NEPTUNE ENERGY

PUBLIC ANNUAL ENVIRONMENTAL STATEMENT 2022

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1 INTRODUCTION

1 WELCOME

Neptune Energy's goal is to conduct our business activities with no harm to people, no damage to the environment and no accidents, today or in the future.

Neptune Energy is committed to responsible and sustainable energy production operations in the UK North Sea.

While we are already well positioned for the energy transition, with a gas-weighted portfolio and a lower carbon intensity production than our peers, our ambitions are to go further with our sustainability plans.

In 2022, Neptune Energy set out an ambitious target to store more carbon than is emitted from our operations and from the use of our sold products. We have submitted three applications for carbon capture and storage licences and securing these will enable us to progress future proposals for integrated energy hubs in the UK North Sea.

Cygnus is the largest single producing gas field in the UK Southern North Sea, and capable of supplying enough gas to heat approximately 2 million UK homes.

Cygnus has one of the lowest carbon intensities in the industry, and we have identified several emission reduction opportunities, including fuel replacement and flare gas recovery, which are expected to deliver an annual reduction of up to 30,000 tonnes of CO_2 by 2028.

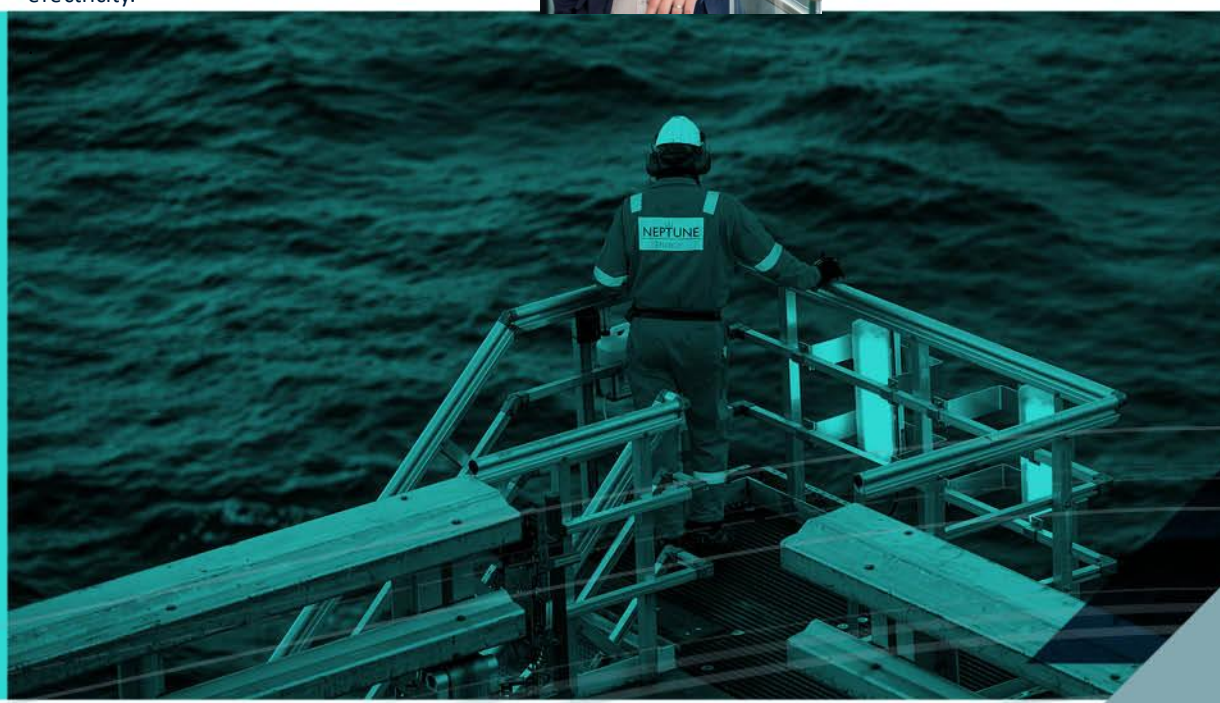
We signed a Memorandum of Understanding with Ørsted and Goal7 in December 2022 to explore powering new integrated energy hubs in the UK North Sea with offshore wind-generated electricity.

Integrated energy hubs have the potential to combine multiple energy systems, including existing oil and gas production assets, carbon storage and hydrogen production facilities. They could extend the life of producing fields and support the economic case for electrification with renewable energy, to keep carbon emissions low

During 2022, scientists working for the Environmental Defense Fund completed evaluation of methane emissions data gathered from the Cygnus platform in the UK in 2021. The evaluation found that while the rotary drone methane measurements and emissions reported at the facility were closely aligned, the fixed wing drone measurements showed greater variance. We plan to conduct further studies in the UK and Norway in 2023 to identify an accurate benchmark for measuring total methane emissions and to determine actions we can take to reduce them.

