SERICAENERGY

ENVIRONMENTAL STATEMENT

2020

WELCOME

Reporting on Serica Energy's first full year as operator of BKR

On 31st of December 2019 Serica concluded its first full year as operator of one of the country's most important energy assets; the Bruce, Keith and Rhum (BKR) fields in the UK North Sea. The Bruce Platform handles up to 40,000 boe/d gross gas and liquids on behalf of the Company and its partners, meaning that Serica is responsible for up to 5% of the UK's gas production.

Our portfolio also includes a non-operated (18%) interest in the producing Erskine field and exploration licences in the UK North Sea and Namibia.

As a modern, dynamic company operating in a rapidly evolving energy sector, Serica recognises the need to lead a responsible business, where our team feels empowered to address some of the significant changes facing our industry in an innovative manner. During 2019 the team not only increased Serica's annual production by ~18% but also reduced platform emissions.

In May of 2020 Serica published its inaugural Environmental, Social and Governance (ESG) Report, explaining our approach to ESG in relation to the UN Sustainable Development Goals which are helping us to frame our strategy. We also aligned our ESG report with the internationally recognised Global Reporting Initiative (GRI) Core Option, enabling comparison with our peers and other industry sectors.

Looking ahead, our leadership and highly experienced Board are committed to putting environmental performance at the forefront of our future operations.

In line with the requirements of the OSPAR Convention for the Protection of the Marine Environment of the North East Atlantic, this Annual Environmental Statement focuses on our operations and portfolio on the UK Continental Shelf. It provides an overview of the environmental management system (EMS), and provides key environmental data on the following topics:

- Atmospheric emissions
- Chemical use and discharge
- Oil in produced water
- Waste management.

Mitch Flegg
Chief Executive Officer

Serica Energy's HSEQ Policy

HEALTH, SAFETY, ENVIRONMENTAL AND QUALITY (HSEQ) POLICY

Our Commitment

Serica is committed to conducting its business activities in a manner that assures the **health**, **safety** and **wellbeing** 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 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.

Mitch Flegg
Chief Executive Officer
February 2020

SAFE | RELIABLE | RESPONSIBLE

SERICAENERGY

Serica Energy's North Sea Portfolio

Serica Energy plc (Serica) is an experienced, independent upstream oil and gas company

Serica now has a balanced and well-established, North-Sea focused portfolio.

Serica focuses the skills of its team of 140+ personnel on adding value to existing assets and exploring sustainable opportunities for growth.

In the North Sea, Serica produces approximately 40,000 boe/d gross gas and liquids on per day via the Bruce Platform.

Serica is both the Duty Holder and Well Operator for the BKR assets as defined by the Offshore Installations (Offshore Safety Directive), (Safety Case etc.) Regulations 2015 (SCR 2015) and the Offshore Petroleum Licensing (Offshore Safety Directive) Regulations 2015.

Over 80% of our production is natural gas, which has significant environmental advantages over other fossil fuels. Gas is a key element of the UK's Energy Transition, and we are committed to building a sustainable future, both through driving asset efficiency with technology and innovation, and by investing in the region, creating new job and training opportunities, and engaging actively with Aberdeen's business community.

The future

This diverse, balanced portfolio puts the Company in an excellent position for future growth, with revenue from our producing assets and the ability to move on other interests when opportunities arise.

Environmental Objectives and Environment, Social and Governance Reporting

Serica promotes a culture of safe, reliable and responsible operations across all aspects of its business and is committed to reducing the impact of its activities on the environment. Additionally, Serica is committed to the transparent reporting of its environmental performance through this Environmental Statement and in the annual Environment, Social and Governance Report.

During Serica's first year of operations in the North Sea it has established environmental baselines and objectives to reduce:

- CO_2 emissions
- Flaring volumes
- Volumes and concentration of oil discharged in produced water
- The number of hazardous chemicals utilised
- Volume of chemicals utilised
- Environmental non-compliances

As a responsible operator, Serica recognises the importance of positive Environment, Social and Governance (ESG) performance to both our stakeholders and to the Company.

In 2019 Serica established ESG as a core function of its business. During the first 12 months of Serica's North Sea operations a number of ESG initiatives were launched to engrain ESG considerations in all aspects of our business, ranging from operational planning through to charitable giving.

