

# ANNUAL PUBLIC STATEMENT ENVIRONMENTAL MANAGEMENT SYSTEM 2022

**Petrofac Facilities  
Management Limited**

# INTRODUCTION

This is Petrofac Facilities Management Limited's 2022 annual public statement for environmental management, covering our UK operations.

Prepared in line with the reporting requirements of the UK's Department for Energy Saving and Net Zero, it meets the requirements of the Oslo Paris (OSPAR) Convention Recommendation 2003/5. It outlines our Environmental Management System (EMS) and our 2022 environmental performance.

## WORKING RESPONSIBLY

Our EMS was developed alongside our Health, Safety, Security and Environment framework and the ISO 14001 standard for environmental management. It enables us to manage the environmental impacts arising from our activities and is based on the internationally approved 'Plan-Do-Check-Act' process. This ensures we have the philosophy, procedures and methods in place to manage significant environmental risks throughout the life cycle of our projects.

As a provider of managed solutions to our clients in the UK's Continental Shelf we fulfil the role of 'Operator' on behalf of the asset owner. As a result, our EMS has been designed to support our operating responsibilities:

- The environmental goals for the prevention and elimination of pollution from offshore sources and the protection and conservation of the maritime area against other adverse effects of offshore activities
- Provision of trained emergency and oil spill responders and specialist emergency response facilities
- Continual improvement in environmental performance

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**Our vision is to reach  
Horizon Zero; a future  
with no accidents or incidents**

# THINKING DIFFERENTLY ABOUT DELIVERY

As a leading provider of services to the global energy industry, we design, build, operate and maintain energy facilities.

We think differently about delivery. By providing standalone or integrated services we align our approach to meet our clients' operating strategies and project objectives, unlocking significant value.

One example of this is our innovative Operator model, which has evolved from the Duty Holder service we pioneered in 1997, where we take responsibility for the Safety Case on behalf of a client.

# OUR JOURNEY TO NET ZERO

Never before have we had such awareness of the importance of sustainability. Petrofac has a duty of care to do all we can to put this awareness into action and support our clients to accelerate the energy transition.

We are committed to reducing emissions to net zero by 2025\* and are working to influence our supply chain to set their own reduction targets.

Our net zero strategy of 'Reduce, Transform, Enable' will focus the business on three areas:

- **Reduce** – cut our emissions by implementing energy efficiencies and low carbon strategies on sites and operations, optimising our operations and methods of construction, and advancing flare and venting reduction and carbon abatement plans
- **Transform** – adopt new technologies such as phasing in hybrid and electric vehicles on site, decarbonising our heating and cooling systems by switching to renewable electricity where available, and fitting smart building technology in our offices to maximise energy efficiency
- **Enable** – support our clients, partners and suppliers in their lower carbon ambitions, enable flexible and agile working practices, continue to embed emission reduction targets in management scorecards, and incentivise our staff to be advocates for net zero

Petrofac is made up of three divisions; Engineering & Construction (E&C), Asset Solutions, and Integrated Energy Services (IES).

\* We expect Asset Solutions, which includes Petrofac Facilities Management Limited, to reduce its Scope 1 and 2 emissions to net zero by 2025, while Engineering & Construction and Integrated Energy Services will achieve the same by 2030.

# OUR OPERATOR MODELS

Following the introduction of the 2015 Safety Case Regulations, our outsourced Duty Holder model evolved to incorporate Installation Operator (including Duty Holder) responsibility, to manage the environmental aspects of an installation.

Responsibility for wells and pipelines (Well Operator and Pipeline Operator) can be combined within one outsourced model called Service Operator.

## SERVICE OPERATOR

Anasuria Operating Company (AOC), Anasuria cluster and FPSO (Floating Production, Storage and Offloading) vessel, UKCS

As Service Operator for AOC we managed the Anasuria FPSO and associated pipelines until June 2022 when AOC assumed the duty holdership over the asset and pipelines. We remained their ISP (Integrated Services Provider).

## WELL OPERATOR

IOG plc, Tailwind Energy, i3 Energy, AOC and NEO Energy

During 2022, we were appointed Well Operator for multiple well operation campaigns across the UKCS, covering new development well drilling and plug and abandonment activities.

## INSTALLATION OPERATOR

Hewett, Irish Sea Pioneer, Kittiwake platforms

During 2022, our Installation Operator portfolio included the Hewett Complex, the Irish Sea Pioneer, and Kittiwake.

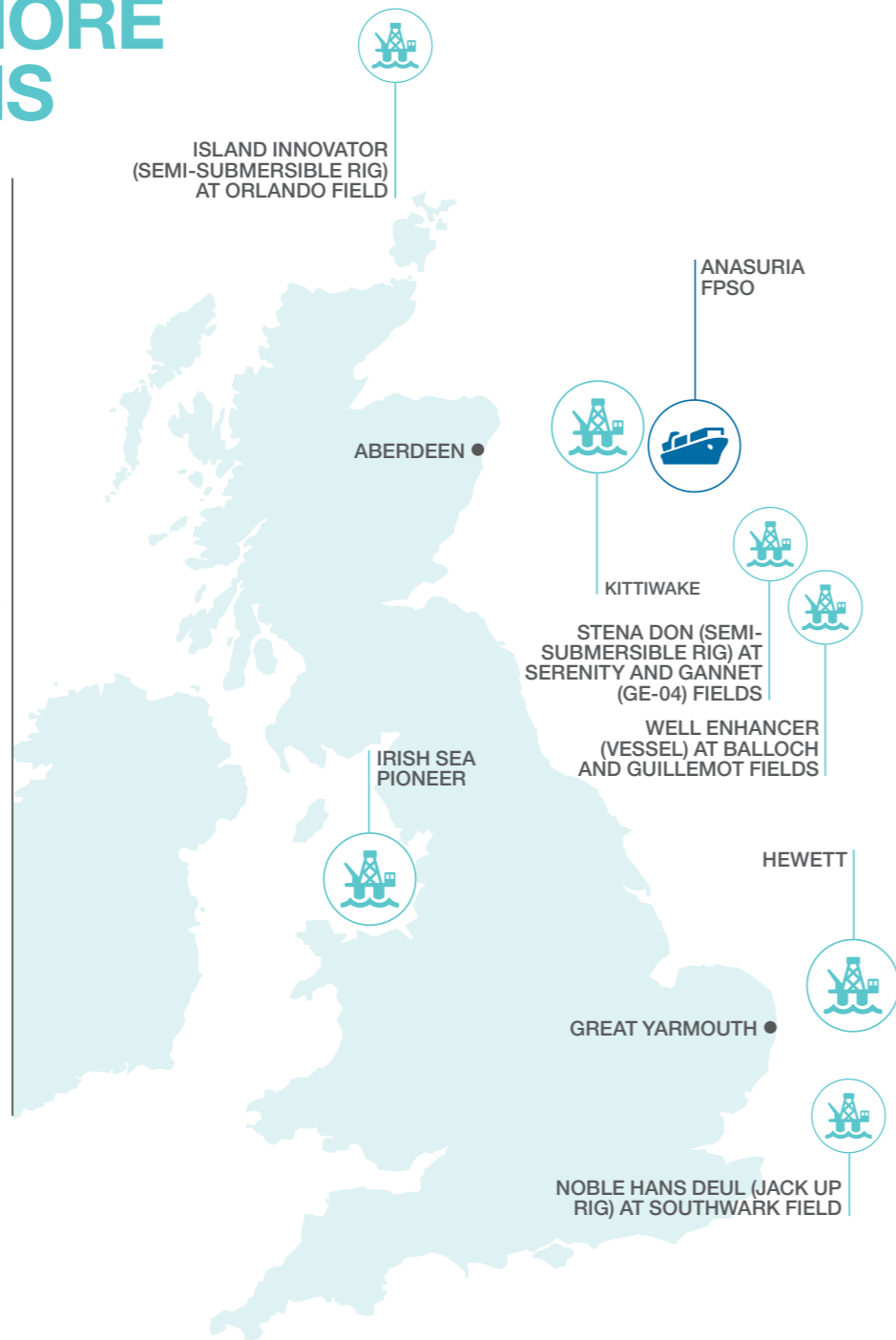
# OUR OFFSHORE OPERATIONS

On behalf of their owners, we currently operate a range of platforms and undertake offshore oil and gas production activities including:

- Non-producing intervention vessel operation
- Oil and gas production platform operation
- Late-life platform operations
- Drilling activities with third-party rig provision
- Asset decommissioning

Under the requirements of this disclosure, the UKCS Operator responsibilities and UKCS assets highlighted within this statement include:

- Service Operator (including Installation Operator) – the Anasuria FPSO until June 2022 and Irish Sea Pioneer, Hewett, and Kittiwake.
- Well Operator - Noble Hans Deul, Stena Don and Maersk Forza



## SERVICE OPERATOR (INCLUDING INSTALLATION OPERATOR)



**Anasuria FPSO**

The Anasuria FPSO is owned by Anasuria Operating Company, a joint venture between Hibiscus Petroleum Berhad and Ping Petroleum Limited. It is located 175km east of Aberdeen.

