
# 2023

# Annual Environmental Statement

## for Shell UK's Upstream Offshore Operations

# Contents




*This statement has been produced in order to meet the requirements of OSPAR Recommendation 2003/5, as advised by the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED).*

# A Message from Simon Roddy

## Senior Vice President Shell UK Upstream

The safety and environmental performance of Shell's upstream business in the UK is a responsibility I take very seriously, ensuring that we effectively manage and mitigate the environmental impacts associated with our operations in the UK.

This annual environmental statement highlights our offshore operational performance across a number of key environmental metrics, including greenhouse gas emissions, oil in produced water discharges, unplanned hydrocarbon releases and waste management.

The industry's commitment to reducing Greenhouse Gas emissions from operations is captured in the North Sea Transition Deal, which targets a basin-wide 50% reduction in emissions by 2030 versus a baseline of 2018. Against this target we have reduced our emissions by greater than 20% since 2018, which is also contributing to Shell's absolute emissions reduction targets.

The UK has one of the most highly regulated oil and gas basins in the world, and this statement is an example of environmental performance reporting in our industry in the context of continued public scrutiny of the role of oil and gas in the UK's energy system.

I welcome this scrutiny and believe, through continued strong performance today and achieving the ambitious commitments enshrined in the North Sea Transition Deal, the UK's oil and gas industry can continue to deliver the energy and products the UK relies on today and into the future.

Thanks for taking the time to read this report.

# Introduction

This is the 2023 Annual Environmental Statement (Statement) for the upstream operations of Shell U.K. Limited and its subsidiaries (Shell UK). The Statement summarises the environmental performance of our upstream offshore facilities operated by Shell UK in 2023 in order to meet the requirements under Recommendation 2003/5 of the Oslo Paris Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Recommendation 2003/5).

Under OSPAR Recommendation 2003/5, the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) requires that all companies operating in the United Kingdom Continental Shelf (UKCS) have systems and procedures in place to identify, monitor and control the environmental aspects associated with offshore activities.

The data used in this Statement has been previously reported to the relevant UK environmental regulators. The offshore facilities reporting is done via the Environmental Emissions Monitoring System to OPRED.

Shell UK has been producing oil and gas from the North Sea for over 50 years, providing the UK with reliable and secure energy. We currently provide approximately 10% of the UK's total oil and gas supply as well as a range of fuels, chemicals and services, and have a substantial presence on the UKCS. Offshore, we have interests in over 50 fields, 25 platforms and one Floating Production and Storage Offshore (FPSO) vessel, which is operated by a third party on our behalf. Onshore* we operate two gas plants located at Bacton and St Fergus, and one liquids processing plant at Mossmorran in Fife. These, in combination with the associated pipeline systems, are delivering more than 20% of the UK's gas supply.

## Terminology used in this Statement

"Installations" refers to Shell UK operated oil and gas offshore production platforms; Floating Production and Storage Offshore (FPSO) vessels, and third party mobile drilling rigs in the UK whilst on contract to Shell in UK waters.

"Facilities" refers to Shell UK operated installations in addition to wells, subsea infrastructure and onshore pipeline systems.

A number of other services are also required to facilitate and support the Shell UK business including facility operations, engineering, logistics (vessels and helicopters), project and development planning, health, safety, security, environment, social performance, production and well fluids chemistry, finance, legal, contracting and procurement and real estate management.

**Note: This statement has been produced in order to meet the requirements of OSPAR Recommendation 2003/5 and does not include detail on our onshore operations.*

# Health, Security, Safety, The Environment & Social Performance Policy

The Shell HSSE & SP Policy applies across Shell globally and is designed to help protect people and the environment.

Our commitment and policy reflects the integrated way we work across Shell in the areas of health, security, safety, environment and social performance. All Shell companies, contractors and joint ventures under our operational control must manage HSSE & SP in line with the commitment and policy.

## Commitment

In Shell we are all committed to:

- Pursue the goal of no harm to people;
- Respect nature by protecting the environment, reducing waste, making a positive contribution to biodiversity, and reducing Greenhouse Gases;
- Use material and energy efficiently to provide our products and services;
- Respect our neighbours and contribute to the societies in which we operate;
- Develop energy resources, products and services consistent with these aims;
- Operate assets safely, efficiently and responsibly;
- Publicly report on our performance;
- Play a leading role in promoting best practice in our industries;
- Manage HSSE & SP matters as any other critical business activity; and
- Create a working environment which is psychologically safe and enables learning in support of this commitment.

In this way we aim to achieve a performance we can be proud of, to earn the confidence of customers, shareholders and society at large, to be a good neighbour and to contribute to sustainable development.

## Policy

Every Shell Company:

- Has a systematic approach designed to ensure compliance with the law and achieve continuous performance improvement;
- Sets targets for improvement and measures, appraises and reports performance;
- Requires Contractors to manage HSSE & SP in line with this policy;
- Requires joint ventures under its operational control to apply this policy, and uses its influence to promote it in its other ventures;
- Engages effectively with neighbours and impacted communities; and includes HSSE & SP performance in the appraisal of staff and rewards accordingly.

We originally published the commitment and policy in March 1997 and the Executive Committee updated it in 2009 and 2023.

# What We Do

## Offshore Installations operated by Shell UK in 2023 –

**Brent:** the Brent Field in the Northern North Sea consisted of four installations: Alpha, Bravo, Charlie and Delta. Brent Alpha, Bravo and Delta have ceased production and topside dismantlement has been completed. Brent Charlie ceased production on March 31 2021, decommissioning is ongoing.

**Clipper:** six fixed bridge-linked platforms in the Sole Pit field located in the Southern North Sea. The Clipper installation produces and processes natural gas from its own wells and imports and processes gas from Barque PB & PL, Galleon PN & PG, Skiff, Clipper South, Carrack, and Cutter fields.

**Gannet:** a fixed drilling and production platform in the Central North Sea which processes and produces oil and gas from the Gannet A, B, C, D, F and G fields via subsea wellhead tiebacks.

**Leman:** five bridge-linked platforms located in the Southern North Sea. The Leman Alpha installation produces and processes natural gas from its own wells. It imports and processes gas from the remainder of the Leman field platforms Bravo, BT, Charlie, Delta, Echo, Foxtrot, Golf, and imports natural gas and liquids from Corvette, Brigantine BG & BR, Caravel and Shamrock.

**Nelson:** a fixed drilling and production platform in the Central North Sea which processes and produces oil and gas from a cluster of subsea satellite wells from the Nelson field and the Howe fields via subsea tiebacks.

**Pierce:** an FPSO (the Haewene Brim) in the Central North Sea which has undergone a significant upgrade to allow gas to be produced after years of the field producing only oil. The gas is now sent through newly installed subsea pipelines and the oil continues to be transported to shore by tanker. The FPSO completed its restart of operations in April 2023 following this major redevelopment. Shell UK is a license holder for the Pierce Field and operates the wells and pipelines. The responsibility for the management of the Haewene Brim and the installation operator is the Pierce Production Company Limited. (Pierce Production Company Limited is a wholly owned subsidiary of Bluewater Services UK Ltd – referred to as Bluewater in this document.)