These actions, along with our lower carbon portfolio and ambitious targets, can help accelerate the energy transition and support the UK government's net zero goals.

Alan Muirhead
Country Director, UK
Neptune E&P UK Limited



1 OVERVIEW OF UK OFFSHORE OPERATIONS IN 2022

Our production operations are, like the rest of our business, driven by a commitment to quality — above all to health, safety and the environment — but also to performance, expertise and technology. In 2022, we had two operated fields in production.

Cygnus

Cygnus, one the UK's largest single producing gas field, located in blocks 44/11a and 44/12a of the Southern North Sea and is capable of meeting around 6% of UK gas demand; enough gas to heat the equivalent of 2 million homes. Cygnus Alpha began producing in December 2016 and in August 2017 Cygnus Bravo produced its first gas.

In 2022 we commenced a two well infield programme at Cygnus. The 10th and 11th well started up during 2023 and will help support production in the field. Further wells are planned to offset natural decline and increase recovery.

During the second quarter, gas compression commenced due to decline in natural pressure. We are currently exploring solutions which will offset fuel use and emissions from compression.

We continue to support plans for a permanent change in UK gas entry specifications, which is required to maintain reliable indigenous gas supplies into the UK and to unlock additional potential reserves and resources from the Southern North Sea.

Several emission reduction opportunities at Cygnus have been identified including fuel replacement and flare gas recovery is expected to deliver an annual reduction of 30,000 tonnes of CO_2 by 2028.

1 OVERVIEW OF UK OFFSHORE OPERATIONS IN 2022 CONTINUED

Seagull

Seagull is a development 17 km south of the BP-operated ETAP Central Processing Facility (CPF). Upon completion a new 5 km pipeline, which will tie the Seagull manifold to the existing Heron pipeline system via a newly installed tie-in skid at the Egret manifold. Production will utilise the Heron pipeline system and riser to evacuate fluids to the ETAP CPF. The development include a 17km control umbilical direct from ETAP.

Progress at our Seagull project continued during 2022 and the first development well was completed and successfully tested. Operations to complete the second well are ongoing. The two remaining development wells are expected to be drilled during 2023 and brought onstream in 2024.

In the fourth quarter of 2022, a subsea campaign was completed including the installation of the subsea control module and flowmeter, umbilical hook-up and testing, pipeline tie-in and leak tests.

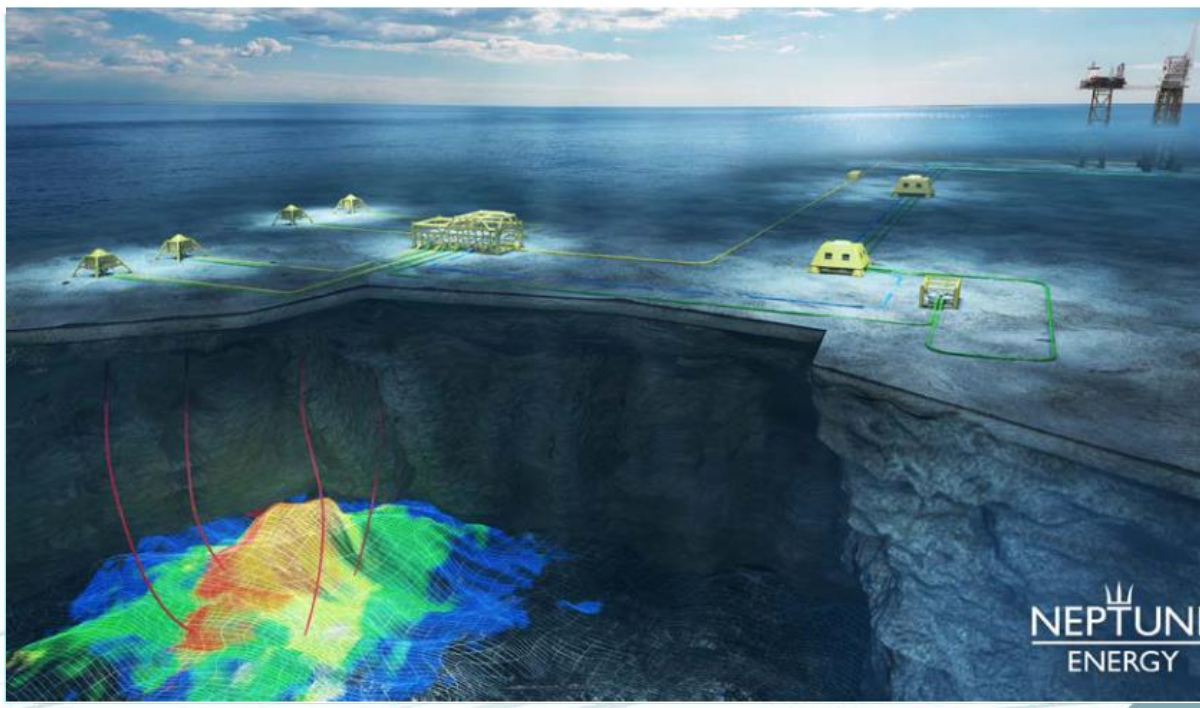
The field is projected to hold 19.0 mmboe net 2P reserves. Installation of the pipeline was carried out in 2020 along with further works at ETAP. Drilling began in 2021.

