

# **Environmental Performance Review 2024**

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## 1.0 FOREWORD



I am pleased to share Spirit Energy's Environmental Performance Review for 2024.

In 2024, Spirit Energy continued as an energy company-focused on optimising the potential of our assets in the basins of north-west Europe. We are meeting this challenge as a lean, agile, and sustainable business adaptable to changing market pressures, whilst operating in a safe, socially conscious, and environmentally responsible way.

Spirit Energy recognises the significant role that the upstream oil and gas industry plays in reducing global greenhouse gas emissions. We value our industry's importance in delivering secure energy supplies when the world needs them most. We are also committed to becoming a Net Zero company, and have established ambitious targets to ensure we are making the right progress towards that goal.

To minimise our environmental impact, Spirit Energy adheres to a robust HSES Policy. This outlines our responsibilities for environmental stewardship and our commitment to improving our environmental performance. We use an integrated approach that embeds the environmental management of our operations into our business management practices. This report details our environmental performance across our operated assets in the UK, and the Netherlands.

During 2024, our teams in the UK and the Netherlands produced 13.3 million barrels of oil equivalent. We had one Tier 1 process safety event involving a gas release and a small number of unplanned releases to sea. Our total recordable incident frequency was unchanged at 0.38. We firmly believe that an Incident Free Workplace is possible, and this will remain a focus both for our supply chain partners and ourselves in the years to come.

Our industry is responsible for supplying reliable and affordable energy products, whilst recognising the need to address climate change. We take that dual responsibility seriously – throughout our operations, the safety of our people and our commitment to the environment remain foremost in our minds and a critical part of our strategy.

Scott McGinigal

Technical Services and HSES Director

## 2.0 HEALTH, SAFETY, ENVIRONMENT AND SECURITY POLICY



At Spirit Energy, creating an incident-free workplace is our top priority. All employees and business partners are required to comply with this policy and our commitments outlined below.

We are committed to:

**Assessing**, understanding, and managing our HSES risks and impacts

**Enabling** the creation of a positive culture holding each other accountable, helping us to: achieve our HSES goals; support business growth; and realise our vision of an incident free workplace

**Proactively** supporting employee health and safety, seeking ways to protect the environment, including the prevention of pollution, efficient use of resources and the reduction of waste and carbon emissions

**Empowering and encouraging** personnel to work in a safe way

**Intervening** if we believe that the work environment or task is unsafe or may cause environmental damage, or we see an unsafe act

**Learning** from our successes and incidents, and freely sharing lessons with business partners

**Working with stakeholders**, suppliers, and business partners in the pursuit of good practice in HSES

**Continually improving** and setting measurable objectives and targets in business plans to enhance HSES performance

**Developing** and testing prioritised incident response and recovery plans to protect our people, the environment and minimize business impact

**Ethically conducting our business** and complying with regulatory and other applicable requirements

**Playing our part** in helping to sustainably meet energy demand and to become net-zero company for our operational emissions

**Minimizing** our impacts and those of suppliers through innovation, technology, and cultural change

**Exploring** how we could reuse our infrastructure to support net zero obligations

Our HSES management system enables the delivery of these policy commitments, is structured in line with recognised good practice, and is routinely assured. Independent certification to ISO 14001 shall be maintained.

Our performance is reviewed regularly, and relevant results published.

Neil McCulloch

Chief Executive

### 3.0 OUR OPERATIONS

Spirit Energy has a diverse portfolio of operated and non-operated assets, shown in Figure 3.1.



Figure 3.1 Spirit Energy Operations

## 4.0 OPERATIONS PORTFOLIO

Our operations are organised into two asset groups – the North Sea (including facilities in both the UK and the Netherlands), and Morecambe Bay.



### North Sea

In the southern North Sea, our operated assets include the York NPAI (Not Permanently Attended Installation) and the Greater Markham Area (GMA) which straddles the UK and Dutch sectors, and produces from several fields (Markham, Chiswick, Grove, and Kew) that each are tied back to the J6A platform. The York field declared cessation of production in 2024 with preparations then commencing for its decommissioning. The York wells are scheduled for plug and abandonment, and the York pipelines are scheduled for flushing and cleaning, during 2025. Further progress with A-Fields (Alison, Annabel, Ann, and Audrey), and Chestnut field decommissioning, specifically the continued removal of their subsea infrastructure and materials, was also made during 2024.