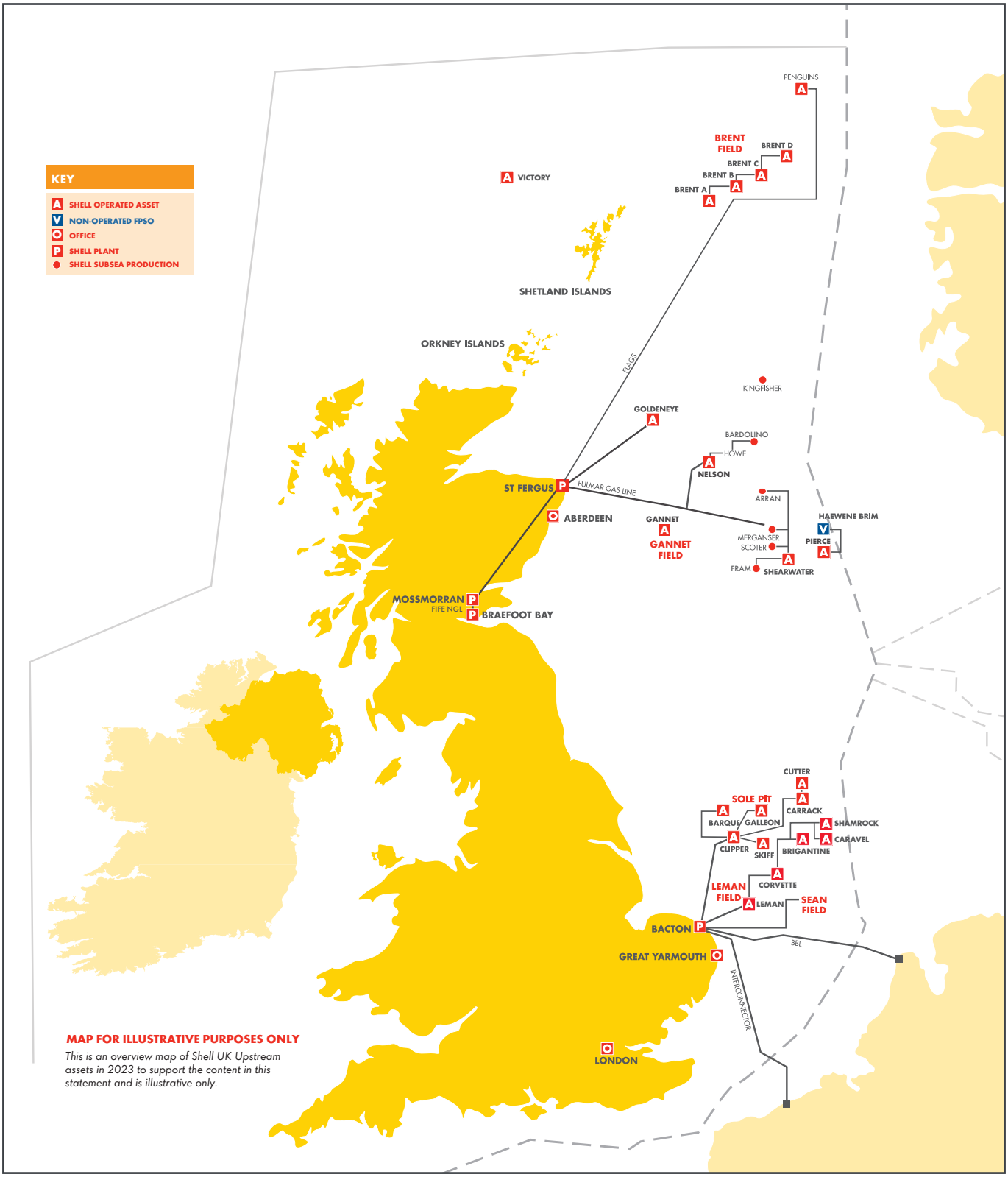
**Shearwater:** a high-pressure, high-temperature (HPHT) gas/condensate reservoir produced via an integrated process, utilities and living quarters platform which is bridge-linked to a wellhead platform in the Central North Sea. Shearwater exports its gas via the Fulmar Gas Line to St Fergus and liquids are routed via Ineos Unity to Cruden Bay.

**Mobiles:** a number of rigs and vessels were contracted to Shell UK in 2023 conducting drilling of development wells and well intervention operations. These included the Valaris 122, Maersk Resilient, the Ocean Endeavour, and the Stena Don, plus a number of well intervention vessels.

For more information on Shell UK, visit our website at:

**www.shell.co.uk/about-us/what-we-do**

# Shell UK Upstream Operations



# Powering Progress

## Respecting Nature

Respecting the environment and local communities has been integral to the way we do business for many years, as set out in the Shell General Business Principles and the Shell commitment and policy on HSSE & SP *(see page 5)*.

Respecting Nature is one of four pillars of Shell's Powering Progress strategy which was launched in 2021. The others are Achieving Net Zero Emissions (see below), Powering Lives and Generating Shareholder Value.

In 2023, we reviewed our progress and performance on Respecting Nature and consolidated our ambitions into the following themes: having a positive impact on biodiversity, aiming for zero waste and using water, other resources and materials efficiently.

The processes and procedures we follow, and resources deployed are designed to comply with the UK environmental regulations, the Shell HSSE & SP commitment and policy and Shell Group's global standards. Our environmental management system, which is integrated into the Upstream UK Health, Safety & Environment (HSE) Management System, is certified to ISO 14001:2015, the current international environmental management standard *(see Appendix 2)*. The management system covers all of our upstream activities and locations involved in exploration and production. It provides a structured approach to:

- The identification of environmental risk and management of potential impacts throughout the life cycle of our activities;
- Preparing for future challenges and opportunities;
- Regulatory compliance;
- Using materials and energy efficiently;
- Monitoring performance and setting targets for improvement;
- Effective engagement with our stakeholders; and
- Playing a leading role in promoting good practice in our industry.

## Achieving Net Zero Emissions

Shell recognises that greenhouse gas (GHG) emissions from the use of hydrocarbon-based energy contribute to climate change. The Paris Agreement aims to strengthen the global response to the threat of climate change by "holding the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels". Shell supports the more ambitious goal of the Paris Agreement, which is to limit the rise in global average temperature this century to 1.5 degrees Celsius above pre-industrial levels. Shell's Annual Report and Accounts 2023 states that the Shell Group achieved a 31% reduction of its Scope 1 and 2 emissions, from its own operations, by the end of 2023 compared with 2016 levels.

In the UK, Shell is also committed to the North Sea Transition Deal (NSTD), which targets a basin-wide 50% reduction in emissions by 2030 versus a baseline of 2018. We are continuing to make progress towards halving our Upstream operational emissions (scope 1&2) and by the end of 2023 have achieved a reduction greater than 20%* against the 2018 baseline. This has been achieved through a combination of completed abatement projects, field decline and cessation of production of late life assets.

These targets cover the emissions under Shell's operational control and complement our existing carbon-intensity targets. Shell UK is aiming to meet these targets via collaboration across supply chains and, where appropriate, the UK Government and the North Sea Transition Authority (NSTA).

