THE REGULATOR

2022 - Issue 2

The important role of HSRs

How volunteer health and safety representatives benefit offshore safety

NOPSEMA
Australia's offshore energy regulator

About **NOPSEMA**

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is Australia's independent expert regulator for health and safety, environmental management, structural and well integrity for offshore petroleum facilities and greenhouse gas storage activities in Commonwealth waters.

By law, offshore petroleum and greenhouse storage activities cannot begin before NOPSEMA has assessed and accepted the required permissioning documents demonstrating how the activity will be undertaken to reduce risks to the health and safety of the workforce and the environment to as low as reasonably practicable (ALARP) and environmental impacts to an acceptable level.

In November 2021, NOPSEMA was given the role and functions of the Offshore Infrastructure Regulator following the passing of the *Offshore Electricity Infrastructure Act 2021* in federal parliament.

For more information, visit our website at **nopsema.gov.au.**

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Strategic compliance focus areas for 2022

Contents

Message from the

Chief Executive

In this edition of The Regulator, we shine a spotlight on the important role HSRs play in offshore safety and our ongoing engagement with industry at the 2022 APPEA conference.

Recently I announced my intention to finish as CEO of NOPSEMA when my current contract expires in September.

My eight years with NOPSEMA has been extremely rewarding and now feels like the right time to hand the reigns over to someone who can make a similar long-term commitment to guide the agency through its next phase.

With exciting opportunities and challenges ahead, I want to know the agency is in safe hands when I step out the door.

Since joining in 2014, I have had the privilege of leading NOPSEMA as it has matured as a leading regulator with international impact.

Among the social, technological and policy developments that have underpinned the agency's evolution are:

- efforts to reduce unnecessary regulatory burden through streamlining of approval processes and expanding the application of risk-based approaches to regulatory activities
- an increasing focus among the community on environment, social and governance (ESG) and social license
- a growing interest in emissions reduction strategies like carbon capture storage and renewable energy activities
- enhancements to the transparency of regulatory assessment and decision-making processes
- increasing regulatory oversight of decommissioning work as the industry matures and facilities approach the end of their life.

In my time as CEO, NOPSEMA has responded to challenges such as the impact of historically low oil prices, widespread community opposition to the development of titles in the Great Australian Bight, and of course the global COVID-19 pandemic.

The collapse of the Northern Oil and Gas Australia (NOGA) group of companies and subsequent liability for decommissioning of the Northern Endeavour facility also proved to be significant issues.

Despite these challenges, NOPSEMA has not lost sight of its' vision of a protected offshore workforce and environment. I am pleased that in the eight years I have been CEO, there have been no fatalities, major accident events or environmental disasters.

As confirmed by multiple independent reviews, NOPSEMA has proven itself to be an efficient and effective regulator that is 'appropriately focused in bringing about improvement in OHS, well integrity and environmental management across the offshore oil and gas industry.'

Key to our success has been a commitment to broad engagement with duty holders, government, workforce representatives, peak industry bodies, environmental NGOs, fishing groups and the wider community.

How we approach our engagement continues to evolve to ensure it is fit-for-purpose and continues to deliver on the expectations of stakeholders.

An incoming CEO will undoubtedly face challenges, but with this comes a great opportunity to lead the development of new functions.

Expanding financial assurance, ensuring regulatory oversight of carbon capture and storage activities, and establishing the role of a safety and environment regulator for the emerging offshore renewable energy sector are all on the horizon.

Opportunities also exist in continuing to lead a community of best practice regulators as Chair of the International Regulators Forum and the International Offshore Petroleum Environment Regulators, together with improving our regulatory management systems and embracing new technologies under the government's deregulation program.

The agency will continue working with government to respond to the recommendations of the 2020 independent operational review of NOPSEMA, including a potential merger of the agency with the National Offshore Petroleum Titles Administrator (NOPTA).

> **The past few years have been challenging for all of us, but I believe that as an agency we have set a high bar for industry and ourselves**.

The expectation that the industry continues to pursue improvement also applies to NOPSEMA and there is plenty more to be done.

I encourage anyone with appropriate qualifications and experience to apply to become the next NOPSEMA CEO. If appointed, you will be rewarded with a fulfilling role where you can make a huge difference.