As a further demonstration of Serica's commitment to ESG we appointed our first Vice President for ESG and Business Innovation in 1Q 2020.

OPERATED PRODUCING FIELDS

Bruce, Keith and Rhum

The Bruce facilities are located on the United Kingdom Continental Shelf (UKCS) 148 km east of Shetland and ~18 km west of the Norwegian median line in water depths of ~122 m.

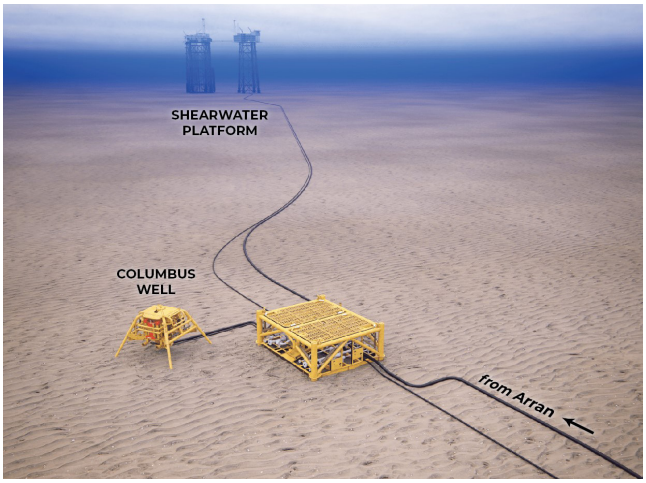
The facilities consist of three bridge-linked platforms, the largest being the Production, Utilities and Accommodation platform, connected to the Drilling platform and Compression Reception platform. The facilities process fluids from the BKR fields in UKCS Blocks 9/8a, 9/9a,9/9b and 3/29. The Rhum field, in Block 3/29, is located 44km from the Bruce Platform. Produced hydrocarbons (oil, condensate and gas) from these fields are exported to shore; oil is exported through the Forties Pipeline to the Kinneil Terminal via Cruden Bay, gas is exported to St Fergus via the Frigg pipeline.

OPERATED DEVELOPMENT

Columbus

The Columbus Development is a gas condensate accumulation in the UK Central North Sea.

In 2018 the Columbus Field Development Plan was approved by the Oil & Gas Authority (OGA). A single subsea development well will be drilled in 2021 to produce the gas and condensate from the field. Production from the Columbus well will join the Arran to Shearwater pipeline to be processed and exported from the Shearwater platform situated 35km to the southwest. First gas is estimated in late 2021.



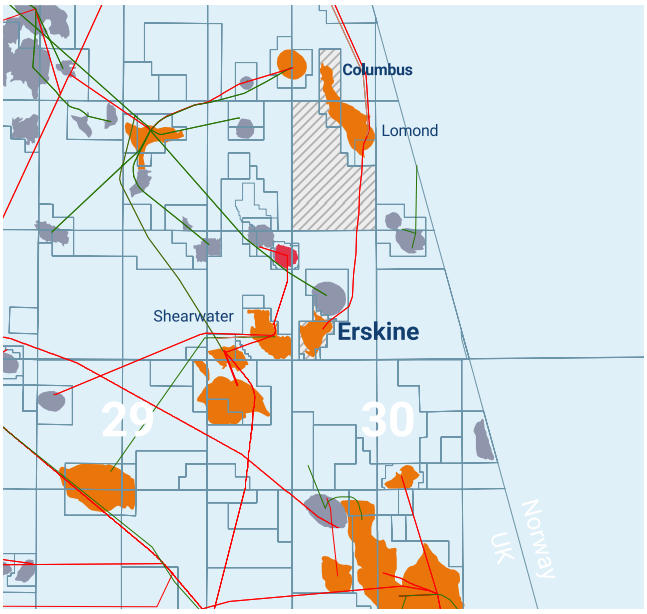
NON-OPERATED PRODUCTION

Erskine

Serica holds an 18% non-operating interest in the Erskine field, which is located in the central North Sea, the field is operated by Chrysaor.

The Erskine Field is a High Pressure High Temperature (HPHT) gas condensate field discovered in 1981. The main reserves are in three overlying Jurassic sandstone producing horizons. The field has been developed with five producing wells.

