



7 November 2025

To: Victorian Legislative Council Environment and Planning Committee Re: Inquiry into Decommissioning Oil and Gas Infrastructure

Thank you for the opportunity for the Institute for Energy Economics and Financial Analysis (IEEFA) to provide input to the Victorian Legislative Council Environment and Planning Committee for the Inquiry into Decommissioning Oil and Gas Infrastructure.

IEEFA is an independent energy finance think tank that examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.

IEEFA considers that Victoria is in a unique position to establish a decommissioning industry given the state has some of the oldest oil and gas extraction infrastructure in Australia and therefore has a greater proportion of its property and equipment ready for decommissioning. It is incumbent on the Victorian government to ensure decommissioning work is undertaken in an orderly and transparent manner. This will help to keep cost downs and provide opportunities for the state's oil and gas workforce and contractors to move into the next phase of oil and gas lifecycle, decommissioning.

We thank the committee for the opportunity to submit to Victoria's inquiry into the decommissioning of oil and gas infrastructure, and we welcome any questions on our submission.

Kind regards,

Kevin Morrison, Energy Finance Analyst, Australian Gas

## Inquiry into Decommissioning Oil and Gas Infrastructure

Question (a) – The scale and legal ownership structure of Victoria's oil and gas infrastructure, including offshore wells, pipelines, high-pressure transmission and low-pressure distribution systems, and relevant projects in Commonwealth waters.

Victoria has the second largest volume of oil and gas infrastructure that needs to be decommissioned among Australia's states and territories, behind Western Australia. This infrastructure is also among the oldest in Australia given Bass Strait was Australia's first significant offshore oil and gas development. Gas production in the Gippsland Basin started with the Barracouta and Marlin fields in March and April 1969, respectively. The first oil produced in the Gippsland was from the Halibut field in March 1970.

Figure 1 below provides a breakdown of the types of oil and gas infrastructure offshore Victoria that need to be decommissioned. The Gippsland Basin has 9% of the oil and gas infrastructure material to be decommissioned in Australia with an additional 2% in the Otway and Bass basins.<sup>3</sup>

Figure 1: Victoria's decommissioning asset profile

## 22 platforms 2,089km pipelines and umbilicals 120 flexible risers and dynamic umbilicals 52 subsea lifts ~460 wells to be plugged and abandoned

Source: NOPSEMA. Australia's Decommissioning Journey. The Regulator's perspective in 2023. Page 4.

<sup>&</sup>lt;sup>1</sup> Woodside Energy. <u>Bass Strait. Bass Strait Overview and History.</u>

<sup>&</sup>lt;sup>2</sup> Minerals and Petroleum Victoria. Oil and Gas Resources of Victoria. 1998. Page 17.

<sup>&</sup>lt;sup>3</sup> Australian Government. Department of Industry, Science and Resources (DISR). Australia's Offshore Resources Decommissioning Roadmap, December 2024. Page 6.



Given offshore Victoria has some of the oldest gas and oil infrastructure that needs decommissioning, much of the expected decommissioning work will be undertaken in Victoria before other jurisdictions in Australia.

700 600 500 Asset Count 400 300 200 100 0 Perth Northern Gippsland Bonaparte Otway Browse Bass Carnarvon ■ Platform Wells ■ Subsea Development Wells ☐ Subsea Exploration & Appraisal Wells ■ Fixed Facilities (Platforms)

Figure 2: Australian offshore oil and gas asset stock by basin and typology

Source: Advisian. Offshore Oil and Gas Decommissioning Liability (Australia). November 2020. Page 5.

□ Floating Facilities
□ Infield Flowlines

■ Subsea Structures

The infrastructure earmarked for decommissioning offshore Victoria is owned and operated by a handful of companies. Historically, the largest oil and gas producing complex is the Gippsland Basin Joint Venture (GBJV), also known as the Bass Strait project.<sup>4</sup> This year, Woodside took over as operator of the venture from ExxonMobil, which had operated the project since 1969.<sup>5</sup>

■ Export & Inter-field Pipelines

☐ Static Umbilicals

Other companies with decommissioning liabilities offshore Victoria include Beach Energy<sup>6</sup> and Amplitude Energy.<sup>7</sup> Most of the extraction activity is in federal government waters, and not in Victoria's offshore maritime jurisdiction (Figure 3).

<sup>&</sup>lt;sup>4</sup> Woodside Energy. <u>Bass Strait.</u>

<sup>&</sup>lt;sup>5</sup> The Australian Financial Review. Woodside to operate Bass Strait venture boosting east coast gas supply. 29 July 2025.

<sup>&</sup>lt;sup>6</sup> Energy Today. <u>Beach Energy gets busy in the Otway Basin.</u> 3 November 2025.

