PERENCO

Annual Public Statement of Environmental Performance

2024

CONTENTS

PERENCO UK SOUTHERN NORTH SEA

Perenco UK Limited Southern North Sea 'PUK SNS' has operated in the Southern North Sea since 2003 and processes up to 15% of the UK's national gas production.

PUK SNS owns and operates the largest infrastructure within the United Kingdom Continental Shelf (UKCS), acquiring assets in 2003 and 2012 from BP and from ExxonMobil in 2007. Today PUK SNS assets comprises 39 offshore platforms, around 200 platform wells (over 100 of which are producing on a typical day), 14 subsea wells, and a network of more than 2,400 km of pipelines connected to its 2 onshore gas terminals at Bacton on the Norfolk coast and at Dimlington near Humberside, Yorkshire.

This report forms PUK SNS's 2024 Public Statement, as required under OSPAR Recommendation 2003/5 and outlines the offshore environmental performance for UKCS operations during 2024. Bacton and Dimlington onshore gas terminal operations are excluded from this report as they fall outside of the requirement.

PRODUCTION HUB PROFILES

CLEETON

Location	Located within UKCS blocks 42/29, 47/3, 47/4, 47/5, 47/9, 42/28 & 42/30.
Discovery Date	1976
Infrastructure	The Cleeton Hub is comprised of the manned Cleeton installation, satellite installations Ravenspurn South Alpha, Bravo and Charlie, Neptune, Minerva and subsea developments Whittle, Wollaston, Apollo, Mercury and the third-party Eris & Ceres tie backs.
Export	Processed gas and condensate produced through Cleeton and associated infrastructure is exported via 36-inch PL447 to the Dimlington Gas Terminal.

INDEFATIGABLE (INDE)

Location	Located within UKCS Blocks 49/18, 49/23 & 49/30.
Discovery Date	1966
Infrastructure	The Inde Hub is comprised of the Inde 23A installation, satellite installations Inde 18A, 18B, 23C, 23D, Davy, Bessemer and subsea developments North West Bell, Davy North and East. The Bessemer installation is no longer in production, however, receives and exports gas from the North West Bell subsea well. The Davy platform and subsea infrastructure have been shut in since 2020.
Export	Gas and condensate produced through the Inde Hub is received on Inde 23A and exported to the Bacton Gas Terminal via Leman 27B via PL22.

LANCELOT AREA PIPELINE SYSTEM (LAPS)

Location	Located within UKCS Blocks 48/17 & 48/12.
Discovery Date	1986
Infrastructure	The LAPS Hub is comprised of 4 satellite installations Lancelot, Excalibur, Waveney, Malory and the Durango subsea well. Durango is a third-party tie back to the Waveney installation and has been shut in since 2019.
Export	Comingled gas and condensate are exported from the Lancelot installation to the Bacton Gas Terminal via PL876.

LEMAN

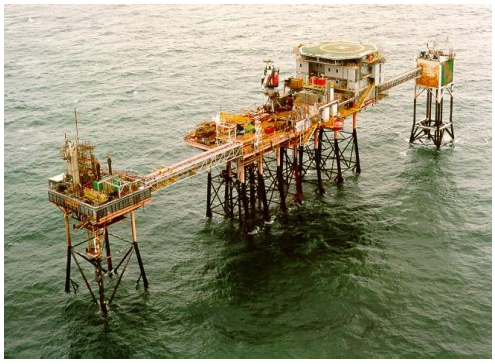
Location	Located within UKCS Block 49/27 & 53/02.
Discovery Date	1966
Infrastructure	The Leman Hub is comprised of the manned 27B installation and satellite installations 27A, 27C, 27D, 27E, 27F, 27G, 27H, 27J and the Leman South East and West subsea development. The Leman South West subsea well has been shut in since 2020.
Export	Gas and condensate produced through the Leman Hub is comingled with Inde production and exported to the Bacton Gas Terminal via PL23.

RAVENSPURN NORTH

Location	Located within UKCS blocks 43/26, 43/27 & 42/30.
Discovery Date	1983
Infrastructure	The Ravenspurn North Hub is comprised of the Ravenspurn North manned installation, ST2 and ST3 satellite installations and the Johnston Subsea Development.
Export	Processed gas and condensate from the Ravenspurn North and Johnston fields is exported via PL669 to the Cleeton Development, where it is co-mingled prior to export to Dimlington Gas Terminal.

TRENT

Location	Located within UKCS Block 43/24.
Discovery Date	1991
Infrastructure	Trent
Export	Trent has not operated since 2021. Whilst it was in operation, gas and condensate were exported to the Bacton Gas Terminal via the PUK SNS operated East Anglian Gas and Liquids Evacuation System (EAGLES) export pipeline (PL253).