All wells associated with our Trees subsea field located in the central North Sea were successfully plugged and abandoned during 2024.



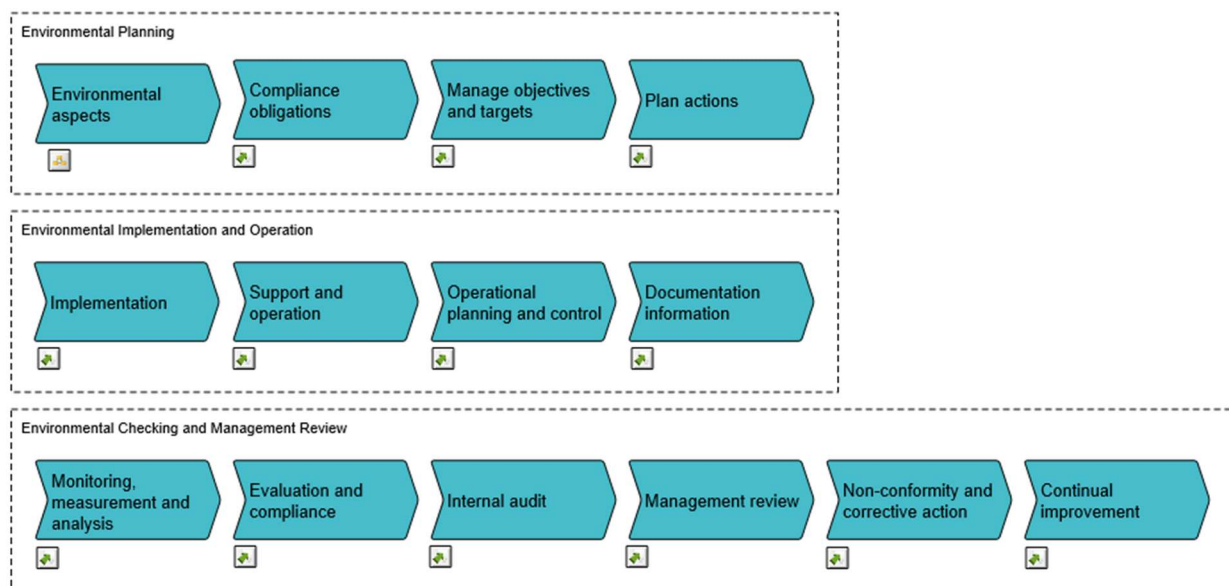
### Morecambe Bay

The combined fields of Morecambe Bay continue to provide a significant portion of the UK's gas supply, having produced more than 6.5 trillion cubic feet of gas for UK homes and businesses since coming on stream in 1985. The Morecambe Bay fields are produced via the South Morecambe Central Processing Complex (comprising three bridge-linked installations) as well as four NPAIs and one subsea tiebacks.

The Barrow Gas Terminals (which comprises of North Terminal and Rivers Terminal) process all the gas from Morecambe Bay for export to the national gas grid.

## 5.0 OUR ENVIRONMENTAL MANAGEMENT SYSTEM

The Spirit Energy Health, Safety, Environment and Security (HSES) Policy outlines our responsibilities in relation to environmental stewardship and our commitment to continually improve our environmental performance. The environmental management of our operations (shown in Figure 5.1) is incorporated into our fully integrated business management system. This integrated system ensures the embedding of environmental requirements into all our business practices to deliver maximum benefit.



**Figure 5.1 Environmental Management System Structure**

The following key impacts and risks are managed within routine operations:

- Greenhouse gas emissions from power generation, flaring and venting
- Air pollutant emissions
- Oil discharged in produced water
- Chemical use and discharge to sea
- Surface water and effluent discharge
- Waste generation and disposal
- Unplanned events – emissions, discharges and permit non-compliances

Performance is reported externally to the regulators and internally to operations and executive leadership. Performance data are also reported to other forums such as to the Carbon Disclosure Project and are available on our shareholders website ([Sustainability \(centrica.com\)](https://www.centrica.com/sustainability)) and performance data under Streamlined Energy and Carbon Reporting (SECR).



Improvements in performance are planned and managed within the annual improvement planning cycle. These improvements are approved by senior leadership and aligned with business operational plans. Maximum benefit from strategic initiatives and improvements can be achieved across the business through this planning process.