<sup>&</sup>lt;sup>7</sup> Amplitude Energy. <u>Decommissioning.</u>



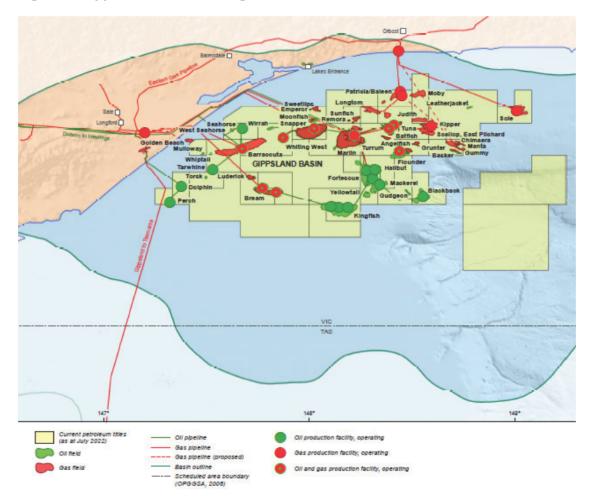


Figure 3: Gippsland Basin oil and gas fields and infrastructure

Source: Geoscience Australia. Regional Geology of the Gippsland Basin.

Question (b) – The scale and nature of oil and gas infrastructure requiring decommissioning over the coming decades, including onshore works and works in Commonwealth and Victorian waters.

The Australian government published a decommissioning roadmap in 2024, and estimated most decommissioning in Victoria would be in the offshore Gippsland and Otway basins. Most of this decommissioning work will need to be done by ExxonMobil and Woodside through the Bass Strait project and Kipper joint venture. "These assets comprise 421 wells, 19 platforms, six subsea facilities and more than 800 kilometres (kms) of subsea pipeline." These assets represent most of the planned decommissioning for Victoria (Figure 1).

These facilities are in water depths that range from 38 metres to 402 metres, and their distance from the coast ranges from 12km to 87km.<sup>9</sup>

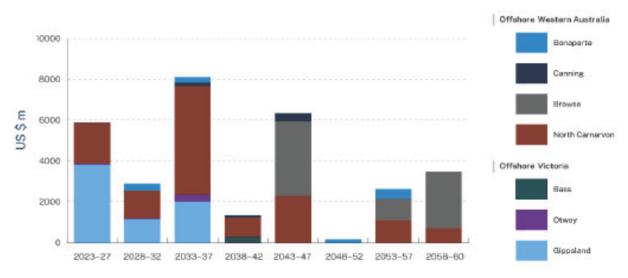
<sup>&</sup>lt;sup>8</sup> ExxonMobil. <u>Bass Strait Operations</u>. <u>Decommissioning Report 2024</u>. Page 1.

<sup>9</sup> Ibid. Page 2.



Most of ExxonMobil's and Woodside's offshore pipeline network is in federal government waters, with seven primary pipelines and one secondary pipeline extending to the shore through state waters. This equates to about 790km of pipelines in federal waters and some 50km in state waters.<sup>10</sup>

Figure 4: Potential decommissioning pipeline in Australia from 2023 to 2060



Source: DISR. Australia's Offshore Resources Decommissioning Roadmap. December 2024. Page 7.

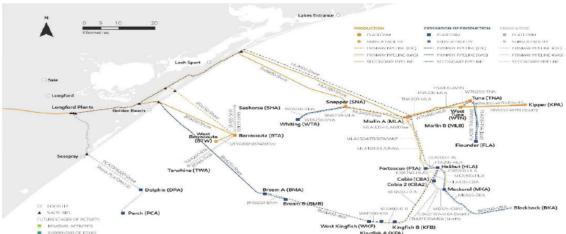
ExxonMobil has illustrated that a considerable proportion of the oil and gas infrastructure offshore Victoria has stopped production (Figure 5). ExxonMobil said it completed AU\$575 million of decommissioning work in 2024, including plug and abandonment of platform-based wells on Flounder, Bream A, Bream B, West Kingfish, Perch and Dolphin; plug and abandonment of the Gudgeon-1 and Terakihi-1 subsea wells; and started decommissioning work on the Fortescue and Kingfish B platforms. It also completed AU\$340 million of decommissioning work in 2023. By the end of 2024, ExxonMobil has completed almost AU\$2 billion decommissioning activities.<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> ExxonMobil. <u>Bass Strait Operations</u>. <u>Decommissioning Report 2024</u>. Page 4.

<sup>&</sup>lt;sup>11</sup> Ibid. Page 24.



Figure 5: ExxonMobil/Woodside status of facilities and pipelines at 31 December 2024



Source: ExxonMobil. Bass Strait Operations. Decommissioning Report 2024. Page 8.