Stuart Smith
Chief Executive Officer

Engaging industry at the 2022 APPEA Conference

The Australian Petroleum Production and Exploration Association's (APPEA) annual conference and exhibition is an important fixture on the industry calendar and a valuable platform for NOPSEMA to engage with a broad range of industry representatives.

Running from 16 to 19 May at the Brisbane Convention and Exhibition Centre, NOPSEMA will be present at the Australian Government booth in the main pavilion. Delegates include the regulator's executive team and representatives from the Health and Safety and Environment and Decommissioning divisions.

NOPSEMA's Head of Safety and Integrity Division Derrick O'Keeffe will be delivering a presentation on the recently published "Cradle to Grave: Planning for All Well Decommissioning" paper.

The paper discusses NOPSEMA's decommissioning compliance plan and strategy, and the road map to achieve the agency's goals.

These goals include all wells to be risk assessed and have accepted abandonment plans in place by 2023, and that by 2025 all wells will be permanently abandoned within three years of becoming non-operational.

The paper also outlines the decommissioning challenges faced by the industry, including the immediate challenge of reducing the backlog of unused wells to plug and abandon, and the future challenges of incorporating decommissioning considerations into each stage of a facility's lifecycle.

The presentation will cover the context of regulatory developments around decommissioning.

NOPSEMA's involvement with these events is a continuation of our longstanding commitment to working with industry to help them understand their obligations and develop a clear, industry-wide understanding of the regulator's expectations.

This commitment has included NOPSEMA's involvement in APPEA's Drilling Industry Steering Committee (DISC) Well Operations Management Plan (WOMP) working group, which seeks to create a consistent and standardised WOMP format.

Members of industry are encouraged to stop by NOPSEMA's booth and speak to our representatives.

Case study highlights decommissioning pitfalls

A recent investigation into a titleholder's non-compliance with a direction has further highlighted the importance of titleholders undertaking proactive planning for decommissioning.

NOPSEMA issued a direction requiring the titleholder to plug and abandon the wells by the end of 2021.

The Titleholder was already in the process of tendering for contractors to complete the decommissioning work. It subsequently became apparent that the chosen contractor would be unable to initiate decommissioning work in time to complete it within the deadline.

To their credit, the titleholder selected an alternative contractor who was ultimately able to safely complete the job.

However, the alternative was not without challenges. Delays resulted in the titleholder's failure to meet their deadline for decommissioning and led NOPSEMA to commence an investigation.

This case highlights the need for titleholders to recognise the variables and uncertainties associated with decommissioning, particularly decommissioning wells, structure and property that has not been in use for a considerable period and has not been subject to recent monitoring or adequate maintenance effort.

NOPSEMA's Decommissioning Manager David Christensen said the case highlights the need for titleholders to recognise that decommissioning of wells and structures presents a range of unique technical challenges.

"Removal of structures is not simply a reversal to installation – given degradation of material, there is the need for specialist equipment and expertise, and supporting studies and contingencies to effectively manage safety and environmental risks," David said.

"Additional time is often needed to safely and environmentally responsibly complete decommissioning activities."

Ultimately, proactive planning for decommissioning can reduce and limit many of these risks and variables.

Titleholders need to ensure that the decommissioning dates and timeframes included in their Environment Plans are achievable and begin planning for them as soon as practical.

For more information on how to begin proactive planning you can find the "Information Paper – Planning for Proactive Decommissioning" on the NOPSEMA website.

Trailing liability provisions now in effect

Provisions for enhanced remedial directions, commonly referred to as trailing liability provisions, have officially come into effect as of 2 March.

These provisions are designed to ensure that the costs and liabilities associated with decommissioning will be borne by the petroleum industry and do not become the responsibility of the government or the Australian community.

The provisions do this by allowing the government to call back former titleholders, related corporate entities, or people related to current or former titleholders to undertake remedial work.

The Australian government has implemented changes to the offshore oil and gas decommissioning framework and the trailing liability provisions are a part of these changes.

They are intended to be a last resort option and should only be employed when no other effective avenues for remediation by the current titleholder are available, or where there is no current titleholder.

Instances where these provisions may be used include where a current titleholder has failed to decommission in accordance with regulatory requirements, (such as the current titleholder entering liquidation) or if issues arise in relation to previously decommissioned property (such as previously plugged well begins leaking).