Carbon capture and storage

In September 2022, we submitted three applications for carbon capture and storage licences as part of recent Carbon Dioxide Appraisal and Storage, we are expecting the results of these applications Q2 2023.

Exploration

At the end of 2022 we completed appraisal drilling at the Isabella discovery. Hydrocarbons were encountered in the Upper Juassic and Triassic sandstone reservoirs and logs were acquired within each zone. Results from the well are being analysed to determine commercially od the reservoir.



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ENVIRONMENTAL STRATEGY

2 ENVIRONMENTAL STRATEGY

Neptune Energy's Environmental Strategy underpins our Environmental Policy and sets out Neptune's environmental commitments. The strategy has been developed to help the company operate in a safe, sustainable and responsible manner. The strategy defines our top 10 environmental issues. These were identified through a rigorous materiality process based on their importance to both our internal and external stakeholders, and are aligned with the IPIECA's sustainability reporting guidance.

Our Environmental Policy can be viewed on the following page.

THE 10 TOPICS ARE:

Climate change and the energy transition

CO_2e emissions

GHG Emissions and Energy UseEnergy use

GHG ands Other air emissions

Spills

Waste

Discharges to water

Water use

Biodiversity

Decommissioning

Neptune Energy Environmental Policy

Uncontrolled unless viewed via the Management System

NEPTUNE ENERGY

Our commitment

Environmental excellence is an integral part of our journey of being a leading international independent E&P company. Neptune Energy is committed to minimising the impact of our operations on the environment as set out by this policy. Our goal is to empower our employees and contractors to achieve environmentally responsible operations, including the authority and responsibility to stop work for a situation regarded as potentially harmful to the environment.

Our impact on the environment is one of the operational matters discussed regularly by everybody as part of health, safety and environment (HSE).

We will ensure that the necessary resources are provided to fully support this policy and will ensure that it is subject to audit and review as part of the company's Management System.

Neptune Energy relies on the commitment and responsibility of everyone associated with our business to achieve environmental excellence.

Our environmental management

Our environmental strategy prioritises ten topics. These were defined through a robust process that included direct engagement with our key stakeholders, including employees, investors, industry bodies and NGOs.

For the **ten environmental topics** below, we consider regulatory requirements as a minimum. We are committed to monitoring the impact of our activities and mitigating their impacts on the environment and will use Best Available Techniques (BAT) in accordance with industry practices. For some, we have further ambitions and will apply our own, more stringent, standards.

Together, we will:

1 Conduct our operations with minimal impact on the environment, focus on improving energy efficiency and reduce our emissions, recognising **climate change** is a global challenge.

2 Ensure zero operational **spills**.

3 Reduce our **CO2e emissions** and achieve an ambitious long-term intensity measure.

4 Improve our **energy** efficiency performance through ambitious target setting.

5 Reduce our **other air emissions**, e.g. NOx, SOx and nmVOCs.

6 Reduce our volume of **waste**. Our first priority is waste prevention, then reuse and recycle.

7 Monitor and reduce hazardous contaminants in **discharges to water**.

8 Manage impact of **water use** in water scarce areas.

9 Minimise our impact on **biodiversity**.

10 Achieve environmentally responsible **decommissioning**.

All personnel working on behalf of Neptune Energy must comply with this policy and be proactive in the pursuit of environmental excellence.

Pete Jones
03/05/2022

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MAKE IT SAFE. MAKE IT SAFER.

HOW WE DO THINGS SAFELY.

ENVIRONMENTAL STRATEGY

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MANGEMENT OF ENVIRONMENTAL ISSUES

We assess and minimise impact on the environment from our activities through an Integrated Management System (IMS) certified against ISO 14001 and ISO 50001 and underpinned by the same commitment to quality that we bring to all areas of our performance.