Up until June 2022 Petrofac was Service Operator for the FPSO and associated cluster (installation, wells with exception of the Cook well and pipelines). Currently Petrofac remain AOC's Integrated Service Provider.



**Irish Sea Pioneer**

Petrofac has been Installation Operator of the Irish Sea Pioneer since 2015, prior to which Petrofac had been Duty Holder of the asset since 2006.

The non-producing mobile platform is owned by Eni and provides intervention services to Eni's operations in the Liverpool Bay area.



**Hewett**

Located in the Southern North Sea, there are four platforms: The Hewett Complex (48/29Q, AP and A-FTP), 48/29 B, 48/29 C and 52/5A.

The Hewett field ceased the export of natural gas at the end of December 2020. Since this cessation, the process of decommissioning the assets has begun in preparation for their removal for disposal onshore.



**Kittiwake**

Petrofac has been the Duty Holder for the Kittiwake, a fixed steel jacket platform in the Central North Sea, since 2004, on behalf of current and previous owners EnQuest, Centrica and Venture Production respectively.

In June 2017 Petrofac became Installation Operator and assumed responsibility for the environmental performance for the asset.

## WELL OPERATOR



**Noble Hans Deul**

Petrofac was the appointed Well Operator, on behalf of Licensee IOG, for the Southwark-well campaign in the Southern North Sea. The jack-up drilling rig, owned by Noble Drilling, carried out the work in the Southwark fields in 2022.



**Island Innovator**

Petrofac was the appointed Well Operator, on behalf of the licensees Tailwind Energy, for a Well Intervention campaign in the Northern North Sea.

The Island Innovator, owned by Island Drilling Company, carried out the work in the Orlando field for Tailwind.



**Well Enhancer**

Petrofac was the appointed Well Operator, on behalf of the licensee Anasuria Operating Company and Neo Energy, for a Well Intervention campaign in the Central North Sea.

The Well Enhancer, owned by Helix Energy, carried out the work in the Guillemot A, Donan (also known as Dumbarton), Lochranza, and Balloch (DLB) fields.



**Stena Don**

Petrofac was the appointed Well Operator, on behalf of the licensee i3 Energy and Tailwind Energy, for a drilling campaign in the Central North Sea.

The semi-submersible drilling rig, owned by Dolphin Drilling, carried out the work in the Serenity and Gannet E fields.

# ENVIRONMENTAL MANAGEMENT SYSTEM

## HSE MANAGEMENT STRATEGY



As part of our Business Management System (BMS), our EMS is certified to the ISO 14001:2015 International Standard, and complies with the Oil Spill Prevention, Administration and Response Fund. It is governed by the Petrofac Group Health, Safety and Environment Management Strategy.

- HSE MANAGEMENT STRATEGY ELEMENTS**
1. Leadership and accountability
  2. People and competence
  3. Subcontractors, suppliers and partners
  4. Customers, products and services
  5. Community and stakeholders
  6. Risk assessment and management
  7. Design and construction
  8. Operations and maintenance
  9. Management of change
  10. Information and documentation
  11. Incident investigation and analysis
  12. Crisis and emergency management
  13. Assessing and improving effectiveness

Our EMS is flexible enough to maintain continuity with existing practices during the transfer of platforms to the Petrofac system, whilst taking on board best practice where identified which is then shared across other assets.

# MANAGING OUR IMPACT ON THE ENVIRONMENT

Specific areas of our offshore operations require daily focus to ensure their impact on the environment is managed effectively. These include:

## DISCHARGES TO SEA

### OIL IN WATER

Water is extracted from wells, along with oil and gas. The water, known as produced water, is then separated from the oil and treated. Although treatment removes most of the oil from the water, residual traces are still discharged. These traces are regulated and released under permitted conditions.

### DRILL CUTTINGS DISCHARGE

Drill cuttings and fluids discharged from drilling operations can also contain residual oil associated with the formation.

### CHEMICAL DISCHARGES

Prior to approval and discharge for use offshore, chemicals are subjected to a risk assessment. The potential impact from chemical discharges is graded using the ranking system below:

COLOUR BANDING		INITIAL OFFSHORE CHEMICAL NOTIFICATION SCHEME (OCNS) GROUPING	
GOLD	Lowest hazard	Initial grouping	
SILVER	↓	A	
WHITE		B	
BLUE		C	
ORANGE		D	
PURPLE		Highest hazard	E

## ATMOSPHERIC EMISSIONS

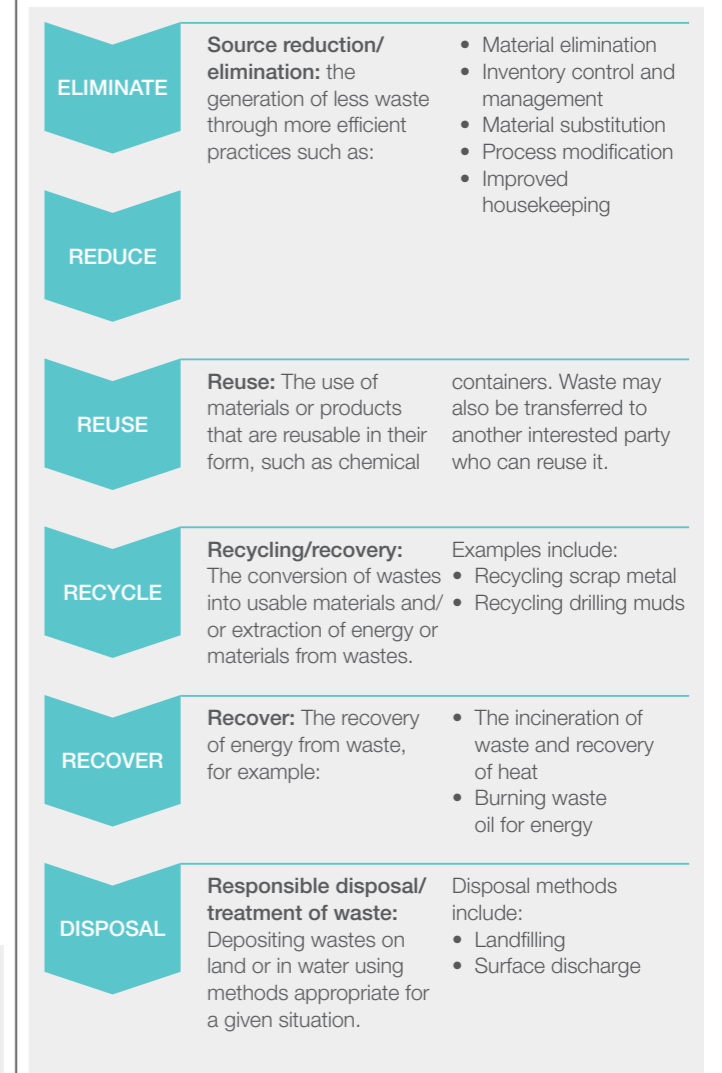
The combustion of diesel and gas to generate power and the burning of flare gas creates atmospheric emissions of Carbon Dioxide (CO<sub>2</sub>) and other combustion products including:

- Nitrous oxides
- Sulphurous oxides
- Carbon Monoxide (CO)
- Methane (CH<sub>4</sub>)
- Other Volatile Organic Compounds (VOCs)

During activities on the assets, refrigerant gases are used offshore, primarily to support living conditions and equipment cooling. This activity is regulated and reported on annually.

## WASTE MANAGEMENT

Waste generated offshore is managed to allow maximum reuse or recycling of materials before being treated, incinerated or disposed to landfill. Petrofac follows the waste management hierarchy below:



## PETROLEUM OPERATIONS NOTICE AND NON-COMPLIANCE REPORTING

All notices and non-compliance are recorded within Petrofac's incident management system, detailing the circumstances, investigation, outcomes and actions. The system is also used for lesson sharing and incident trending to assist with continuous improvement.

### PETROLEUM OPERATIONS NOTICE

Any spill to sea of oil or chemical is reported to the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) using the Integrated Reporting System (IRS) PON 1 form.

The loss of any objects to sea which may have an impact on the environment or sea users are reported to OPRED using a form via the IRS.

### NON-COMPLIANCE

A non-compliance against any of the permit conditions is reported using the appropriate form in the IRS.

