Offshore Decommissioning Journey

The Regulator's Perspective in 2023

Pierre Achour – Decommissioning Specialist **D&A 2023 Australia Conference 30 May 2023**nopsema.gov.au



# **Acknowledgement of country**



NOPSEMA respectfully acknowledges the Traditional Custodians of the land on which we meet today; the Whadjuk people of the Noongar Nation, and pay our respect to their Elders past, present and emerging.

## **NOPSEMA**

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is Australia's independent expert regulator for health and safety, structural (well) integrity and environmental management for all offshore energy operations and greenhouse gas storage activities in Commonwealth waters, and in coastal waters where regulatory powers and functions have been conferred.

Our vision is for a safe and environmentally responsible offshore industry.

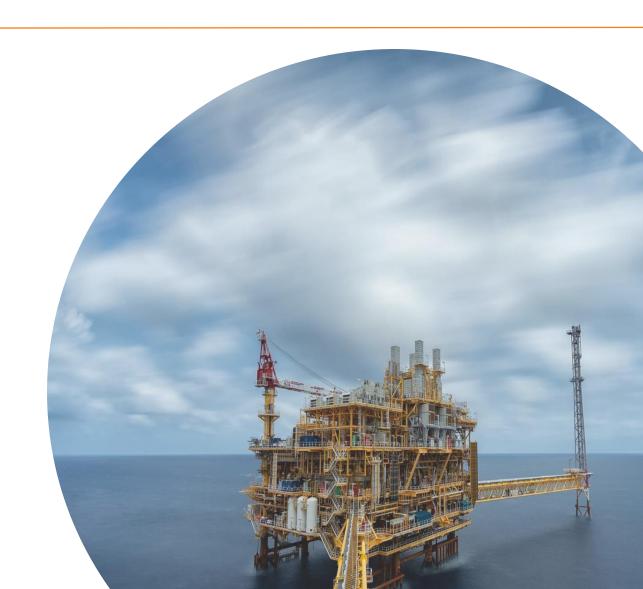
#### **Introduction and overview**



- Australia's offshore decommissioning landscape
- Status check: progress and outlook

Learnings, feedback and key issues

- Regulatory guidance updates
- Questions and Comments



# Australia's offshore decommissioning landscape

**Current situation** 

#### WA & NT



35 platforms



11 Floating facilities



6,076 km pipelines and static umbilicals



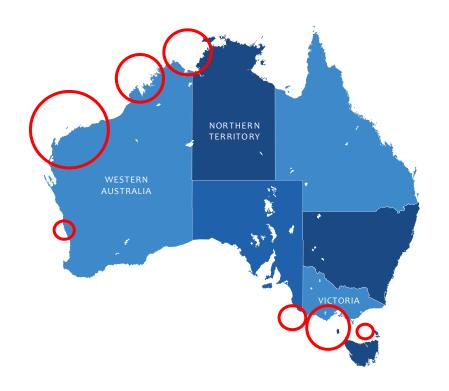
120 flexible risers and dynamic umbilicals



