

Environmental Statement 2024

CNOOC Petroleum Europe Limited







Foreward

At CNOOC Petroleum Europe Limited (CNOOC), we are committed to minimising our environmental impact through the delivery of safe and sustainable operations.

Throughout 2024, our positive environmental practices resulted in:

- A 21% reduction on Scope 1 GHG emissions compared to 2018 levels, achieved through operational improvement activities.
- The development of an Environment Representatives (E-Rep) Initiative Improvement Plan which will be implemented in 2025.
- A refresh of all platform Environmental Reduction Action Plans (ERAPs) to maintain compliance with NSTA Stewardship and ESOS obligations.
- ~1.7% of production waste was sent to landfill, a significant improvement on 2023 and below the Scottish Government's target of <5%.

These improvements were only possible due to the hard work, commitment, and engagement of our people who consistently strive to deliver success.

Looking forward to 2025, we remain committed to progressing our net zero ambitions and meeting our environmental targets and key performance indicators.

I hope you find this Environmental Statement informative and see the results of our continued progress to deliver safe and sustainable energy.

Mr. Pan Yiyong Managing Director, CNOOC UK



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Introduction

CNOOC Petroleum Europe Limited is a wholly owned subsidiary of CNOOC International, the international division of CNOOC Limited. The CNOOC Group is the largest producer of offshore crude oil and natural gas in China and one of the largest independent oil and gas exploration and production companies in the world. The Group mainly engages in exploration, development, production, and sale of crude oil and natural gas.

CNOOC is a leading upstream business in the UK North Sea and operator of the Buzzard, Golden Eagle, and Scott assets. Our strategy is to maximise the value of our UK portfolio and we are committed to delivering on the North Sea Transition Deal emissions reduction targets and being a net zero energy business in the UK by 2050.

This statement refers to CNOOC's UK operations only.

Environmental Management System

CNOOC's Environmental Management System (EMS) is aligned with requirements of ISO 14001:2015. The EMS is independently verified in line with the requirements of the Oslo/Paris Convention (OSPAR) Recommendation 2003/5, to promote the use and implementation of Environmental Management Systems on the UKCS.

An OSPAR verification opinion statement with zero comments was reported to the Offshore Petroleum Regulator for Environment & Decommissioning (OPRED) in April 2025.

Environment Representatives (E-Reps)

CNOOC's E-Reps continue to provide valuable support to offshore workforce engagement activities including:

- Roll out of procedures and environmental initiatives.
- Reduction of waste, including the 'Zero Waste to Landfill' initiative.
- Spill reduction, OPEP awareness drills, and environmental hazard identification programmes.
- Area inspections, including wildlife observations and reporting, in particular bird monitoring.
- Supporting environmental audits and inspections.
- Identification and trialing of new environmental training options.

Health, safety, environment & social responsibility

The policy shown below details the beliefs, values, and principles governing the management of health, safety, environment & social responsibility within CNOOC.



ECN-HS-POL-00065 Revision 13.0 September 2023

Our commitment to

Health, Environment, Safety & Social Responsibility

This Policy Commitment underpins the requirements outlined in the Corporate Policy Framework and applies to all activities carried out by and under the control of CNOOC Petroleum Europe Limited, its branches and subsidiaries (CPFI)

Within CPEL, the Board of Directors owns and takes responsibility for our overall HSE&SR performance working with our executive leadership and functional teams. We believe that management and staff commitment to HSE&SR is essential to ensuring a healthy, safe and environmentally acceptable operating environment.

We see our people are our most important asset and we will not compromise our HSE&SR standards to achieve other corporate goals, in so far as it is reasonably practicable. As such, we value the experience, professionalism and integrity of our workforce, and the commitment, leadership and accountability of all personnel for our HSE&SR performance.

We integrate HSE&SR planning and management into our day-to-day activities, defining individual responsibilities, authority and accountability. By providing adequate control of HS&E risks arising from our work activities, we strive to prevent accidents, injuries and cases of work related ill health, damage to equipment and the environment.