Neptune E&P UK Limited has developed an effective approach for the management of environmental issues. The company has developed Environmental Cases (E-cases) for our offshore operations and onshore assets.

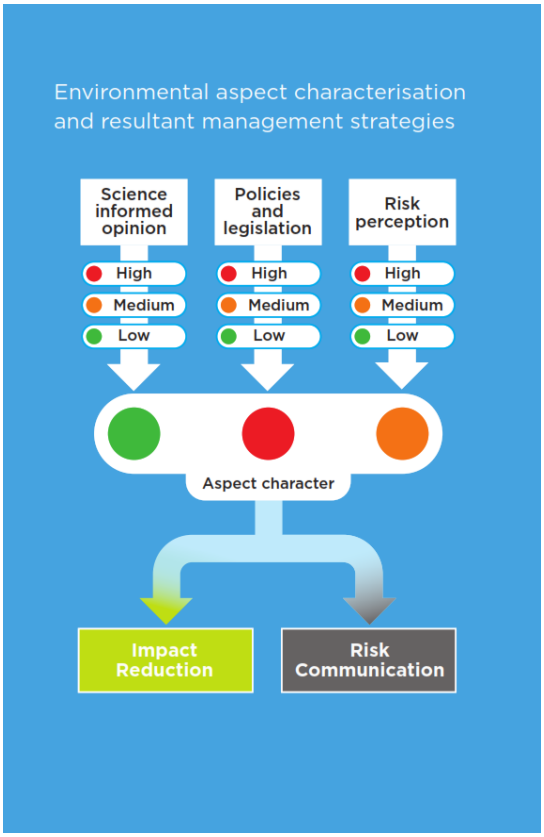
The E-cases are central to the environmental aspects of the IMS and are designed to bridge the gap between operational objectives and stakeholder expectations. They provide an audit trail between high level objectives and individual tasks and responsibilities.

Benefit of E-Cases

E-cases offer a structured approach to better alignment in the management of environmental issues.

They also offer a path towards unlocking the benefits of goal setting regulation and away from prescriptive regulation.

Our side-by-side assessments provide an interpretation of different environmental expectations in society. It looks to science for an objective assessment of impacts while being conscious of its limitations. On the more subjective side it looks at the expectations of stakeholders while considering their motivations and influence. Finally, it reviews legislation and company standards.



ENVIRONMENTAL OBJECTIVES

3 ENVIRONMENTAL OBJECTIVES

Environmental objectives 2022 and progress

- **Support the electrification of Cygnus high-level study through to completion and issue findings to all relevant personnel.**

  A high-level study has been completed. Various options are currently being assessed for taking forward.

- **Support reduction of CO_2 intensity by unlocking asset improvement projects within current asset power demand.**

  Significant Asset improvement projects are being explored in accordance with electrification options, compressor studies and energy usage.

- **Build on Cygnus methane study findings to improve quantification and data accuracy.**

  Commenced work on a Methane Action Plan to support the ERAP, which includes conducting studies to identify primary methane emission sources from Cygnus. The study will inform us where substantial methane reductions shall be targeted.

- **Work towards attaining OGMP 2.0 Level 4 reporting for Cygnus.**

  Top down drone surveys required to fully understand our profile and extend of methane emissions.

- **Share experience and lessons learned in relation to ISO 14001 and 50001 certification with other Neptune Energy countries.**

  A cross-country group ISO group has been set-up, headed up by Head of Quality. A number of lessons learned presentations has been shared.

3 ENVIRONMENTAL OBJECTIVES

Environmental objectives 2022

Neptune E&P UK Limited has a number of objectives and methods to improve the environmental performance and/or data capture. The list below is not an exhaustive list but are the most relevant and in line with the purpose of this document:

- **Develop Methane Action Plan to support ERAP – includes the development of engineering studies.**
- **Assess electrification options for Cygnus Alpha**
- **Develop and complete a schedule of environmental audits covering operated assets, MODU;'s and key vendors as appropriate**
- **Develop and roll out an Environmental Compliance Handbook to appropriate departments to support compliance activities.**

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ENVIRONMENTAL PERFORMANCE 2022