# ENVIRONMENTAL OBJECTIVES AND TARGETS

## 2022 OBJECTIVES

Petrofac aims to provide low carbon design options in bids and tenders based on technology and raw material intensity

Carry out quantification of fugitive methane emissions using direct measurement techniques

Phase out the use of single use plastics as alternatives become available

Continue to develop the use of digital tools to provide visibility and insight to environmental data

## 2022 ACHIEVEMENTS

Focus on environmental sustainability- engineering design optimising energy/ material requirements and designing out waste, operating combustion equipment at efficiencies stated by the manufacturers, use of renewable hybrid power, monitoring energy consumption and setting up targets

Drone and micro surveys undertaken to provide quantification of methane used in baseline identification

Removal of blue boots covers, replacing polystyrene cups with porcelain dishware. Working with supply chain to reduce plastic wrapping and product packaging

Continuous use and improvement of digital tools in company's environmental reporting, dashboards available to the workforce providing transparency on energy use and GHG emissions

## CONTINUOUS IMPROVEMENT

In 2023, Petrofac will maintain ISO 14001 Certification across all operated assets and extend into new areas as operational changes require. It is also planning to enhance the use of digital technology in support the United Nations' Sustainable Development Goals.

Engagement with supply chain to encourage and promote circular economy

Continue with emission reduction application in all stages of the process / services

Explore sources of renewable energy and its application in Petrofac UKCS portfolio





# ENVIRONMENTAL PERFORMANCE

## ANASURIA FPSO

The environmental permits in place for the Anasuria FPSO associated with oily water discharges to sea, offshore chemical use and discharge, and atmospheric emissions from power generation and flaring.

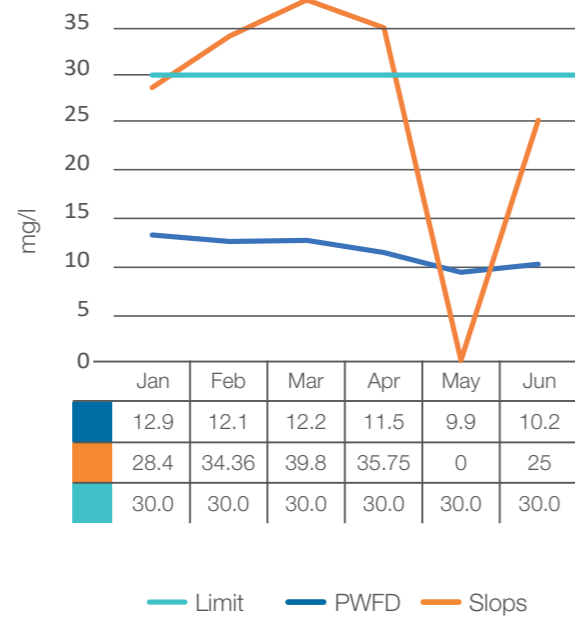
### DISCHARGES TO SEA

#### OIL IN PRODUCED WATER

Water discharges are monitored and reported in accordance with the Oil Pollution, Prevention and Control Permit. The average oil in water concentrations over both discharges (produced water flash drum and slops) for the period was 13.36 mg/l.

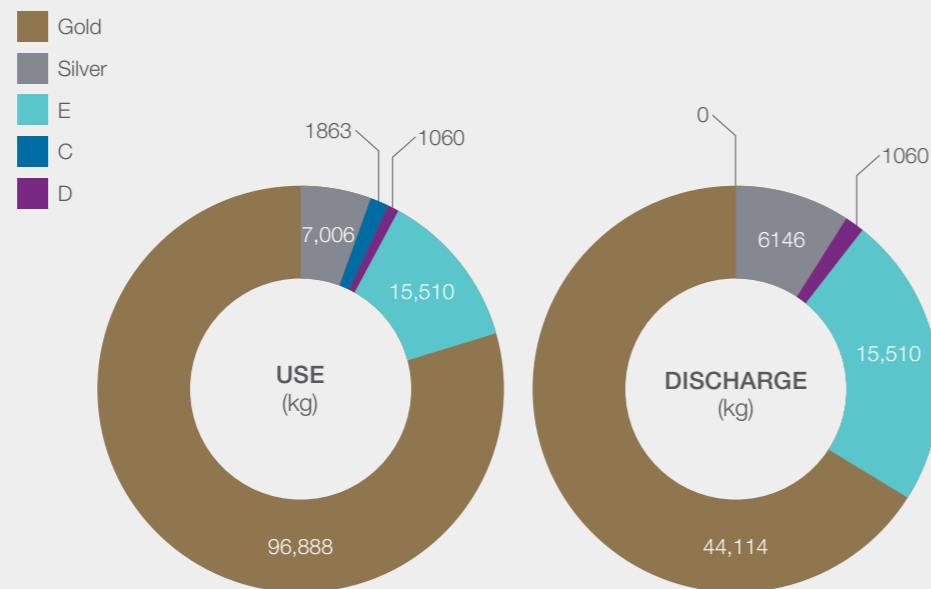
The total volume of water and mass of oil discharged over the period of operation was 592,612m<sup>3</sup> and 7,920kg of oil. (it does not include Slops OPPC Non-conformance)

OIL IN PRODUCED WATER DISCHARGE CONCENTRATION



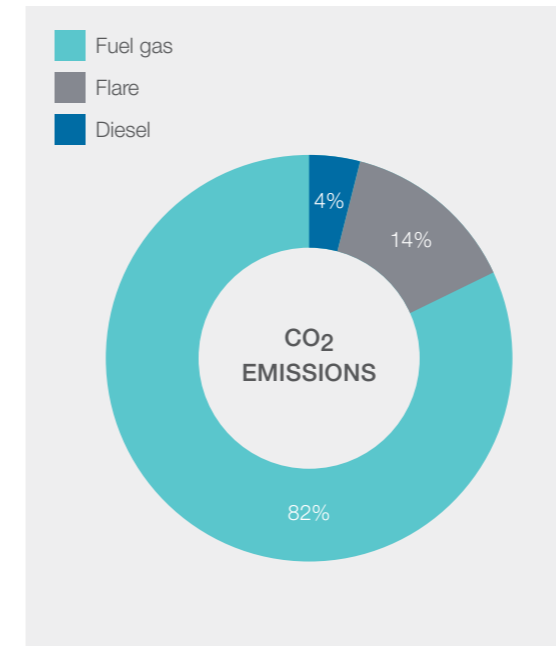
#### CHEMICAL USE AND DISCHARGE

The majority of chemicals in use on the Anasuria FPSO are in the least harmful Gold (CHARM) and E (non-CHARM) categories. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.



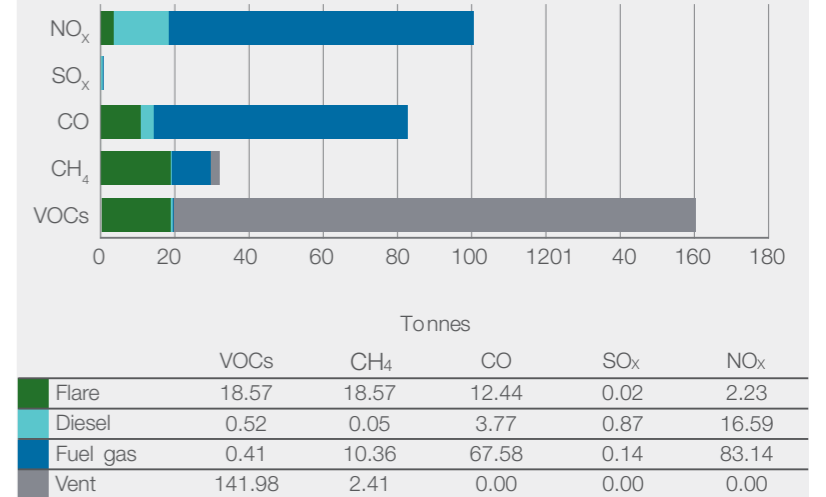
### DISCHARGES TO ATMOSPHERE

Power generation is the main source of atmospheric emissions. Other sources are flaring and venting gas. 37,166 tonnes of CO<sub>2</sub> and other emissions were reported via the Environmental Emissions Monitoring System in 2022.