> **The trailing liability provisions apply to titles as they existed on or after 1 January 2021.**

Guidelines for how these provisions apply to the decommissioning of offshore petroleum property have also been made available on the Department of Industry, Science, Energy and Resources website.

Keeping an eye on corrosion

Corrosion is first and foremost a safety risk which must be understood and managed

Once safety risks associated with corrosion are managed, control of the associated economic risks will generally follow.

NOPSEMA inspectors have seen evidence of advanced corrosion at some facilities due to a lack of proactive management programs.

In some cases, the advanced corrosion has exceeded what was planned for during the design of the facility and the operator is no longer able ensure the facility will remain safe for its remaining operation life without significant remediation.

There can be a significant cost for those remediation activities, including unscheduled downtime to implement those repairs.

Even planned maintenance with fixed scheduling may not be cost effective unless it is linked to known deterioration rates.

Proactive corrosion management strategies can prevent these issues through early identification of corrosion hazards, followed by inspection and maintenance programs that allow appropriate action to be taken before significant degradation of structural integrity is sustained.

> **The goal is to identify corrosion trends and be predictive so action can be taken to stop corrosion rates as required.**

Proactive corrosion management can be complex to set up and requires considerable initial expenditure but it will ‘provide longer term improved safety and economic benefits in terms of less unscheduled downtime.’

Reactive investigations and breakdown maintenance regimes are not effective strategies for corrosion management and, at worst, could lead to major accident events.

Proactive approaches are detailed by the Energy Institute, the UK Health and Safety Executive, and NOPSEMA’s guideline on ageing assets and life extension.

Safety first: the role of HSRs

Safety is the number one priority for offshore energy and an integral part of maintaining a high safety standard are the Health and Safety Representatives.

At DISER's initial Safety Stakeholders Group public forum in 2018 (set up to review the Offshore Petroleum and Greenhouse Gas Storage Act), 100 per cent of participants voted HSRs as the most important part of ensuring offshore safety.

As a key player in the space, Ross Wilson considers this all the motivation he needs for his hard work.

"I most definitely feel like I'm making a difference as an HSR – attending the forum, along with participating as an active member of the Safety Stakeholders Group over the past three years, really highlighted the important role we play."

"Having worked offshore for almost 25 years, I feel I've seen a good amount of the operations that occur, ranging from drilling to maintenance and production.

"Hopefully that experience can bring something to the table when representing the designated work group I am a part of and all of the other work groups that make up the offshore team."

Ross feels he played an instrumental part in bringing together the tripartite agreement between the business association representatives, union representatives, and NOPSEMA for the annual HSR forum after promoting this during the Safety Stakeholders Group meetings.

By connecting representatives through platforms such as NOPSEMA's HSR forums, Ross wants to encourage people to share their experiences and lessons.

"We want to let people know they are not alone and that there are others are probably going through the same things – there is always someone to talk to."

Ross says most people don't stick their hand up for the role but those that do are often pleasantly surprised.

After all, being a HSR is a voluntary position and secondary to the job you are employed to do.

Having been a HSR for seven years, Ross says while the role can be difficult at times, the positives far outweigh the negatives.

"I have to say I do enjoy it, particularly the learning opportunities from the people you work with."

> **"When you see that people have confidence in you to openly share their concerns it really drives you to do the best you can.**

"Some engineers have even listed me as a knowledgeable other to provide feedback to their supervisors for yearly appraisals.

"If you don't have a good relationship with someone, or are at loggerheads, then you wouldn't be asking them for feedback in your appraisals.

"I take it as great compliment, it shows the kind of professional relationships, and outcomes, you can achieve in this role."

Ross is the first to admit the role comes with challenges, namely the additional work and stereotypes that can come with being a health and safety representative.

"We're not out to cause problems or interfere with work and progress, we're here to represent the designated work group we are a part of."

"We act as the point of communication for consultation where changes are proposed and most importantly, we ensure everyone gets home safely at the end of the day.

“The aim is to work with people to achieve these goals rather than against them.

“It’s equally important to articulate the positive outcomes and not just the concerns.

> **“It’s all about safely producing oil and gas, if everyone remembers that goal hopefully any other thoughts can be put aside to focus on this.”**

Ross also speaks highly of his fellow HSRs in Bass Strait: “The support network is fantastic, anyone new to the role is warmly welcomed whether you’re directly hired by the operator of the facilities or from one of the many contract groups.”

