NATIONAL ENERGY RESOURCES AUSTRALIA

8 November 2021

Committee Secretary
Senate Economics Legislation Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Driving a collaborative technology-led approach to harness Australia's offshore oil and gas decommissioning challenge as an economic, environmental and social opportunity

Dear Secretary,

National Energy Resources Australia (NERA) appreciates the opportunity to contribute to the Economics Legislation Committee's inquiry into offshore decommissioning legislation. I would particularly like to inform the Committee on how industry is working closely with NERA to enable a pro-active, coordinated and collaborative approach to Australia's enormous decommissioning challenge through our Centre of Decommissioning Australia (CODA) and National Decommissioning Research Initiative (NDRI).

NERA released a landmark study in partnership with seven oil and gas operators in 2021, identifying that Australia's offshore petroleum industry has an estimated USD 40.5 billion decommissioning workload over the next 50 years. Over half of this work is forecast to take place by 2030 and 73 per cent by 2040.¹ Figure 1 outlines the timeline of projected decommissioning expenditure for wells plugging and abandonment (P&A) and facilities. This infrastructure is distributed across Western Australia (North Carnarvon, Browse and Perth basins), Victoria (Gippsland, Otway and Bass basins) and the Northern Territory (Bonaparte basin).

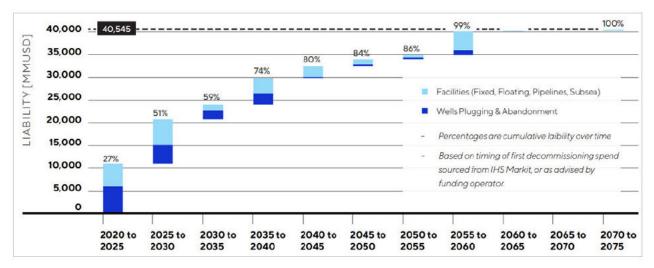


Figure 1. Australian offshore oil and gas decommissioning timeline.

¹ Centre of Decommissioning Australia. 2021. "A Baseline Assessment of Australia's Offshore Oil and Gas Decommissioning Liability."

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With significant urgent expenditure emerging, Australia must prepare to perform a large portion of this work domestically to maximise economic growth and job creation – much of which will be in regional areas – and minimise capital outflows. Australia has the skills and desire, though we believe that a coordinated approach by Australia's oil and gas industry is critical to building our national ability and preparedness to execute this work in a safe, efficient, environmentally responsible and cost-effective manner.

NERA, working alongside industry and leveraging a trusted reputation built over the past six years, has embarked on the process of coordinating Australia's approach to decommissioning by establishing the Centre of Decommissioning Australia (CODA).² CODA brings together the entire decommissioning value chain, including asset owners and operators, the service and supply sector, regulators, research, and State and Federal governments. It connects all parties to share insights, knowledge and best practice and assists the sector in coordinating its approach to offshore and onshore decommissioning.

NERA launched CODA in partnership with seven of Australia's largest operators in March 2021 as an independent centre for decommissioning to:

- Pursue a 35 per cent reduction in decommissioning costs in Australia, providing savings both to industry and the Australian taxpayer
- Identify or establish optimal recycling and reuse of offshore infrastructure to enable circular economy opportunities and support emerging low-emissions technologies
- Maximise opportunities for the local workforce, service and technology companies; and
- Support the building of a globally competitive domestic decommissioning industry that can service needs locally and throughout the Asia Pacific region.

To address these objectives, CODA is initiating joint projects, technical working groups and industry-wide knowledge-sharing activities to de-risk and reduce the overall costs of decommissioning, ensure optimum environmental outcomes and maximise local opportunities to pursue Australian and regional work. In addition, CODA connects with other global decommissioning knowledge hubs to accelerate knowledge sharing in and out of Australia.

Building on the release of our landmark 2021 liability report, CODA has commenced three further foundation studies to understand the current state and needs of the Australian decommissioning industry.

1. Planning and execution of global best practice applicable to Australian operations

We are conducting a global review of decommissioning planning and execution as an early enabler of best practice development for Australia. This project will identify key learnings from comparable jurisdictions to accelerate understanding of the opportunities, providing Australian industry with an accessible digest of international best practice for local use.