The activities in our operated assets from exploration to decommissioning are certified to the Environmental Management System ISO 14001:2015.

This report summarises the performance and initiatives of Spirit Energy's production, decommissioning operations in 2024 and the planned improvements for the coming years for our ultra-late life assets.

## 6.0 OUR PERFORMANCE

The environmental performance of our activities in 2024 is summarised in the following sections.

### 6.1 GREENHOUSE GAS EMISSIONS

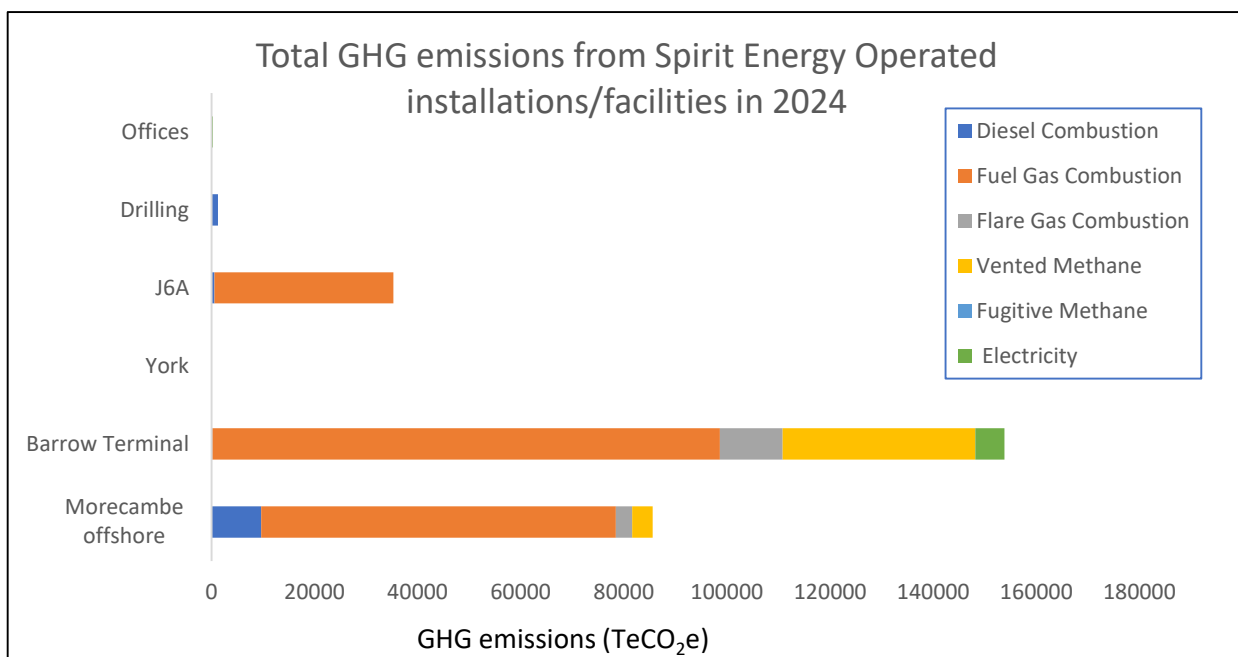
Most emissions to the atmosphere from our installations are from gas-fired turbines used for power generation and gas compression. The lack of process and compression equipment on the smaller NPAs results in considerably lower emissions from these installations. Carbon dioxide from the combustion emissions at the Morecambe Hub and the Barrow Gas Terminals are part of the UK Emissions Trading System (UK ETS (Emissions Trading Scheme)).

A wider scope of greenhouse gas (GHG) emissions are also reported under Streamlined Energy and Carbon Reporting (SECR) as tonnes of carbon dioxide equivalent (TeCO<sub>2</sub>e). This includes the emissions covered by UK ETS, combustion emissions from non-EU ETS installations/equipment, flaring and venting emissions, formation CO<sub>2</sub> and purchased electricity.

