



 **SERICAENERGY**

ENVIRONMENTAL STATEMENT

2023

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Chairman and Interim CEO's Letter

"During 2023, Serica increased in size and scale through the acquisition of Tailwind Energy and continued its focus on environmental performance, striving to reduce emissions and manage our impact on the natural environment."

During 2023, Serica increased in size and scale through the acquisition of Tailwind Energy and continued its focus on environmental performance, striving to reduce emissions and manage our impact on the natural environment. I am pleased to say we achieved two milestones on our operated Bruce facilities in 2023; reducing emissions through the introduction of a temporary power system during an extended maintenance period and overhauling the water injection system which reduced our oil in water discharges to sea by 70%. Our carbon intensity on Bruce is significantly lower than the UK average and we work hard to keep it that way.

Now, almost half our production comes from assets that are processed on facilities operated by other companies. We actively promote collaborative working throughout the company to share, encourage and influence our partners to reduce emissions and manage environmental performance. We are a supporter of the North Sea Transition Deal and work closely with the Regulator and industry bodies to promote the implementations of Emissions Reduction Action Plans and share best practice via industry forums.

Our contribution to the UK energy mix is even more significant now that we have grown, and we fully understand the importance of being a responsible operator. We lead by example by minimising our impact on the environment, whilst providing much needed oil and gas as well as supporting the wider economy through direct jobs, taxes and the supply chain. We involve all of our staff in this endeavour, using environmental targets in staff remuneration and providing regular communications on emissions reduction, flaring, waste, chemicals and oil in water.

In accordance with OSPAR's Convention for the Protection of the Marine Environment of the Northeast Atlantic, this annual statement focuses on our operations on the UK Continental Shelf (UKCS), providing an overview of all the environmental aspects that are of material relevance to us and our stakeholders. The topics covered in the Environmental Statement are:

- Atmospheric emissions
- Chemical use and discharge
- Oil discharges to sea and
- Waste



A handwritten signature in black ink, appearing to read 'David Latin', written in a cursive style.

David Latin
Chairman and Interim CEO

HSEQ Policy



Our Commitment

Serica is committed to conducting its business activities in a manner that assures the **health, safety** and **well-being** of our staff and contractor personnel whilst also safeguarding the environment within which we operate.

Principles

Serica's Operations Management System (OMS) provides an integrated and systematic approach to Health, Safety, Environmental and Quality (HSEQ) management and demonstrates how we:

- comply with all applicable legislation, industry standards and good practice
- promote a positive HSEQ culture through visible leadership commitment, personal accountability, communication and engagement with key stakeholders
- understand our risk profiles and apply a risk management process that reduces this risk to As Low As Reasonably Practicable (ALARP)
- ensure that HSEQ remains integral to the planning, design, construction, operation, maintenance and disposal of our assets
- promote environmental sustainability and the reduction of our carbon footprint
- provide staff with suitable information, instruction and training relevant to their duties and responsibilities

- maintain emergency response plans and the organisational capability to respond effectively to incidents and emergencies
- continually improve our HSEQ performance by defining performance objectives, monitoring and measuring results, and completing a programme of audit and assurance activities

Serica expects everyone involved in our activities to take responsibility and be accountable for compliance with this policy, our OMS, current legislation and all applicable regulatory requirements.

The Chief Executive Officer, supported by the Board of Directors, is accountable for the HSEQ performance of the company and shall ensure that sufficient resources are in place to implement this policy.

A handwritten signature in black ink, appearing to read 'David Latin'.

David Latin
Chairman and Interim CEO
April 2024

Serica Energy (UK) Limited

During 2023, Serica grew and diversified its business through acquisition, maintained its record of reserves replacement and prepared for significant new well programmes linked to its existing fields and infrastructure. The acquisition of Tailwind Energy Investments Ltd, was completed in March 2023 and has provided operational diversity and scale for Serica.

OSPAR Recommendation 2003/5 is to Promote the Use and Implementation of Environmental Management Systems (EMS) and the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) requires all operators of offshore installations to produce a Public Statement to report their environmental performance. These Public Statements are prepared on an annual basis (covering offshore installation activities carried out during the previous calendar year) and made available to the public.

In accordance with the above requirement, this report presents Serica Energy (UK) Ltd (SEUK) environmental performance for 2023.

SEUK core business is production from and development of its Northern North Sea (NNS) production asset, the Bruce Platform. It also has non-operated production from the Triton area, Columbus, Erskine and Orlando fields. Serica net production in 2023 averaged at circa. 40,100boe/d.

Bruce, Keith and Rhum (BKR) fields are produced into the Serica operated Bruce facilities, three bridge-linked platforms that accommodate over 100 people and provide over 5% of the UK's gas production. Oil and gas is processed on the platform and transported to shore via the Forties and Frigg pipelines.

The Triton area consists of subsea wells that produce from a number of fields tied back via pipelines to the Triton Floating Production, Storage and Offloading vessel (FPSO), which is operated by Dana Petroleum. Oil is then sent to refineries via tankers from the FPSO.

Orlando and Columbus are both single subsea wells, tied back to the Ninian and Shearwater facilities respectively. Serica operates the Columbus subsea wells and Petrofac operate the Orlando subsea wells. The host facilities are operated by third parties. Erskine is a field that produces via a small, non-manned platform that has five production wells



and the oil and gas is piped to the Harbour operated Lomond platform, where it is processed and transported via pipeline to shore.

SEUK prioritises an elevated level of environmental performance across all operations and sets measurable and meaningful Health, Safety and Environmental (HSE) Key Performance Indicators (KPIs) designed to both maintain existing high standards and drive continuous improvement. These include environmental KPIs which are linked to the Company's employee bonus scheme and are aligned with the North Sea Transition Deal (NSTD), Energy White Paper ambitions and the World Bank Zero Flaring Initiative.

Environmental Management System (EMS)

The SEUK Operations Management System (OMS) provides the framework for systematic management of HSEQ across the SEUK organisation and is designed to ensure the delivery of safe, environmentally responsible, and reliable operations in accordance with defined policies, practices, procedures, and standards.

The EMS, contained within the OMS, covers aspects of environmental management, such as chemical management, pollution prevention and control and emissions management, and is designed to achieve SEUK's corporate expectation to implement best practice above and beyond the requirements of the regulations.