Other combustion emissions reported through the EEMS can be found below:

#### EMISSIONS BY SOURCE

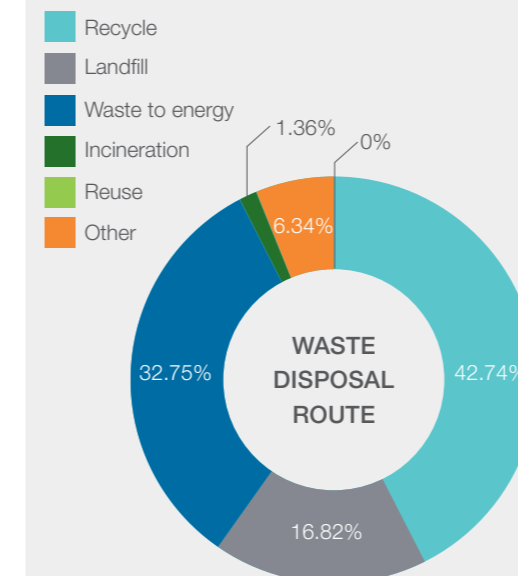


There are three hydrochlorofluorocarbon (HCFC) refrigerant compounds and a common mixture containing HFC's\* in use on the Anasuria FPSO. The inventory and emission details are monitored and reported:

Compound	On facility (kg)	Emitted (kg)	CO <sub>2</sub> equivalent factor (kg)	CO <sub>2</sub> equivalent (t)
HFC-134a	1.61	0.00	1,430	0.00
HFC-404a	0.46		3,922	0.00
HFC-417a	30.40	0.00	2,346	0.00
R448A*	1.70	1.70	1,386	2.36
HC-600A	0.30	0.00	3	0.00
R290	0.08	0.00	3	0.00
<b>Total</b>	<b>34.55</b>	<b>1.70</b>	<b>-</b>	<b>2.36</b>

### WASTE MANAGEMENT

34 tonnes of waste were managed onshore. The disposal routes are charted below:



### REPORTS AND NOTIFICATION

During 2022 there was one release of oil reported as PON1. There was no unpermitted discharge of chemicals reported. All incidents were managed out through the IRS system.

#### PON 1 Notification details

Activity	Oil/Chemical type	Discharge (t)
Subsea crude oil release from Guillemot A riser	Oil	0.041

A total of three non-compliances with permit conditions were submitted to DESNZ during 2022:

Permit	Non-compliance	No.
OPPC (Oil Pollution Prevention and Control) Regulations 2005	Monthly slops OIW average higher than 30mg/l	2
OPPC (Oil Pollution Prevention and Control) Regulations 2005	Slops discharge failure (in review)	1

# ENVIRONMENTAL PERFORMANCE

## HEWETT

The environmental permits in place for the Hewett Field Complex, blocks 48/29AP, 48/29 B, 48/29 C and 52/5A are associated with oily water discharges to sea, offshore chemical use and discharge, and atmospheric emissions from power generation and venting. The 48/29 B block only has one permit for 'Consent to Locate', all other permits for the block have been surrendered as decommissioning of the field progresses.

### DISCHARGES TO SEA

#### OIL IN PRODUCED WATER

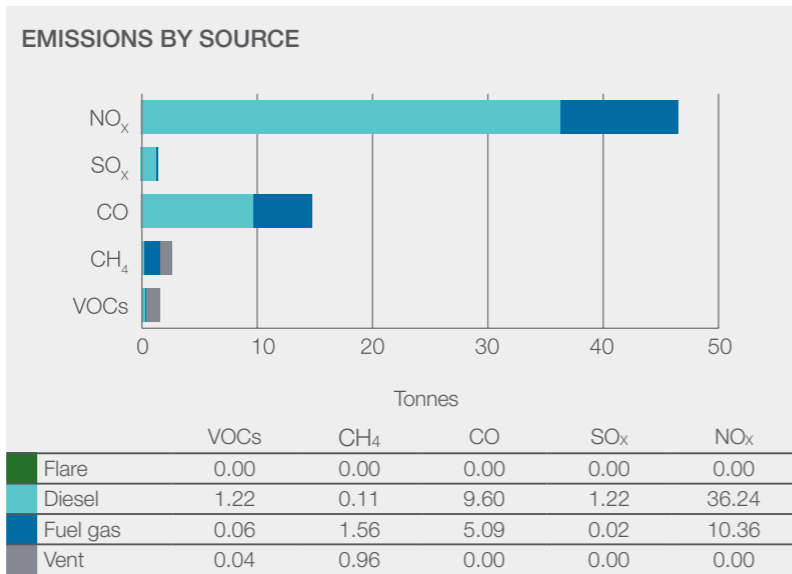
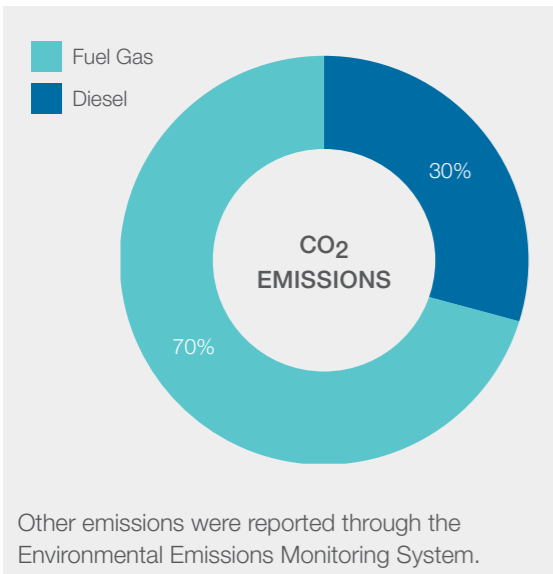
No produced water was discharged to sea in 2022. Fluids from production for fuel gas only, are reinjected into the platform wells. During preparations for decommissioning, fluids from cleaning and flushing activities across the platforms were injected into the platform wells (some of these were done under the owner permits rather than Petrofac as the operator).

#### CHEMICAL USE AND DISCHARGE

There was no chemical use or discharge on the Hewett platforms in 2022. Chemical permits remain in place on platforms for future decommissioning activities and contingency purposes for planned activities.

### DISCHARGES TO ATMOSPHERE

Power generation is the main source of atmospheric emissions, with the other sources comprising of venting gas. 6,492 tonnes of CO<sub>2</sub> emissions were verified for greenhouse gas reporting purposes. Other emissions were reported through the Environmental Emissions Monitoring System.

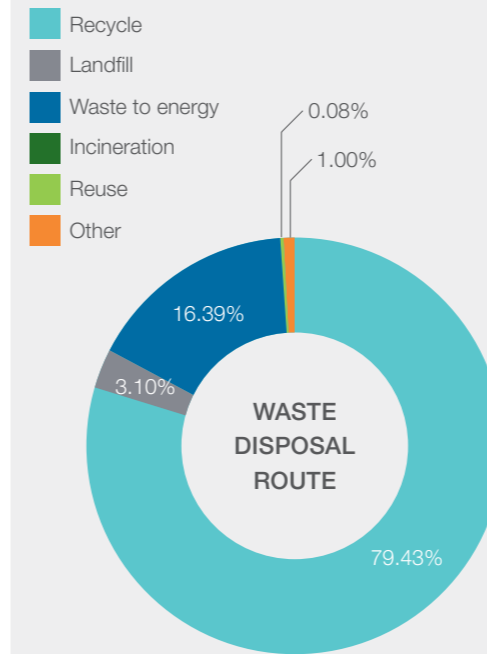


There are four hydrochlorofluorocarbon (HCFC) refrigerant and two non-HCFC refrigerant compound in use on the Hewett Complex. The inventory and emission details are monitored and reported opposite:

Compound	On facility (kg)	Emitted (kg)	CO <sub>2</sub> equivalent factor (kg)	CO <sub>2</sub> equivalent (t)
HFC-134a	7.39	0.00	1,430	0.00
HFC-227ea	12	0.00	3,220	0.00
HFC-407c	7.6	0.00	1,774	0.00
HFC-422d	6.5	0.00	2,729	0.00
HC-600a (Isobutane)	2.86	0.00	3	0.00
R290	0.32	0.00	3	0.00
<b>Total</b>	<b>37</b>	<b>0.00</b>	<b>-</b>	<b>0.00</b>

### WASTE MANAGEMENT

119 tonnes of waste were managed onshore. The disposal routes are charted below:



### REPORTS AND NOTIFICATION

During 2022 there was one unpermitted release of oil reported and closed out through the PON 1 reporting system. There were no other releases reported and no unpermitted discharge of chemical reported.

#### PON 1 Notification details

Activity	Oil/Chemical type	Discharge (t)
Hydraulic power unit bund over spilled during inclement weather	Hydraulic oil	0.002

There were no non-compliances with permit conditions reported in 2022.

## ENVIRONMENTAL PERFORMANCE

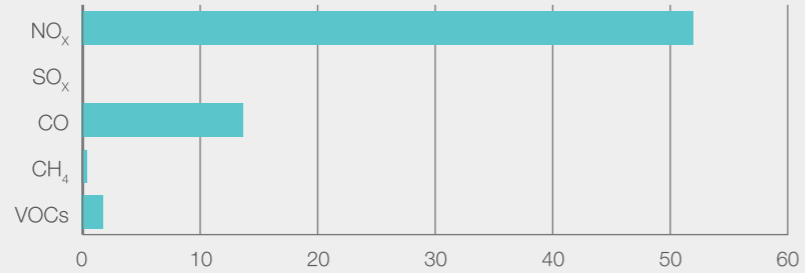
# IRISH SEA PIONEER (ISP)

The environmental permits in place for 2022 are associated with atmospheric emissions from power generation.