We meet all applicable regulatory requirements, as well as other compliance requirements to which we subscribe, and strive to deliver continuous improvement in our HSE&SR performance.

Occupational Health and Personal Safety

CPEL consult with our people on matters affecting their health and safety working conditions, plant and equipment, and provide appropriate HSE&SR information, instruction, training and supervision to employees and contractors.

We strive to optimise the safety of all our worksites by contracting those contractors who can demonstrate that they have suitable HS&E performance and management systems in place. In addition, we ensure that emergency response capability is in place and periodically test for all our operations and facilities.

We ensure all workers are competent to carry out their tasks, in so far as they can impact on the

Pan, Yiyong Managing Director UK health and safety of themselves and those around them, or the environment.

CPEL maintains safe and healthy working conditions, by providing and maintaining safe plant and equipment, and ensuring that the use and handling of substances is carried out safely.

Process Safety

CPEL applies the principles of Process Safety Management to maintain the integrity of our operations.

We ensure that risks associated with major accident hazards, arising out of our offshore operations, are identified and controlled.

Environmental Management

CPEL is committed to integrating responsible environmental management into all aspects of its operations.

Our EMS provides the framework for setting and reviewing environmental targets and objectives, and the process by which the EMS is documented implemented and maintained. Our actions will support the prevention of pollution and the reduction of waste generation.

Energy and Emissions Management

CPEL measures, monitors and controls our energy consuming and emissions producing practices with the aim of creating a net reduction in greenhouse gas emissions, specifically CO₂, methane, N₂0 and HFCs.

Our Net Zero business plan aligns with CNOOCs principles of green development and supports the North Sea Transition Deal's Supply Decarbonisation targets on the UKs roadmap to emissions neutrality by 2050.

Social Responsibility

We are committed to behaving ethically and contributing to economic development while improving the quality of life of the workforce and their families as well as the local community within the sphere of our activities.

At regular intervals the Board of Directors reviews and revises this policy, as necessary. The Directors of the company each individually and collectively share the commitment and will seek to act as Directors in accordance with the above principles.



Environment, Social & Governance

Environment, Social & Governance (ESG) is incorporated into CNOOC's integrated management system which aligns with ISO14001.

CNOOC's UK Board is the principal and decision-making body for ESG matters and the Board regularly receives special updates on health, safety, and environmental protection performance throughout each year. The Board assesses and determines the company's ESG-related opportunities and risks (including climate-related risks), and ensures that the company has an appropriate and effective ESG risk management and internal control system.

The Board supports CNOOC's HSE, Net Zero, and Community Investment Committees to implement the company's long-term strategy, business plans and investment decisions, and sustainable development goals, while providing updates and making recommendations as required. The UK senior management team are also kept informed on HSE and net zero matters through various steering committees, operations stewardship meetings, and regular internal reports.

CNOOC formally reviews its annual health, safety, social, security, and environmental performance, including the completion rate of business objectives. New objectives will be set for the next year to continue measuring the effectiveness of the company's health and safety system, environmental pollution, community investment, and green and low-carbon development strategies. CNOOC shares ESG performance and risk data to CNOOC International's head office and CNOOC Group on an annual basis.

Greenhouse gas emissions and energy use

We are committed to minimising our impact on the environment and in 2019, we developed a net zero business plan which sets out our roadmap to becoming a net zero energy business in the UK by 2050.

Our 2024 target was a continued reduction in greenhouse gas emissions towards a 2025 target reduction of 10%, set against a 2018 baseline. Our 2024 performance recorded total emissions of 657,951 tonnes of carbon dioxide equivalent from Scope 1 (direct) and Scope 2 (purchased electricity) sources, an overall reduction of 21% against our 2018 baseline.