483 subsea lifts



~548 wells to be plugged and abandoned



# AUD 50 bn\* 10 years



#### **Victoria**



22 platforms



2,089km pipelines and umbilicals



120 flexible risers and dynamic umbilicals



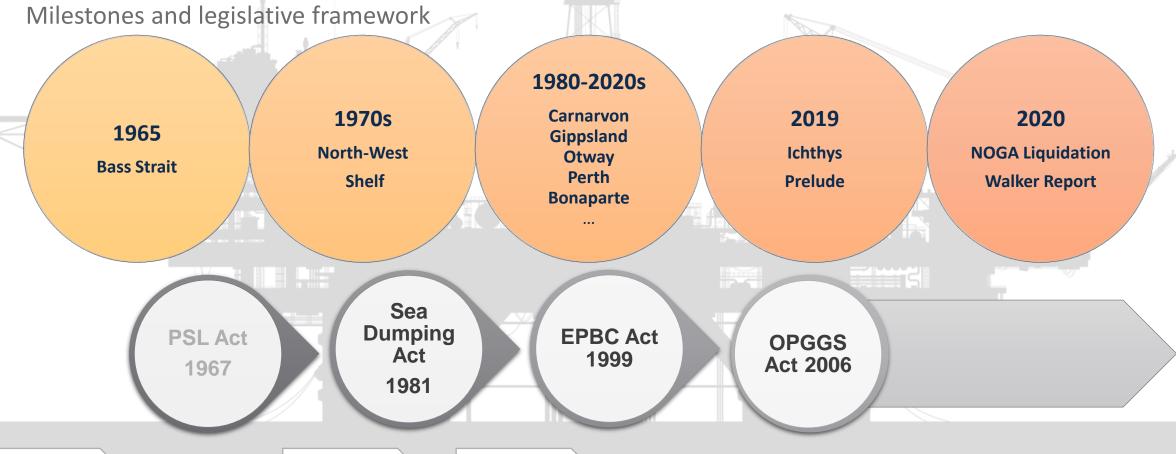
52 subsea lifts



~460 wells to be plugged and abandoned

# Australia's offshore decommissioning landscape





IMO Member 1953 MARPOL 73/78 IMO Resolution A672(16) 1989

UNCLOS 1958 London Convention & Protocol 1972 Basel Convention 1992

Minamata Convention 2013







#### Offshore Petroleum and Greenhouse Gas Storage Act 2006

No. 14, 2006

- Section 572 of the Act is a long-standing, key provision. Titleholders are required to:
  - Maintain all structures, equipment, and property in a title area in good condition and repair.
  - Remove these when no longer being used in connection with operations authorised by the title.
  - Alternative to full removal via acceptance of an Environment Plan (i.e., a 'Deviation').
- Section 270 of the Act requires NOPSEMA to advise if it is satisfied titleholder decommissioning's obligations have been met prior to the surrender of the title.
- Requirement for permissioning documents (Environment Plans, Safety Case, WOMP) to undertake petroleum activities, through the Regulations.

# What is 'decommissioning'?



The process of removing or otherwise satisfactorily dealing with offshore petroleum property (including wells) in a safe and environmentally responsible manner when it is neither used nor intended to be used.

- Cessation of production / disused equipment
- End-state deviations
- Execution of removal activities
- Monitoring and remediation
- Plugging and abandonment of wells
- Any combination of the above



## Status check

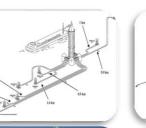
# NOPSEMA Australia's offshore energy regulator

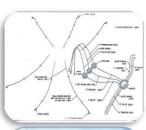
#### Decommissioning to date

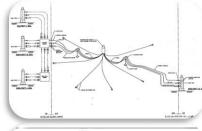














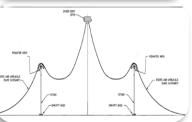












Talisman Field

1992

(Aqua Blue FPSO)

**Buffalo Field** (Buffalo Venture FPSO)

2004

Legendre Field (Ocean Legend MOPU, Karratha Spirit FSO)

2010

Jabiru & Challis Fields (Jabiru Venture FPSO Challis Venture FPSO)

2013

Puffin Field (Front Puffin FPSO)

2015

Northern Endeavour ceases production

2019

Woollybutt Field (removal of property)

2022

MEFF

(removal of floating property)



Griffin Venture FPSO sailed in 2009



BMG Crystal Ocean FPSO sailed in 2010



Woollybutt Four Vanguard FPSO sailed in 2012



Mutineer-Exeter MV11 FPSO sailed in 2013



Stybarrow MV16 FPSO sailed in 2015



Balnaves Armada Claire FPSO sailed in 2016





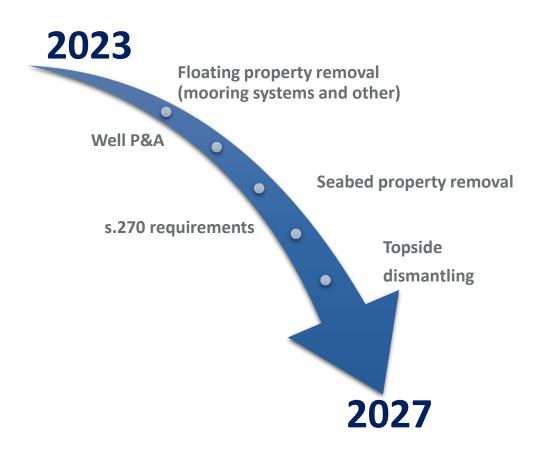
Enfield Nganhurra FPSO sailed in 2018

# **Status check**

#### Decommissioning to come – next five years



Title Holder & Project
Eni Australia Limited - <u>Woollybutt</u>
Santos Limited - <u>Mutineer-Exeter</u>
Woodside Energy Julimar Pty Ltd - <u>Balnaves</u>
Woodside Energy Ltd - <u>Echo Yodel Subsea</u>
Woodside Energy (Australia) Pty Ltd - <u>Stybarrow field</u>
Woodside Energy Ltd - WA-28-L (Enfield)
Woodside Energy (Australia) Pty Ltd - <u>Griffin Development</u>
Woodside Energy (Victoria) Pty Ltd - Minerva Development
Cooper Energy Limited - Gippsland Offshore Development (BMG)
Esso Australia Resources Pty Ltd - Bass Strait Development



# Learnings and key issues

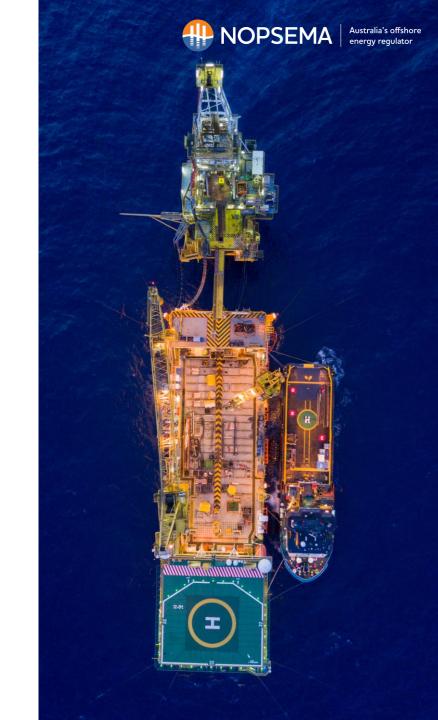


- The General Directions effectively established a pathway to resolve the backlog.
- Long lead decommissioning requirements seem to be under recognised.
- Actual costs can be significantly higher than estimates, especially where planning was late.
- Visibility on EOFL and CoP is limited, and estimates are uncertain.
- The importance of inspection, monitoring and repair of disused property.
- Unseized opportunities:

Consolidating existing data, commissioning studies to inform planning, technical innovation and cooperation between title holders.