The structure and content of the OMS recognises the principles of HSG65 (Managing for health and safety), ISO 45001 (Occupational Health and Safety Management Systems), ISO 14001 (Environmental Management Systems) and ensures that risks to health and safety of personnel and to the environment are reduced to As Low as Reasonably Practicable (ALARP).

SEUK's EMS was successfully reverified against the requirements of OSPAR 2003/5 in May 2023 by LRQA Limited.

North Sea Operations

OPERATED PRODUCTION

The Bruce, Keith and Rhum Fields

The Bruce Platform is located on the United Kingdom's Continental Shelf (UKCS) 148 km East of Shetland and 17 km West of the UK and Norwegian median line in water depths of 122 meters in the NNS.

The Bruce facilities, operated by SEUK, consist of:

- The Bruce and adjacent Keith and Western Area Development (WAD) fields, located in UKCS Blocks 9/8a, 9/9a and 9/9b.
- The Rhum gas field (3/29a), situated 44km North of Bruce and tied back via a subsea manifold and pipeline.

Oil is exported via the Forties Pipeline System to Cruden Bay, near Peterhead, and to the Kinneil Terminal in Grangemouth and Gas is exported to St Fergus via the Frigg pipeline.

Serica's net production in 2023 for BKR averaged circa. 19,000 boe/d.

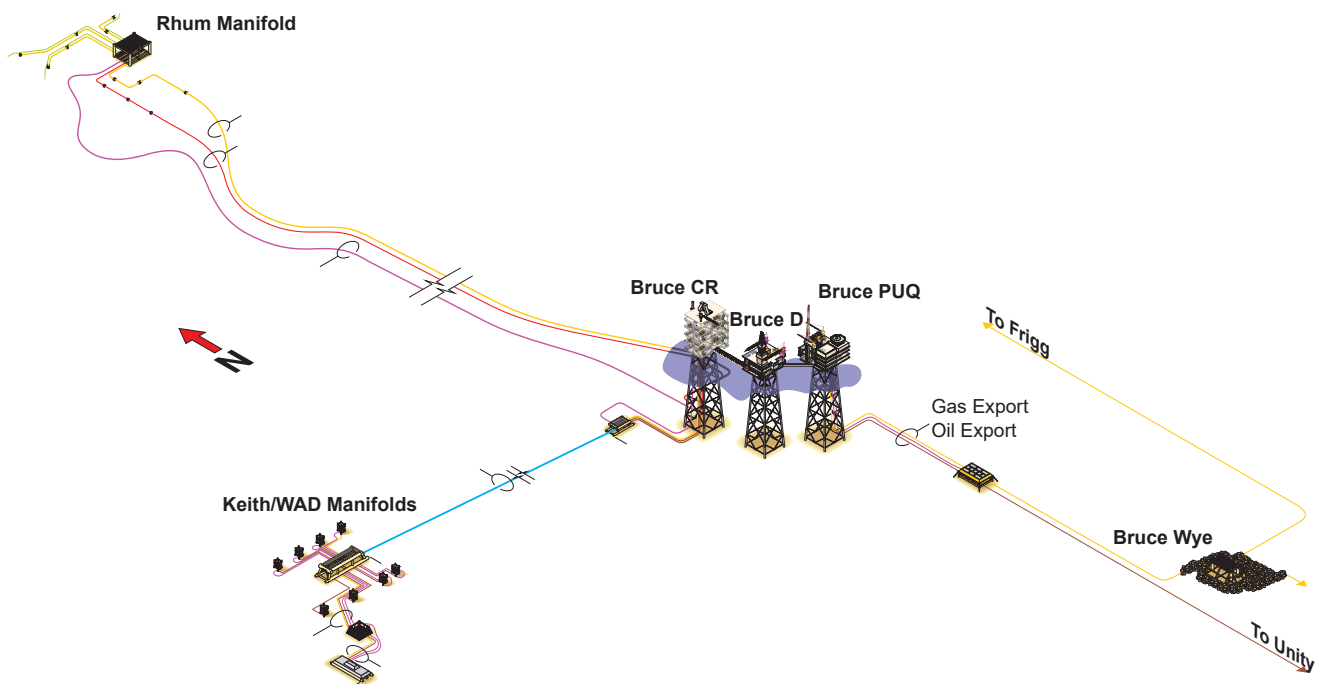


Figure 1 – BKR Fields, Pipeline and Platform Schematic

North Sea Operations

Columbus

The Columbus gas condensate field (23/16f) contains a single subsea production well that was successfully drilled in Q2 2021 and commenced production in November 2021. The pipeline and umbilical were installed and connected to a tie-in manifold structure on the Shell Arran pipeline that comingles and exports hydrocarbons to the Shell operated Shearwater Platform approximately 43 km southwest of the Columbus well.

Hydrocarbons (predominantly gas/gas condensate) from the Columbus Field are exported to shore from the Shearwater Platform, gas to St Fergus via the SEGAL pipeline and condensate/oil via the Forties pipeline to Cruden Bay.

Serica's net production in 2023 for Columbus averaged circa. 2,180 boe/d.