The reduction is the result of implementing operational efficiencies which have reduced gas flaring and planned production shutdowns at our offshore installations, reducing fuel consumption. Scope 3 (indirect) sources are also monitored but we are not yet able to report on all categories that may be relevant and therefore have omitted them from this report to allow for clearer year-on-year comparison.

The accounting methodology used is detailed in CNOOC's UK Greenhouse Gas (GHG) Emissions Inventory Procedure and follows the standard approach detailed in the WBCSD Greenhouse Gas Protocol 2004 and is aligned with International Standard Organisation (ISO) 14064-1:2018. We have used the operational control approach and reported for periods of a calendar year.

Energy Management System integration continued throughout 2024 as part of the company's net zero business plan workscopes and an energy saving action plan was submitted in compliance with the ESOS regulations.

Throughout 2024, CNOOC has continued to identify, evaluate, and implement its ERAPs for each offshore asset. Emission reduction opportunities which have already been implemented are validated to determine their effectiveness.

Emissions inventory

	Year	Data	Unit
UK energy use	2024	719,966	Offshore electricity MWh
		3,544	Purchased
			electricity MWh
		1,878	MWh natural gas
		14	Solar PV
			MWh
		128,958	Heat generated offshore
			MWh
GHG emissions (total Scope 1 and 2)	2018	832,221	Tonnes CO2e
	2019	775,439	Tonnes CO2e
	2020	792,080	Tonnes CO2e
	2021	738,257	Tonnes CO2e
	2022	729,376	Tonnes CO2e
	2023	654,614	Tonnes CO2e
	2024	657,951	Tonnes CO2e
Intensity ratio	2024	31.44	Kg CO2e / barrel of oil
carbon intensity			equivalent (BOE)

Energy reported is in the form of electricity and heat generation and electricity and fuel use.

The offshore production platforms generate their own electricity through the use of produced gas, imported gas or purchased diesel. Onshore offices utilise purchased electricity from the grid and a small amount from onsite solar generation. Natural gas is used in heating and cooking. Heat energy is generated on two of our offshore platforms via the use of waste heat recovery units on the exhaust of the power generation turbines.

Third party energy use is not accounted for in this report. As the accuracy of monitoring and measurement is continually improving, previously reported figures may be updated year-on-year where accuracy has improved post publishing.

Community investment

CNOOC strives to be an employer of choice and create a culture which fosters employee development and enables people to reach their full potential. Employee led Sports and Social Clubs, a Community Investment Committee, HSE Focal Points, Offshore Welfare Committees, and the Employee Forum are empowered to promote and support causes that our people care about, create change, and make a positive impact on their employee experience.

CNOOC's community investment strategy has three pillars: supporting safe and thriving communities, advancing education (with a focus on Science, Technology, Engineering and Math (STEM)), and environmental stewardship. Through meaningful donations, sponsorships, volunteering, and matched funding for employee donations, we support projects that provide long-term, sustainable results and have a positive impact across communities where we operate.

Over the past five years, CNOOC has donated almost £2.4 million to UK charities and community groups that align with our community investment strategy. We have long term, meaningful relationships with several strategic partners in Aberdeen and Uxbridge, including, Friends of ANCHOR, the River Dee Trust, TechFest, Aberdeen Football Club Community Trust, the Iver Environment Centre, Trinity Homeless, Hillingdon Food Bank, and Charlie House.

In addition to financial support, CNOOC actively encourages volunteering and provides employees with two paid volunteer days per year. We also open our office facilities to help others and regularly welcome Friends of ANCHOR to CNOOC's Aberdeen office to support rehearsals for their Courage on the Catwalk and Brave fashion show events.



A Friends of ANCHOR Brave rehearsal is held in CNOOC's Aberdeen office.



CNOOC volunteers carried out gardening and ground works at the Iver Environment Centre in Uxbridge.

Asset operations

CNOOC's three UK operated assets:



Buzzard

Buzzard is located approx. 100 kilometres northeast of Aberdeen (Block 20/06a) and produced first oil in 2007.