### DISCHARGES TO ATMOSPHERE

Power generation is the only source of atmospheric emissions on the ISP, emitting 2,804 tonnes of CO<sub>2</sub>. Other combustion emissions reported through the Environmental Emissions Monitoring System (EEMS) are described on the right.

EMISSIONS BY SOURCE



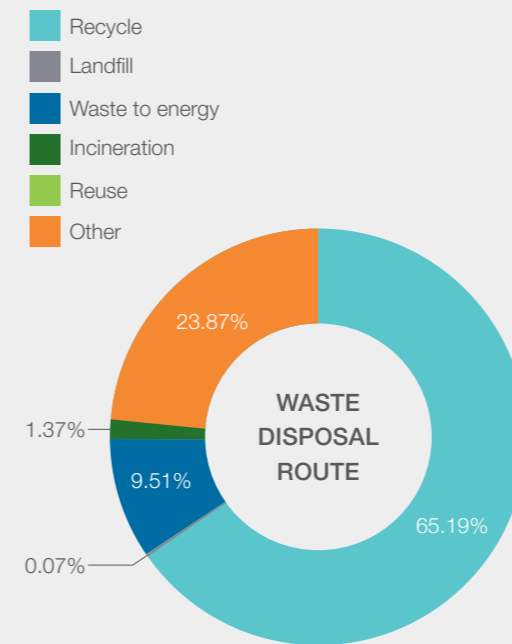
	VOCs	CH <sub>4</sub>	CO	SO <sub>x</sub>	NO <sub>x</sub>
Flare	0.00	0.00	0.00	0.00	0.00
Diesel	1.75	0.16	13.76	0.00	52.05
Fuel Gas	0.00	0.00	0.00	0.00	0.00
Vent	0.00	0.00	0.00	0.00	0.00

There are two hydrochlorofluorocarbon (HCFC) refrigerant components in use on the ISP. The inventory and emission details are monitored and reported:

Compound	On facility (kg)	Emitted (kg)	CO <sub>2</sub> equivalent factor (kg)	CO <sub>2</sub> equivalent (t)
HFC-143a	50.00	10.00	1,430	14.30
HFC-404a	24.00	0.00	3,922	0.00
<b>Total</b>	<b>74.00</b>	<b>10.00</b>	<b>-</b>	<b>14.30</b>

## WASTE MANAGEMENT

46 tonnes of waste were managed onshore. The disposal routes are charted below:



## REPORTS AND NOTIFICATION

During 2022 there were no releases to air or sea.

# ENVIRONMENTAL PERFORMANCE

## KITTIWAKE

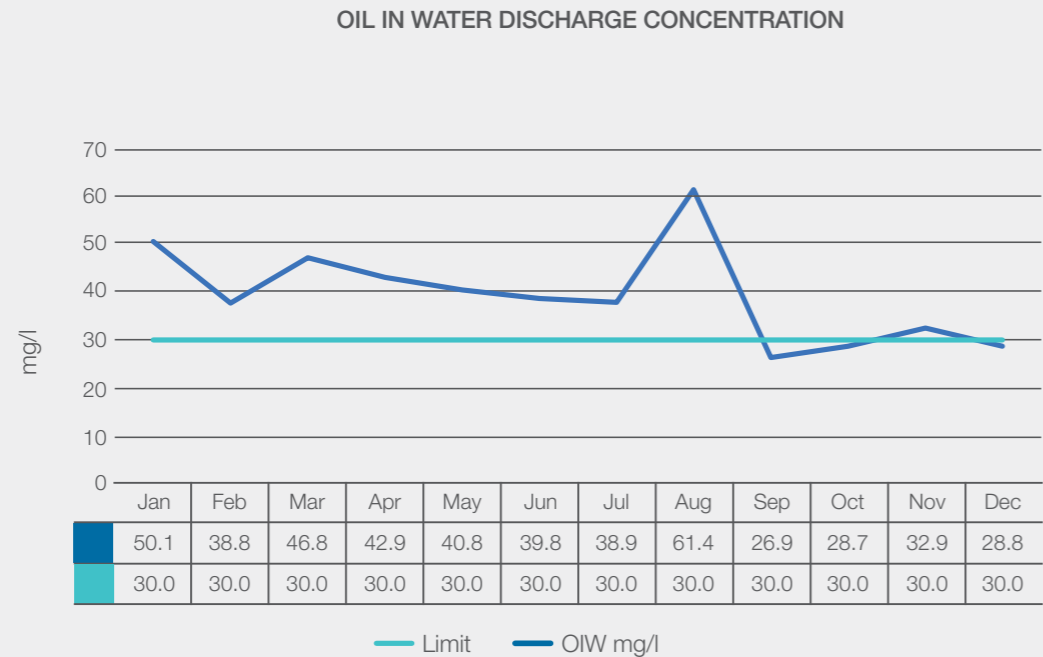
The Petrofac environmental permits in place for the Kittiwake are those associated with oily water discharges to sea, offshore chemical use and discharge and atmospheric emissions from power generation.

### DISCHARGES TO SEA

#### OIL IN PRODUCED WATER

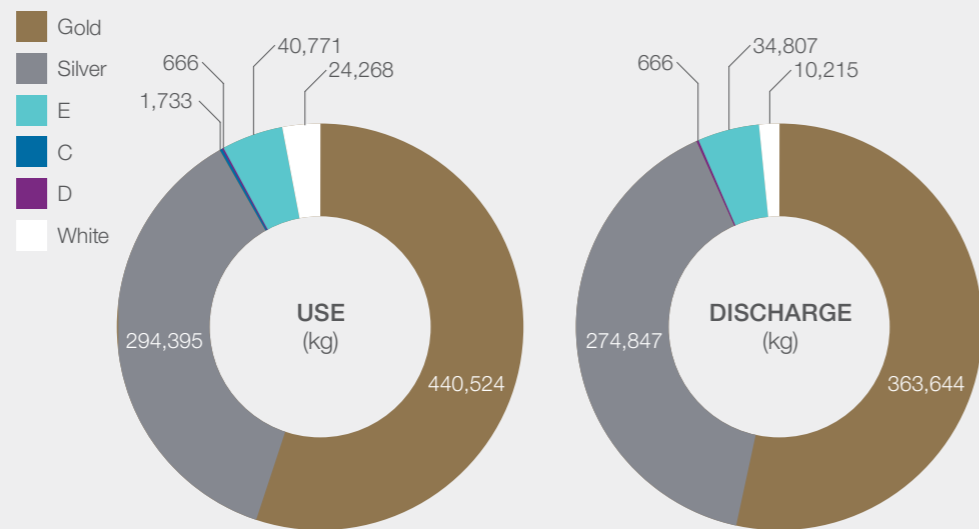
Water discharges are monitored and reported in accordance with the Oil Pollution, Prevention and Control Permit. The average oil in water concentrations over both discharges for the period was 38.28 mg/l.

The total volume of water and mass of oil discharged over the period of operation was 1,606,710m<sup>3</sup> and 61,510 kgs of oil.