ExxonMobil has also provided a timeline for its decommissioning activities in the Gippsland Basin to 2032. 12

The range of activities involved in decommissioning will vary. CSIRO estimated there were 5.7 million tonnes of materials to be brought to shore of which 3.56 million tonnes is steel, 1.39 million tonnes is concrete and about 400 tonnes of plastics as well as tonnes of non-ferrous materials and hazardous materials.<sup>13</sup>

The types of hazardous waste contained in material brought onshore include hydrocarbons, process chemicals, heavy metals (mercury, lead, cadmium), naturally occurring radioactive materials (NORMs) and asbestos. <sup>14</sup> The handling of radioactive substances is subject to international laws and regulations. Australia is a member of the International Atomic Energy Agency (IAEA) and is required to adhere to IAEA standards in the handling of radioactive substances. <sup>15</sup>

Question (c) – The regulatory powers of the Victorian Government to ensure oil and gas companies deliver planned and timely infrastructure decommissioning.

Offshore petroleum operations undertaken in Victoria's coastal waters are regulated under the state's Offshore Petroleum and Greenhouse Gas Storage Act 2010. The Act mirrors the Commonwealth Offshore Petroleum and Greenhouse Gas Storage (OPGGS) Act, and contains similar provisions relating to decommissioning.<sup>16</sup>

<sup>&</sup>lt;sup>12</sup> ExxonMobil. Bass Strait Operations. Decommissioning Report 2024. Page 45.

<sup>&</sup>lt;sup>13</sup> Australian government, DISR. Australia's Offshore Resources Decommissioning Roadmap, December 2024. Page 19.

<sup>&</sup>lt;sup>14</sup> Macquarie University. Best practice for dismantling, recycling and disposal of offshore petroleum structures. Page 20.

<sup>15</sup> Macquarie University. Best practice for dismantling, recycling and disposal of offshore petroleum structures. Page 21.

<sup>&</sup>lt;sup>16</sup> Australian government, Department of Industry, Innovation and Science. <u>Discussion Paper – Decommissioning Offshore Petroleum Infrastructure in Commonwealth Waters.</u> October 2018. Page 90.





However, decommissioning will involve the movement of materials onshore, and any onshore decommissioning activity, which may involve recycling or repurposing the materials, is likely to require a statement on the environmental effects of this activity. Victoria requires an assessment of the potential environmental impacts of any proposed development, which may include decommissioning activity. The legislation does not specify decommissioning, and is subject to the Minister's discretion. There will need to be co-ordination between the various ministries in the Victorian government responsible for different parts of the decommissioning supply chain; it would be more effective to have a special office to oversee all regulatory, safety and workforce issues given the urgency and significance of decommissioning. This should streamline decision-making and enhance transparency on the oversight for the decommissioning supply chain. For example, WorkSafe Victoria is responsible for the handling of hazardous substances, while the Department of Energy, Environment and Climate Action oversees environmental pollution and waste management.

## Question (d) – Any actions the Victorian Government can take to ensure oil and gas companies provide sufficiently to cover decommissioning costs.

Given that most of the offshore oil and gas infrastructure is in federal waters, the federal government's trailing liabilities provision in the OPGGS Act will be the main financial mechanism to ensure companies face ongoing liability for the costs of decommissioning offshore oil and gas infrastructure.<sup>18</sup>

Victoria can exercise its legislative powers to check and enforce that companies are undertaking the decommissioning work as required under the state's *Offshore Petroleum and Greenhouse Gas Storage Act 2010*, under provisions 621 and 634.<sup>19</sup> This state law gives the Minister the power to enforce the removal of property if there is non-compliance by the owner with their obligation to remove oil and gas infrastructure.<sup>20</sup>

Victoria also has the option to widen its proposed amendments to its legislation on trailing liabilities on mines to include oil and gas infrastructure that is decommissioned within Victoria's jurisdiction. The Victorian state government introduced the *Mineral Resources (Sustainable Development) (Financial Assurance) Amendment Bill* on October 28, 2025.<sup>21</sup> The proposed amendments are to mirror the trailing liabilities provisions in the OPGGS Act and will apply to Victoria's coalmines. An additional amendment to this bill could be made to ensure oil and gas companies are required to have adequate financing for their decommissioning work.

A robust framework on financial provisioning is required to ensure the Victorian government can pursue the opportunity to establish a decommissioning industry in the state, to utilise the experience of oil and gas workers, whose skills gained in the extractive phase of the industry can be applied to the decommissioning phase of the industry.

<sup>&</sup>lt;sup>17</sup> Victorian Department of Transport and Planning. <u>Environment effects statements in Victoria</u>. June 2024.