The production facilities comprise an unattended installation located at Erskine with production handled and controlled from the Chrysaor-operated Lomond platform, 30 km to the north of Erskine. The Lomond platform lies 269 km east of Aberdeen and is adjacent to the Columbus Field. Gas from Lomond is exported to a terminal at Teesside. The condensate from Lomond is exported to Cruden Bay.



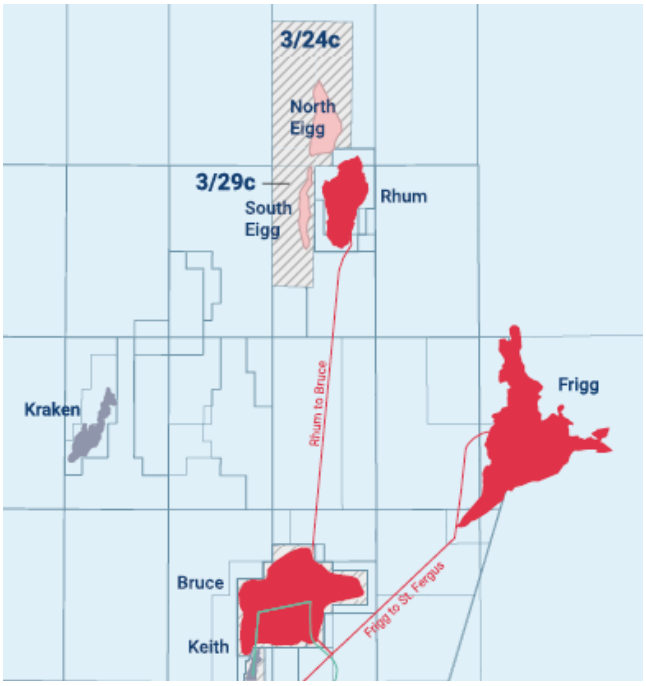
EXPLORATION

North Eigg

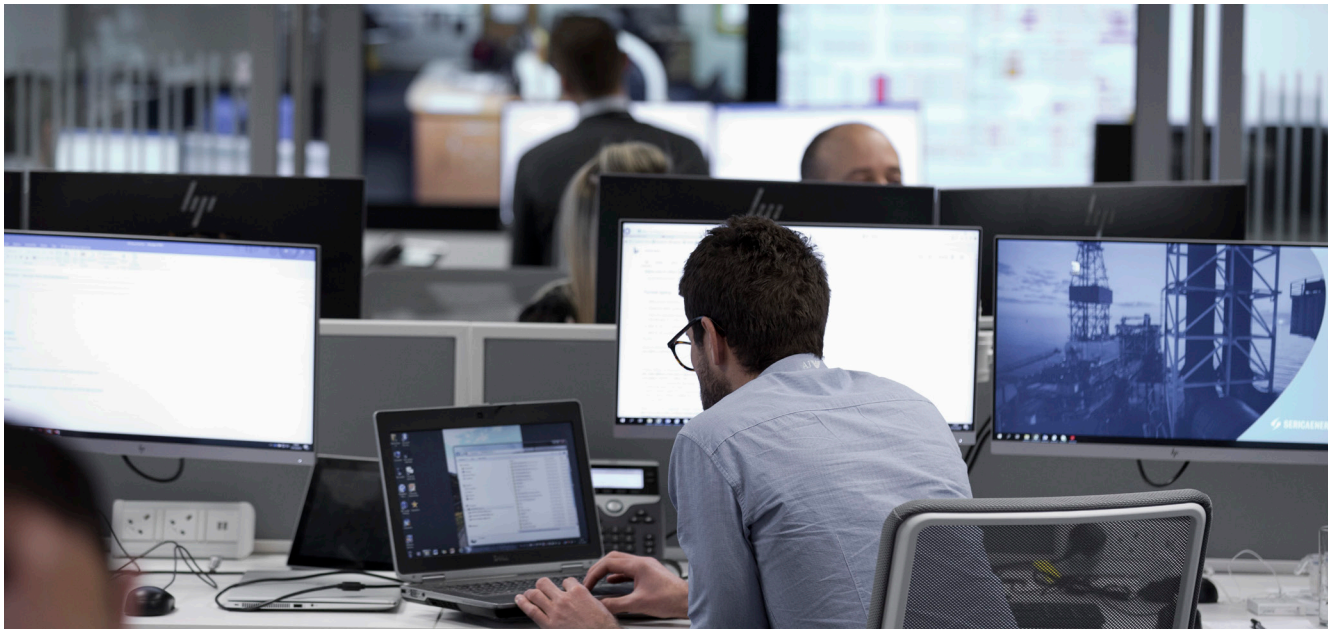
At the end of 2019, Serica received an out of round award of a 100% interest in the UK petroleum licence P.2501, blocks 3/24c and 3/29c. These blocks are located in the area adjacent to the Serica operated Rhum field.