# Learning and key issues

- In situ proposals can only progress by demonstrating environmental benefits are resolving long-term uncertainties:
  - Consistent with principles of Ecologically Sustainable Development (ESD)
  - Consistent with national plans and key documents (e.g. plastics)
  - No impacts on maters of National Environmental Significance (NES)
- Assumptions are not always supported by robust scientific evidence.
- Consider Sea Dumping Act requirements (Abandonment, Dumping or Reefing permits).



# **Consultation and community acceptance**



Barossa Pty Ltd v Tipakalippa [2022] FCAFC 193 (appeal decision) on 2 December 2022.



#### **Current focus**



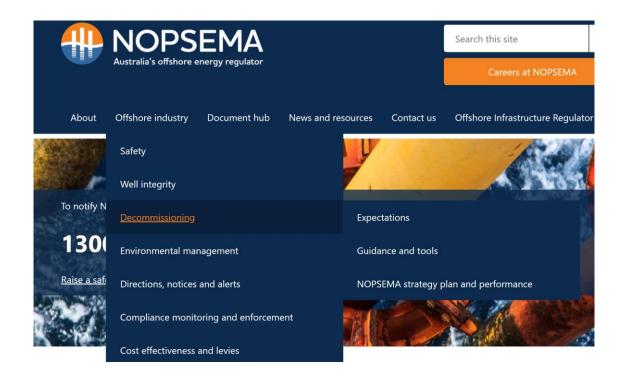
- Continued compliance monitoring of Tier 1 projects.
- Heightened compliance monitoring of Tier 2 projects, typically operating assets with uncertain or upcoming EOFL/CoP <5 years.</li>
- Continued use of EP revisions to firm up decommissioning expectations and plans.
- Seeking evidence of leadership, planning and provisioning by title holders.
- Collaboration with government departments and agencies (e.g. DCCEEW, NOPTA and ASIC) and other organisations (e.g. research bodies, CODA, APPEA).
- Continuing provision of guidance and information to title holders (e.g. indirect impacts).

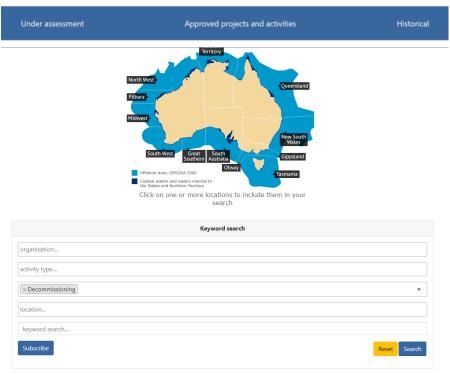


# Regulatory guidance update

#### Home | NOPSEMA







In-force Decommissioning EPs: 17

Under Assessment Decommissioning EPs: 22

# Regulatory guidance update



**NOPSEMA's revised Research Strategy** 

20.03.2023

**Considerations when preparing for decommissioning activities** 

15.12.2022

Section 572 Maintenance and removal of property regulatory policy

09.12.2022

**Section 270 Consent to surrender title policy** 

02.09.2022

Planning for proactive decommissioning

16.12.2021

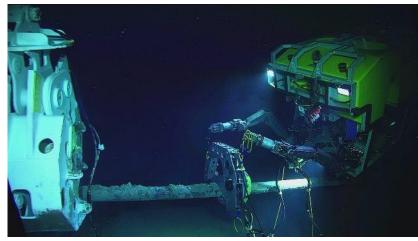
**Decommissioning Compliance Plan** 

12.05.2021

**Decommissioning Compliance Strategy** 

12.05.2021





## **Decommissioning Compliance Strategy and Plan**



#### Vision

Decommissioning of offshore petroleum wells, structures and property is completed in a timely, safe, and environmentally responsible manner.



Ensure titleholders have appropriate plans for decommissioning and are completing activities in a timely manner



Provide certainty to industry regarding their obligations to decommission



Improve understanding and build capacity in safe and responsible decommissioning

#### **OBJECTIVES**

**Targets** 

Moored or tethered buoyant infrastructure removed within 12 months of permanently ceasing operation

All wells plugged and closed-off with accepted abandonment report within 3 years of permanently ceasing operation

All structures, equipment and property decommissioned to approved end-state within 5 years of permanently ceasing operation

# Thank you

Questions and discussion

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