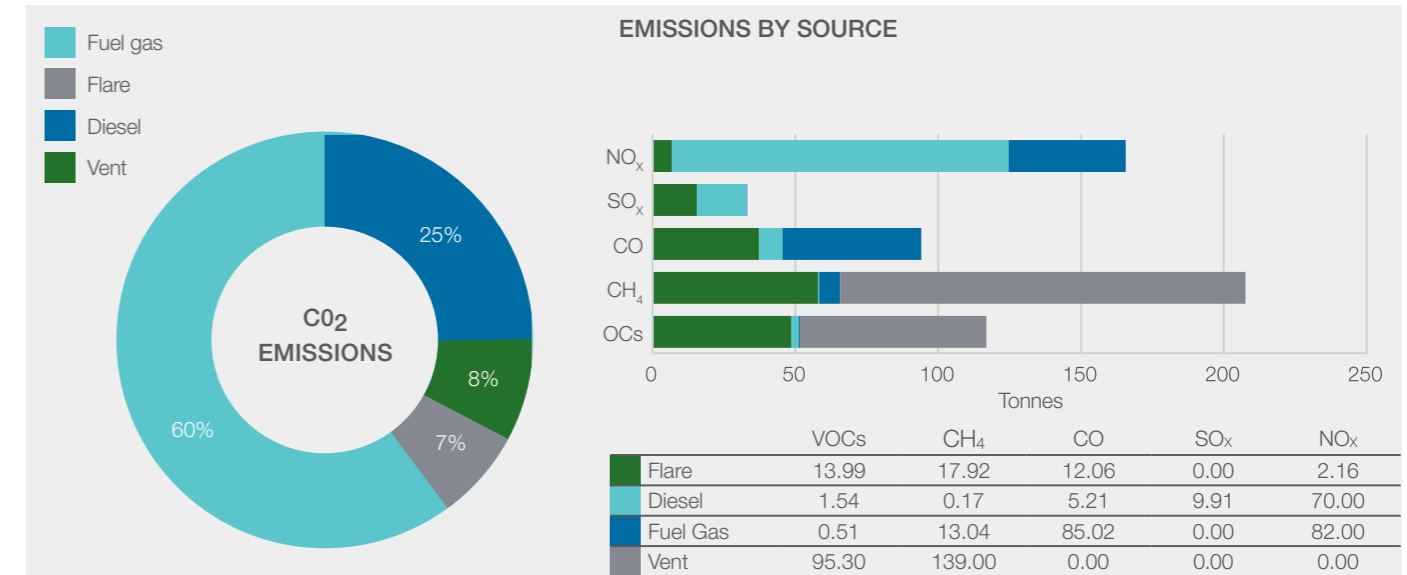
#### CHEMICAL USE AND DISCHARGE

The majority of chemicals in use on Kittiwake are Gold category. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.



### DISCHARGES TO ATMOSPHERE

Power generation is the main source of atmospheric emissions. Other sources are flaring and venting gas. 58,672 tonnes of CO<sub>2</sub> emissions were verified for greenhouse gas reporting purposes. Other emissions were reported through the Environmental Emissions Monitoring System.

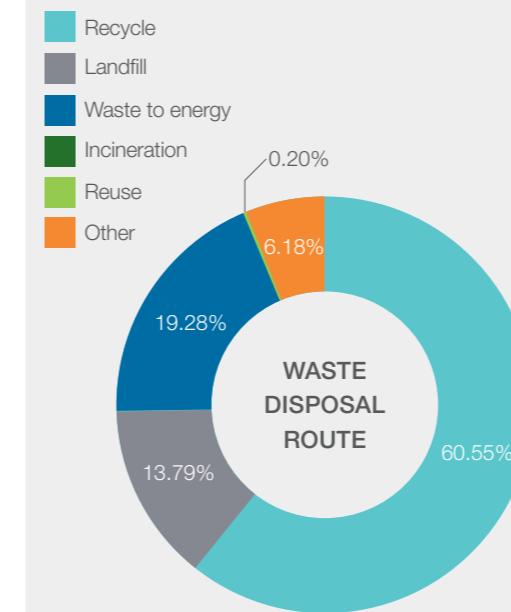


There are four hydrofluorocarbons (HFC) refrigerant compounds, one hydrocarbon (HC) refrigerant compound and one other non-hydrocarbon compound in use on Kittiwake. The inventory and emission details are monitored and reported here:

Compound	On facility (kg)	emitted (kg)	CO <sub>2</sub> equivalent factor (kg)	CO <sub>2</sub> equivalent (t)
HFC-134a	3.00	0.00	1,430	N/A
HFC-404a	6.00	1.00	3,922	4.00
HFC-407c	45.00	0.00	2,729	N/A
HFC-417a	34.00	14.00	2,346	32.00
HC-600a	1.00	0.00	3.00	N/A
R717	0.25	0.00	0.00	N/A
<b>Total</b>	<b>89.25</b>	<b>15.00</b>	<b>-</b>	<b>36</b>

### WASTE MANAGEMENT

160 tonnes of waste were managed onshore. The disposal routes are charted below:



### REPORTS AND NOTIFICATION

During 2022 there were no accidental releases of oil and or chemical to sea. There was one chemical permit non-compliant event and twelve oily discharge permit non-compliant events.

Permit	Non-Compliance	No.
OPPC (Oil Pollution Prevention and Control Reg 2005)	Oil in water 30mg/l monthly threshold excursion	9
OPPC (Oil Pollution Prevention and Control Reg 2005)	Oil in water 100mg/l monthly threshold excursion	3
OCR (Offshore Chemical Regulations 2002)	Period of over injection of deoiler chemical vs. permitted injection rate	1

## ENVIRONMENTAL PERFORMANCE

# NOBLE HANS DEUL

The Noble Hans Deul (now known as Shelf Drilling Perseverance) is a jack-up drilling rig which completed the Southwark A2 well drilling campaign in the Southern North Sea between Jan and Dec 2022.

### DISCHARGES TO SEA

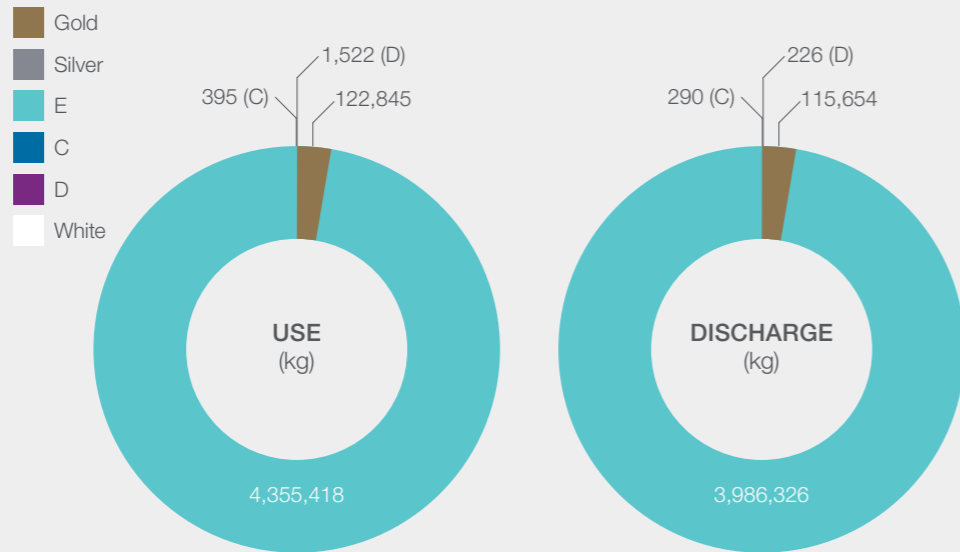
#### DRILLING DISCHARGE

A total of 733.97 tonnes of cuttings were discharged to sea during drilling operations. The total oil discharged associated with the cutting was 0.00 tonnes, with an average concentration of oil in the fluids of 0.00%.

Total quantity of cuttings discharged (t)	733.97
Total quantity of oil discharged (t)	0.00
Average oil on oil bearing reservoir cuttings discharged (%)	0.00

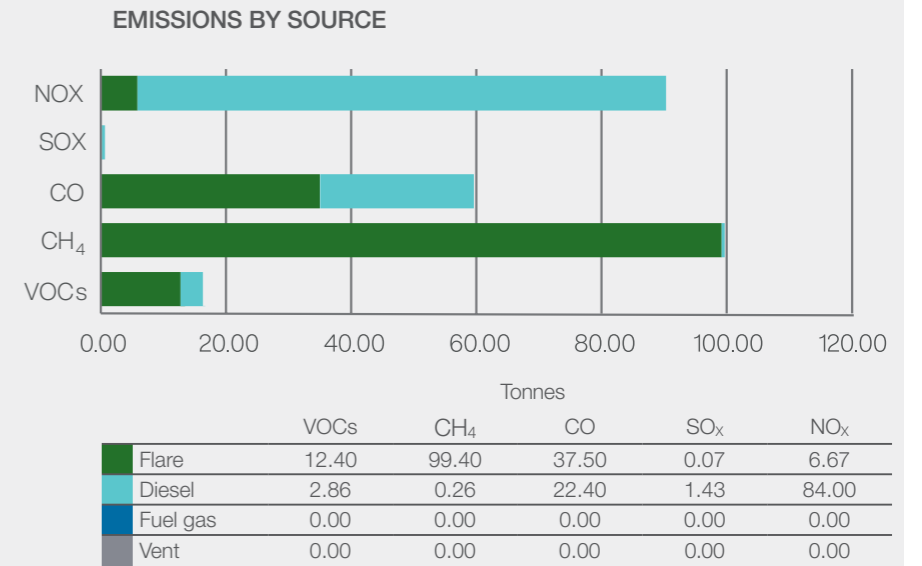
#### CHEMICAL USE AND DISCHARGE

The majority of chemicals in use during the Noble Hans Deul campaign were in the least harmful Gold, C, D and E categories. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.