The award contains the HPHT North Eigg and South Eigg prospects. The primary prospect is North Eigg which is estimated to have 360 bcf of gas (P50 prospective resources) and potentially over 1Tcf (P10 prospective resources). Serica has committed to drilling an exploration well within three years and in the event of a commercial discovery intends to develop the field via a subsea tie-back to the Serica operated Bruce platform.

As well as providing Serica with potentially significant additional reserves, a tie-back to the Bruce platform would reduce unit operating costs and extend the economic life of this strategic North Sea infrastructure.



Our Operations Management System (OMS)



The Serica OMS provides the framework for the systematic management of HSEQ across the Serica organisation and aims to ensure the delivery of safe, environmentally responsible and reliable operations in accordance with defined policies, practices, processes and standards. Documents within the OMS are managed by a centralised document control system and are reviewed periodically to ensure they are aligned with organisational goals and industry best practice.

The purpose of the OMS is to ensure that, as far as reasonably practicable, all activities are undertaken in accordance with Serica's commitment to HSEQ and in compliance with all relevant statutory provisions. At the core of Serica's OMS is the Serica HSEQ Policy. The HSEQ Policy articulates Serica's commitment to:

- Provide a safe, reliable and responsible operating environment for the wellbeing of staff and contractors
- Comply with, or strive to surpass, all applicable legislation and industry best practices

The HSEQ Policy also states an expectation that all personnel and third-party organisations working for Serica share the values of protecting the environment and one another. The HSEQ Policy is signed and dated by the Chief Executive Officer (CEO) and is reviewed at defined intervals as part of the management review process.

The Environmental Management System (EMS) contained within the OMS went through a successful OSPAR 2003/5 re-verification audit. The structure and content of the EMS recognises the principles of ISO 14001 (Environmental Management Systems) and ensures that risks to the environment are reduced to As Low as Reasonably Practicable (ALARP).

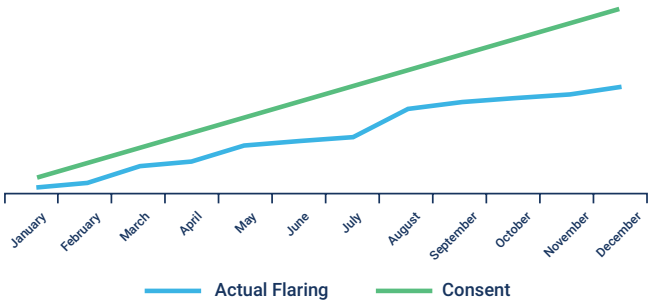
Atmospherics

Atmospheric emissions of carbon dioxide (CO_2), nitrogen oxides (NOx), sulphur dioxide (SO_2), carbon monoxide (CO), methane (CH_4) and non-volatile organic compounds (VOCs) have the potential to adversely impact the environment.

The use of fuel gas for power generation and compression on the Bruce facilities is Serica's leading source of CO_2 emissions, accounting for 199,224 tonnes in 2019. Flaring accounted for 26,484 tonnes of CO_2 and diesel usage accounted for 6,342 tonnes of CO_2 giving a total of 241,503 tonnes of CO_2 emitted at Bruce for 2019. Total emissions of non-CO_2 gases, on the Bruce were as follows:

- NOx – 568.19 tonnes
- SO_2 – 4.08 tonnes
- CO – 527.94 tonnes
- CH_4 – 191.10 tonnes
- Non-Methane VOCs – 74.6 tonnes

Figure 1 Flaring Performance



During 2019 efficient running of the Bruce Platform led to a significant reduction in flaring volume compared to the previous year. Serica's 2019 flaring performance remained well within our consented allowance (see Figure 1 - Flaring Performance). Serica remained in compliance with both the Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2013 and the Greenhouse Gas Emissions Trading Scheme Regulations 2012 (Si 2012, No.3038).