4 ENVIRONMENTAL PERFORMANCE 2022

ATMOSPHERIC EMISSIONS

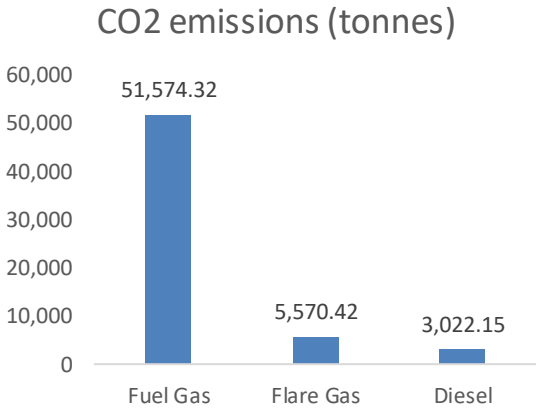
Atmospheric emissions

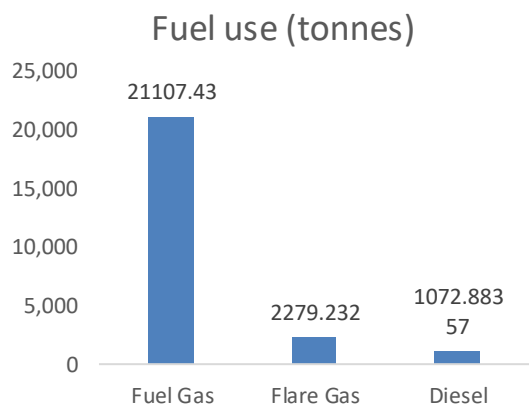
Atmospheric emissions occur in our operations mainly as a result of the combustion of diesel fuel and fuel gas to generate power and through flaring. Emissions in the North Sea are controlled by UK, European and international regulations.

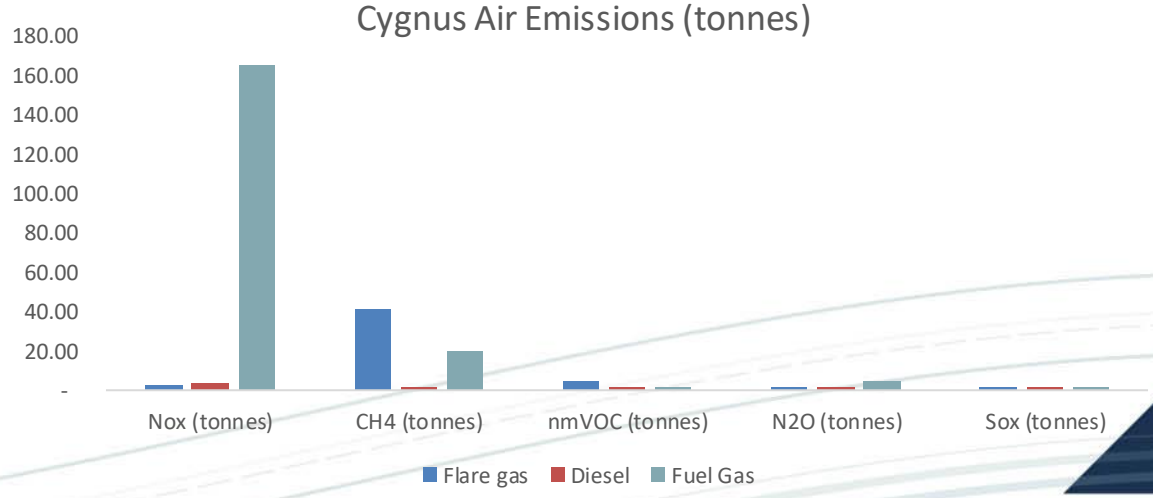
We report greenhouse gas emissions on a CO_2 equivalent basis, including CO_2 and CH_4. We also report other air emissions including the oxides of nitrogen (NOx) and sulphur (SOx).

Our total greenhouse gas emissions for our Cygnus operations were 68,714 tonnes of CO_2e in 2022.

While we currently have one of the lowest carbon intensities in the industry in the UK at 4.69 kg CO_2/boe and for our managed operations (UK, Norway, the Netherlands and Germany) at 6.986 kg CO_2/boe (industry average is 20.81 kg CO_2/boe) . Due to natural depletion of wells as our asset mature, our carbon intensity increased during 2022 as our compressors came online. More energy is needed to extract more mature oil and gas reserves meaning that CO2 emissions due to an increase in fuel use has been reported since 2021. Without action, our carbon intensity across our managed operations would increase to 22 kg CO_2/boe in 2030. That is why we have set ambitious targets of 6 kg CO_2/boe and net zero methane emissions by 2030.