** As we continue to focus on opportunities within our portfolio to reduce our emissions there remains scope to improve the accuracy of our emissions data, which means the possibility remains that published emissions data may change in future.*

Shell UK has a brownfield carbon abatement team to support emissions reduction projects' delivery. These brownfield abatement projects focus on three key themes: operations excellence, efficiency improvement, vent and flare management. Potential abatement opportunities are identified, screened and prioritised to fill the brownfield abatement project funnel. Prioritised projects are put through a scalable maturation process to be fully defined and prepared for execution. Together with other major decarbonisation projects these will form the building blocks to support Shell UK to achieve its NSTD 2025, 2027 and 2030 targets.

Shell UK also has a key focus to seek new opportunities and investments related to the energy transition. During 2023, Shell UK progressed decarbonisation initiatives relating to carbon capture utilisation and storage, hydrogen production and electrification amongst other opportunities. Further work across the business is being done to identify what is needed to close the gap to the net zero emissions target in 2050 and support Shell's powering progress strategy.

Some of the key environmental focus areas and achievements in 2023 were:

Continued focus on brownfield abatement delivery and reducing our emissions -

- Comprehensive review and submission of our Emissions Reduction Action Plan (ERAP) to demonstrate how we plan to continue reducing our emissions in support of the NSTA Net Zero Stewardship Expectation 11.
- Completing brownfield abatement projects across UK installations achieving a combined saving of 37 kilotonnes (kt) of carbon dioxide equivalents ($CO_2e$).
- Fulmar gas pipeline pressure lowered by 5 bar to reduce fuel gas demand at Shearwater platform.
- Re-routing of Gannet dry gas seals vent to flare.
- Completing the down staffing of Brent Charlie in Oct 2023 as part of our decommissioning activities.

Improving our supply chain's environmental footprint -

- Introducing integrated sustainability key performance indicators into contracts with service partners and rig contractors to ensure commitment to emissions reduction thus improving support to implement sustainability initiatives.
- Collaborating with our supply chain to ensure our helicopters are supplied with 10% sustainable aviation fuel (SAF) at Aberdeen Airport.
- Installing engine monitoring systems on three drilling rigs to track key performance metrics and relay to a live dashboard, enabling the development of fuel-saving strategies.
- Launching 'Respecting Nature' campaign with supply chain vendors in May 2023 to eliminate packaging waste, where possible. This saw a drive to use sustainable packaging instead of single-use plastics such as shrink wrap, and re-usable cages for the movement of small packages to offshore locations.

In July 2023, the UK Government announced the Acorn Project as one of the two Track 2 CCS Clusters best placed to deliver its objectives. This is an important step forward for one of the UK's leading CCS clusters which could enable the decarbonisation of Scottish Industry by providing $CO_2$ transport and offshore long-term storage. The Acorn Project will further develop offshore storage licenses in 2024 and work with the UK Government to progress cluster plans.

Also, in 2023, we held a successful Tier 3 emergency response exercise at the end of 2023, which provided an opportunity to demonstrate our capability to respond to a large spill at sea and involved working closely with the Regulator and the UK national contingency response organisations.

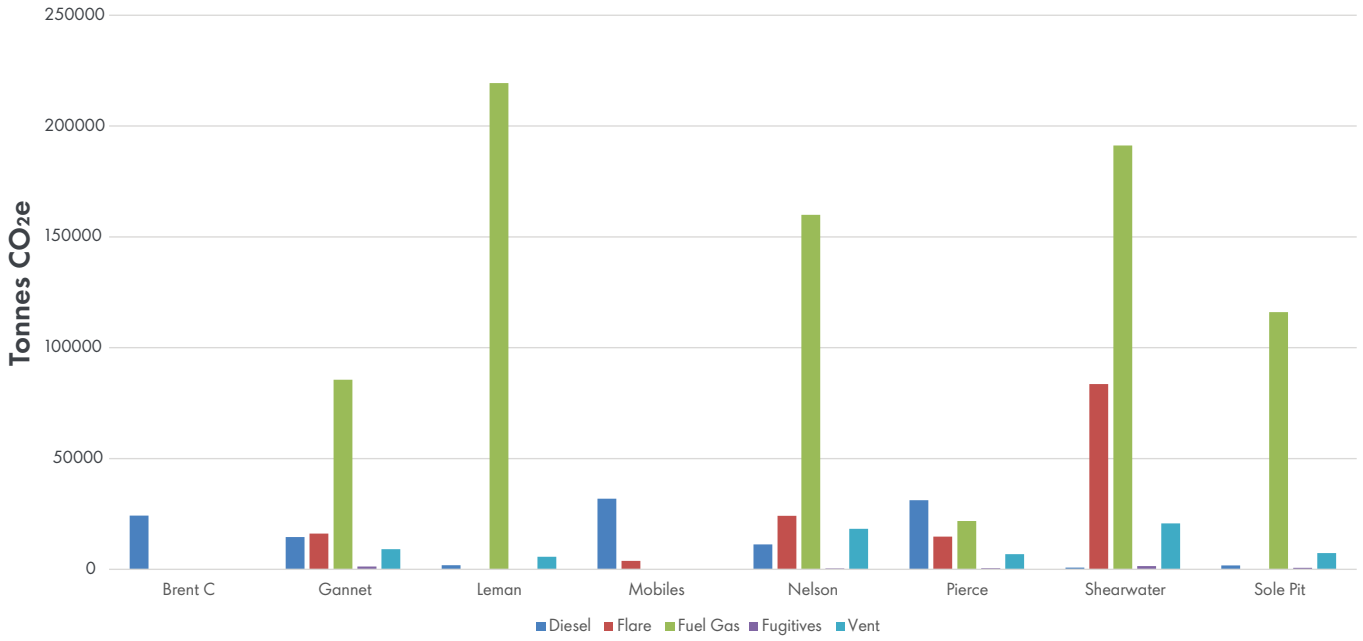
# Environmental Performance

## Greenhouse Gas Emissions

Shell UK monitors greenhouse gas (GHG) emissions and converts the data into carbon dioxide equivalents ($CO_2e$). We use the data to manage the emissions from our own operations and illustrate our performance and progress against targets. Our $CO_2$ emissions from combustion are reported under the UK Emissions Trading Scheme following independent verification on an annual basis. Emissions from all our offshore facilities are reported to OPRED.

The total Scope 1 direct GHG emissions from Shell UK offshore facilities in 2023 was 1.1 million tonnes of $CO_2e$. The breakdown by emissions source is shown below in *Figure 1*.

**Figure 1: GHG emissions by source per offshore facility in 2023**




The principal contributor to the direct GHG emissions from our operations are the combustion emissions generated from the burning of fuel gas. In 2023, fuel gas combustion contributed 71% of the total GHG emissions. All other contributors for 2023 are illustrated below in *Figure 2*.

**Figure 2: Offshore GHG Emissions by Source 2023 (tonnes CO2e)**

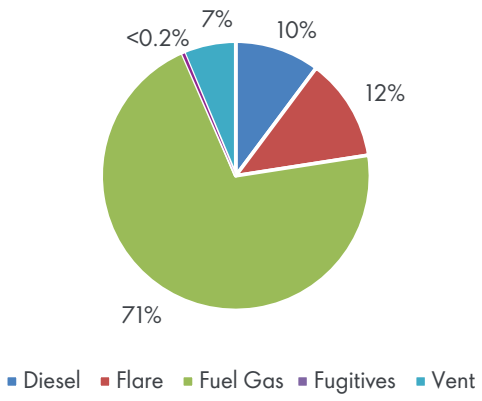



*Figure 1* and *Figure 2* are based on 100% of emissions at Shell UK offshore operated facilities, mobile rigs on contract to Shell UK and the Pierce facility operated by Pierce Production Company Ltd. Note that the GHG emissions for Pierce may be duplicated within the Bluewater's annual environmental statement.