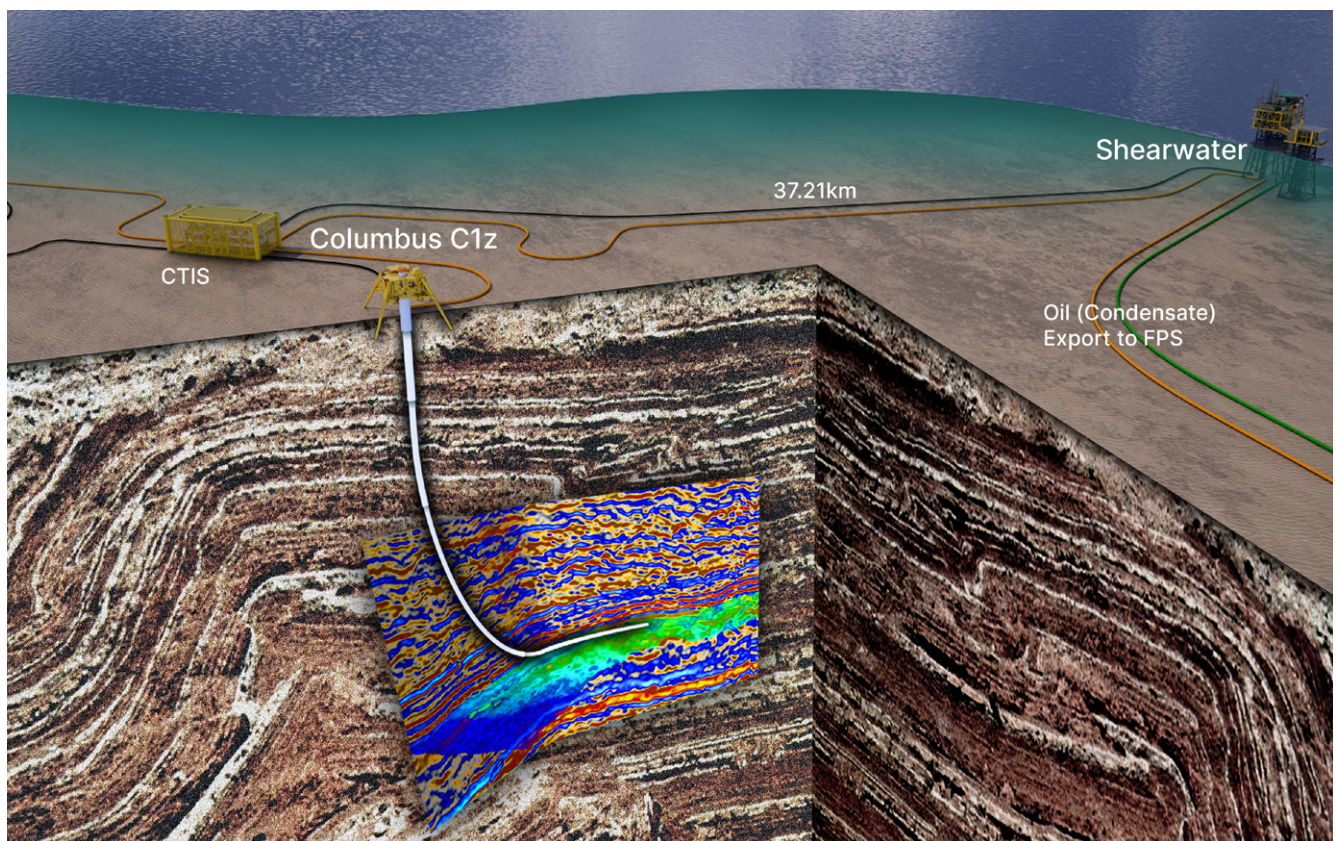


Figure 2 Columbus

NON-OPERATED PRODUCTION

Triton Area

The Triton Area consists of seven producing oil fields developed via common infrastructure in the UK Central North Sea, located approximately 190km east of Aberdeen. The seven fields currently producing oil and gas via the Triton FPSO, are Bittern, Guillemot West, Guillemot North-West, Gannet E, Clapham, Pict and Saxon. Dana Petroleum (E&P) Limited (Dana) and Waldorf Production UK Plc (Waldorf) are our partners in the Triton cluster. Dana currently operates the Triton FPSO along with the Clapham, Saxon, Pict and Guillemot West fields. The fluids produced from the Triton field are transported via a subsea pipeline to the Triton FPSO for onward processing and export.

Serica's net production in 2023 for Triton averaged at circa. 14,150 boe/d.

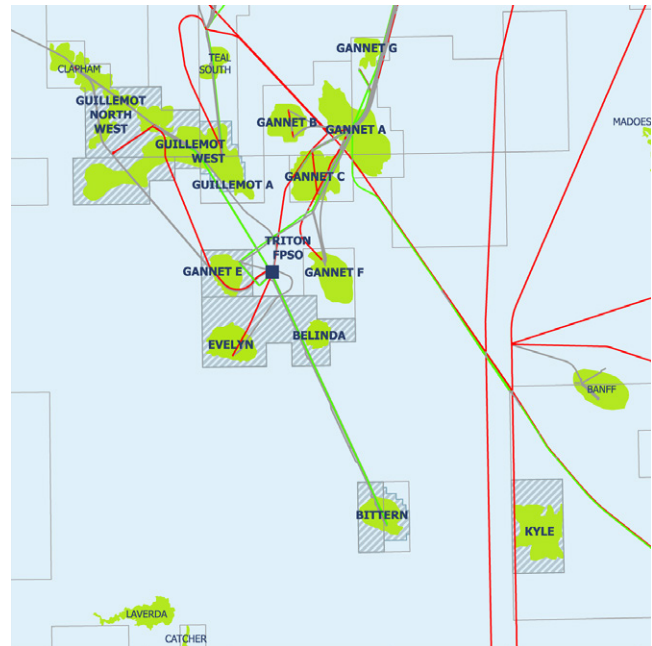


Figure 3 Triton location

Erskine

Serica holds an 18% non-operating interest in the Erskine gas condensate field, which is located in the Central North Sea (UK) and operated by Ithaca Energy.

The field is High Pressure High Temperature (HPHT) with the main reserves lying in three separate but overlying Jurassic sandstone producing horizons. It was originally discovered in 1981 and five wells have thus far been developed.

The production facilities comprise of a normally unattended installation located at the Erskine field with production handled and controlled from the Harbour Energy (32%) operated Lomond Platform. Erskine condensate is exported through the Forties Pipeline System via the Central Area Transmission System (known as CATS) riser platform at Everest and gas is exported via the CATS pipeline to the CATS terminal at Teesside. Serica's net production in 2023 for Erskine averaged circa. 1,325 boe/d.

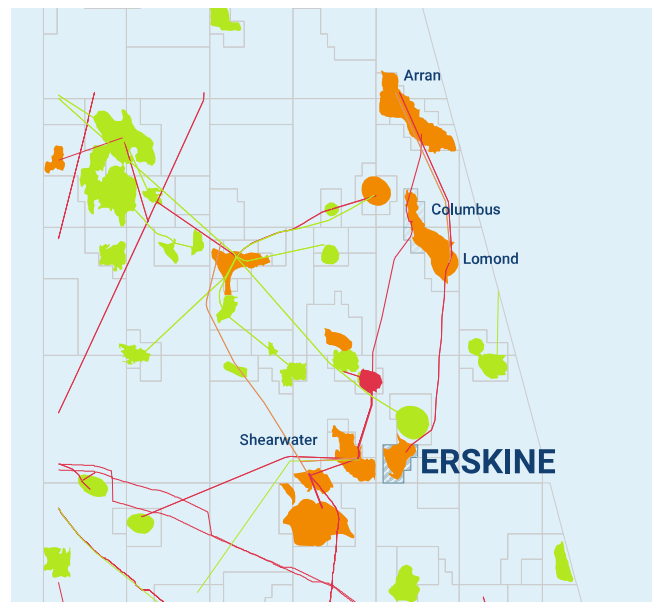


Figure 4 Erskine Location

Orlando

The Orlando Field is located in the Northern North Sea approximately 127km east of Shetland, 17km from the UK/Norway Median Line and 11km north-east of the Canadian Natural Resources International (CNRI) operated Ninian Central Platform (NCP).