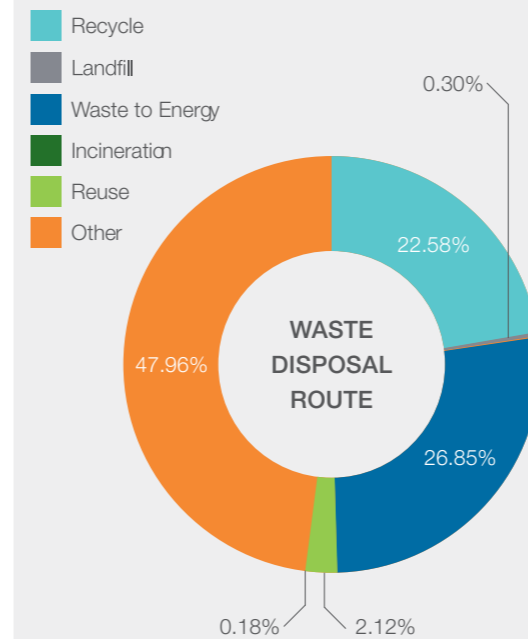
### DISCHARGES TO ATMOSPHERE

Emissions to atmosphere generated from drilling activities are associated with power generation using diesel-fuelled engines and flaring from well testing. The main combustion product is carbon dioxide (CO<sub>2</sub>). A total of 19,518 tonnes of CO<sub>2</sub> was emitted from the sources described on the right:



### WASTE MANAGEMENT

A total of 385 tonnes of waste was brought onshore for disposal from the Noble Hans Deul during its activities. A large proportion of this waste was tank washings (185 tonnes) which included special wastes and required further treatment prior to disposal under licence.



### REPORTS AND NOTIFICATION

During its activities for Petrofac, no non-compliance notifications were submitted for the Noble Hans Deul drilling rig.

## ENVIRONMENTAL PERFORMANCE

# ISLAND INNOVATOR

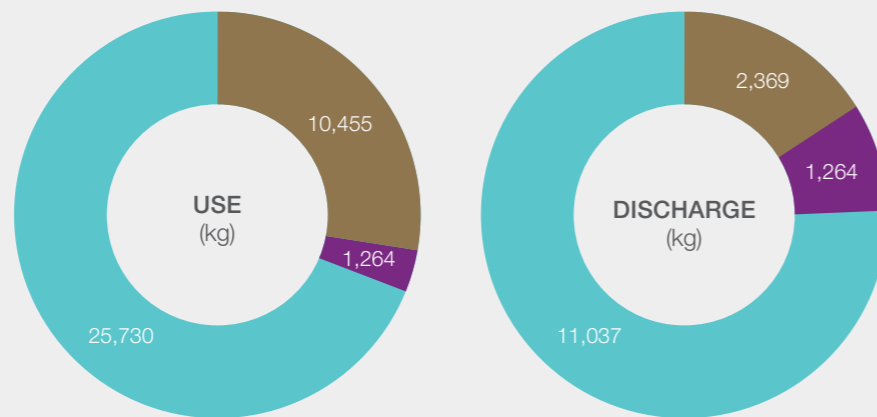
The Island Innovator semi-submersible rig completed one well intervention campaign in the North Sea between July and August 2022.

### DISCHARGES TO SEA

#### CHEMICAL USE AND DISCHARGE

The majority of chemicals in use during the Island Innovator campaign were in the least harmful Gold, D and E categories. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.

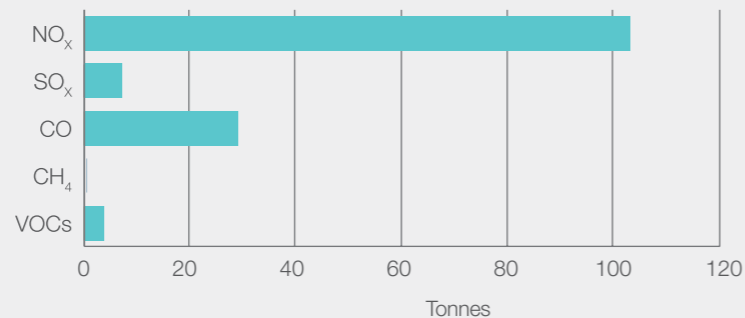
- Gold
- D
- E



### DISCHARGES TO ATMOSPHERE

Emissions to atmosphere generated from well intervention activities are associated with power generation using diesel fuelled engines. The main combustion product is carbon dioxide (CO<sub>2</sub>). A total of 6,048 tonnes of CO<sub>2</sub> was emitted from the sources described on the right:

#### EMISSIONS BY SOURCE

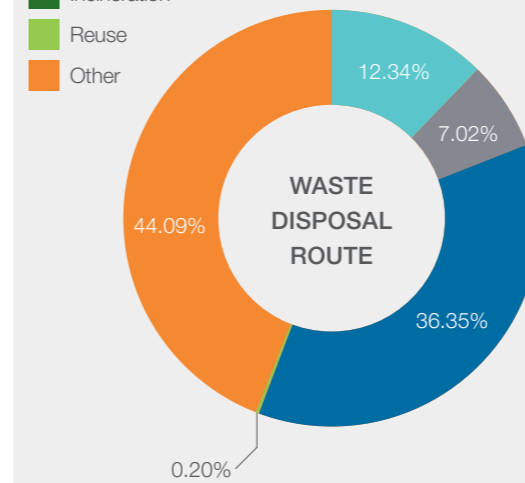


Source	VOCs	CH <sub>4</sub>	CO	SO <sub>x</sub>	NO <sub>x</sub>
Flare	0.00	0.00	0.00	0.00	0.00
Diesel	3.78	0.34	29.67	7.56	112.27
Fuel gas	0.00	0.00	0.00	0.00	0.00
Vent	0.00	0.00	0.00	0.00	0.00

## WASTE MANAGEMENT

A total of 171 tonnes of waste was brought onshore for disposal from the Island Innovator during its activities. A large proportion of this waste was contaminated oils (134 tonnes).

- Recycle
- Landfill
- Waste to Energy
- Incineration
- Reuse
- Other



## REPORTS AND NOTIFICATION

During its activities for Petrofac, one PON 1 Notification was submitted for the Island Innovator drilling rig. The total discharged was less than one tonne of fluid – the details of which are indicated below.

#### PON 1 Notification details

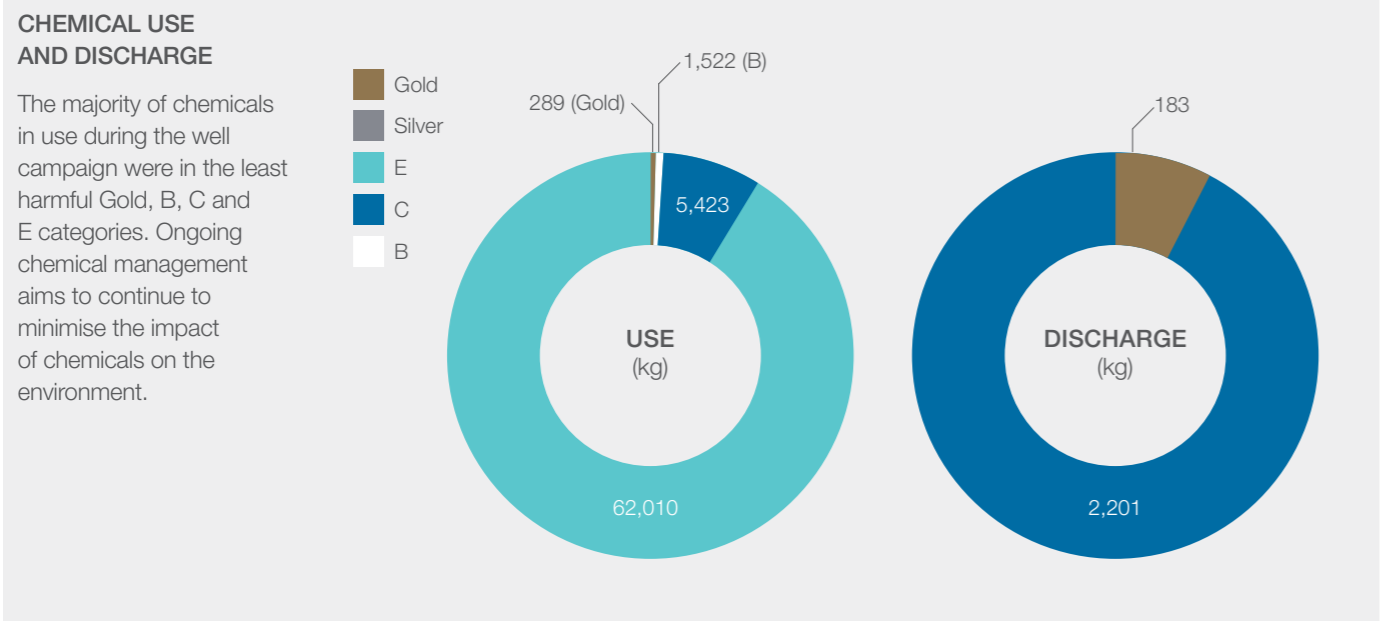
Activity	Oil/Chemical type	Discharge (t)
Running Completion Components- Loss of inhibited drill water	Chemicals: Nuosept 78 Safe-Scav NA Safe-Cor Safe-Scav HSN	0.0287