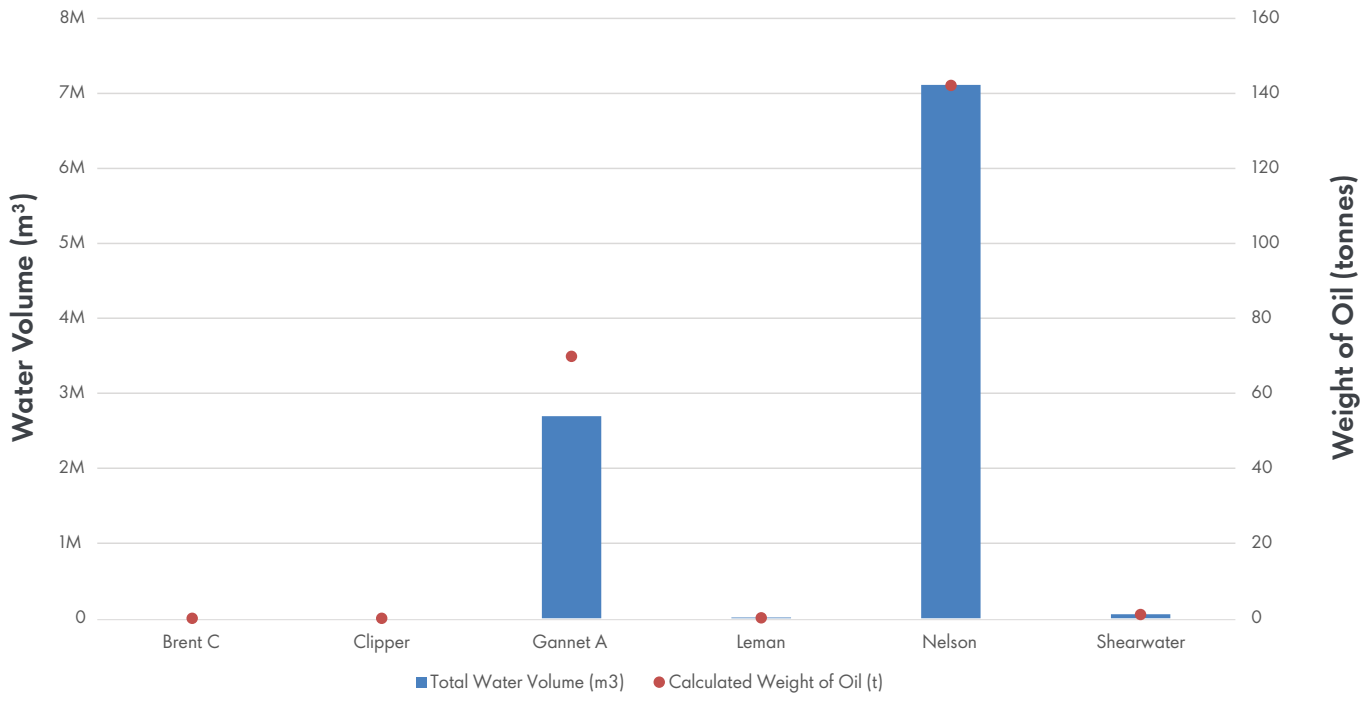
# Oil in Produced Water

Water produced with oil and gas offshore is separated from hydrocarbons during processing. The produced water is treated before discharge to the sea in accordance with the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (as amended).

The water treatment systems onboard Shell UK's offshore installations are designed to handle the volumes and types of fluids expected in the field, although there are occasions where equipment can malfunction or treatment may be affected by changes in produced fluid content, for example, during the start-up of a well. On these occasions, oil in water levels may exceed limits for a short duration and can result in a non-compliance within permitted limits.

Residual oil in produced water concentration is monitored prior to discharge and any exceedance of the regulatory monthly average limit of 30 milligrams of oil per litre or parts per million is reported to the regulator. The amount of produced water and residual oil discharged with the produced water in 2023, from offshore facilities that are operated by Shell UK, is shown below in *Figure 3*.

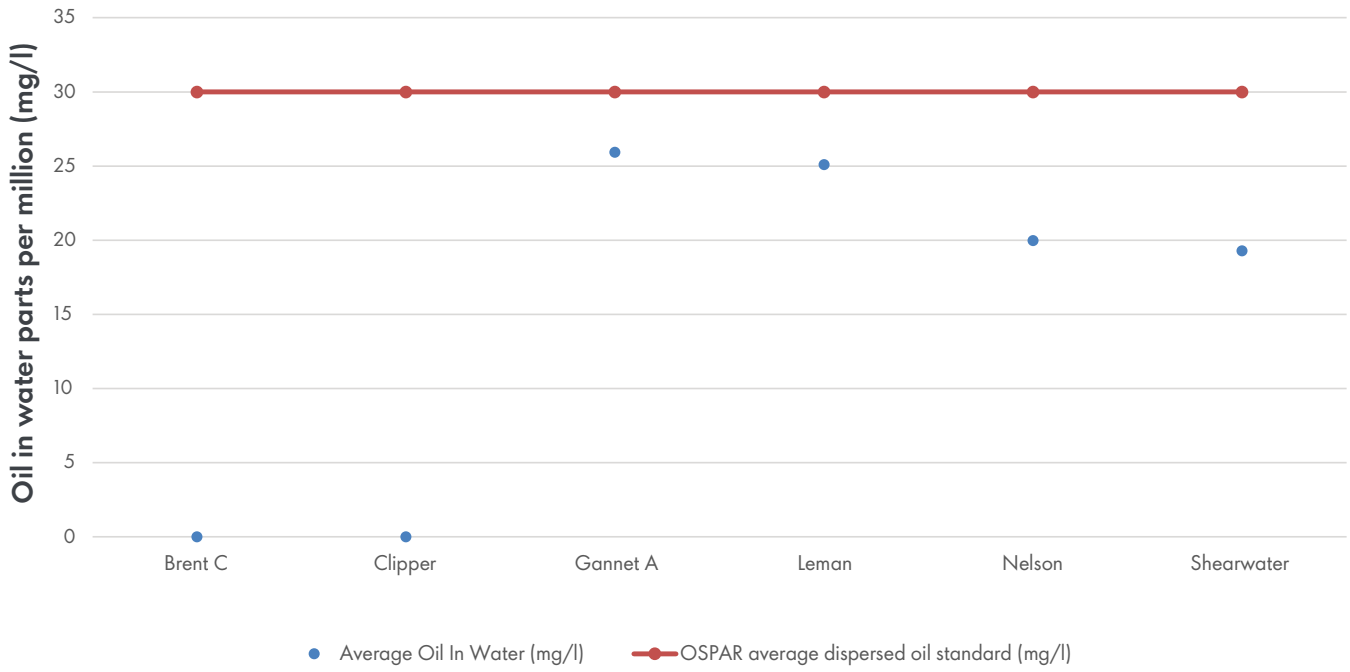
**Figure 3: Total volume of produced water and mass of oil discharged to sea from each Shell UK operated offshore facilities in 2023**




The total amount of residual oil discharged was 213 tonnes. In 2023, the Leman installation introduced produced water re-injection for the CPUG system (Corvette, Brigantine BG & BR, Caravel and Shamrock normally unattended installations) since Q2 2023 where liquids are re-injected and thereby reducing total oil discharged into the sea.