“While we’re all busy in our own roles, it’s never too much trouble to have a chat to one of the other HSRs to seek guidance, support or feedback on a topic you are dealing with.”

Like many working offshore, Ross is no stranger to hard work. While offshore, he fulfils his HSR role alongside his responsibilities as an Operations Technician.

Not one to slow down, he returns home to a young family and an 85-acre beef farm in Neerim Junction, Victoria.

“I go from one intense job to the next,” he says.

“Really, I just like to have a go, there’ll be plenty of time to take it easy down the track.

“For now, I enjoy what I do and will keep doing it as long as I can.”

He insists that becoming an HSR it doesn’t have to be a daunting undertaking.

“There are opportunities to become a back-up HSR, which gives a soft start into role and allows you to learn the ropes.”

To anyone out there thinking about becoming an HSR, Ross has some simple advice:

“At the end of the day, the only way you’re going to find out is by giving it a go. I’m in my second term so it can’t be that bad.”

Ross is one of the HSRs for Shift 2 Operations Technicians at Esso Australia’s Gippsland Operations, Offshore Bass Strait, covering multiple producing facilities.

What’s happening offshore?

During Q1 2022 , there were 41 fixed facilities, five mobile offshore drilling units, three vessels, 92 pipelines, eight sets of subsea infrastructure and three seismic activities within NOPSEMA’s jurisdiction.

The number of offshore hours worked decreased compared to the same period last year and was the lowest recorded in more than a year.

A significant drop in hours worked on mobile facilities due to deferred projects was a key contributor to the overall decrease.

Of the total number of facilities under NOPSEMA’s regulatory oversight, ten fixed facilities, eight sets of subsea infrastructure, and 17 pipelines have ceased operations permanently and require timely decommissioning.

During Q1 2021, NOPSEMA undertook 27 inspections and commenced 39 assessments of key permissioning documents, comprising 14 new submissions and 25 revisions.

There were 15 injuries this quarter, a significant decline from the 27 recorded in Q1 2022 and lowest number since the same time last year. None of the recorded injuries this quarter were classified as major injuries.

NOPSEMA issued one enforcement action, an OHS improvement notice relating to a partially functional and maintained gas detection system on a vessel facility.

The titleholder informed NOPSEMA it had carried out the required actions and the notice was closed.

One seismic survey environment plan proposed in the North West Shelf and regulatory guidance on “Human Factors: Risk Mitigation” were published on the NOPSEMA Consultation Hub for public comment, both of which have closed.

Public comment also closed for the draft policy, “Section 270 – consent to surrender title”, which aims to provide additional guidance on decommissioning.

NOPSEMA is considering the comments and will present the feedback to APPEA before an expected publication date in mid-2022.