Buzzard is one of the UK's highest-producing fields, providing safe and secure energy for the UK.



Golden Eagle

The Golden Eagle platform is located approx. 111 kilometres north-east of Aberdeen (Block 20/1S) and produced first oil in 2014.

Golden Eagle has an exceptional safety record spanning its operational life and achieved 10 years without a lost time injury in 2024.



Scott

The Scott asset is located approx. 185 kilometres north-east of Aberdeen (Block 15/22) and commenced production in 1993.

The Scott, Telford, and Rochelle fields are tied into the platform. The Scott and Telford fields continue to produce through Scott, while the Rochelle field reached COP in 2019.

Drilling operations

CNOOC's contracted drilling rigs in the UK:



COSL Pioneer

The COSL Pioneer semi-submersible drilling rig supported a well abandonment campaign at the Ettrick field during 2024.



Shelf Drilling Fortress

The Shelf Drilling Fortress jack-up rig supported drilling campaigns at Golden Eagle during 2023 and 2024.

Atmospheric emissions

Production GHG emissions as CO2 equivalent

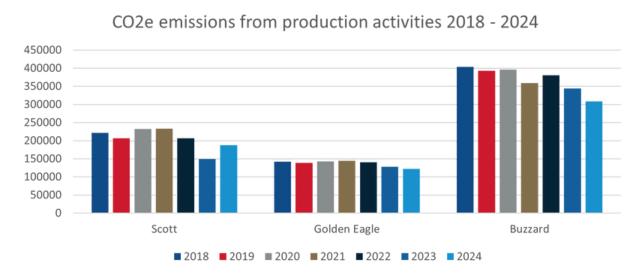
The chart below represents a very small change in combined CO2e emissions from 654,231 tonnes in 2023 to 657,607 tonnes in 2024.

There was an overall decrease of 21% on the 2018 baseline emissions from offshore installations. This is good progress on the roadmap to reaching the NSTD target of a 10% reduction on the 2018 baseline by 2025.

2024 power generation CO2 emissions related to fuel gas consumption were down 20% on the 2018 baseline, however this was offset by the doubling of diesel fuel related CO2 emissions. This is due to long TAR lengths in 2024 coupled with power generation reliability issues on the Scott installation.

Flaring related CO2 emissions have reduced 44% compared to 2018, due to the asset teams' significant efforts to implement good flare management practices and modify practices and equipment to route more gas back to the process.

CO2e emissions from production activities



GHG emissions from CNOOC's offshore installations by tonnes CO2 equivalent between 2018 and 2024.

Note, CO2 equivalent refers to converting all relevant Kyoto GHGs to CO2e using their Global warming potential (GWP). The inventory includes CO2, CH4, N2O, HFCs (PFCs and SF6 not considered relevant to CNOOC's UK offshore operations).

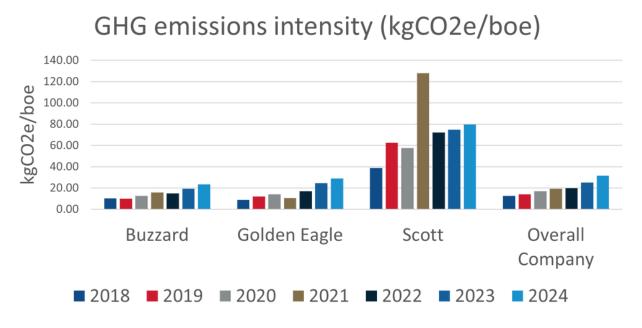
Emissions intensity is a productivity and efficiency ratio which expresses the GHG impact in kilograms of CO2e emitted divided by the production output (in barrels of oil equivalent). A decreasing intensity performance will reflect a positive and more efficient performance improvement in terms of less GHG emitted per unit of production.