WEST SOLE

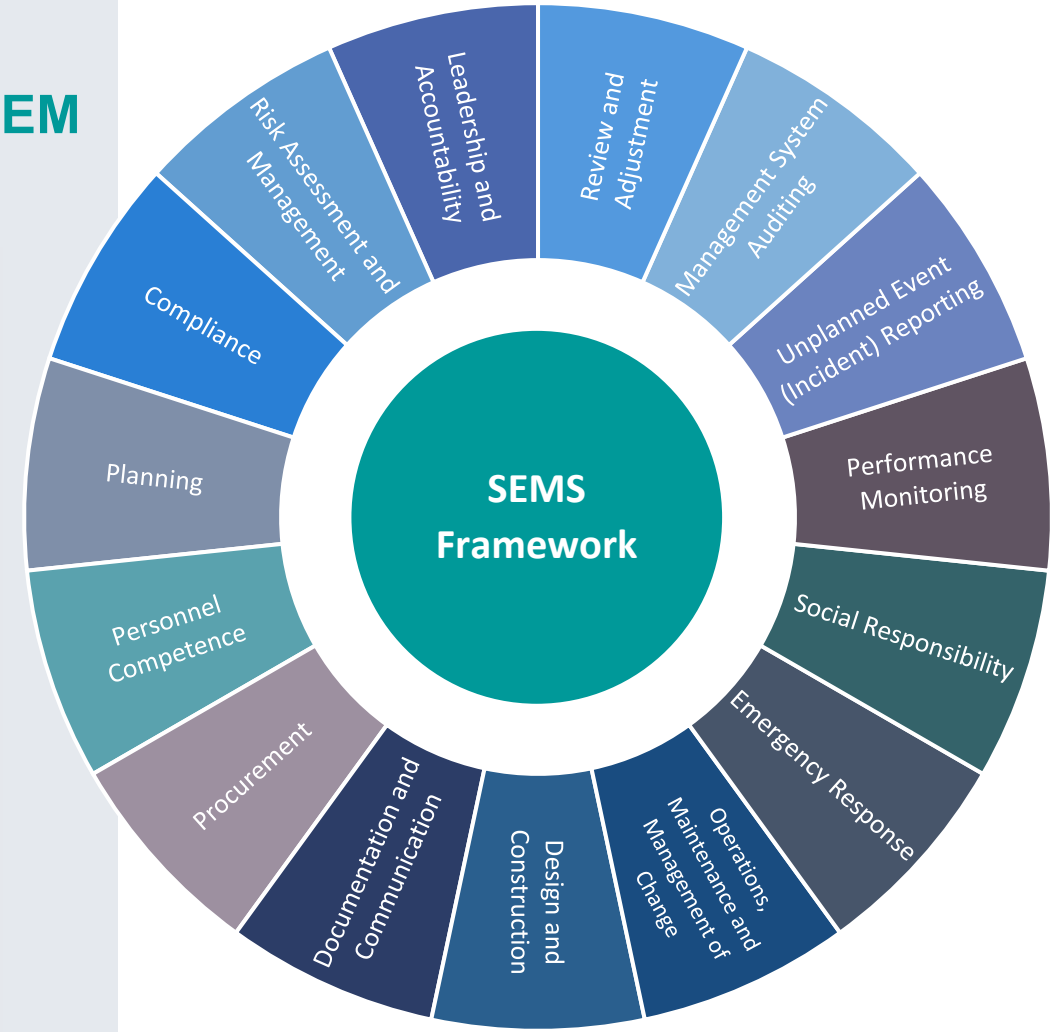
Location	Located within UKCS blocks 48/6, 47/5 & 48/7.
Discovery Date	1965
Infrastructure	The West Sole Hub is comprised of the NUI West Sole Alpha installation, satellite installations West Sole Bravo and Charlie, Hyde and Hoton and subsea tie back Newsham and the Seven Seas third-party tie back.
Export	Processed gas and condensate produced through the West Sole Hub is exported onshore via PL145 and PL28 to Dimlington Gas Terminal.

ENVIRONMENTAL MANAGEMENT SYSTEM

PUK SNS implements an integrated Safety and Environmental Management System (SEMS) certified to ISO 14001:2015. Operating within SEMS ensures that activities are undertaken in accordance with PUK SNS policies and comply with all relevant statutory provisions.

SEMS comprises 15 key components which together provide a framework for safe, environmentally responsible and reliable operations. Each of the components set out standards which must be complied with, a set of actions to be implemented, along with supporting information to provide guidance on implementation.

Following a tri-annual recertification audit in September 2024 the PUK SNS SEMS remains accredited to the ISO 14001:2015 standard.



PERENCO UK SNS
ENVIRONMENTAL POLICY

PUK SNS IS COMMITTED TO APPLYING EFFECTIVE ENVIRONMENTAL MANAGEMENT CONTROLS across all onshore and offshore operations to monitor, minimise and mitigate our environmental impacts, prevent pollution, and protect the environment, local communities and stakeholders.

PUK SNS WILL IMPROVE ENVIRONMENTAL PERFORMANCE THROUGH:

Leadership and commitment from top management to promote environmental protection.
Continual improvement of our ISO14001 accredited environmental management system.
Compliance with all applicable environmental legislation.
Communication of our Environmental Policy and Objectives.
Commitment of our staff, contractors and third parties to environmental procedures.
Innovation to improve performance, extend field life and evaluate opportunities to participate in the future Energy Transition.
Investigation and reporting of incidents thoroughly to prevent re-occurrence.
Achieve annual environmental performance targets.

Jonathan D. White
PUK-SNS General Manager
May 2025

PERENCO

OPERATIONS AND ENVIRONMENTAL IMPROVEMENTS

In 2024, PUK SNS saw a continued high level of offshore activity, including decommissioning and well intervention campaigns, and a carbon capture storage injection test at the Leman field.

DECOMMISSIONING

The ERDA Mobile Offshore Decommissioning Unit (MODU) removed the Amethyst A1D topside module in Q2 2024 and then the Leman 27J platform topside module in Q3/Q4 2024. Petrodec UK Ltd (Petrodec) was the Well and Installation Operator and Duty Holder for both installations and will retain the operatorship of Amethyst A2D and Leman 27J until the jackets are removed during the Heavy Lift campaign (HL) in 2025/2026.

The Arthur Field subsea wells were plugged and abandoned to Abandonment Phase 3 (AB3) and the wellhead protection structure was removed using the HAEVA jack-up barge (JUB) and a dive support vessel (DSV). The work was completed in Q3 2024 with Perenco UK Limited as Licensee and Pipeline Operator, and Petrodec as Well Operator.

Four Exploration and Appraisal wells (Bell, Davy, Davy East, and Whittle) were abandoned to AB3 using the Kingsborg in Q4 2024. Work was completed with Perenco UK Limited as Licensee and Well Operator.

Ongoing decommissioning projects on Galahad, Indefatigable 18A, Pickerill A, Pickerill B, Amethyst A2D, Amethyst B1D and Amethyst C1D were also taking place throughout 2024. The remaining topside modules and jackets for these platforms are expected to be removed during the HL campaign in 2025/2026.

POSEIDON CCS INJECTION TEST

In the North Sea Transition Authority's (NSTA's) first competitive Carbon Capture and Storage (CCS) license round, Perenco UK and partner Carbon Catalyst Ltd (CCL) were awarded a license to appraise and pursue The Poseidon Project, a carbon storage project in the Leman gas field.

PUK SNS undertook the first steps in the Project Poseidon Carbon Capture Storage (CCS) injection test in the Leman field, with the Erda rig mobilising in December 2024 and conducting injection trials throughout the first quarter of 2025.