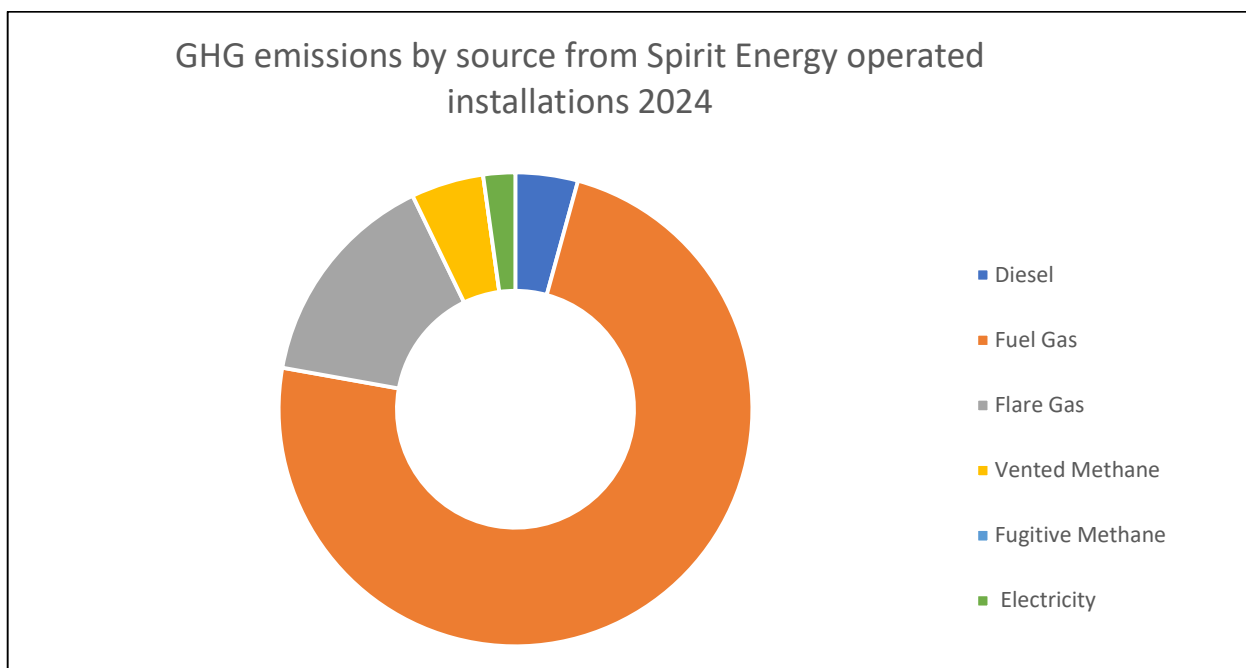
The way in which Spirit Energy reports GHG emissions is being updated, therefore historical data is not included in this report. Historical data from 2020 onwards will be reported as our baseline in the following years so that trends in these data can be shared going forward.

The reduction in emissions from 2022 - 2024 is in part due to asset shutdown periods and natural production decline as well as the active management of operational emissions under our Production and Emissions Management Standard. This standard aligns with Spirit Energy's existing production management system, and facilitates real-time intra-day emissions monitoring, interventions, and management.

Figure 6.1 shows the total emissions from Spirit Energy's operated offshore installations, drilling operations, onshore terminal, and offices during 2024. Figure 6.2 shows the breakdown of these emissions by source for the same installations/facilities.