Overall, there is an increasing trend in emissions intensity, despite reducing actual emissions. This is expected for mature assets as production declines but they still require the same or more power for production. This metric is commonly used to compare performance between assets, though doing this can be misleading and must be put in context of the asset, the basin, and the product type.

Overall offshore GHG Intensity in 2024 was 31.44 kgCO_{2e}/boe.

Individual installation CO2 emissions

CNOOC's ERAPs were first published in 2022, identifying credible opportunities to reduce GHG emissions. They were updated in 2024, validating implemented activities and with the addition of new opportunities to reduce emissions.



GHG emissions intensity in kgCO2e per barrel of oil equivalent for CNOOC's offshore assets.

Oil in produced water discharge (permitted discharges)

The mass of oil discharged increased from 55.5 tonnes in 2023 to 74 tonnes in 2024. Total water volume discharged increased across the three platforms in 2024. This is due to there being extended TAR and shutdowns in 2023 and more stable production operations up-time throughout 2024.

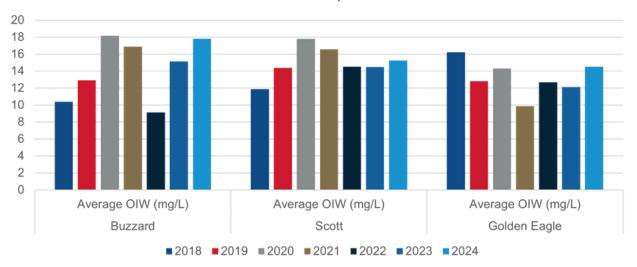
Due to the high percentage of water re-injection that takes place on Buzzard, changes to the level of PW discharge seem more notable. In 2024, the overall volume of oil discharges increased by approximately 1.7 Te from the 2023 levels This is roughly in line with the figures from 2022 and 2021 and is attributable to some instability in Buzzard's amine system throughout 2024.

On the Scott Platform, there were higher production volumes in 2024 due to increased power generation and improved plant stability. Telford uptime increased, which contributed to higher levels of oil within the produced water. This is due to the relatively high viscosity and difficulties separating the oil and water fractions.

Golden Eagle experienced a hydraulic fluid leak identified on the supply to a water injection well resulting in a reduction of the available rejection capacity. In addition, the SAGE pipeline was subject to a planned 28-day maintenance shutdown. To maintain operations without fuel gas import, Golden Eagle operated on one water injection pump to reduce the platform's power demand. The two events limited Golden Eagle to one water injection pump in July, August, and September with excess produced water discharged to sea.

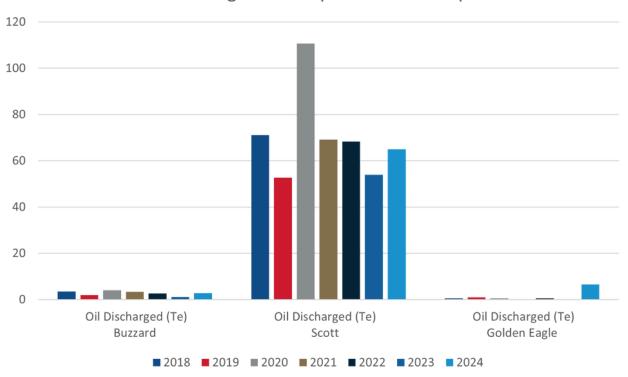
Water re-injection to maintain reservoir pressure increased on Buzzard and Golden Eagle corresponding with the continued decline of these fields. Produced water re-injection is an important process as it maintains reservoir pressure for improved production and reduces overboard discharge of oil and chemicals in produced water. This is especially noticeable on Buzzard and Golden Eagle where produced water re-injection uptime is high resulting in very low produced water discharges. The Scott platform does not have produced water re-injection capability.

Average oil in water concentration of produced water overboarded per asset



Oil in produced water discharged per asset.

Total oil discharged within produced water per asset



Total oil discharged per asset.