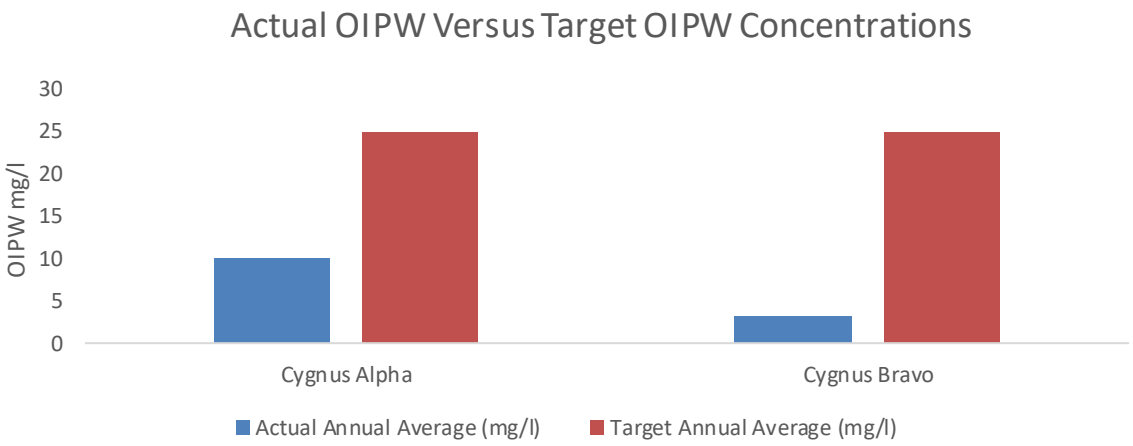
4 ENVIRONMENTAL PERFORMANCE 2022

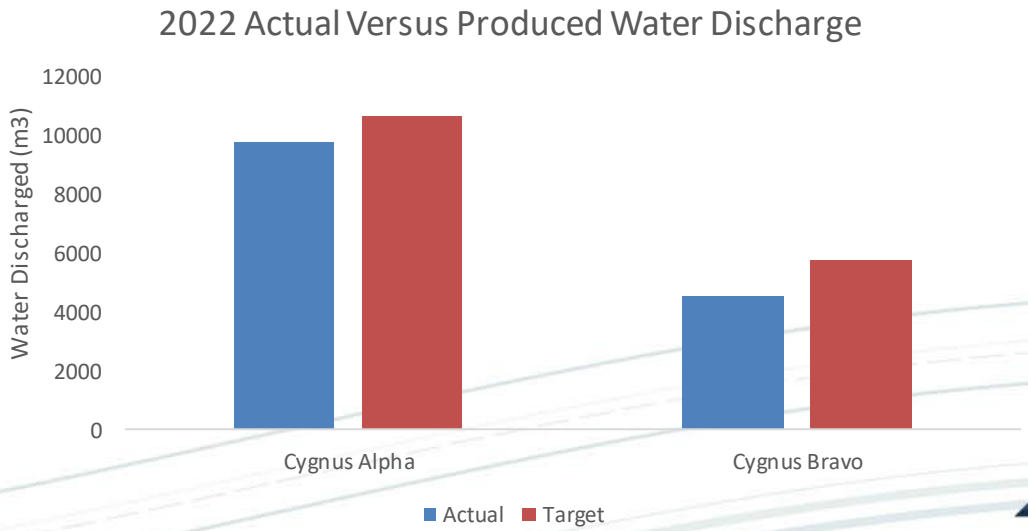
Produced Water

Produced water is created during the process of oil and gas extraction and can include dissolved and dispersed hydrocarbons. Typically gas reservoirs produce less water compared to oil. Once oil and gas has been separated from reservoir fluid the resulting water can be discharged to sea providing strict limitations are adhered to.

All discharges must be permitted by Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) including the volume of produced water and the concentration of oil discharged within the water. Therefore, ongoing monitoring is required to ensure legal limits are not breached.

Within 2022, Cygnus Alpha and Bravo had zero instantaneous samples >100mg/l or a monthly average >30mg/l. Target concentrations less than 25mg/l were set and achieved as samples shown an average of 10.021mg/l from Alpha and 3.259 from Bravo. In regards to produced water discharges, we were also within permitted limits as Alpha was 92% of the discharge limit and Bravo was 79%.





ATMOSPHERIC EMISSIONS

4 ENVIRONMENTAL PERFORMANCE 2022

Chemical use and discharge

Use and discharge associated with Neptune operations.

The use of chemicals in the offshore industry is an essential part of any production and operational activities and the subsequent processes involved in the production of hydrocarbons from an installation, including drilling mud chemicals, corrosion inhibitors, scale inhibitors, biocides, demulsifiers, antifoams and detergents.