The Orlando asset consists of a single producing well tied back to the Ninian Central Platform (NCP). SEUK is Licence Holder of the Orlando Field and is also the pipeline operator and Petrofac are the Well Operator. The Orlando hydrocarbons are produced through an 8"/12", 11.5km long pipe-in-pipe production line to NCP and into the Orlando separator.

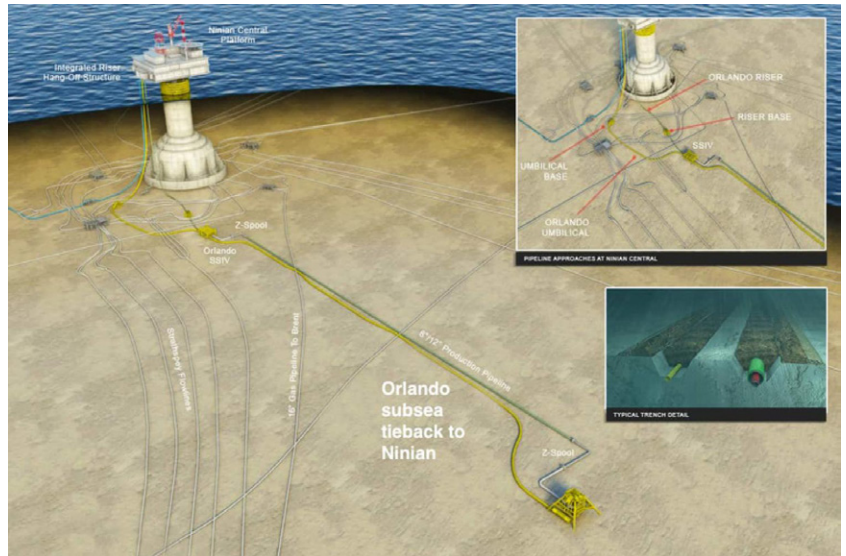


Figure 5 Orlando

The Orlando hydrocarbons are produced through an 8"/12", 11.5km long pipe-in-pipe production line to NCP and into the Orlando separator. Following separation, Orlando oil is routed via the Orlando metering package, Following separation, to co-mingle with Brent oil upstream of the Brent oil heater/cooler. The fluids then pass through the Brent Low Pressure Separator, before leaving for export via the Strathspey metering package. Gas can be channelled to either fuel or to flare. NCP does not have gas export facilities, and gas is therefore used as either fuel gas or flared.

Serica's net production in 2023 for Orlando averaged circa. 3,500 boe/d.

EXPLORATION

North Eigg

Serica was awarded the P2501 License in December 2019, comprised of Blocks 3/24c and 3/29c which contained the North and South Eigg prospects. The prospects were assessed to be of high pressure and temperature (HPHT) and share similar geological characteristics to the adjacent Rhum Field. The 3/24c-6B North Eigg exploration well was drilled to a depth of 5,099 meters in the Jurassic Heather formation, completing in early 2023. Following detailed interpretation of the well results, Serica decided there was insufficient accessible oil to justify re-entering the suspended well and drilling a sidetrack. In late 2023 a vessel-based abandonment of the North Eigg exploration well was completed and the licence will be relinquished in 2024.

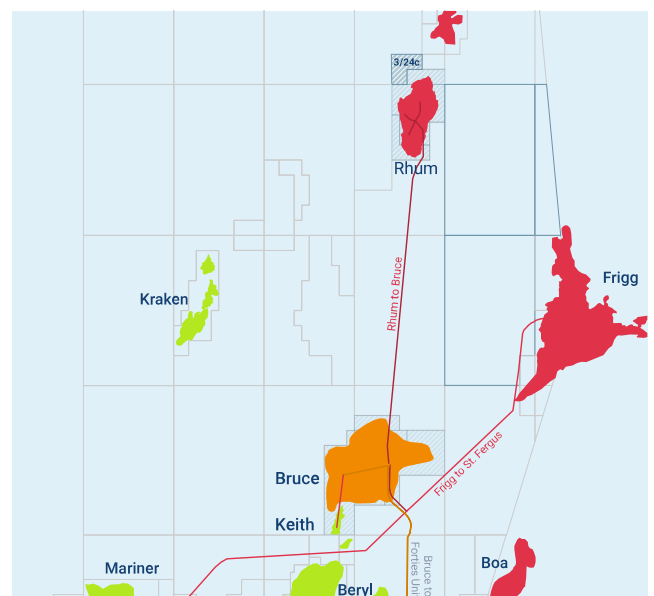


Figure 6 North Eigg Exploration Location

Environmental Performance

SEUK has a strong focus on integrating environmental performance into everyday planning and operations. Key Performance Indicators (KPIs) are set on a yearly basis and primarily cover BKR operations.

In 2023 BKR KPI's included:

- Daily Category A flaring below 9.5 tonnes
- Scope 1 Carbon Intensity below 17kg CO₂/boe
- Produced CO₂ below 200,000 tonnes
- Total flare below 5000 tonnes
- Waste generated offshore (general waste and dry mixed recyclables) below 90 tonnes

All emissions related KPIs were designed to ensure SEUK progresses towards achieving the UK and industry climate change objectives as outlined in the NSTD and the Energy White Paper.

Emissions and discharges associated with Triton, Columbus, Erskine and Orlando are not included in SEUK reporting as they are reported via other oil and gas operators.

Atmospherics – BKR

Serica is fully aligned to the emission reduction targets as set out in the North Sea Transition Deal (NSTD), which commits the UK oil and gas industry to reduce absolute emissions by 10% by 2025, by 25% by 2027, 50% by 2030, and become Net Zero by 2050 from a 2018 baseline. Serica also supports the World Bank’s target of reaching zero routine flaring by 2030.