Chemicals

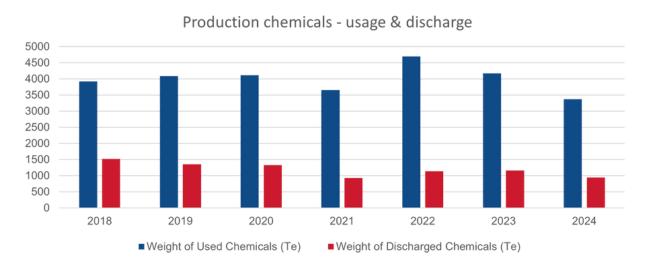
Production chemicals

The total chemical used in 2024 decreased from 41,773 tonnes in 2023 to 33,755 tonnes in 2024.

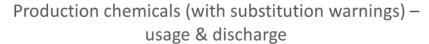
Chemicals which are hazardous to the marine environment are subject to substitution (SUB) warnings under the Harmonized Mandatory Control Scheme (HMCS). Usage of production chemicals with SUB warnings decreased in 2024 compared to 2023. CNOOC is committed to reducing the overall number of SUB warning chemicals used in our operations as well as the overall volume of usage and discharge of these chemicals. Usage of these chemicals is closely monitored and wherever suitable alternatives or opportunities to reduce usage become available, CNOOC endeavours to make these improvements.

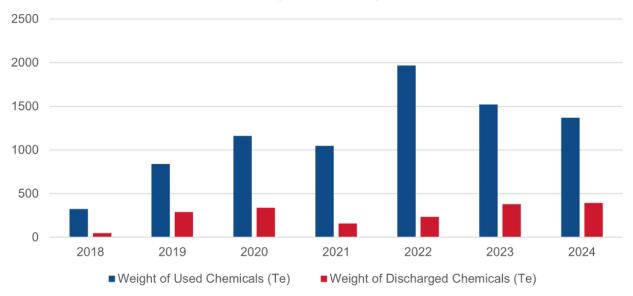
CNOOC is currently exploring a replacement for the hydraulic fluid on Buzzard and Golden Eagle which should further eliminate a significant portion of our current SUB chemical statistics. Despite CEFAS introducing lower thresholds and new elements to certify chemicals with warning labels, CNOOC's performance in this area continues to improve year-on-year.

At this time, no alternatives to the substitution chemicals still being used by CNOOC have been sourced. CNOOC will continue to explore more environmentally friendly chemicals to replace these sub warning chemicals.



Production chemical usage.





Production chemical usage with substitution warnings.

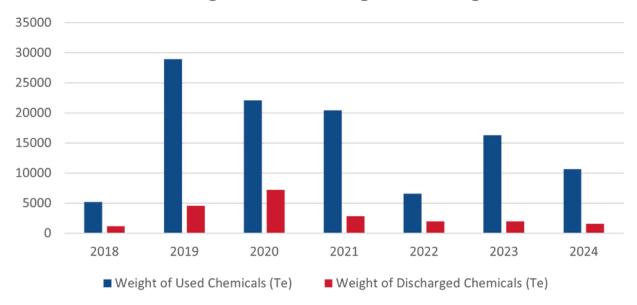
Drilling - including well intervention and pipeline chemicals

Chemical use decreased from 16,290 tonnes in 2023 to 10,677 tonnes in 2024. This is due to less wells being drilled in 2024 overall. Discharge weight decreased slightly for the same reason.

The use of SUB labelled chemicals for drilling approximately halved from 2023 to 2024, from 300 tonnes to 153 tonnes. Overall discharge of chemicals with SUB warnings decreased from 100 tonnes in 2023 to 63 tonnes in 2024.

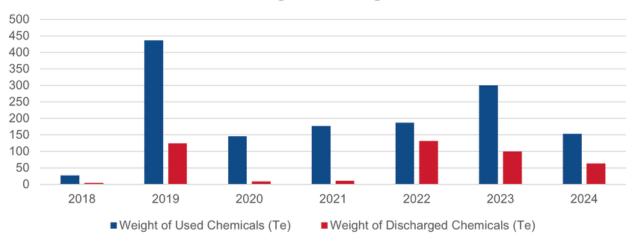
CNOOC strives to avoid discharge of SUB warning chemicals and is committed to seeking alternatives for these chemicals wherever suitable options are available.