Poseidon is projected to have an initial injection capacity of 1.5Mtpa, rising to an ultimate capacity of 40Mtpa, commencing in 2029.

ENVIRONMENTAL PERFORMANCE

PUK SNS monitors the atmospheric emissions, discharge of produced water and chemicals, disposal of waste and hydrocarbon and chemical spills to measure the Environmental Performance across PUK SNS assets through 2024.

ATMOSPHERIC EMISSIONS

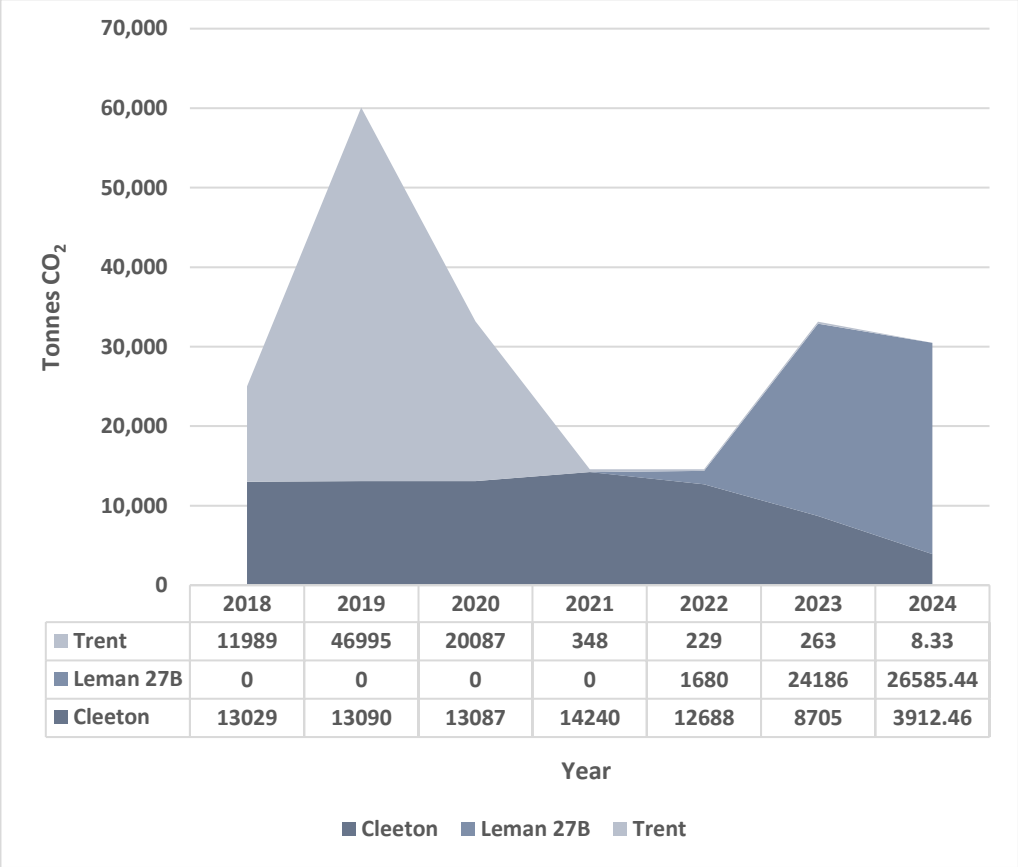
CARBON DIOXIDE EQUIVALENT (CO_2e) EMISSIONS (EMISSIONS TRADING SCHEME)

Cleeton, Leman 27B and Trent were subject to control under the UK Emissions Trading Scheme (UK ETS) (Amendment) Regulations (2020) during 2024. Each of these installations' combustion equipment exceeded a rated thermal input of 20 MWth triggering entry into the scheme.

During 2024, approximately 93,251 tonnes CO_2e was emitted through overall PUK SNS installation diesel and gas combustion activities.

33% of this total figure (30,506.23 tonnes CO_2e) were verifiable under UK ETS, being attributed to Cleeton, Leman 27B and Trent.

Figure 1 shows a small annual decrease in CO_2e emissions from UK ETS verified installations in 2024. This decrease can primarily be attributed to a longer LAPS compressor shut down in 2024 and PUK scarcely used the Cleeton fuel gas system in 2024. Although this means PUK used more diesel, the diesel has a lower CO_2e output.



	2018	2019	2020	2021	2022	2023	2024
Trent	11989	46995	20087	348	229	263	8.33
Leman 27B	0	0	0	0	1680	24186	26585.44
Cleeton	13029	13090	13087	14240	12688	8705	3912.46

Figure 1. 2018-2024 Verified Emissions by ETS Installation

INTENSITY RATIO

Since 2019, PUK SNS has been required to publish detailed CO_2e emissions data in the Director's Report submitted to Companies House, as defined by the Streamlined Energy and Carbon Reporting (SECR) guidelines. As part of this report, PUK SNS have established an intensity ratio of SECR defined emissions converted to CO_2e/exported gas (expressed as barrels of oil equivalent (BOE)), in line with industry standards. The PUK SNS 2018 Base Year intensity ratio was 15.68 kg CO_2e/BOE, which has decreased to 13.42 kg CO_2e/BOE in 2024, a reduction of 14.4%. Increased gas exports can be attributed, in part, to the drilling and bringing onstream of 3 new production wells in the Ravenspurn area and several successful well intervention projects, resulting in increased overall efficiencies and reduction of the intensity ratio. The intensity ratio will continue to be used as a measure of performance against CO_2e emissions.