**ENVIRONMENTAL PERFORMANCE**

# WELL ENHANCER

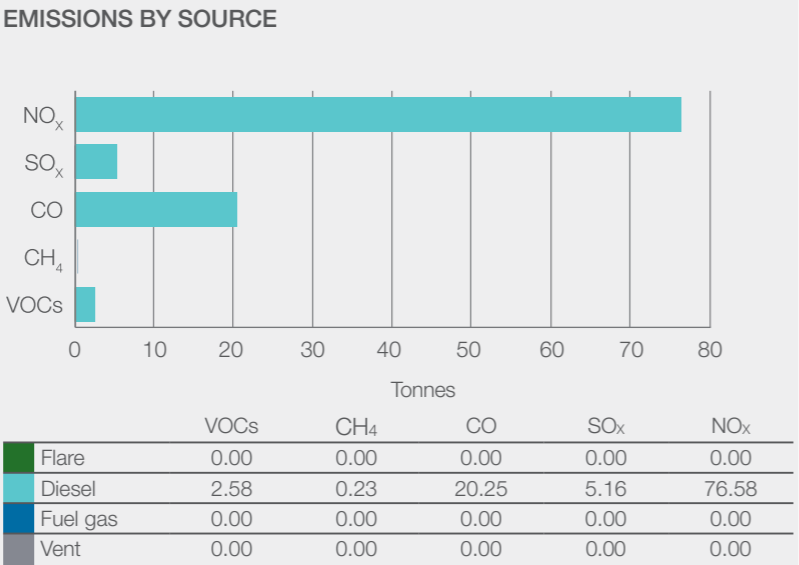
The Well Enhancer completed two well intervention campaigns in the North Sea between March and November 2022.

**DISCHARGES TO SEA**



**DISCHARGES TO ATMOSPHERE**

Emissions to atmosphere generated from well intervention activities are associated with power generation using diesel fuelled engines. The main combustion product is carbon dioxide (CO<sub>2</sub>). A total of 4,128 tonnes of CO<sub>2</sub> was emitted from the sources described on the right:



# ENVIRONMENTAL PERFORMANCE

## STENA DON

The Stena Don semi-submersible drilling rig completed two drilling campaigns in the North Sea between September 2022 and January 2023.

### DISCHARGES TO SEA

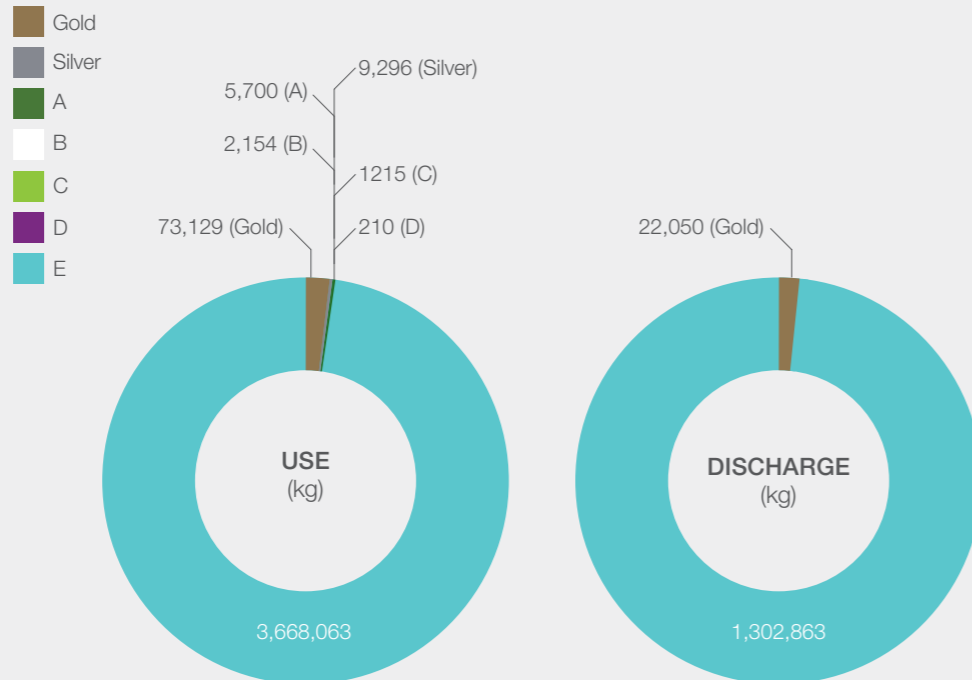
#### DRILLING DISCHARGE

A total of 806.244 tonnes of cuttings were discharged to sea during drilling operations. The total oil discharged associated with the cutting was 0.00 tonnes, with an average concentration of oil in the fluids of 0.00%.

	WELL 1	WELL 2
Total quantity of cuttings discharged (t)	570.38	235.864
Total quantity of oil discharged (t)	0.00	0.00
Average oil on oil bearing reservoir cuttings discharged (%)	0.00	0.00

#### CHEMICAL USE AND DISCHARGE

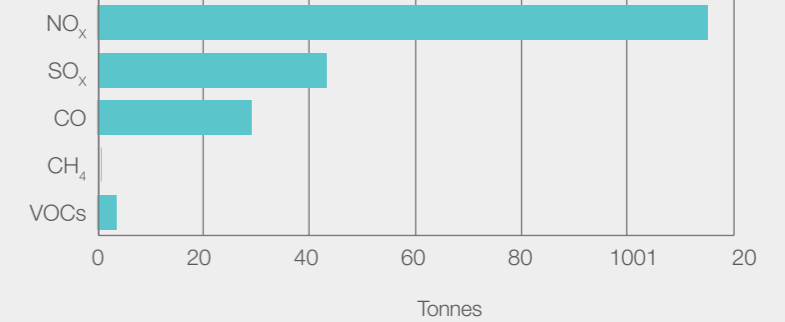
The majority of chemicals in use during the Stena Don campaign were in the Gold, Silver, A, B, C, D and E categories. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.



### DISCHARGES TO ATMOSPHERE

Emissions to atmosphere generated from drilling activities are associated with power generation using diesel fuelled engines. The main combustion product is carbon dioxide (CO<sub>2</sub>). A total of 6,165 tonnes of CO<sub>2</sub> was emitted from the sources described on the right:

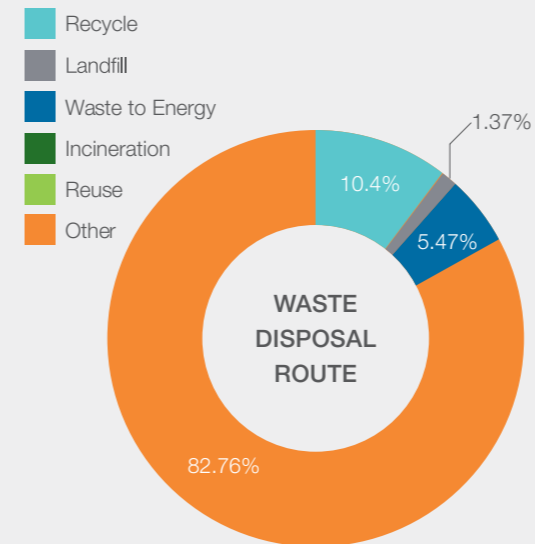
#### EMISSIONS BY SOURCE



Source	VOCs	CH <sub>4</sub>	CO	SO <sub>x</sub>	NO <sub>x</sub>
Flare	0.00	0.00	0.00	0.00	0.00
Diesel	3.86	0.35	30.24	42.34	114.44
Fuel Gas	0.00	0.00	0.00	0.00	0.00
Vent	0.00	0.00	0.00	0.00	0.00

### WASTE MANAGEMENT

A total of 58 tonnes of waste was brought onshore for disposal from the Stena Don during its activities. A large proportion of this waste was tank washings and sludges (35 tonnes) which included special wastes and required further treatment prior to disposal under licence.



### REPORTS AND NOTIFICATION

During its activities for Petrofac, no non-compliance notifications were submitted for the Stena Don drilling rig.





**CONTACT**

**Petrofac**

Bridge View, 1 North Esplanade West,  
Aberdeen, AB11 5QF, UK

**T:** +44 1224 247 109

**E:** [petrofac.environment@petrofac.com](mailto:petrofac.environment@petrofac.com)

**[www.petrofac.com](http://www.petrofac.com)**