Drilling chemicals - usage & discharge



Drilling chemical usage.

Drilling chemicals (with substitution warnings) – usage & discharge



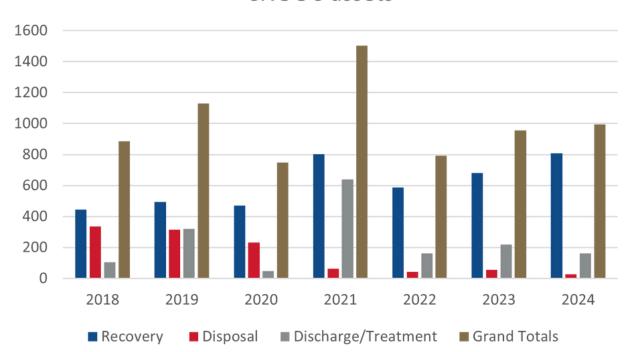
Drilling chemicals usage with substitution warnings.

Waste

Production waste

In 2024, 994 tonnes of waste were generated across all installations, which is a slight increase from the 956 tonnes of waste generated in 2023. With a zero waste to landfill focus across our UK operations, over 98% of waste from all production operations was diverted from landfill with alternative waste management methods and routes being utilised where possible. This comes in well below the Scottish government's zero waste to landfill targets of <5%.

Production waste routing breakdown for CNOOC assets

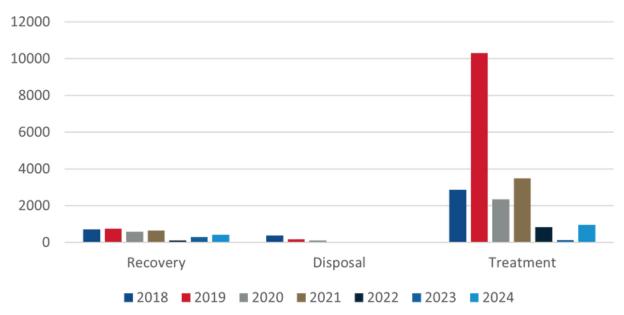


Production waste disposal routes - by year.

Drilling waste

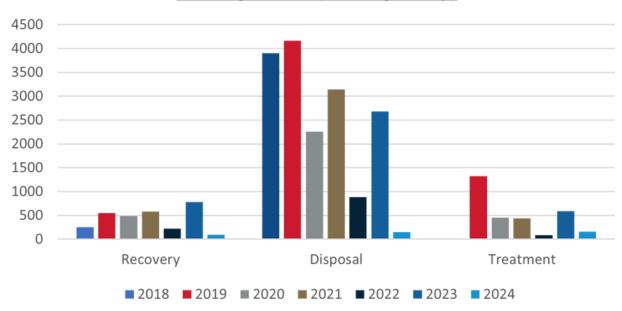
Drilling waste generated (excluding cuttings) in 2024 was circa. 3,714 tonnes compared to 2023 which was circa. 462 tonnes. The increase was due to a significant increase in well plug and abandonment activity in 2024. Waste cuttings returned to shore were kept to a minimum due to the use of a thermo-mechanical cuttings cleaner.

Drilling waste (excluding cuttings)



Drilling waste generated (excluding cuttings).

Drilling waste (cuttings only)



Drill cuttings waste generated.