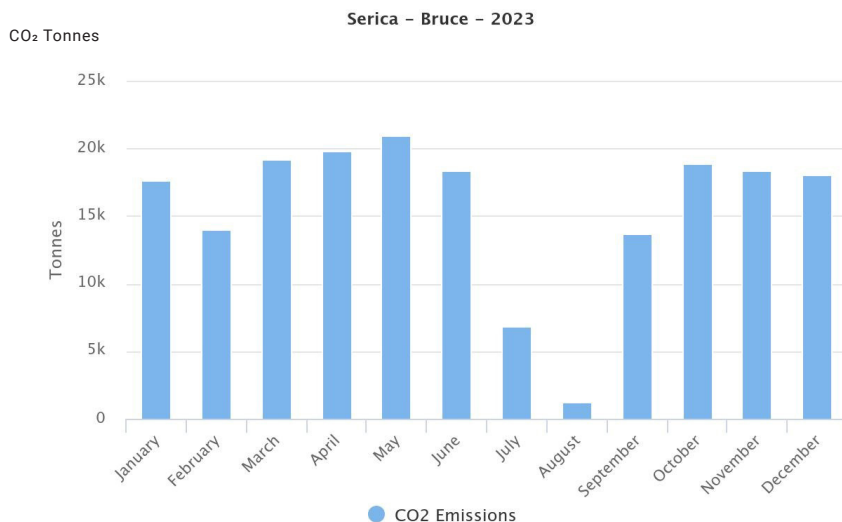
The environmental targets put in place in 2023 included:

- Limiting total Scope 1 emissions to below 200,000 tonnes of CO₂
- Limiting total volumes of flared gas to under 5,000 tonnes

In 2023, Serica achieved both targets, with total Scope 1 emissions(as reported under the UK Emissions Trading Scheme) reaching 179,447 tonnes of CO₂ by the end of the year. This was 39,120 tonnes of CO₂ less than in 2022 and represents a decrease of 18% - see Figure 5. Total flaring volumes of CO₂ were limited to 4,708 tonnes. The main contributors to this reduction was steady production and use of fuel gas and the successful implementation of the temporary power generators installed for the summer maintenance shutdown, which saved approximately 5,500 tonnes of CO₂ from being emitted.

2023 CO₂ emissions reflect a 29% reduction relative to the 2018 baseline of 252,236 tonnes of CO₂.

Figure 7 Monthly CO₂ emissions from the Bruce Platform (UK-ETS-2024)



Environmental Performance continued

Carbon Intensity is a metric that helps us to understand the amount of CO₂ emitted per unit of hydrocarbon produced, reported as kilograms of CO₂ per barrel of oil equivalent (boe) exported from the platform.

In 2023, SEUK achieved a reduction in the carbon intensity of its oil and gas production. The 2023 carbon intensity was 16.36 CO₂/boe. This is 12.64kg CO₂/boe lower than the 2022 NSTA platform definition for Bruce for small platform assets >25 years old and 0.01 kg of CO₂/boe lower than the 2022 SEUK carbon intensity value.

In 2023 the combustion of BKR fuel gas for the compression train and power generation accounted for 90% of the Bruce Platform’s overall CO₂ emissions – see Figure 6 and this was also the largest contributor to non CO₂ GHG emissions (see Figure 7).. Total CO₂ emissions from the combustion of fuel gas on the Bruce Platform totalled 161,165 tonnes of CO₂ (UK-ETS). Total CH₄ from fuel gas consumption in the platform’s Open Cycle Gas Turbines (OCGT) equalled 60.4 tonnes (EEMS) with NO_x emissions totalling 400.47 tonnes (EEMS).

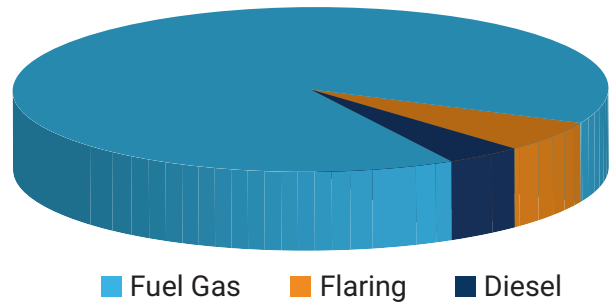
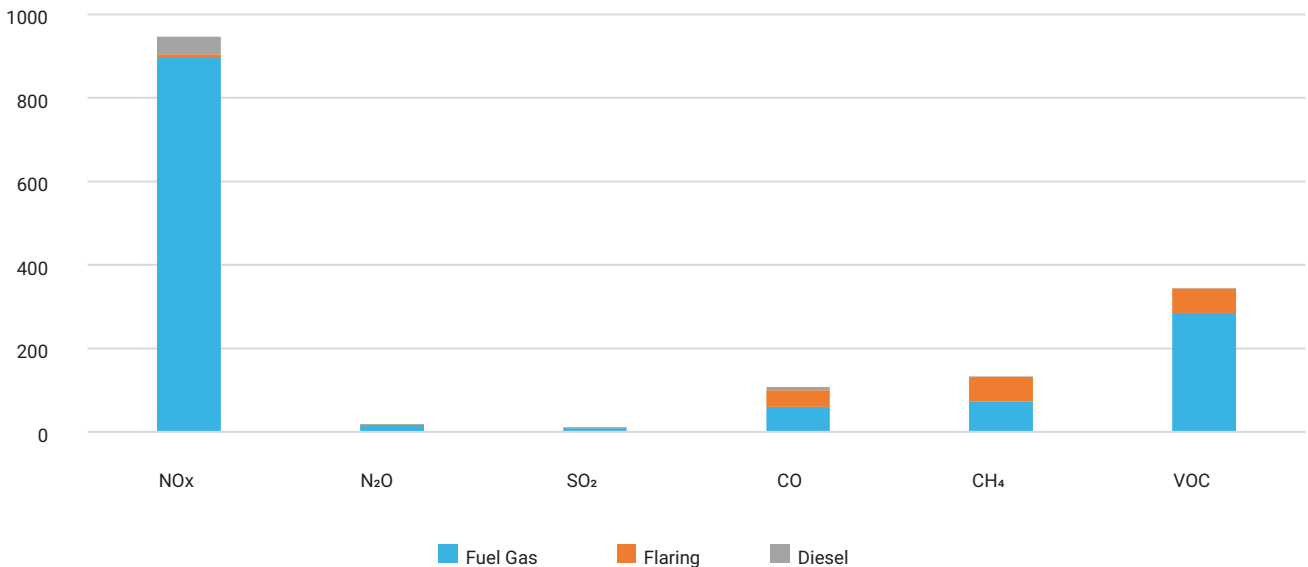


Figure 8 Total CO₂ emissions by source (UK-ETS-2024)

Sampling and testing of turbine exhaust stack gases took place from the 1st to 6th December 2023 and covered the emissions measurement of two items of Low Combustion Plant (LCP equipment); namely the Rolls Royce RB211 power generation turbine (PG-B/CTG41300B) operating on fuel gas at one load point and Rolls Royce RB211 gas export driver gas turbine (MPX-A/CTG07300A) operating on fuel gas at two load points. The testing shows that the items of LCP on the Bruce platform will not exceed the NO_x emissions limit value (ELV) of 350 mg/Nm³ and therefore it will not be necessary to seek derogation from the regulator for these units.