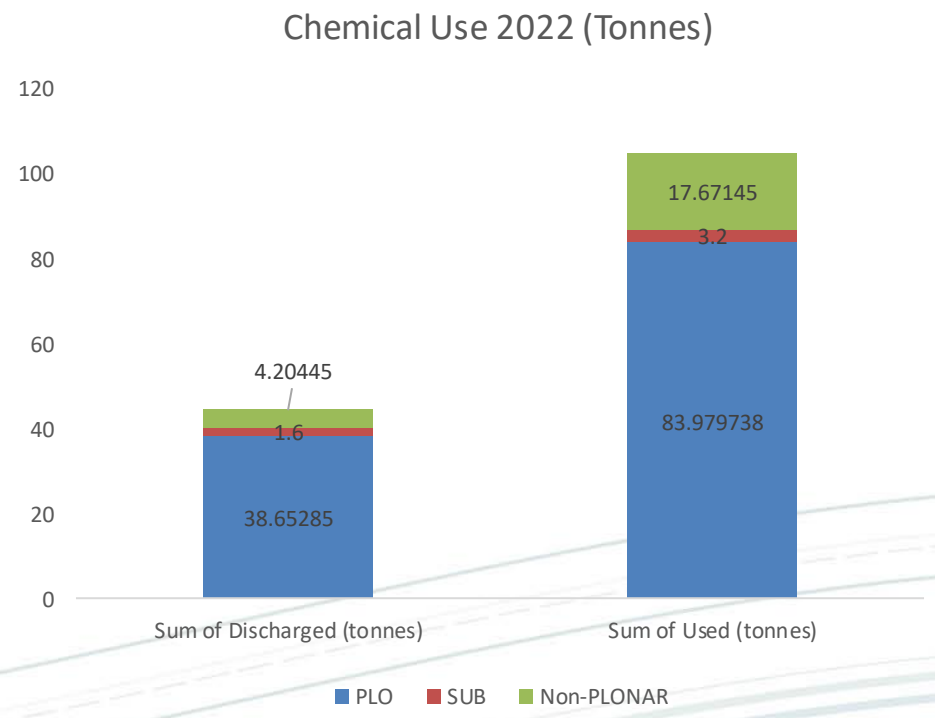
Due to the hazards associated with the use of chemicals offshore to the marine environment, any activity within the North Sea is controlled and regulated using the OSPAR requirements.

These requirements, implemented in the UK through the Offshore Chemicals Regulations 2002, require operators such as Neptune E&P UK Limited to obtain a chemical permit from Offshore Petroleum Regulator for Environment & Decommissioning (OPRED) in the application and discharge of any chemical used offshore.

As stated in these regulations, Neptune E&P UK Limited may only use chemicals which have been registered by the Centre for Environment, Fisheries & Aquaculture Science (Cefas) and continues to work to manage the risks posed to the environment from chemical use.

This has been achieved by actively aiming to use chemicals which are considered to pose little or no risk to the environment (PLONOR) where technically possible and limiting the amount of discharge to the marine environment.

Below you can observe the overall chemical usage and discharge volumes in tonnes, in addition to the proportion of chemicals that are PLONOR or possess a SUBSTITUTION warning. Where technically feasible we continue to try and change our chemicals with substitution warnings for more environmentally friendly alternatives.



4 ENVIRONMENTAL PERFORMANCE 2022

Waste

Operational waste management

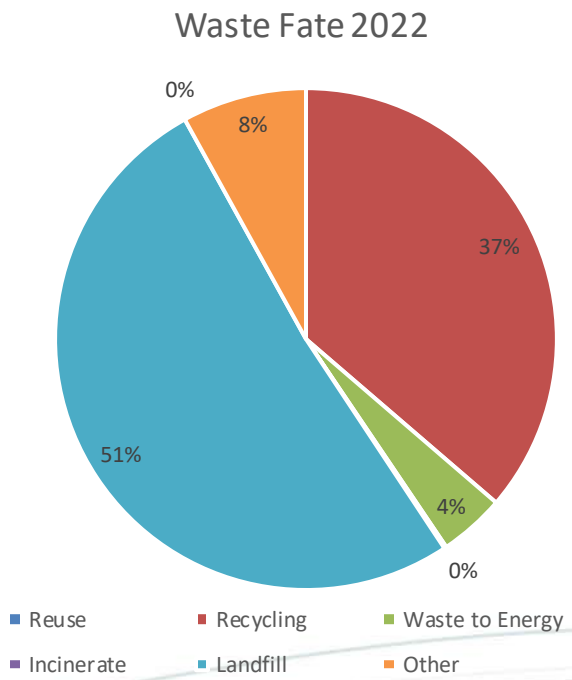
Many aspects of offshore activities in the oil and gas industry generate operational waste and can provide a significant environmental challenge to operators in its safe disposal. All of our projects and operations have waste management plans to prevent waste as the first priority, followed by options for recycling and reuse. As per statutory regulations, any produced waste must be categorised and managed accordingly, using a waste management system. This system ensures all waste is monitored and any hazardous operational waste produced is stored on the installation and shipped ashore for safe disposal.