**Figure 6.1 Total GHG emissions from Spirit Energy operated installations/facilities in 2024**

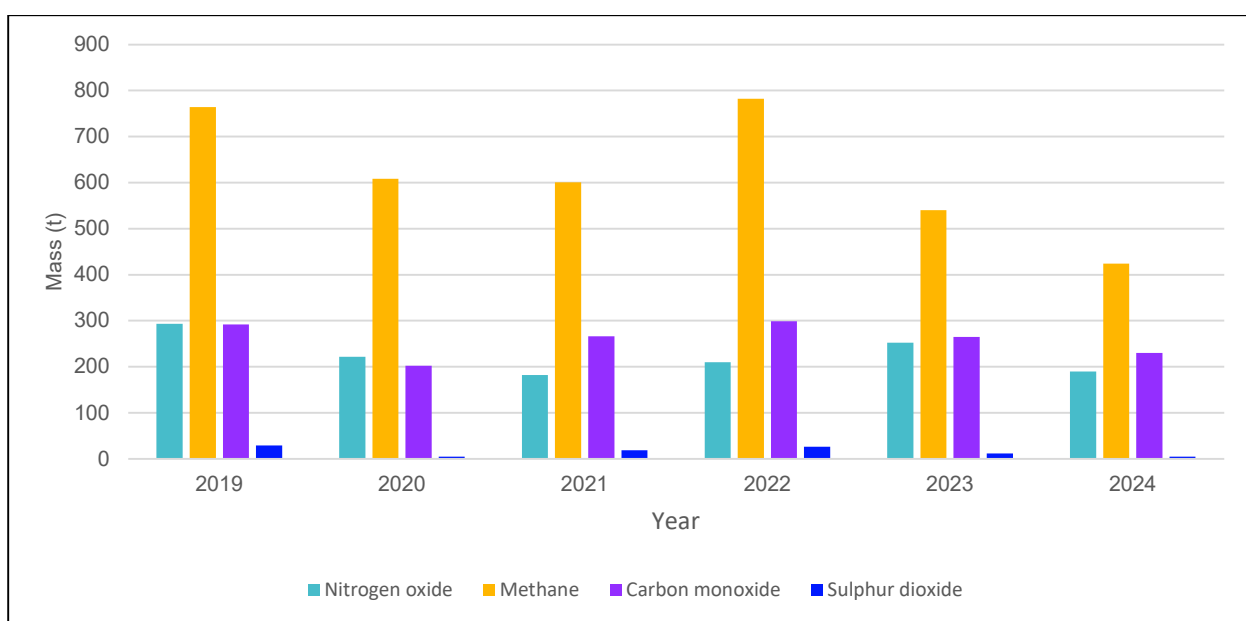


**Figure 6.2 GHG emissions by source from Spirit Energy operated installations/facilities in 2024**

## 6.2 ONSHORE PERFORMANCE - TERMINAL EMISSIONS

The Barrow Gas Terminal operates under an Environment Permit which is regulated by the Environment Agency (EA) and an annual performance report is submitted to the EA for the site.

Emissions to air from the process and discharges to water are monitored and managed within the limits specified in the permit. Any deviation from these limits is investigated to prevent a recurrence. Emissions to air from the Barrow Gas Terminal are monitored and managed within the limits specified in the Environmental Permit. The emissions of specific atmospheric pollutants are shown in Figure 6.3. The lower emissions reflect extended shutdown periods, whilst the 2019 emissions reflect more stable production throughout the year as well as 2022 which is reflected in the associated emissions.



**Figure 6.3 Emissions of nitrogen oxides, methane, carbon monoxide and sulphur dioxide from Barrow Gas Terminal 2019-2024**

6.3 OIL-IN-WATER

Oil is discharged to sea under Spirit Energy’s oil discharge permits at the South Morecambe and J6A platforms. Small volumes of oil were also discharged as part of drilling operations.

The oil discharged in produced water from our Morecambe Bay assets is consistently very low due to the nature of the gas reservoir. Our North Sea assets show a decreasing trend due to end of life and improved operational process efficiencies.

The mass of oil discharged from Spirit Energy’s assets between 2019 to 2024 is shown in Figure 6.4.