Figure 9 Total GHG emissions by source(Tonnes) (EEMS 2024)



Environmental Performance continued

Diesel Consumption

Diesel is used to fuel the power generators when the plant is offline and fuel gas is unavailable. Diesel is also used to fuel smaller pieces of equipment such as lifeboats, fire pumps, and temporary equipment such as air compressors etc. When the plant is down for significant periods of time, such as during a prolonged period of maintenance, diesel consumption can increase.

Diesel use emits more CO₂ than fuel gas (by approximately 1 tonne of CO₂ per tonne of fuel) and results in higher NO_x, SO₂ and VOC emissions; this is why SEUK tries to keep its usage as low as reasonably practicable. 2023 saw 34.8% less diesel consumed on the Bruce Platform compared to 2022. This is due in part to the use of smaller temporary power units during the TAR and continued availability of platform fuel gas throughout 2023.

Table 1 – Breakdown of Emissions from Diesel Consumption (Emtrax EEMS 2024) Flaring

	Total Use (tonnes)	CO ₂ (tonnes)	NO _x (tonnes)	N ₂ O (tonnes)	SO ₂ (tonnes)	CO (tonnes)	CH ₄ (tonnes)	VOC (tonnes)
Turbines	1,688.33	5,338.6	22.5	0.37	3.33	1.53	0.06	0.49
Engines	679.61	2,174.75	40.37	0.15	1.36	10.67	0.12	1.36

Flaring

Reducing flaring from our operations is a priority for SEUK; in 2023 our flaring volume decreased by 1056 tonnes compared to 2022. This can be attributed in part to the extended plant shutdown that happened in July/August 2023. The total flared hydrocarbon mass in 2023 was 4,764.9 tonnes. In 2023, the total CO₂ emissions from High Pressure (HP) flaring was 3,472.36 tonnes and 1,292.55 tonnes from the Low Pressure (LP) flare.

SEUK continues to set ambitious flare reduction targets in 2024 to strive for continuous improvement.

Table 2 Flaring volume per month (EEMS 2024)

Month	HP Flaring: Flare Gas: Gross	LP Flaring: Flare Gas: Gross	Monthly Total
	(tonnes)	(tonnes)	(tonnes)
January	194.31	108.87	303.18
February	199.72	92.43	292.14
March	657.613	97.426	755.04
April	297.17	94.09	391.26
May	181.69	99.59	281.27
June	156.90	118.50	275.40
July	201.97	107.40	309.37
August	685.16	102.59	787.75
September	1,232.66	119.97	1,352.63
October	286.88	145.71	432.59
November	218.707	152.354	371.06
December	148.952	151.169	300.12
Totals	4,461.74	1,390.08	5,851.82

Environmental Performance continued

Chemical Use and Discharge

The use and discharge of chemicals offshore is regulated by the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED). This is managed through the Offshore Chemical Regulations (OCR) (2002) (as amended). Most chemicals used offshore are regulated, requiring a risk assessment and approval for their use and discharge.

All chemicals that are regulated under OCR have been tested to evaluate their toxicity, bio accumulation and bio degradation, and are ranked according to their potential to cause harm to the receiving environment. All chemicals will either get an A to E classification or a Purple to Gold colour banding – see Table 4 and 5. The most hazardous chemicals carry a substitution (SUB) warning label, and operators are required to strive to reduce their usage of SUB chemicals and justify continued usage. It is hoped that the Bruce platform will eradicate the use of SUB chemicals in the coming years, and our goal is to reduce chemical usage wherever possible.

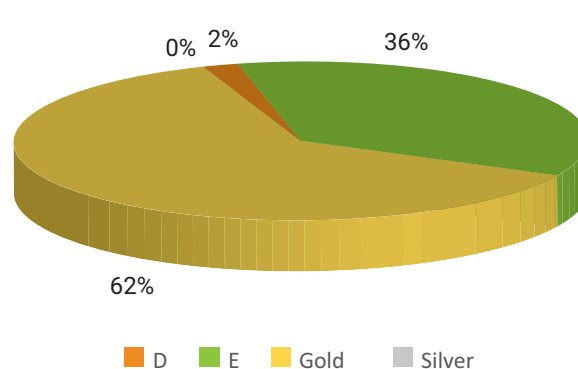
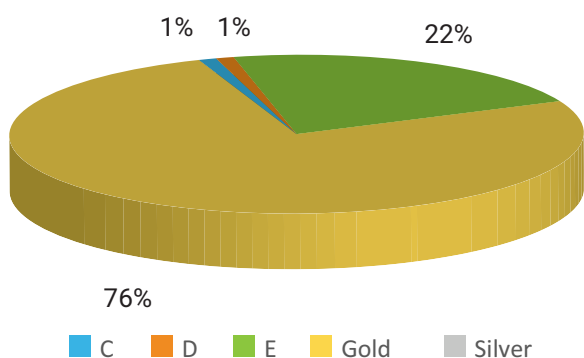
Table 3 Initial OCNS groupings (cefas.co.uk)

Initial grouping	A	B	C	D	E
Result for aquatic-toxicity data (ppm)	<1	>1-10	>10-100	>100-1,000	>1,000
Result for sediment-toxicity data (ppm)	<10	>10-100	>100-1,000	>1,000-10,000	>10,000

Table 4 OCNS HQ and Colour Bands

Minimum HQ value	Maximum HQ value	Colour banding	
>0	<1	Gold	Lowest hazard  Highest hazard
≥1	<30	Silver	
≥30	<100	White	
≥100	<300	Blue	
≥300	<1,000	Orange	
≥1,000		Purple	

Graphs 5 and 6 below present chemical use and discharge by chemical ranking. As can be seen no OCNS group A or B chemicals were used or discharged in 2023.