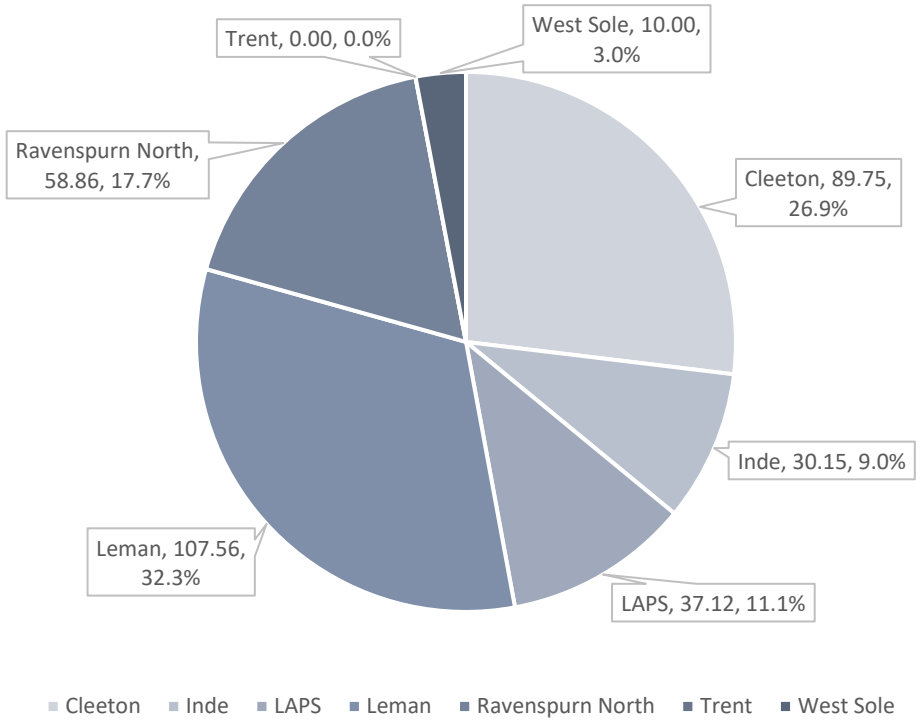


Figure 2. Tonnes of Gas Cold Vented by Hub in 2024

VENTING

Emissions through cold venting in 2024 were ca. 7,936 tCO_2e. This is 11,718 tCO_2e less than 2023 (ca. 19,654 tCO_2e).

As shown in Figure 2, The Leman and Cleeton hubs account for the majority of venting cold venting emissions. In comparison to 2023, the hubs are more equal in split, with the combined Inde-Leman hub (67%; 2023) having a 32% decrease in venting due to the removal of the 23A purge.

PUK plans to continue to reduce cold venting further in 2025.

WASTE

OPERATIONAL AND PROJECT WASTE

PUK SNS successfully diverted 99.85% of its waste from landfill in 2024. As shown in Figure 3, of the 1,831.30 tonnes of waste processed, around 1,446 tonnes of operational and project waste had been recycled. As shown in Figure 4 there was no asset, MODU or rig that relied solely on landfill. This was achieved by working closely with our principal waste management contractor, and proactively managing the wastes generated by application of the waste hierarchy.