Offshore activity Q1 2022

2,103,383
TOTAL HOURS WORKED OFFSHORE

1027
OFFSHORE ASSETS

3 SEISMIC ACTIVITIES

0
FATALITIES

0
SERIOUS INJURIES

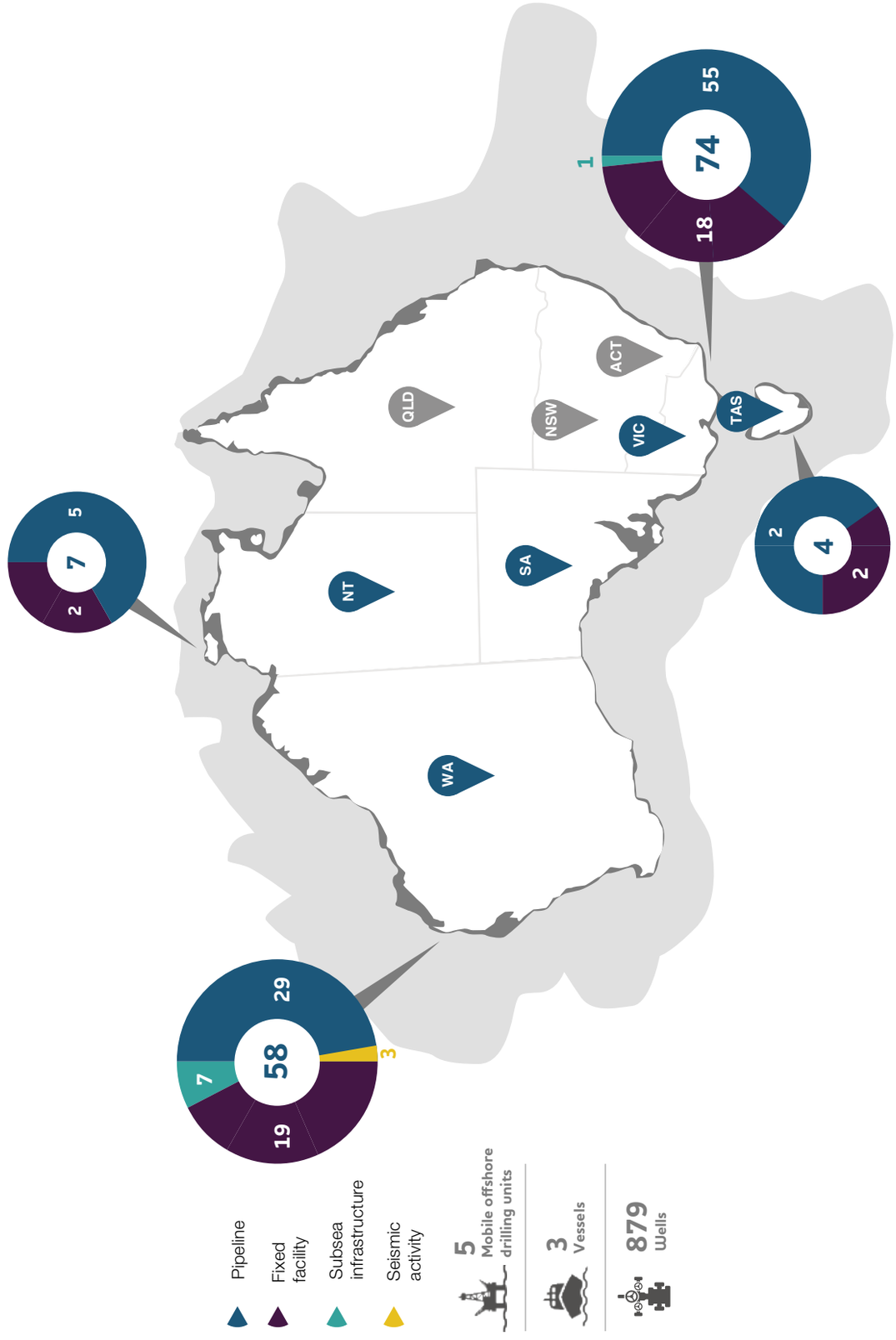
15
INJURIES
includes:
Alternative duties injuries: 6
Medical treatment injuries: 6
Lost time injuries: 3

1 COMPLAINT
Regarding duty holder performance

81
ASSESSMENTS
Includes:
39 key permissioning documents
42 other assessments

27
INSPECTIONS

1
ENFORCEMENT ACTION



New focus area for regulation of seismic surveys

There is always a chance that unintended environmental impacts can occur at sea. Through its compliance monitoring activities, NOPSEMA identified and took action on several issues relating to potential environmental harm from seismic surveys in Commonwealth waters.

Through our inspection program and investigation of incidents, NOPSEMA observed some instances of titleholders failing to fully implement control measures to manage sound and protect marine animals in biologically important areas.

This failure can be particularly serious when affected species are protected under the *Environment Protection and Biodiversity Conservation (EPBC) Act* and have recovery plans in place that identify anthropogenic noise as a high priority threat for management.

A recent example of significant non-compliance occurred when a titleholder discharged underwater noise in a biologically important area when there was a higher-than-expected presence of endangered blue whales.

Where serious breaches are identified, NOPSEMA will investigate and launch proportionate enforcement action.

Other examples where plans have not been fully implemented include:

- Intrusions into exclusion zones for turtles during their nesting periods and commercially important fish species during their spawning periods.
- Not effectively implementing reporting and notification protocols to allow other marine users, such as commercial fishers, to plan their operations to avoid negative interactions.
- Adaptive management measures not being applied when predictions in the environment plan are proven to be unreliable. For example, not ceasing night time operations when passive acoustic monitoring failed to detect whales at night after detecting high numbers of whales during the day.

Significant incidents rarely happen, but the observations above serve as important case studies into the implications of not having an effective environmental management system in place.

These systems should include specific measures to monitor and manage the implementation of control measures, ensure they are being implemented effectively, and allow timely action to be taken when issues are identified.