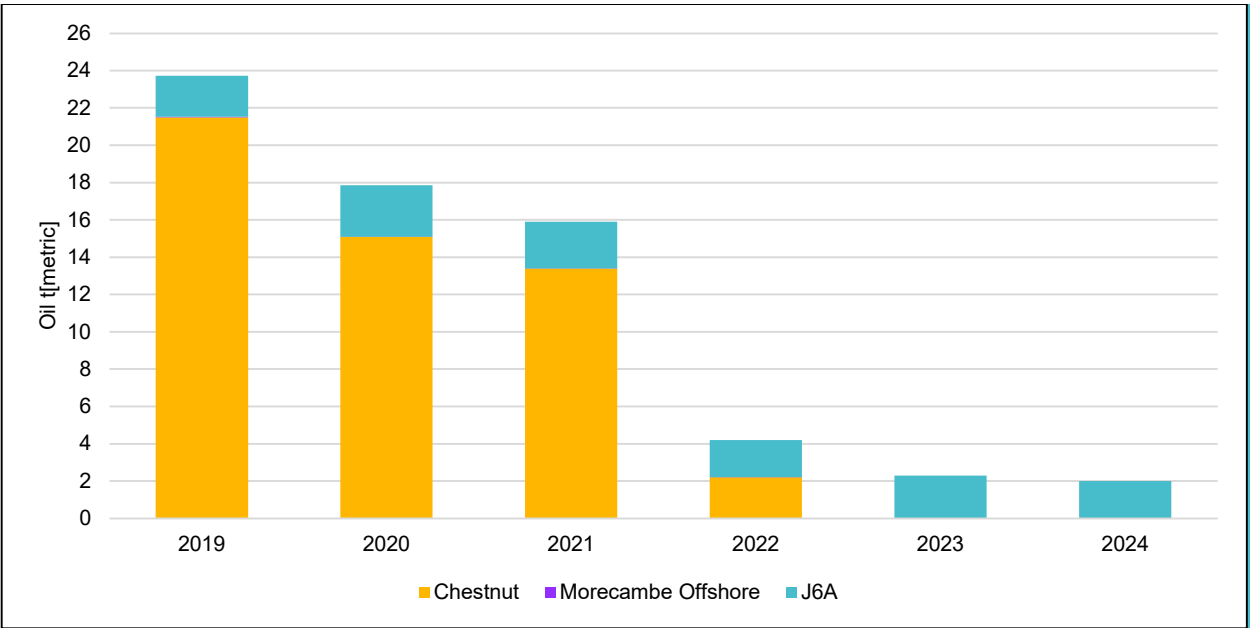


Figure 6.4 Oil discharged to sea in produced water 2019-2024

## **6.4 CHEMICAL USE AND DISCHARGE**

The amount and type of chemicals used and discharged during our offshore operations differ depending on the activities and reservoir types, for example the rock type to be drilled, well design and production functions. Spirit Energy works with its suppliers to ensure that the least harmful chemicals are used in our operations and all chemical use and discharge is permitted by the appropriate authority.

There were, respectively, twelve and eight chemicals with substitution warnings or red category labels in use on Spirit Energy's operated production installations, and with drilling and intervention operations, in the UK. A significant number of these were not used at all or used (but not discharged).

In some applications, the use of red category chemicals or those with substitution warnings is unavoidable, for example to ensure well integrity. Work continues to identify replacement products across our activities including the review of the technical justifications for chemicals flagged for substitution.

6.5 WASTE

Waste is a key area for environmental impact, from the potential for contamination from hazardous wastes to long term impacts of waste such as plastics in our environment. As decommissioning activities including well plug and abandonment are increasing in our operations schedule, we are working to minimise the production of waste such as disposing of cleaning fluids downhole instead of bringing them back ashore.

The final fate of waste from our operated installations and drilling operations are waste to energy, reuse, recycle, other, landfill and incinerate and are shown in Figure 6.5. The average recycling percentage of all production, well operation, development and Netherlands was greater than 85% in 2024.