<sup>&</sup>lt;sup>18</sup> Australian Government, Department of Industry, Science and Resources. <u>Trailing liability for decommissioning of offshore petroleum property: quidelines</u>

<sup>&</sup>lt;sup>19</sup> Victorian Legislation. Offshore Petroleum and Greenhouse Gas Storage Act 2010. Pages 715 and 732.

<sup>&</sup>lt;sup>20</sup> Ibid. Page 739.

<sup>&</sup>lt;sup>21</sup> Resources Victoria. <u>Trailing liabilities for declared mines</u>. Accessed 6 November 2025.





## Question (e) - Opportunities for employment in decommissioning.

There have been several studies on employment opportunities in Australia's decommissioning, including one by CSIRO,<sup>22</sup> the Centre of Decommissioning Australia<sup>23</sup> and the Australian Academy of Technological Sciences and Engineering.<sup>24</sup>

The steel inventory in Victorian oil and gas infrastructure earmarked for decommissioning could provide feedstock for a possible electric arc furnace at Whyalla in South Australia.<sup>25</sup> This would provide work opportunities all along the supply chain. It would also provide some revenue for the companies required to remove the subsea infrastructure, which could be directed towards offsetting decommissioning costs.

Question (f) – Opportunities for Traditional Owner acknowledgement, consultation, and employment where oil and gas infrastructure exists on their ancestral lands and/or Sea Country.

Business opportunities and partnerships for Traditional Owners were outlined by the Australian government in its Roadmap to establish an Australian decommissioning industry.<sup>26</sup>

Question (g) – Identifying current and potential leaked greenhouse gases from Victoria's existing and retired oil and gas infrastructure, including relevant projects in Commonwealth waters and the quantity of leaks.

A scientific study found, "Decommissioned oil and wells are an underreported source of greenhouse gas emissions ... [that] may partly counteract efforts to mitigate greenhouse gas emissions from fossil fuel infrastructure." This could have an impact on Australia reaching its international emissions commitments.

The study highlighted the risks posed by ageing oil and gas infrastructure. "Leakage of greenhouse gases from offshore wells may occur because of faulty, damaged, or corroded well casings, sometimes referred to 'well integrity issues.' The leakages may also occur due to fluids migrating outside of the well."<sup>28</sup>

NOPSEMA has issued several notices to operators about methane and hydrocarbon leakages from their idle infrastructure in the marine infrastructure. For example, the offshore regulator issued a notice to Beach Energy and its partners in the offshore Yolla facility in the Gippsland

<sup>&</sup>lt;sup>22</sup> CSIRO. Exploring regional opportunities and social acceptability for offshore oil and gas decommissioning and resource recovery. April 2024.

 <sup>&</sup>lt;sup>23</sup> Centre of Decommissioning Australia. Skills review for the Australian oil and gas decommissioning industry. March 2024.
 <sup>24</sup> Australian Academy of Technological Sciences and Engineering. Offshore oil and gas decommissioning. Technologies.
 Pages 29-33.

<sup>&</sup>lt;sup>25</sup> The Conversation. How Whyalla can be upgraded to green steel and why we need to keep steel production in Australia. 24 February 2025.

<sup>&</sup>lt;sup>26</sup> Australian government, DISR. Roadmap to establish an Australian decommissioning industry, issues paper. Page 14.

<sup>&</sup>lt;sup>27</sup> International Journal of Greenhouse Gas Control. <u>Greenhouse gas emissions from marine decommissioned hydrocarbon wells: leakage detection, monitoring and mitigation strategies</u>. *Bottner, C. et al.* September 2020. Page 1.

<sup>&</sup>lt;sup>28</sup> Ibid. Page 2.





Basin for consistently exceeding hydrocarbon concentration limits in produced water discharges, posing unacceptable risks to marine life.<sup>29</sup>

ExxonMobil's Australian subsidiary Esso Australia was issued with a notice from NOPSEMA for repeatedly failing to properly prepare for an "oiled wildlife" incident, as promised in its environment plan.<sup>30</sup>

Question (h) – Any actions the Victorian Government can take to cap and otherwise protect the population from leaked greenhouse gases across Victoria's existing and retired oil and gas infrastructure.

The Victorian government's gas substitution roadmap has provided a path for the state to reduce its greenhouse gas emissions from its existing and retired gas infrastructure.<sup>31</sup>

<sup>&</sup>lt;sup>29</sup> NOPSEMA. Environmental Improvement Notice. Notice number: 761. August 2019.

<sup>&</sup>lt;sup>30</sup> NOPSEMA. Environmental Improvement Notice. Notice number: 738. April 2019.

<sup>&</sup>lt;sup>31</sup> Victorian government, Department of Energy, Environment and Climate Action. Victoria's Gas Substitution Roadmap. 2024.