> **We want titleholders to ensure they can prevent things going wrong rather than being identified when it is too late to take effective corrective action.**

As a result, NOPSEMA will be implementing a new focus area on environmental management systems for the assessment and inspection of marine seismic surveys.

This focus area will be implemented over the next 12 months and will provide broad insights into the effectiveness of environmental management systems at ensuring the impacts of surveys continue to be managed to ALARP and acceptable levels during activities.

Observations from this focus area will be shared with industry to facilitate continuous improvement.

The winds of change

With the commencement of the *Offshore Electricity Infrastructure Act 2021 (OEI Act)* just around the corner, NOPSEMA will be officially established as the regulator for offshore renewables.

The regime provides for regulatory and investment certainty including security of tenure and protections for offshore infrastructure.

The OEI Act, along with the associated Regulatory Levies and Consequential Amendments to the *Offshore Petroleum and Greenhouse Gas Storage (OPGGS)* and other Acts, will come into effect on 2 June.

As the Offshore Infrastructure Regulator, we will have responsibilities for overseeing work health and safety, infrastructure integrity, environmental management, and financial security of offshore infrastructure activities.

Although we are taking on a new role in this emerging industry in Australia, we will not be taking any focus away from the important role we play in regulating the offshore oil and gas sector.

Funding for the renewables role will also be entirely separate via government funding until industry activity results in sufficient and separate renewables levies.

The regulations that underpin the OEI Act are being developed in stages, with the first set of draft regulations covering the licensing scheme, fees and levies, spatial referencing, and treatment of pre-existing infrastructure which were released for consultation in March.

The next set of regulations intend to cover management plans, financial security, safety and protection zones, and work health and safety aspects and are expected to be released for consultation later this year.

There continues to be a high level of interest in offshore renewables both domestically and internationally.

We look forward to officially overseeing the growth and direction of this emerging industry and we are already involved in supporting the Department of Agriculture, Water and Environment in project approvals under the EPBC Act.

The Global Wind Energy Council estimates that Australia has the potential to generate up to 5,000 gigawatts (GW) of electricity from offshore wind using a combination of fixed and floating infrastructure.

This estimate represents 100 times the installed capacity of Australia's two largest electricity networks.

Most of country's world-class wind resources are generally located on the south side of the country and adjacent to large population centres, industrial hubs, and mining projects.

Offshore wind represents a proven and competitive generation technology that can contribute to the diversification of Australia's energy sources.

The Offshore Infrastructure Regulator will progressively publish information and materials on its Offshore Renewable Energy page at NOPSEMA's website.

Interested stakeholders can also subscribe to receive offshore renewables updates via the NOPSEMA homepage.

The keys to emissions management

In the rapidly developing space of greenhouse gas (GHG) emissions management in the offshore petroleum industry, NOPSEMA has observed innovation and responsiveness from titleholders in reducing the emissions footprints of their activities.

While large scale emissions reduction projects such as battery storage installation can require significant resources, emissions reduction can also be achieved through incremental operational improvements and involving the expertise of the offshore workforce.

At a recent offshore inspection, NOPSEMA identified several opportunities to improve GHG emissions management.

One observation from inspectors was that many of the staff had ideas for reducing energy use and emissions from offshore plant and equipment, but mechanisms for raising these ideas up for evaluation were not widely or frequently used.

As a result, the titleholder used their existing safe card reporting system to add some emissions related categories to encourage ideas.

With every onboard employee submitting a safe card every day, the system is a highly accessible and adaptable method for requesting input from the workforce.

The titleholder also implemented a weekly award for the best emissions-reduction idea and the suggestions are collected in a database where they are formally evaluated.

The system has also been rolled out on a second facility managed by the titleholder.

Another inspection finding identified that a key piece of equipment (a low-pressure compressor) being out of service was significantly increasing the emissions from the facility.

This finding had also been identified by the titleholder, and a path to rectification had been established, but the inspectors observed that there may be opportunities to accelerate the return to service and therefore decrease emissions.

The titleholder investigated and found opportunity to reduce the timeline, with the compressor returning to service roughly two months earlier than originally planned and reducing emissions back down to baseline levels.

While every activity's footprint is different, NOPSEMA encourages innovation and proactiveness as displayed in the examples above to continue to reduce energy use and GHG emissions throughout the activity life.

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