Neptune have developed site specific waste management plans, within each plan the emphasis is to reduce waste generation wherever possible. In addition, we continue to engage with waste contractors in order to seek out more sustainable waste processing options to avoid landfill disposal. We continue to monitor waste segregation by carrying out skip audits and sharing the findings with offshore personnel.

Category	Tonnes
Group 1 - Special	
Chemical/Paints	7.46
Drums/Containers	1.049
Oils	10.135
Miscellaneous Special Waste	6.135
Sludges/Liquids/Tank Washing	4.53
Group II - General	
Chemicals/Paints	2.72
Drums/Containers	0.004
Scrap Metal	18.877
Segregated Recyclables	31.29
General Waste	89.175
Sludges/Liquids/Tank Washings	0.21
Group III - Other	
Asbestos	0
Radioactive materials (exc. NORM)	0
Clinical	0.172
Explosives	0
Total	171.757

Total waste types

We produced a total of 171.757 tonnes of operational waste in 2022 from Cygnus. 29.309 tonnes was hazardous and 142.276 tonnes non-hazardous.



4 ENVIRONMENTAL PERFORMANCE 2022

Unplanned Releases

Our aim is to zero operational spills. We have an approved Oil Pollution Emergency Plan (OPEP) in place for all offshore operations. The OPEP details the actions and sequence of events that shall be followed in event of an unplanned spill. In addition, Neptune have an Environmental Events procedure which details what constitutes an unplanned release and responsibilities.

We are members of Oil Spill Response Limited (OSRL), who provide resources in the event of an oil spill. In 2022 we worked with OSRL on our response readiness. Certain roles within in the organisation have completed mandatory oil spill response training. In addition, OIM's are required to complete a OPEP exercise annually as a minimum.

PON1's reported through the BEIS Integrated Reporting System (IRS) are displayed below. The majority of fluid lost to sea during 2022 derived from Seagull where MEG-Water has been discharged to sea during start-up operations.

Type	Date	Detail	Tonnes
PON1	12th March 2022	Punctured waste helifuel drum backloaded with container	0.0008
PON1	1st may 2022	Small leak from a hose on a hydraulic jumper	0.00005
PON1	28th June 2022	Pressure loss at ETAP topsides indicating a leak.	9.340
PON1	6th July 2022	Failed weld on ¾" drain line causing loss of fluid through open grating.	0.00001476
PON1	1th December 2022	Bunkering release	0.036
Total			**9.341**

Unplanned Releases

5

ENVIRONMENTAL CERTIFICATES

ISO14001 CERTIFICATE

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:	Initial certification date:	Valid:
20362-2008-AE-GBR-UKAS	14 September 2009	25 September 2021 – 08 May 2024

This is to certify that the management system of

Neptune E&P UK Limited

16 North Esplanade West, Aberdeen, AB11 5RJ, United Kingdom

Cygnus Complex
UKCS Block, 44/11 and 44/12, United Kingdom

has been found to conform to the Environmental Management System standard:

ISO 14001:2015

This certificate is valid for the following scope:

The management of significant environmental aspects associated with exploration and production of oil and gas.

Place and date:
London, 28 September 2021

UKAS MANAGEMENT SYSTEMS
0013

IAF

For the issuing office:
DNV - Business Assurance
4th Floor, Vivo Building, 30 Stamford Street, London, SE1 9LQ, United Kingdom

Doug Milne
Management Representative

ISO50001 CERTIFICATE

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:	Initial certification date:	Valid:
10000309442-MSC-RvA-GBR	12 November 2019	13 November 2022 – 12 November 2025

This is to certify that the management system of

Neptune E&P UK Limited

16 North Esplanade West, Aberdeen, AB11 5RJ, United Kingdom

and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Energy Management System standard:

ISO 50001:2018

This certificate is valid for the following scope:

The management of energy associated with the exploration and production of oil and gas.

Place and date:
Barendrecht, 14 October 2022

For the issuing office:
DNV - Business Assurance
Zwolseweg 1, 2994 LB Barendrecht, Netherlands

MGMT. SYS. RvA C 024

IAF

Erie Koek
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689. www.dnv.com/assurance


NEPTUNE
ENERGY