Graph 5 Chemical Usage

Graph 6 Bruce Chemical Discharge

Environmental Performance continued

BKR Operations

2023 BKR offshore operations used a total of 228,821kg of chemicals. This is reduced from the 2022 figure of 288,581kg and 2021 figure of 303,910 kg. Produced water re-injection (PWRI) into Well C5 re-commenced in April 2023 and this has led to a reduction in the volume of chemicals required. The reduction in chemical usage can also be attributed to improved chemical management and the summer maintenance shutdown (TAR). During this time the platform is not producing any oil or gas and thus does not use large amounts of production chemicals.

The 2023 figure can be further broken down to 119,624kg being discharged to sea including 58,652 kg of which is considered to Pose Little or No Risk to the Environment (PLONOR) (49%). The most used chemical in 2023 was HSCV10610A 237,250kg. This is an H₂S scavenger required to remove H₂S from the gas phase. This chemical helps reduce corrosion and improves plant safety by removing a toxic gas.

Produced water re-injection (PWRI) into Well C5 re-commenced in April 2023 and this has led to a reduction in the volume of chemicals required.

The Bruce platform submitted no Offshore Chemical Non-Compliance Reports (NCR) to the regulator in 2023.

Projects

Throughout 2023 Serica undertook a range of subsea and well activities including wellhead maintenance, intervention campaigns and decommissioning work. We can report that we completed our project scopes with minimal environmental impact. We aim to maintain, if not better this performance, in the years to come by continuing to build our relationships with our contractors and encourage a strong environmental culture.

Light Well Intervention Campaign (LWIV)

During the Autumn and Winter of 2023, Serica carried out a Light Well Intervention Campaign using Helix Energy Solutions Group's vessel the Well Enhancer. The campaign focused on three wells within the Bruce WAD Field with the intention of increasing production at these wells. Operations were completed with only one chemical non-compliance.

Keith and North Eigg Plug and Abandonment (P&A) Campaigns

During November of 2023 Serica began the first phase of the decommissioning commitment as outlined in the NSTA's Decommissioning Strategy. Using the Siem Day vessel, four Keith wells were successfully moved to AB3 status by using wellhead severance methods and setting environmental plugs. After our operations at Keith, the vessel went to North Eigg to fully abandon the three spud locations of the exploration wells that were drilled earlier in the year. Both aspects of the campaign had high levels of environmental compliance with no incidents occurring throughout the duration of the campaign.

Discharges to Sea

BKR wells produce a mixture of crude oil, water, condensate, and gas. Following separation, produced water is either re-injected via a dedicated well or cleaned to permitted oil in water concentrations using a deoiling package and discharged overboard.

Routine discharge and re-injection of produced water is closely monitored and monthly concentrations of oil in produced water (OiPW), and mass of dispersed oil discharged are recorded, and reported to OPRED, as per the conditions of the Oil Discharge Permit under the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (as amended) (OPPC permit).

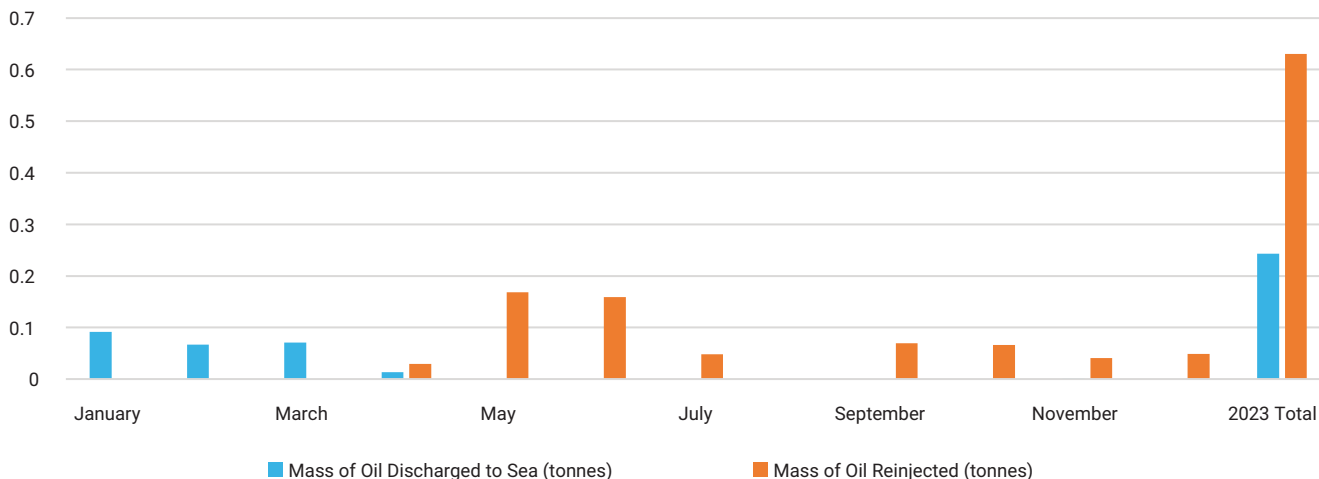
As mentioned above, the PWRI package was reinstated in April 2023 and over the course of its operation in 2023 achieved an uptime of 93% and reduced discharges to sea by 70%.

A total of 3,235 m³ of produced water was discharged overboard after treatment by the deoiling package. A total of 0.24 tonnes of oil was discharged to sea at an average oil in produced water concentration of 18.39 mg/l.

In 2023 a total of 27,688 m³ of produced water was reinjected into well A5(C5). A total of 0.63 tonnes of oil was reinjected at an average oil in produced water concentration of 22.77 mg/l.

Environmental Performance continued

Figure 10 2023 Oil in Produced Water Discharges



SEUK reported two OPPC Non-Compliance Reports (NCRs) in 2023, The first relates to an individual oil in water analysis result exceeding 100mg/l following a plant restart and the second one was for exceeding 30mg/l (av) for the month of February 2023. Both events would not have been reportable if the plant had been reinjecting produced water.

SEUK submitted two Petroleum Operation Notifications 1s (PON1s) in 2023 relating to oil releases from the Bruce Platform. In total, 0.0012 tonnes of oil were attributed to the Bruce Platform in the form of PON1s. This is a slight reduction when compared to 2022 discharge levels.