Chemical use and discharge

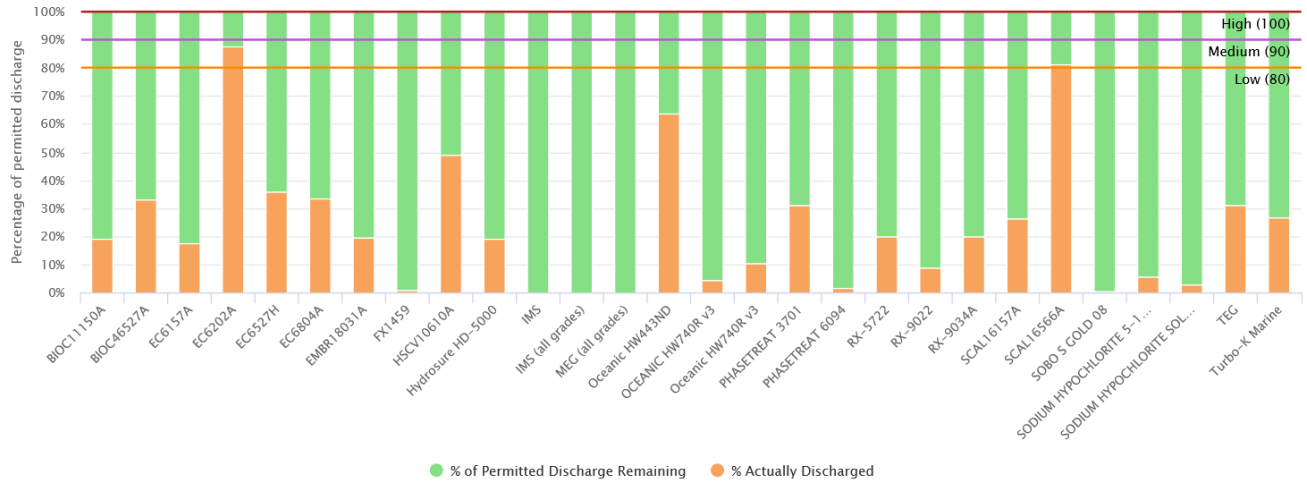
The offshore use and discharge of chemicals on the UKCS is closely regulated by the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED). This is managed through the Offshore Chemical Regulations (OCR) (2002) as amended 2011. The majority of chemicals used offshore require a risk assessment and approval for their use and discharge. All chemicals that are regulated under the OCR are tested to evaluate their toxicity, bioaccumulation and biodegradation, and are ranked according to their potential to cause harm to the environment. The most hazardous chemicals carry a Substitution (SUB) warning label and Operators are required to continually reduce their usage of SUB chemicals.

In 2019 BKR Production Operations utilised 334,914 kg of chemicals of which 53% were discharged to sea. Of the 42 chemicals on the Production Chemical Permit 28 were used in 2019, six of these chemicals carried a SUB warning.

In 2019 Serica raised three OCR Non-Compliance for the following reasons:

- Exceeding the volume of use for a permitted chemical for a specific application
- The use of a permitted chemical for an unpermitted application
- The discharge of a permitted chemical via an unpermitted discharge route.

Figure 2 Percentage of chemical discharge versus permitted discharge allowance (end of year figures)



Oil Discharges to Sea

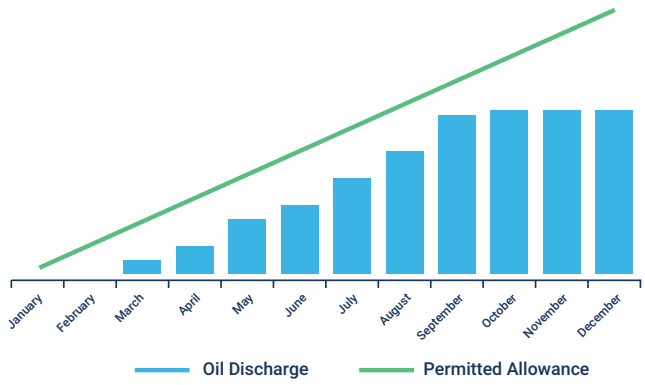
The discharge and re-injection of produced water is closely monitored and the monthly concentrations of oil in produced water (OiPW), mass of dispersed oil discharged, and single sample concentrations are recorded and reported to the Regulator, as per the conditions of the Oil Discharge Permit under the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (as amended 2011) (OPPC).