Annual average concentrations of residual or dispersed oil in the produced water discharges from each facility in 2023 are presented in *Figure 4*.

**Figure 4: Annual average dispersed oil concentrations in produced water from Shell UK operated offshore facilities in 2023**




Total residual oil discharged to sea with treated produced water during production operations at UK offshore installations in 2023 were within the annual approved limits set for each individual facility permit.

Details of the Pierce FPSO oil in produced water performance are included in Bluewater's annual environmental statement as the Bluewater company, Pierce Production Company Limited, operates the Pierce FPSO.

# Unplanned Releases

Shell UK has a range of controls and procedures in place aimed at preventing the unplanned release of hydrocarbons or chemicals to the sea. Maintenance programmes are conducted to improve facility reliability and to ensure the integrity of equipment used in the production, processing or transfer of liquid materials to keep unplanned releases to a minimum. Barriers are installed around hydrocarbon processing, chemical skids and storage areas which act as secondary containment for any unplanned releases to help prevent any losses reaching the environment. Unplanned releases to sea can, however, still take place during the course of conducting operations and there can be varying reasons for these events, including operational factors, equipment failures, human error, or because of unusual degradation of ageing infrastructure.

Any unplanned releases or spills are closely monitored, recorded and investigated internally regardless of volume. Releases that enter the sea are reported to the regulator at the time of the release using a Petroleum Operations Notice (PON1).

In 2023, a total of 22 unplanned releases of oil and chemicals from our operations were recorded and reported. The total volume of those releases was 4.3 tonnes. *Table 1* shows the breakdown of oil versus chemical releases and their associated volumes.

**Table 1: Unplanned Releases in 2023**

| | |
|---|---|
| **Total Number of releases** | **22** |
| **Total Volume of releases (tonnes)** | **4.3** |
| Number of oil releases | 15 |
| Volume (tonnes) | 0.4 |
| Number of chemical releases | 7 |
| Volume (tonnes) | 3.9 |

Of the total unplanned releases recorded in 2023, there were no spills individually greater than 2 tonnes.

At the time of publication, several of the 22 PON1s submitted in 2023 are still under review by the regulator. This may result in a future adjustment to our figures.

Details of any unplanned releases from the Pierce FPSO Installation are included in Bluewater's annual environmental statement as the Bluewater company, Pierce Production Company Limited, operates the Pierce FPSO.

# Chemical Management

## Production Chemicals

The type and volume of production chemicals used in our operations varies across our facilities. Production chemical use and discharge is affected by various factors such as production rates, field age and changing reservoir fluids.

Shell UK has strict chemical selection procedures in place that aim to ensure the most effective chemicals are selected for each process and any potential impact to the environment is minimised. The use and discharge of chemicals is approved by the regulator under the Offshore Chemicals Regulations 2002, through the use of chemical permits. The assessment of options to phase out the remaining substitution-warning chemicals used in our operations continues as we work with our suppliers to identify technically viable alternatives.

**Figure 5: Total production chemicals used and discharged at offshore facilities in 2023**

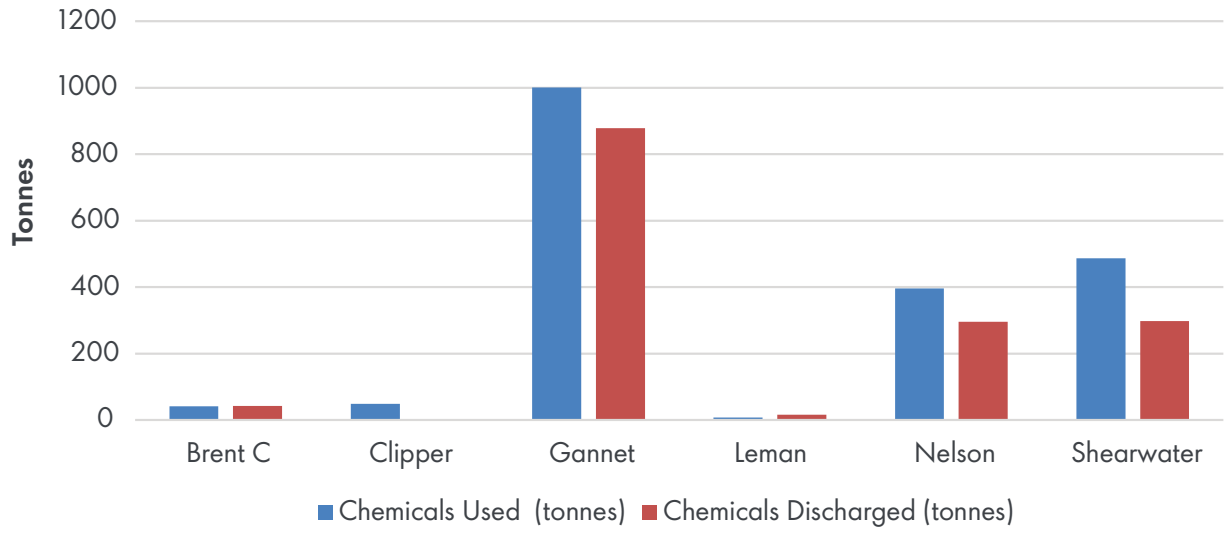


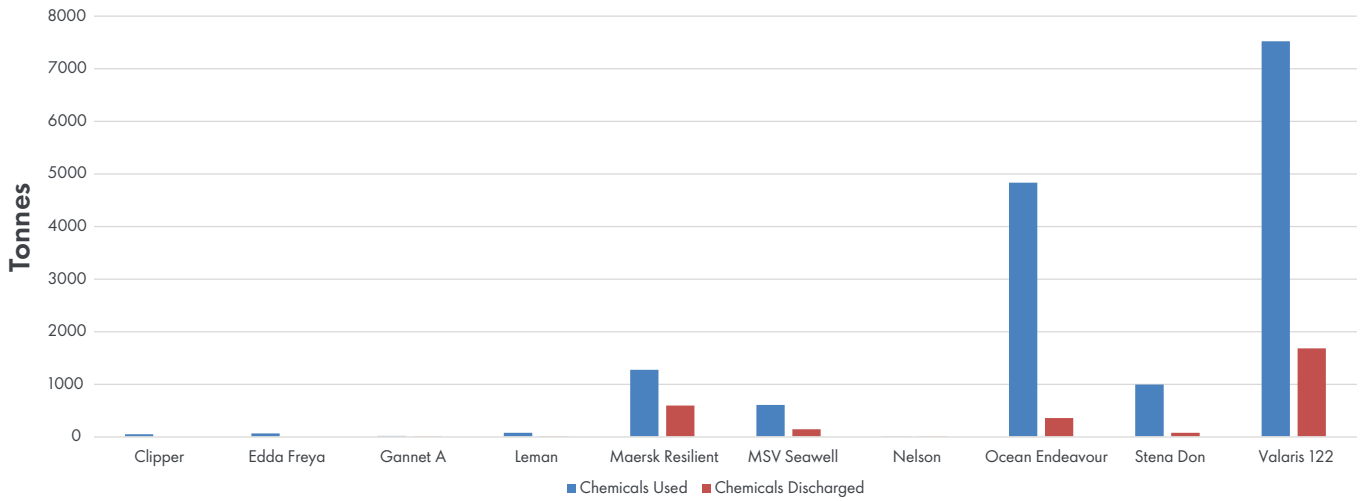

*Figure 5* shows the total use and discharge of production chemicals per facility. In 2023, 1,980 tonnes of offshore production chemicals were used across Shell UK. Of the 1,980 tonnes, 77% were discharged. Of the chemicals discharged to sea, 46% were "PLONOR" classified chemicals which pose little or no risk to the environment or do not contain substances which are required by the regulator to be substituted. 20% of those discharged to sea were chemicals with a substitution warning. Shell UK reviews these substitution warning chemicals on a case by case basis to determine if it is feasible to replace them.