² Find out more about <u>CODA</u>.

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2. Decommissioning technology roadmap

Through this project, CODA is developing a decommissioning innovation and technology roadmap to identify the work areas that will most benefit from applying innovative approaches and technologies. The roadmap will highlight technology advancements and process optimisation that, if deployed in Australia, can create significant efficiencies in late-life management, innovative removal and optimised abandonment, unlocking up to USD 5.6 billion in potential savings. We are also initiating a Services and Technology Working Group to ensure Australian businesses have visibility of technology requirements and opportunities to showcase capability and direct innovation efforts to high impact areas.

3. Recycling and disposal pathways

Creating local disposal or recycling pathways within Australia could support economic development in regional areas and save approximately USD 1.5 billion.³ This project forecasts the volume of materials to be removed during the decommissioning process against the anticipated decommissioning activity schedule, then assesses Australia's existing capacities and capabilities for the disposal and recycling of these materials. CODA is also engaging with state governments to support the identification of locations for and subsequent development of the supporting infrastructure – such as appropriate ports and hubs – needed to execute disposal and recycling on Australian shores.

Long term planning of decommissioning activities has also been identified as one of the most important contributors to improving efficiency in the decommissioning design and execution process and creating opportunities for Australian businesses. CODA is working with industry to develop a ten-year outlook report to enhance the visibility of upcoming decommissioning activity. This outlook report will help the local supply chain ensure it is prepared and has the capability and capacity to perform the work.

Supporting independent, research-based, decision making

As the scale of Australian decommissioning activities grows, many questions remain to be resolved around the approval of activities. While the regulations call for full removal of all installed infrastructure, there are situations where leaving some infrastructure in situ may result in ongoing environmental benefits. Currently such situations are considered on a case-by-case basis, however, reaching consensus around removing or leaving in situ some classes of equipment may help to speed up decisions and streamline the process for both the owners and regulators. To support some facets of this decision process, CODA is delivering world-leading environmental research through its National Decommissioning Research Initiative (NDRI⁴).

The NDRI was initiated in 2019 in partnership with eight oil and gas operators to deliver independent science to improve understanding of the effect of removing or leaving offshore

³ Centre of Decommissioning Australia. 2021. "A Baseline Assessment of Australia's Offshore Oil and Gas Decommissioning Liability."

⁴ Find out more about the NDRI.

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infrastructure. Operating with oversight from an Independent Scientific Advisory Board, this research will ensure that decision-making for Australia's decommissioning activity can be built on sound, independent scientific research, providing the best possible outcomes for industry and the environment and community. Gaining clarity around decommissioning activity approvals can also enable the adoption of innovative approaches to decommissioning, such as multi-asset campaigns, application of new technologies, and development of local disposal pathways. The NDRI's Phase 1 research program is nearing completion, with Phase 2 set to commence in 2022.

Growing a future decommissioning industry in Australia

The scale of the collaborative decommissioning opportunities highlighted above can deliver significant jobs and economic growth for Australia, supporting high-skill employment and regional development. CODA's coordinated approach to industry development will help Australia leverage decades of expertise and capacity in oil and gas, mining and advanced technology sectors into decommissioning and emerging energy industries. As Australia builds capability and skills in decommissioning, it can export technology and services throughout the Asia-Pacific region and use local infrastructure to support regional decommissioning work.

NERA is establishing CODA as a stand-alone not-for-profit organisation in 2022 to deliver value and impact over the coming decades. We are presently discussing funding and partnership models with Commonwealth, State and Territory Governments and industry to enable CODA to operate independently but collaboratively. I also note that Commonwealth Government endorsement and support is critical to the ability of CODA to deliver its full potential value to the economy and achieve its aims to reduce decommissioning costs and maximise jobs and economic growth for Australia. The support that NERA receives from DISER has enabled us to operate independently from industry. Maintaining a similar level of independence will be vital for CODA to remain effective.

We appreciate the opportunity to highlight our areas of interest to this review and note how critical collaborative action can ensure a positive decommissioning future for Australia. We would be pleased to discuss our comments with you further, and any inquiries can be directed to

General Manager Decommissioning and Strategy

Yours sincerely,



Miranda Taylor

CEO