Following repair work during the 2023 TAR , SEUK was able to close a PON1 that was first reported in 2021. This amounted to a total of 8,058 kg of hydraulic fluid Oceanic HW443ND over the two years. The chemical is a Gold band hydraulic fluid and is therefore of low hazard to the environment. 0 kg of this chemical was released to sea in 2023.

Projects

SEUK submitted 2 PON1s during our North Eigg drilling operations for the loss of:

1. 932.5kg of water-based mud to sea. This was as a result of an open valve on a subsea pump outlet manifold on the riserless mud recovery system.
2. 1kg of hydraulic fluid to sea. During a period of adverse weather, one of the control lines on the marine riser tensioner ring hydraulic control umbilical, in the moonpool area, failed due to wave impact.

During well abandonment operations on Columbus, a PON1 was submitted for 409.15kg of oil-based mud being lost to sea when the debris cap was removed during normal well abandonment operations.

During vessel based diving operations at Bruce, 0.51kg of hydraulic oil was lost to sea due to a hose failure. This resulted in a PON1 being submitted to OPRED.

Environmental Performance continued

Waste

Waste is generated offshore during oil and gas production operations. This waste can be categorised as either liquid or solid waste. These waste streams are strictly regulated and covered separately under permits for authorised chemical disposal.

Liquid waste streams can include produced water, chemicals or oils. Some of the produced water can be shipped to shore, injected down-hole or discharged to sea.

Solid waste streams require shipping onshore for appropriate treatment, recycling, or disposal, in line with the Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008 (as amended) which prohibit the disposal of solid waste at sea. These waste items include scrap metal, barrels, wood, plastics, cardboard, aluminium cans, medical waste and WEEE (Waste Electrical and Electronic Equipment).

The volume of waste generated, and its type, is entirely dependent on the activities being conducted. SEUK has robust arrangements in place for the management and segregation of waste materials generated by its BKR operations, through application of its Waste Management procedures. SEUK’s waste policy is that where possible, waste should be eliminated and minimised according to the waste hierarchy.

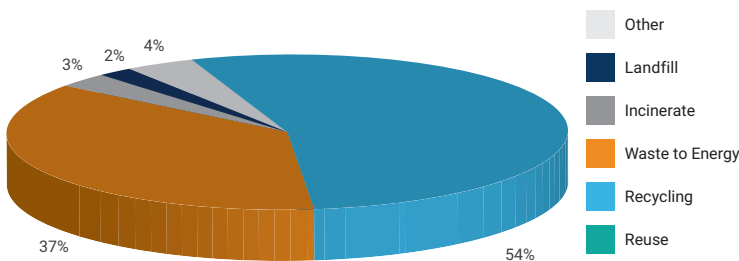
To help drive waste management improvement the Bruce platform had two 2023 waste performance targets:

1. Achieve at least 90% waste that is Reused, Recycled or sent to the Waste to Energy plant.
2. Produce less than 90 tonnes of General Waste and Dry Mixed Recyclables.

In 2023 the Bruce platform achieved 82% for waste that is Reused, Recycled or sent to the Waste to Energy plant and produced 105 tonnes of General Waste and Dry Mixed Recyclables.

Figure 11 shows the split of 2023 Bruce waste by disposal route.

Figure 11 % of Waste by Method of Disposal (EEMS 2024)



In 2023, Bruce platform generated 304 tonnes of solid waste. Overall, in 2023 SEUK saw a 16% increase in the overall volume of waste generated by the platform. This can be attributed in part to increased production and an extended offshore maintenance campaign.

In terms of reducing waste going to landfill, the Bruce platform has reduced this figure each year since 2020 – see Figure 13.

Figure 13 Tonnes of waste going to landfill per annum

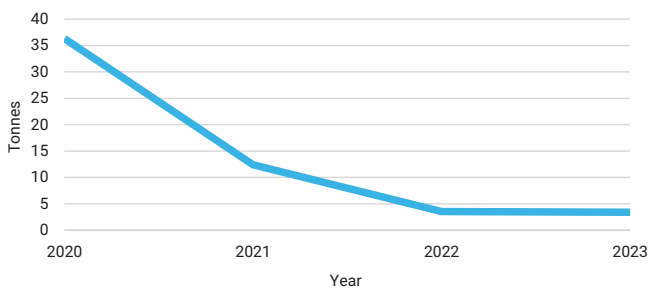


Figure 13 shows the steady decrease in waste going to landfill since 2020.

In 2023, SEUK will continue to investigate ways in which waste can be removed or reduced at source. We believe that a focus on engagement and constructive interaction with the supply chain, supplemented by input from our ESG champions and workforce, is the best way to achieve a continued reduction in waste.

List of Abbreviations

3D	three-dimensional
ALARP	As Low as Reasonably Practicable
boe/d	barrels of oil equivalent (barrels of oil, condensate and LPG plus the heating equivalent of gas converted into barrels at the appropriate rate) produced per day
BKR	Bruce, Keith and Rhum fields
CH₄	Methane
CO	Carbon Monoxide
CO₂	Carbon Dioxide
EEMS	Environmental and Emissions Monitoring System
EMS	Environmental Management System
ESG	Environment, Social & Governance
GHG	Greenhouse Gas
HP	High Pressure
HPHT	High Pressure High Temperature
HSE	Health, Safety and Environmental
HSEQ	Health, Safety, Environment & Quality
KPIs	Key Performance Indicators
LP	Low Pressure
mg/l	milligrams per litre
mmboe	million barrels of oil equivalent
mmscfd	million standard cubic feet per day
NNS	Northern North Sea
NO_x	Nitrogen Oxides
NCR	Non-compliance report
OCR	Offshore Chemicals Regulations
OCNS	Offshore Chemical Notification Scheme
OCGT	Open Cycle Gas Turbines
OGA	Oil and Gas Authority
OiPW	Oil in Produced Water
OMS	Operations Management System
OPPC	Oil Pollution Prevention & Control
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning
OSPAR	Oslo Paris Convention
PLONOR	Pose little or no risk to the environment
PON	Petroleum Operations Notification
PWRI	Produced Water Re-injection
SEUK	Serica Energy (UK) Limited
SO₂	Sulphur Dioxide
SSIV	Subsea Isolation Valves
SUB	Substitution
UKCS	United Kingdom Continental Shelf
VOC	Volatile Organic Compound
WAD	Western Area Development
WEEE	Waste, Electrical & Electronic Equipment



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