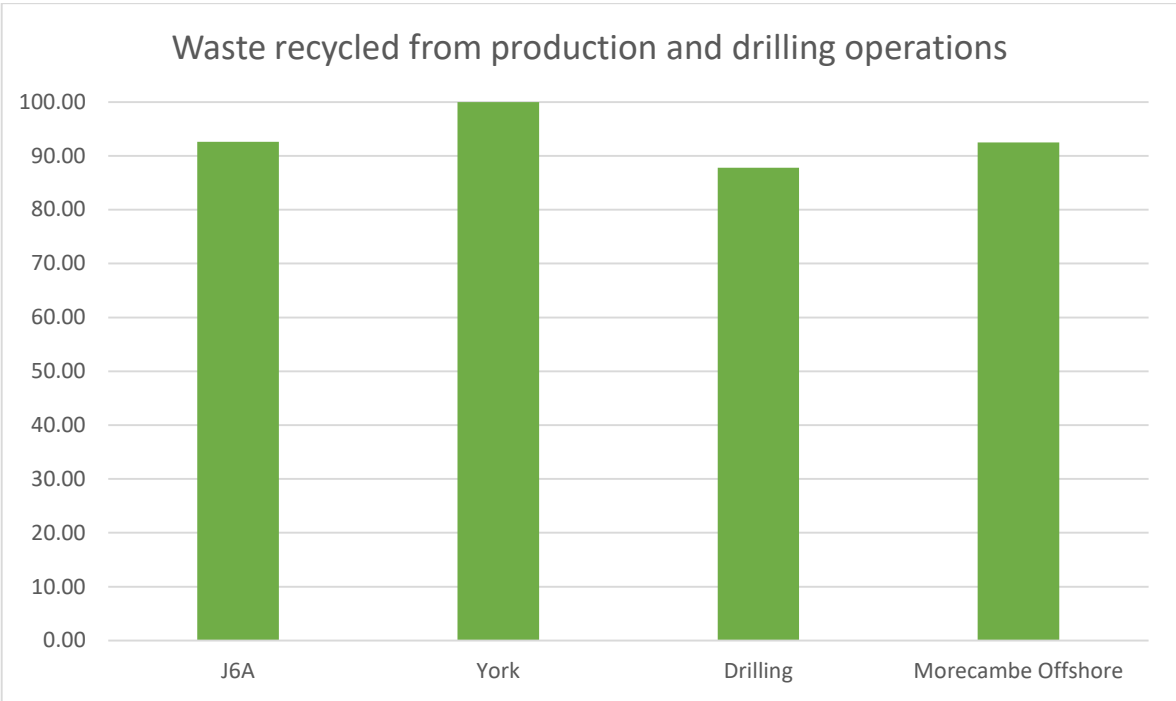


Figure 6.5 Recycled waste in UK and Netherlands

## **6.6 UNPLANNED EVENTS**

In 2024 there were six small unplanned releases to sea (down from twelve in 2023), as well as fewer permit non-compliances. This significant downward trend is attributed to greater control and awareness of our permitted operational activities, as well as improved operational efficiencies (Section 6.3).

### **6.6.1 Unplanned releases to sea**

We reported six unplanned releases ('spills') to sea from Spirit Energy assets in 2024 that were mostly small volumes of chemicals, such as hydraulic fluid. All unplanned releases were isolated events with none reported as ongoing.

### **6.6.2 Other regulatory non-compliances**

The decrease in non-compliances recorded in 2024 continues to demonstrate our focus and control of our permitted activities. All events have been investigated and addressed at both an asset and cross asset basis to ensure learnings are captured for Spirit Energy.

The Barrow Gas Terminal operates under an Environmental Permit which is regulated by the Environmental Agency (EA) and an annual performance report is submitted to the EA for the site.

Unplanned releases to sea and regulatory non-compliances associated with Spirit Energy's operated offshore installations are shown in Figure 6.6.





**Figure 6.6 Unplanned releases and regulatory non-compliances 2022 - 2024**

## 7.0 2023-2024 ENVIRONMENTAL IMPROVEMENT PLANS AND PERFORMANCE

Table 7.1 Improvement plans and progress

Area	Initiatives	Progress
<i>Risk management – environmental integrity</i>	<i>Continued cross-asset focus on the management of regulatory compliance.</i>	<i>Audit and assurance focus on spill prevention, chemical and oil management, and oil spill response. The focus for 2024 was on emissions reductions, ERAP development, minimising waste and promoting resource efficiency.</i>
<i>Reporting and Performance</i>	<i>Common reporting system across the business and review all performance metrics.</i>	<i>The standalone online observations reporting tool is now embedded throughout the business. Ongoing planned enhancements to our internal reporting tool to streamline our internal reporting was successfully rolled out.</i>
<i>Awareness and training</i>	<i>Improvements in environmental awareness across North Sea and Morecambe assets.</i>	<i>Bespoke Computer Based Training (CBT) courses have been completed in 2023 and rolled out.</i>
<i>Carbon/energy management</i>	<i>Development of carbon savings and energy efficiency opportunities.</i>	<i>We continued reporting carbon intensity and GHG emissions of our major emitting installations in 2023. Energy efficiency and reduction opportunities identified our assets are being actively reported into our business planning cycle. This will include our ESOS Reporting obligation.</i>
<i>Waste management</i>	<i>Development of waste key performance indicator and opportunities for improvement.</i>	<i>We will be focusing on the waste to energy, landfill, and liquid treatment in 2024 and re-establishing an updated baseline to measure and monitor against to fit our assets striving for sustainability.</i>
<i>Maintenance of social license</i>	<i>Energy Transition (ET) and Net Zero.</i>	<i>Development of a roadmap to support the 2050 net zero timeline is ongoing. Management and assurance of Production &amp; Emissions management standard. Spirit Energy's SECR (Streamlined Energy and Carbon Reporting) disclosure has been successfully completed for 2024.</i>