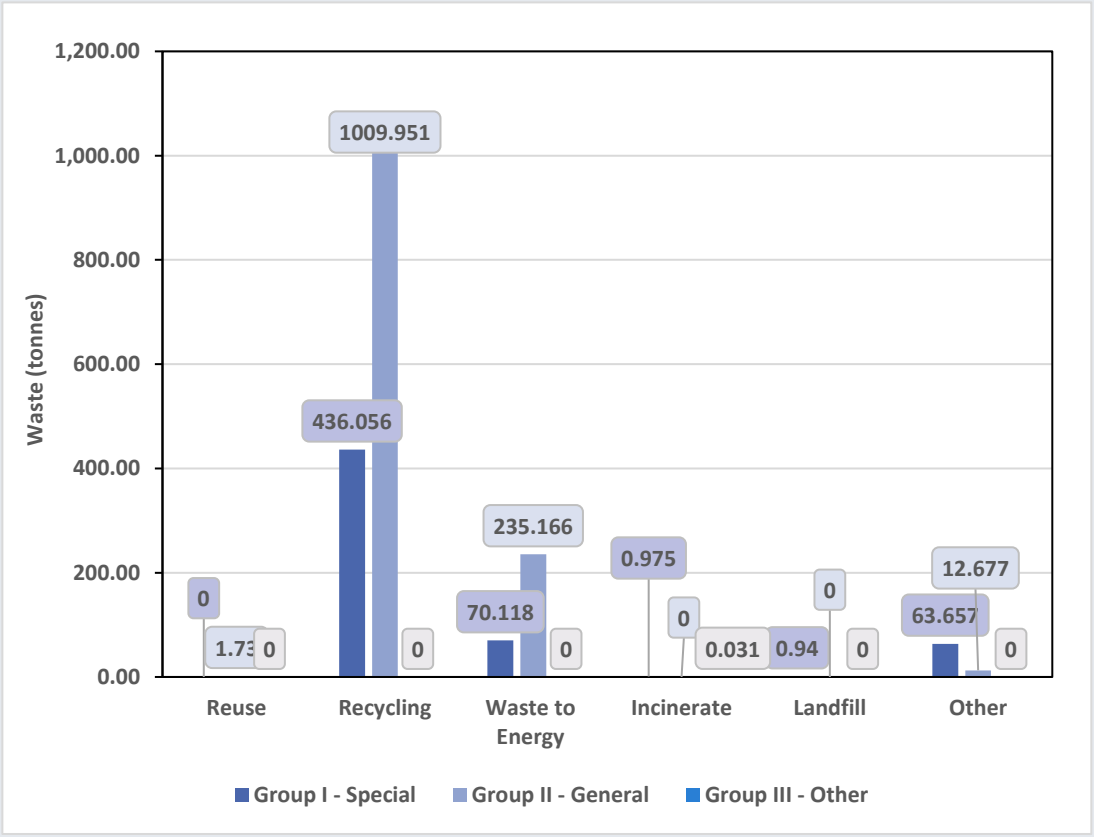


Figure 3. Fate of Operational and Project wastes by Waste Classification

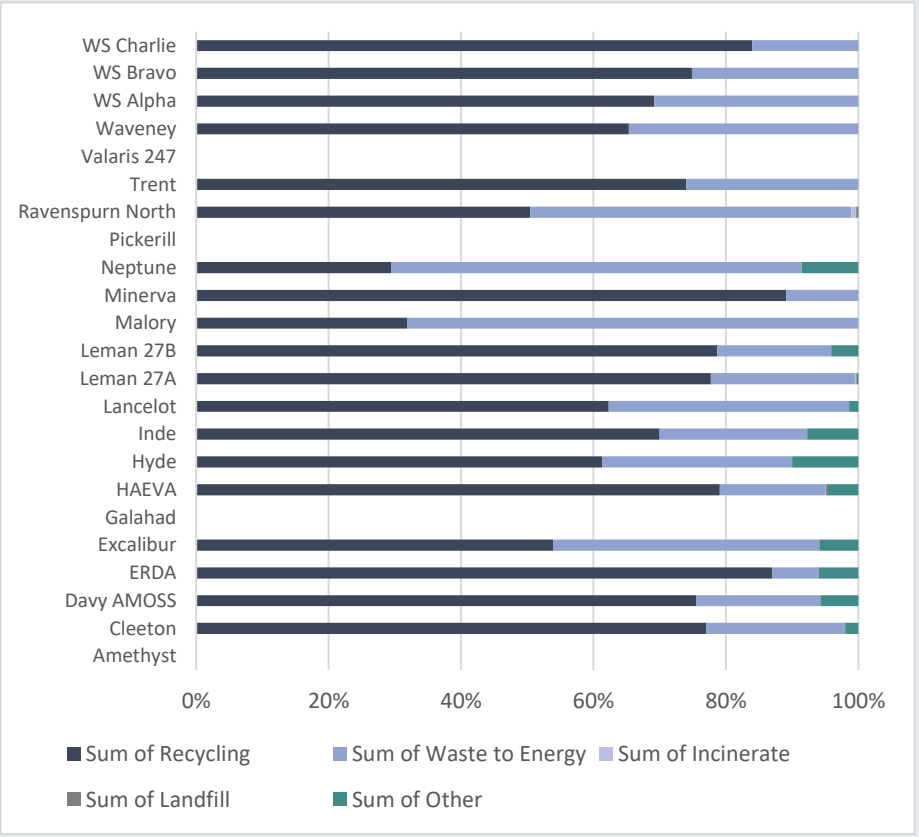


Figure 4. Fate of wastes generated by asset, MODU and rig

CHEMICAL USE AND DISCHARGE

Table 1. 2024 Chemical Use and Discharge Quantities According to Offshore Chemical Notification Scheme (OCNS) Categories for all activities.

ASSESSMENT			TOTAL USAGE (kg)	TOTAL DISCHARGE (kg)
NON-CHARM MODEL CHEMICAL CATEGORISATION	A	HIGH HAZARD	6,620.00	0
	B		2,367.00	327.00
	C		40,536.98	39,246.70
	D		432,814.00	0
	E	POSES LITTLE OR NO RISK	4,492,915.38	446,569.90
CHARM MODEL CHEMICAL CATEGORISATION	PURPLE	HIGH RISK	0	0
	ORANGE		0	0
	BLUE		0	0
	WHITE		0	0
	SILVER		14,317.00	0
	GOLD	LOW RISK	382,546.43	67,306.96

The use and discharge of offshore chemicals is subject to control under the Offshore Chemicals Regulations 2002 (as amended). Only chemicals that have been registered by the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) may be used.

The Offshore Chemical Notification Scheme (OCNS) applies to offshore chemicals, under which they will undergo a hazard assessment and assigned a colour banding or category (dependant on applicable assessment) based on their environmental hazard potential.

As shown in Table 1, PUK strive to reduce environmental risk through chemical use. In 2024 across all activities, PUK used a total of 5,372 tonnes of chemicals, and discharged 553 tonnes (10.3% of the total use) to the marine environment as reported on EEMS.

Only 0.06% of chemicals discharged by PUK SNS in 2024 were classified within the high risk OCNS categories (A, B, Purple and Orange). 80.69% of all chemicals used by PUK SNS in 2024 posed little or no risk to the marine environment.

PRODUCTION CHEMICALS

PUK SNS used a total of around 307 tonnes of chemicals in 2024 for production operations, **a 22% decrease from 2023** (ca. 393 tonnes). Around 13% of the total use was discharged to sea (ca. 40 tonnes) in line with permit conditions. The usage of chemicals over the last 5 years has seen an overall downward trend. This is due to a combination of factors:

- A reduction of continuous dosing of chemicals and a movement towards batch dosing methodology for chemicals used for hydrate control and corrosion inhibition.
- Decommissioning and the simplification of platforms leading to subsequent reductions in chemical use.

As shown in Figures 7 and 8, over 99% of the chemicals used and discharged during 2023 for production activities are classed as having a **lower** environmental risk (C, D, E, Blue, White, Silver, Gold).

*Figure 7. Production Chemicals **Used (%)** by OCNS Categories*

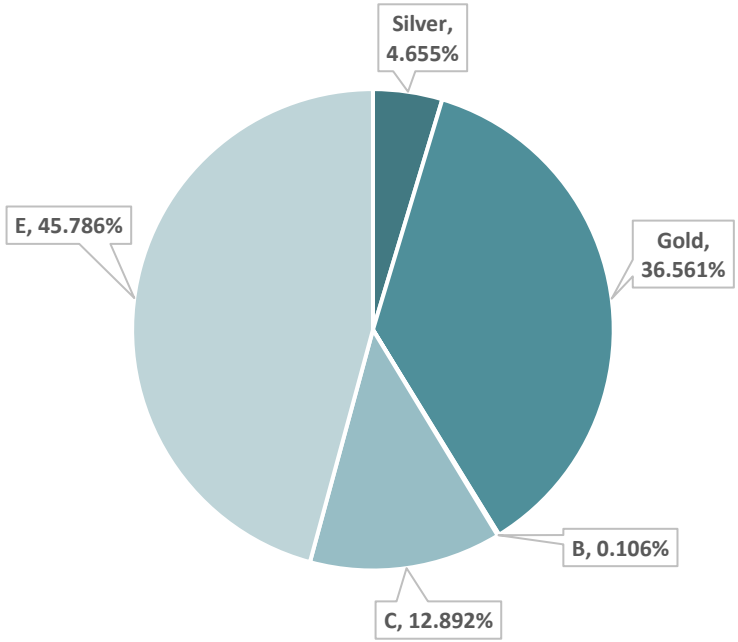
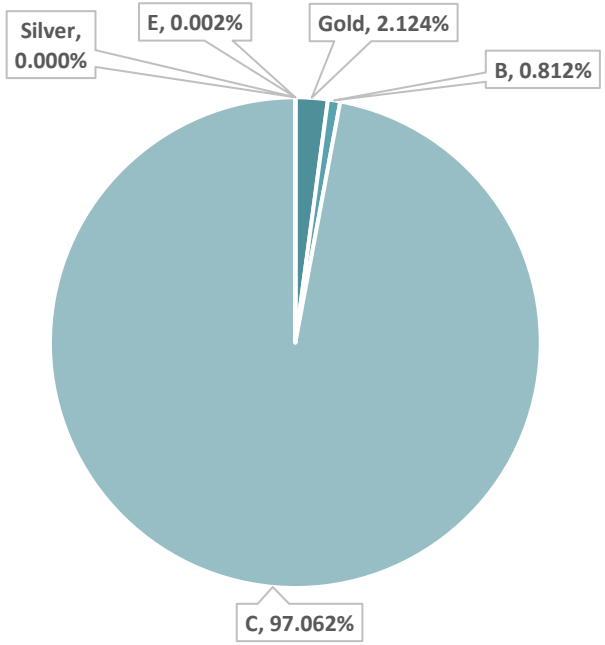