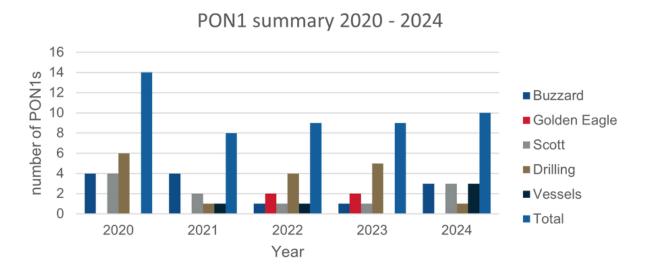
Compliance

2024 unplanned releases

During 2024, there were 10 unplanned releases. (This figure does not include ongoing PON1s.) Only one PON1 was submitted for drilling operations in 2024 and seven of the releases occurred subsea.

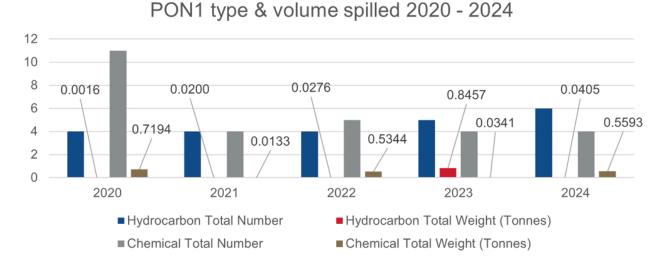
Six releases were from production operations:

- Scott had three releases.
- Golden Eagle had zero releases.
- Buzzard had three releases.
- Vessels had three releases.



Individual installations - PON1 summary.

The breakdown of PON1s from 2024 show that two were hydrocarbon related and seven were chemical related. There was a total of 0.6 tonnes spilled in 2024, of which, hydrocarbon releases accounted for 0.04 tonnes, while chemical spill accounted for 0.56 tonnes in total.



Type & volume spilled.

2024 regulatory non-compliances

Two non-compliances occurred during 2024, both reported by the Buzzard platform.

- The first was for oil in produced water discharge concentration greater than 100mg/l. During this short period of overboard discharge only 8.9 kg of oil was discharged.
- The second was for a monthly average oil in produced water concentration of 34.4 mg/l, which is greater than the 30 mg/l regulatory limit. This short duration of overboard discharge occurred during re-start after a planned maintenance turnaround (TAR). The water injection system remained online for the rest of the month keeping the average monthly concentration high as there was no further overboard discharge. It is against CNOOC's environmental objectives to unnecessarily discharge produced water to sea in order to dilute and reduce monthly average oil in produced water figures.

Environmental objectives

CNOOC's 2024 environmental goals and objectives were achieved through activities such as:

- Environmental compliance assessments completed across all offshore assets.
- Quarterly environmental offshore awareness themes including flaring, recycling, waste management & dangerous goods, hose management, and spill kits.
- Internal and external stakeholder engagement meetings focusing on flaring, venting, and produced water performance.
- TAR ENVID support.
- Support to net zero workstreams, progression of ERAPs, and transition strategy.
- Chemical supply chain end-to-end review.

A management review concluded the Environmental Management System is adequate and effective for achieving continual improvement across CNOOC's environmental performance.

Environmental objectives 2025

CNOOC's environmental objectives are to:

- Manage and minimise emissions from power generation, flaring, and unburned hydrocarbons.
- Optimise energy intensity in line with newly established Energy Performance Indicators (EnPIs).
- Manage and minimise discharges to sea of oil and hazardous chemicals.
- Manage and minimise waste generation within the supply chain to achieve zero waste to landfill.
- Prevent and mitigate significant environmental unplanned / accidental discharges to sea and air.
- Promote and improve environmental awareness and engagement.

2025 environmental targets are:

- Maintain trajectory towards a target of 10% reduction on 2018 baseline emissions by 2025.
- One or more months per producing asset where zero waste to landfill was achieved.
- Zero significant (enforcement action level) spills to sea.
- Zero unplanned production permit variations.
- Monthly monitoring of EnPIs and establishment of benchmarks.

These objectives and targets are supported by an Environmental Management System foundation of engagement, compliance, and continuous Improvement.