BKR wells produce a mixture of oil, condensate and gas. Following separation, produced water is re-injected into a dedicated re-injection well. Produced water is only routed to sea when the Produced Water Re-injection (PWRI) system becomes unavailable or where oxygen levels in produced water are recorded as being less than 10 ppb. PWRI acts as a disposal route only, with 100% of produced water being re-injected during PWRI uptime.

During 2019 produced water was reinjected while PWRI was online. When it was not, produced water was filtered through a Regulator approved water cleaning skid before being discharged overboard. The water cleaning skid was in place for approximately seven months whilst essential maintenance was being conducted on the PWRI system. In 2019, 42,390 m³ of produced water was reinjected downhole, this water had an average oil in water concentration of 68.85 mg/l resulting in the reinjection of 2.91 tonnes of oil. During essential maintenance on the PWRI system, 51,238 m³ of produced water was discharged overboard with an average oil in water concentration of 10.3 mg/l. This resulted in approximately 0.53 tonnes of oil being discharged overboard.

In 2019, 11 new PON1s were submitted resulting in the unpermitted release of 0.4109 tonnes of hydrocarbon. In addition to this three OPPC non-compliances were submitted to BEIS, two as a result of an exceedance of the 100mg/l threshold and one as a result of a monthly exceedance of the permitted 30mg/l limit.

Figure 3 Bruce Platform Oil Discharge (Permitted versus Actual)

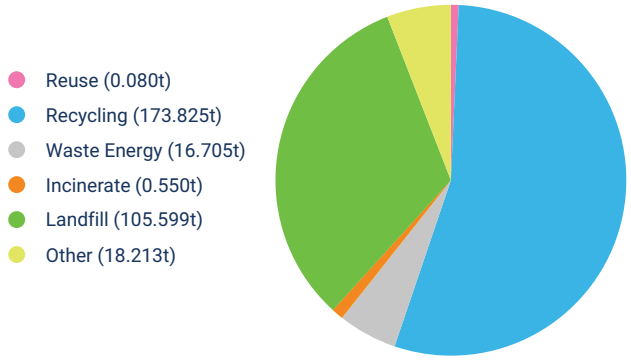


Waste

Serica's solid waste streams are shipped back to shore for treatment, recycling or disposal, in line with The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008 which prohibit the disposal of solid waste at sea. These waste items can include, scrap metal, barrels, wood, plastics, cardboard, aluminium cans, medicinal waste and WEEE (Waste Electrical and Electronic Equipment). Food waste and grey and black water is discharged overboard in line with Merchant Shipping regulations.

Serica is committed to reducing, reusing or recycling waste and reducing the amount of waste sent to landfill. Serica has robust arrangements in place for the management of waste materials generated by its BKR operations, through application of its waste management procedures. In 2019, Bruce generated 314.972 tonnes of waste, of which 173.825 tonnes (55.2%) was recycled, 105.599 tonnes (33.5%) was sent to landfill, the remainder was either reused, incinerated or converted to energy.

Figure 4 Fate of Serica Waste 2019



Acronyms

ALARP	As Low as Reasonably Practicable
bbl	barrel of 42 US gallons
bcf	billion standard cubic feet
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
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
EMS	Environmental Management System
ESG	Environment, Social & Governance
FPS	Forties Pipeline System
GRI	Global Reporting Initiative
HPHT	High Pressure High Temperature
HSEQ	Health, Safety, Environment & Quality
mg/l	milligrams per litre
mmbbl	million barrels
mmboe	million barrels of oil equivalent
mmscf	million standard cubic feet
mmscfd	million standard cubic feet per day
mscf	thousand standard cubic feet
NOx	Nitrogen Oxides
OCR	Offshore Chemicals Regulator
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
PON	Petroleum Operations Notification
ppb	parts per billion
PWRI	Produced Water Re-injected
SO_2	Sulphur Dioxide
SUB	Substitution
Tcf	trillion standard cubic feet
UKCS	United Kingdom Continental Shelf
VOC	Volatile Organic Compound
WEEE	Waste, Electrical & Electronic Equipment

Serica Energy (UK) Ltd
48 George Street
LONDON W1U 7DY
United Kingdom

T +44 (0) 20 7487 7300
F +44 (0) 20 7487 7330

info@serica-energy.com
www.serica-energy.com

G0000SF6566000