*Figure 8. Production Chemicals **Discharged (%)** by OCNS Categories*



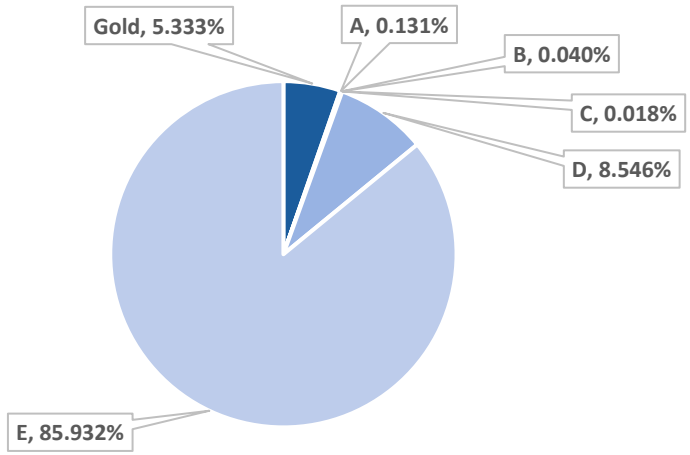


Figure 9. Chemicals used by OCNS Categories

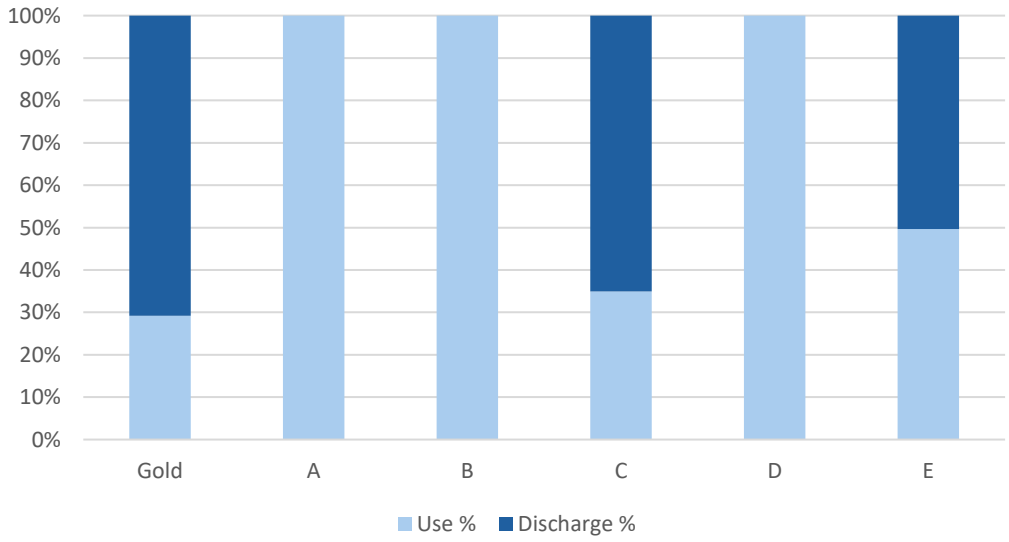


Figure 10. Percentage of Chemicals Used vs Discharged by OCNS Categories

DECOMMISSIONING AND PROJECT CHEMICALS

A total of around 5,064 tonnes of chemicals were used for decommissioning and project activities during 2024, **a 34% decrease from 2023 (ca. 7,679 tonnes)**. Around 10% of the total use was discharged to sea (ca. 513 tonnes) in line with permit conditions and the outstanding 90% remaining downhole or exported to shore.

During 2024, well intervention campaigns were completed on Ravenspurn North ST3, Hoton, Leman 27J, Leman 27H, Neptune, and Ravenspurn South Charlie.

Decommissioning work involving chemical use and discharge was undertaken on Durango (flushing) and Amythest (PL649).

As shown in Figure 9, only 0.17% of chemicals used in 2024 for decommissioning and project work were classified within the high risk OCNS categories (A, B, Purple and Orange).

OIL IN PRODUCED WATER

The discharge of oil is subject to control under the Oil Pollution Prevention and Control (OPPC) Regulations 2005 (as amended). PUK SNS had 11 active Oil Discharge Permits during 2024 including Indefatigable, Lancelot, Malory, Excalibur, Waveney, Hyde, Cleeton and Ravenspurn North. Oil in Produced Water (OiPW) was discharged overboard from 5 operational assets: Hyde, Indefatigable, Leman 27B, Ravenspurn North, and Malory.

Produced water from the remaining 6 installations was either discharged downhole or exported onshore for processing.

Figure 11 shows that the oil discharged in 2024 has decreased since 2023. This is due to the simplification and temporary rerouting to onshore of produced water for various platforms. **This year, PUK SNS saw the lowest values of Oil (kg) discharged annually within the period 2017 - 2024**.