# Wells Chemicals

The volume of wells chemicals used and discharged is directly related to the type and number of well activities undertaken and completed in 2023. Further details on well operations can be seen in *Appendix 1*.

*Figure 6* shows the total use and discharge of wells chemicals per facility. In 2023, we used a total of 15,347 tonnes of chemicals in well activities. Of this figure approximately 18% of the chemicals were discharged to sea. Of those discharged to sea, 60% were "PLONOR" classified and 1% were chemicals with a substitution warning. As mentioned, Shell UK is continuing efforts to phase out substitution-warning chemicals. Any chemicals discharged to sea are done so in accordance with the allowances of approved chemical permits from the regulator.

**Figure 6: Total drilling chemicals used and discharged by offshore facilities in 2023**




Details of production and wells chemical use and discharge at the Pierce FPSO are included in Bluewater's annual environmental statement as the Bluewater company, Pierce Production Company Limited, operates the Pierce FPSO.

# Waste Management

As part of Shell's overall Respecting Nature ambition, we aim to use water, other resources and materials efficiently, and to increase reuse and recycling. We have been conducting detailed assessments across our businesses to better understand our waste streams and define our approach.

Across our businesses, we are exploring ways to improve the application of circular economy principles and to identify and integrate the risks and opportunities associated with a "rethink, refuse, reduce, reuse, repair, recycle" hierarchy. We also work with our supply chain to help our businesses progress towards our aim of zero waste.

Shell UK collaborates with contractors at our offshore sites to establish arrangements so that waste is controlled across all our UK operations. Those arrangements include that installations segregate their waste streams in accordance with both the Group standards and the applicable legal requirements. Effective segregation of waste allows for more environmentally acceptable routes of disposal. In accordance with the waste hierarchy, which ranks waste management options according to what is best for the environment, we work to eliminate waste at the source and minimise waste generated.

*Figure 7* shows the offshore waste disposal routes across 2023. The overall waste mass for 2023 was 16 kilotonnes (kt). 90% of the hazardous waste generated was from mobile rigs, which were sent for treatment onshore. 71% of non-hazardous waste generated from offshore activities was recycled.

**Figure 7: Waste disposal and recovery routes 2023**

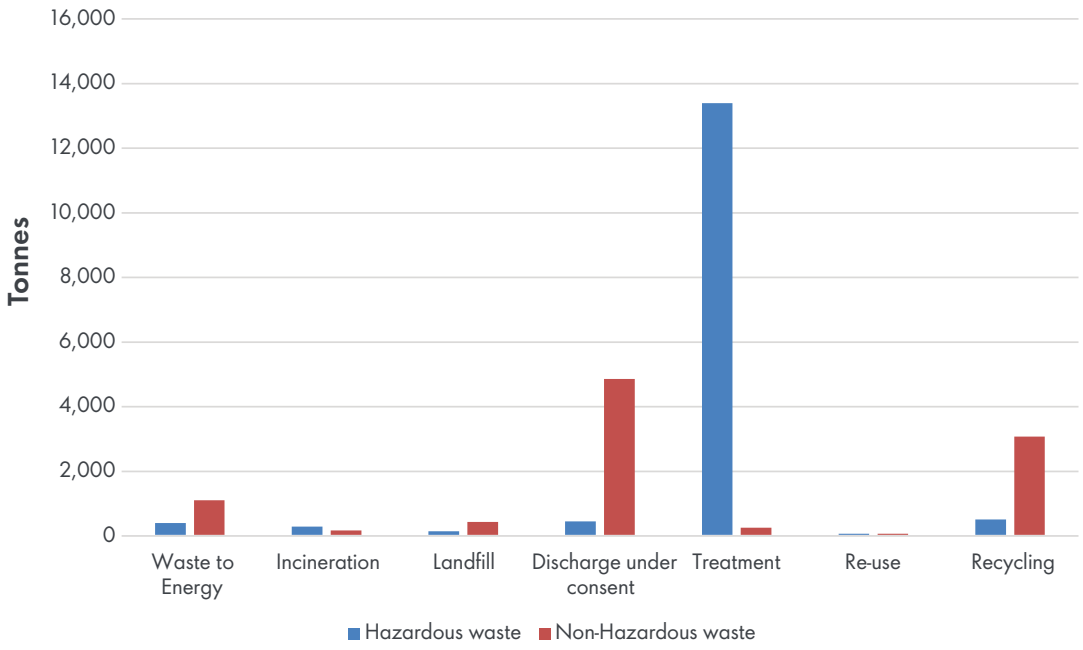
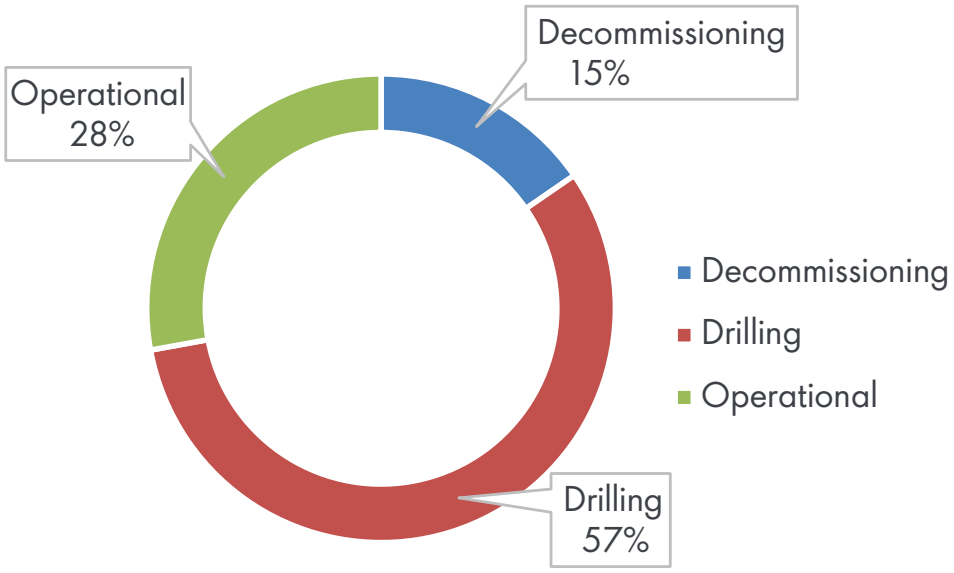


*Figure 8* shows the split between operational, drilling, and decommissioning waste from 2023.