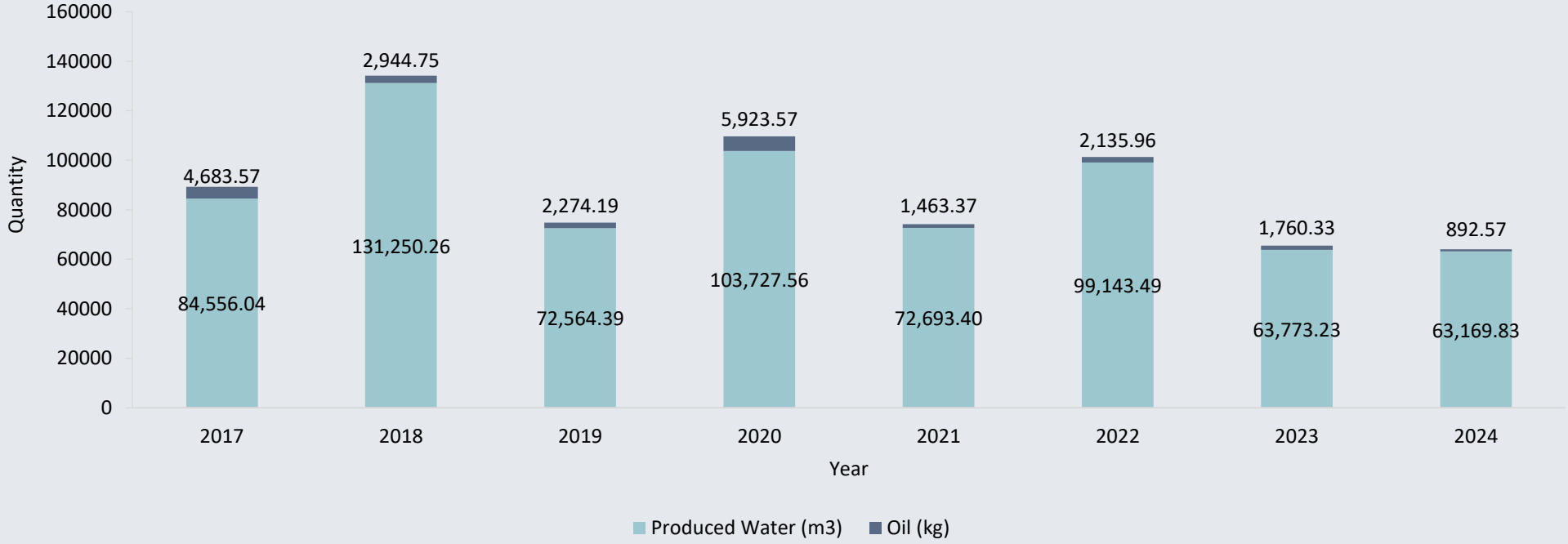


Figure 11. Annual Produced Water and Oil Discharged 2017 - 2024

The volume of produced water discharged from each asset during 2024 is presented in Figure 12 with the monthly flow-weighted average concentration of OiPW against the consented limit.

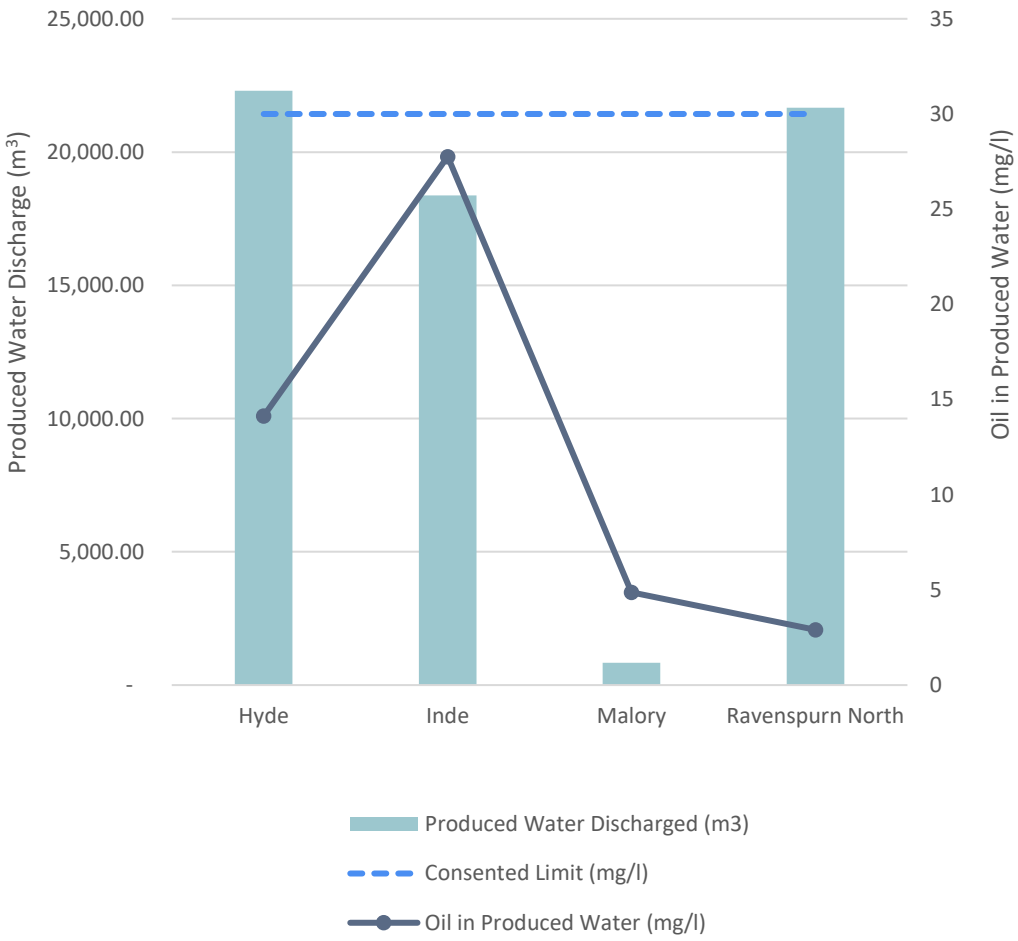


Figure 12. The volume of Produced Water discharged from each asset

INDE - EXCEEDANCES

Between January and May of 2024, the majority of Inde fluids were directed to Leman 27B due to frequent issues with the PW unit which resulted in high monthly samples.

These complications were resolved, and following a sample taken in early May, the Inde platform fell back within compliance. The flow weighted average OiPW of Inde in 2024 was 27.77 mg/L.

LANCELOT - INVESTIGATIONS

Lancelot has historically discharged produced water alongside OiPW from the platform. Since July 2023, produced water has been re-routed for export.

In August 2024, PUK SNS opened the production separator during the shutdown in an effort to remove solids – however due to access issues further works are required. PUK SNS plan to include a complete bypass of the production & water clean-up separators, leaving no PW overboard dump facilities at Lancelot from June 2025 onwards.

ACCIDENTAL RELEASES

PUK SNS investigate all accidental hydrocarbon and chemical releases to ascertain the cause and prevent reoccurrence, and report these via a PON1 notification, in accordance with The Oil Pollution Prevention and Control (OPPC) Regulations 2005 (as amended).

9 accidental releases from PUK SNS assets were reported during 2024 (**an 11% decrease from 2023**), with 5 hydrocarbon and 4 chemical releases. These have been categorised in Figures 13 and 14. The overall amount of the hydrocarbon releases have been reduced by 37.5% since 2023.

Figure 13. Reported sources of accidental releases during 2024 by Category

**Of the 2 Unknown PON1 sources, both were investigated by Perenco and concluded that no route cause could be identified. Both leak incidents were of chemical nature and had no further issues after inspection.*

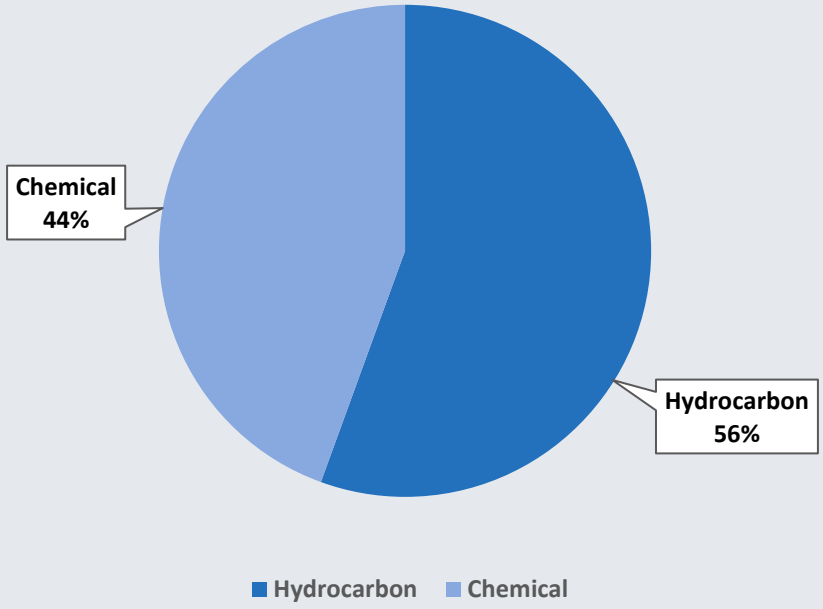


Figure 14. Number of PUK SNS PON1 releases

PERFORMANCE AGAINST ENVIRONMENTAL OBJECTIVES

PUK SNS Senior Management annually reviews existing and agrees new environmental objectives in line with SEMS to help drive continual improvement.

2024			
Business Objective	**Overall Objective**	**Aspect**	**Progress**
Extending the field life whilst Maximising Economic Recovery in line with the UK Net Zero Pathway Strategy; whilst minimising our impact on the environment.	Initiate fugitive emissions surveys at operational locations.	Air Emissions	Perenco successfully trialed the use of a baseline drone methane emission detection system at the Bacton Terminal in 2024. The resulting baseline assessment indicated a significant reduction in baseline GHG emissions for the site and a leak reduction plan is in place to address remaining identified emissions sources. 47/50 low level fugitive leaks eliminated. Plan for remaining 3 during planned maintenance shutdown. Dimlington Terminal – following the successful Bacton trial a GHG Emission drone survey was completed in May 2025 with the analysis and results expected in Q3 2025.
	Analyse cause of historical PON1 incidents and identify trends.	Oil and Chemical Release Data	All PON1 incidents are individually assessed to understand their initiating cause and appropriate mitigations implemented to prevent reoccurrence. Historical PON1 trends are used to identify opportunities for proactive mitigation measures in targeted areas to reduce the likelihood of further releases.

2025			
Business Objective	**Overall Objective**	**Aspect**	**Measure**
Extending the field life whilst Maximising Economic Recovery in line with the UK Net Zero Strategy; whilst minimising our impact on the environment.	Maintain ISO14001 certification and compliance.	Environmental Management System (EMS) effectiveness and continuous improvement	Annual audit reports confirming continued ISO14001 certification, corrective actions, evidence of environmental performance management and targets for improvement.
	Build an active community of E-Reps, trained and focused on driving continuous improvement in environmental awareness and good practice with PUK-SNS operations.	Employee engagement and competence in environmental stewardship	Trained and engaged E-Reps across sites, focused on identifying areas of environmental improvement at the work front. Involvement of E-Reps in work planning, auditing, management of change, investigations.
	Support gas production and decommissioning by ensuring that environmental regulatory requirements are anticipated sufficiently in advance to cause no delay to operational delivery and project execution.	Proactive regulatory compliance and risk management for operations	Number of environmental permits and consents for operations obtained within required timelines. Absence of regulatory breaches related to environmental non-compliance. Proactive engagement with regulatory bodies on upcoming projects and decommissioning plans.
	Understand the impact of the upcoming Finch legal ruling on Environmental Assessments and adapt our processes accordingly.	Adaptation of evolving Environmental Impact Assessment (EIA) processes	Updates to internal process for conducting EIAs. Ensure future project EIAs demonstrate compliance with the spirit and letter of the Finch ruling.

	Delivery of ERAP objective: Electrification of gas fired compression train.	Air Emissions	Perenco are in the feasibility and conceptual engineering phase for the replacement of 1 x gas fired compression train at the Dimlington Terminal.
	Delivery of ERAP objective: Replacement of 2 x offshore attended installation gas fired power generators.	Air Emissions	Perenco are in the feasibility and conceptual engineering phase for powering 2 attended installations and associated NUI platforms with power supplied via subsea cable.