**Figure 8: Total Waste Generated by Source in 2023**




We have various decommissioning activities under way in the UK. In 2023, approximately 15% of the waste generated resulted from those activities. When decommissioning, we actively seek ways to reuse, repurpose and to maximise the recycling of materials. Typically, around 97% of material returned to shore is either re-used or recycled.

Details of waste management at the Pierce FPSO in 2023 are included in Bluewater's annual environmental statement as Bluewater company, Pierce Production Company Limited, operates the Pierce FPSO.

# Shell UK Decommissioning in the North Sea

## Brent Field

The Brent oil and gas field, and its pipeline systems, are located in Block 211/29 of the UK sector of the North Sea, approximately 186 km northeast of the Shetland Islands. It has been a cornerstone of the UK's hugely successful oil and gas industry for over 40 years. It is one of the largest fields in the North Sea, and consisted of four large platforms - Alpha, Bravo, Charlie and Delta.

The Brent field was a prolific national asset and since 1976 produced around three billion barrels of oil equivalent. At its peak, it was producing more than half a million barrels a day. The regulator granted permission for the cessation of production (CoP) from Brent Delta in 2011, and Alpha and Bravo at the end of 2014.

Decommissioning of the Brent Charlie wells started in late 2017 and the cessation of production from the Brent Charlie platform concluded March 31 2021, marking the end of 45 years of production in the Brent field. Throughout 2022 and 2023 the platform was being prepared for single lift with conductor recovery, leg and module clearance, strengthening, cutting and sea fastening work scopes. The platform is now in an unattended installation mode prior to removal.

## Curlew Field

The Curlew Field is located approximately 210 km east of the Aberdeenshire coastline, and 55 km west of the UK/Norway median line, in a water depth of 93 m. The facility consisted of a central processing FPSO vessel with three subsea field tiebacks and was connected into the Fulmar pipeline for gas export to the St Fergus onshore facility.

The Curlew field ceased production at the end of March 2019. The Curlew FPSO was towed to Forth Ports' Dundee facility for cleaning in June 2019 and moved to the dismantlement facility in Norway in July 2020 for final cleaning and recycling. All process topsides were dismantled and recycled onshore during 2021. In November 2022, the FPSO hull was transferred to the quayside to begin dismantlement. Work on the FPSO hull continued throughout 2023.

During 2021, production wells at Curlew B and C were plugged and made safe. Throughout 2022, subsea infrastructure at Curlew was decommissioned within a Shell UK portfolio decommissioning campaign. This included removal of subsea structures, risers, stabilisation features, the FPSO mooring system and remediation of all pipelines and umbilicals decommissioned in situ per the approved Decommissioning Programmes. In 2023, the wellheads at Curlew B and C were removed and recovered to shore during a portfolio campaign.

## Goldeneye Field

Following the cessation of production in March 2011 the topside and jacket of the Goldeneye platform in the Central North Sea was removed in September 2021 and transported to shore in Norway for dismantling and recycling. The Goldeneye Post Decommissioning Survey was completed in September 2022 and all environmental permits surrendered. In October 2023, the final dismantlement waste fraction was repatriated for onshore disposal under regulatory approval. The Goldeneye marine pipeline to St Fergus will remain in place for potential reuse for the transportation of $CO_2$ as part of the Acorn carbon capture and storage project.

## Leman Field

Leman F & G are two Normally Unattended Installations (NUIs) tied-back to the Leman A Complex in the UK's Southern North Sea. The NUIs are approaching the end of their economic life and Shell UK has commenced planning for decommissioning.

The Decommissioning Programmes for Leman F & G were completed and submitted to the Regulator at the end of 2023, supported by Comparative Assessment and Environmental Appraisal.

# Kingfisher (Subsea)

The Kingfisher Field is located 280 km northeast of Aberdeen, approximately 5 km from the median line with Norway. The Field consists of six subsea wells which were tied back to the TAQA Bratani Limited owned-and- operated Brae Bravo Platform. Production ceased from Kingfisher in July 2018. Part 1 of the Decommissioning Programmes covering the Kingfisher infrastructure outside of the Brae Bravo 500m zone was approved in June 2021. Part 2 of the Decommissioning Programmes will be submitted at a later date to cover the infrastructure within the Brae Bravo 500m zone.

Removals scope associated with the approved Part 1 Programmes was included in a Shell UK decommissioning portfolio campaign in 2022. This included removal of the Kingfisher Production Manifold and surface-laid tie-in infrastructure. Plug and make safe scopes for the six Kingfisher wells began in 2023. Wellhead severance is planned to be executed within a portfolio campaign during 2024 and 2025.

# Scoter And Merganser (Subsea)

Scoter and Merganser are two normal pressure and temperature gas-condensate subsea tiebacks to the Shearwater Cluster located in Block 22/30a of the Central North Sea. Having produced since 2004 and 2006 respectively, the fields ceased production on 17 December 2020.

An opportunity to re-use the Scoter Riser on the Shearwater A Platform was identified. To support this re-use, the flushing and disconnection of the Scoter and Merganser subsea infrastructure was executed in Q1 2021, whilst flushing of the control umbilicals was executed in Q4 2021.

Decommissioning Programmes covering the full decommissioning scope for both fields were approved in September 2022. As per the approved Decommissioning Programmes, Shell UK plans for the removal of all surface-laid infrastructure for recovery to shore and recycling / disposal. Trenched and buried pipelines and umbilicals will be decommissioned in situ.

In early 2023, the Scoter and Merganser wells were plugged and lubricated, allowing the wells to be fully plugged and made safe in Q3 2023. Wellhead severance is planned to be executed within a portfolio campaign in 2024 or 2025.

# Heron (Subsea)

Heron, Egret and Skua are daisy-chained subsea tiebacks to the Eastern Trough Area Project (ETAP) platform operated by BP. Each field has a dedicated production manifold, from which fluids were transported to ETAP via pipe-in-pipe production flowlines.

In 2016, Shell submitted a Cessation of Production Report to the Oil and Gas Authority (OGA), now the NSTA. In March, 2017, the OGA consented to the Heron Cluster CoP with a condition that the Heron Cluster Operator engage with the operator of the Seagull discovery in block 22/29 to investigate the re-use potential of the Heron Cluster infrastructure.

This engagement led to the divestment of the three production manifolds and the production flowlines to the ETAP operator. The agreement required Shell UK to decommission all infrastructure outboard of the three production manifolds. This scope was approved by OPRED through an Exchange of Correspondence in October, 2018.

The Heron field ceased production at the start of February, 2019. The six wells at the Heron Cluster (1-off at Skua, 1-off at Egret, 4-off at Heron) were plugged and made safe between 2019 and 2023. In 2020, the surface-laid production spools and control jumpers between the three production manifolds and their respective wells were recovered to surface and returned to shore for recycling. In 2021, severance and recovery to shore of four wellheads was completed, the remaining two wellheads from the Heron Cluster were removed and recovered to shore with other Shell UK subsea asset during a 2023 portfolio campaign.

# Contact Us

This report is updated and published annually on our corporate website at **www.shell.co.uk**

For further information, please contact the Shell office in Aberdeen on **01224 882525** and ask for the Corporate Relations department:

**Shell U.K. Limited**
**The Silver Fin Building**
**455 Union Street**
**Aberdeen**
**AB11 6DB**

# Appendix 1

## Well Activities in 2023

### Drilled

| Installation / rig | Shell well name | Well start date | Permit reference |
|---|---|---|---|
| Ocean Endeavor | Gannet GF04 | 17/03/2023 | DRA/941, CP/3037 |
| Ocean Endeavor | Penguins PC-04 | 19/05/2023 | DRA/943, CP/2955 |
| Ocean Endeavor | Penguins C-Triassic | 11/09/2023 | DRA/995, CP/3149 (Note that this well was suspended before completion – intent to return mid-2024 to finish) |
| Ocean Endeavor | Fram G6 | 25/10/2023 | DRA/1011, CP/3198 (Well completed in Feb 2024) |
| Valaris-122 | Orlov Exploration Well | 05/08/2022 | DRA/858, CP/2832 (Well completed on 14/02/2023) |
| Valaris-122 | Shearwater SW-IWA Well | 14/02/2023 | DRA/962, CP/2937 |
| Valaris-122 | 4 x Jackdaw wells | TBC | DRA/997, CP/3162. DRA/998, CP/3163. DRA/1000, CP/3165 (Note these are being batch drilled, currently ongoing until early 2025) |
| Maersk Resilient | Pensacola | 21/11/2022 | DRA/934, CP/2886 |

### Abandoned

| Installation / rig | Shell well name | Well start date | Permit reference |
|---|---|---|---|
| Maersk Resilient | Pensacola | 27/02/2023 | DRA/934, CP/2886 |
| Stena Don | Gannet GB01 Well | 04/06/2023 | WIA/1399, CP/3108 |
| Stena Don | Gannet GC204 Well | 23/05/2023 | WIA/1398, CP/3094 |
| Stena Don | Brent North North Well | 04/07/2023 | WIA/906, CP/3120 |
| Stena Don | 3 x Merganser Wells | 22/07/2023 | WIA/1512, CP/3145 |
| Stena Don | 3 x Scoter Wells | 29/08/2023 | WIA/1517, CP/3184 |
| Stena Don | Kingfisher BP1.1 Well | 23/09/2023 | WIA/1546, CP/3195 |

# Appendix 2

## ISO 14001 - 2015 Certificate

# ISO 14001

## Certificate of Registration

**ERM Certification and Verification Services**

Exchequer Court
33 St. Mary Axe
London EC3A 8AA
Tel: +44 (0)20 3206 5281
post@ermcvs.com

*This is to certify that*

***Shell UK Limited***

ERMCVS

*at*

*1 Altens Farm Rd, Aberdeen AB12 3FY, United Kingdom*

Certificate Number: 622
Initial Certification Date (Bureau Veritas): 30 November 2007
Initial ERM CVS Issue: 4 August 2022
Reissue Date: 23 December 2022
Expiry Date: 4 January 2026
Version #: 2

UKAS MANAGEMENT SYSTEMS

*has been registered to ISO 14001:2015 for*

*Exploration, production and decommissioning including management of operated and non-operated assets, processing and storage across the UK energy sector supported by core business and technical functions.*



***Signed on behalf of ERM CVS by:***

Ron Crooks

***Ron Crooks***
***Partner, Head of Certification***

# Cautionary Note

The companies in which Shell plc directly and indirectly owns investments are separate legal entities. In this statement "Shell", "Shell Group" and "Group" are sometimes used for convenience where references are made to Shell plc and its subsidiaries in general. The words "Shell UK", "we", "us" and "our" are used to refer to Shell U.K. Limited and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. ''Subsidiaries'', "Shell subsidiaries" and "Shell companies" as used in this statement refer to entities over which Shell plc either directly or indirectly has control. The term "joint venture", "joint operations", "joint arrangements", and "associates" may also be used to refer to a commercial arrangement in which Shell has a direct or indirect ownership interest with one or more parties. The term "Shell interest" is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interest.

## Forward-Looking Statements

This statement contains forward-looking statements (within the meaning of the U.S. Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward- looking statements are identified by their use of terms and phrases such as "aim"; "ambition"; ''anticipate''; ''believe''; "commit"; "commitment"; ''could''; ''estimate''; ''expect''; ''goals''; ''intend''; ''may''; "milestones"; ''objectives''; ''outlook''; ''plan''; ''probably''; ''project''; ''risks''; "schedule"; ''seek''; ''should''; ''target''; ''will''; "would" and similar terms and phrases. There are a number of factors that could affect the future operations of Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this statement, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, judicial, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; (m) risks associated with the impact of pandemics, such as the COVID-19 (coronavirus) outbreak, regional conflicts, such as the Russia-Ukraine war, and a significant cybersecurity breach; and (n) changes in trading conditions. No assurance is provided that future dividend payments will match or exceed previous dividend payments.

All forward-looking statements contained in this statement are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Shell plc's Form 20-F for the year ended December 31, 2023 (available at https://www.shell.com/investors/news-and-filings/sec-filings.html and www.sec.gov).

These risk factors also expressly qualify all forward-looking statements contained in this statement and should be considered by the reader. Each forward-looking statement speaks only as of the date of this statement, [1 June 2024]. Neither Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this statement.

# Shell's Net Carbon Intensity

Also, in this statement we may refer to Shell's "Net Carbon Intensity" (NCI), which includes Shell's carbon emissions from the production of our energy products, our suppliers' carbon emissions in supplying energy for that production and our customers' carbon emissions associated with their use of the energy products we sell. Shell's NCI also includes the emissions associated with the production and use of energy products produced by others which Shell purchases for resale. Shell only controls its own emissions. The use of the terms Shell's "Net Carbon Intensity" or NCI are for convenience only and not intended to suggest these emissions are those of Shell plc or its subsidiaries.

# Shell's Net-Zero Emissions Target

Shell's operating plan, outlook and budgets are forecasted for a ten-year period and are updated every year. They reflect the current economic environment and what we can reasonably expect to see over the next ten years. Accordingly, they reflect our Scope 1, Scope 2 and NCI targets over the next ten years. However, Shell's operating plans cannot reflect our 2050 net-zero emissions target, as this target is currently outside our planning period. In the future, as society moves towards net-zero emissions, we expect Shell's operating plans to reflect this movement. However, if society is not net zero in 2050, as of today, there would be significant risk that Shell may not meet this target.

# Forward Looking Non-Gaap Measures

This statement may contain certain forward-looking non-GAAP measures such as cash capital expenditure and divestments. We are unable to provide a reconciliation of these forward-looking non-GAAP measures to the most comparable GAAP financial measures because certain information needed to reconcile those non-GAAP measures to the most comparable GAAP financial measures is dependent on future events some of which are outside the control of Shell, such as oil and gas prices, interest rates and exchange rates. Moreover, estimating such GAAP measures with the required precision necessary to provide a meaningful reconciliation is extremely difficult and could not be accomplished without unreasonable effort. Non-GAAP measures in respect of future periods which cannot be reconciled to the most comparable GAAP financial measure are calculated in a manner which is consistent with the accounting policies applied in Shell plc's consolidated financial statements.

The contents of websites referred to in this statement do not form part of this statement.

We may have used certain terms, such as resources, in this statement that the United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website www.sec.gov.