TEPUK

Annual Environmental Statement 2022

TotalEnergies

Contents

Foreword

As I settle into my new role as the Managing Director of TotalEnergies Exploration and Production UK (TEPUK), it is my honour to present our Annual Environmental Statement which provides an overview of the environmental performance of our offshore operations throughout 2022.

As a multi-energy company, TotalEnergies is continually striving to build upon the environmental performance of the previous years and to intensify our ambition. Our environmental performance is supported by an Environment Roadmap which focuses on emissions reduction, biodiversity, produced water discharge and waste management. TEPUK has set its own objectives and targets to support the company's ambitions.

Maintaining our emissions reduction success from previous years, we have implemented further projects and made day to day operational improvements to reduce emissions. Example projects include the Gryphon Power Management Philosophy (reduction in diesel usage) and Elgin Start-up Optimisation.

TotalEnergies is transforming and reinforcing its ambition to be a world-class player in the energy transition and to get to net zero in 2050, together with society. We place the environment at the heart of our ambitions, we have a goal, as a responsible energy company, to improve the environmental performance of all our facilities.

TEPUK has developed an ambition to support the company with its aspiration; It's 2025: The UK needs lower carbon energy. We're supplying it. This is borne out with the actions and objectives we have set in this statement.

At TEPUK in 2022, we identified and executed strategic projects which had a positive impact on our management of the environment. From identifying methane sources from our operating installations to fast tracking emission reduction opportunities and ensuring the veracity of our CO2e data, we are confident that TEPUK is on the right track. In 2023, maintaining our momentum we have our environment culture drive ('Visa'), our 'Sustainab'ALL' initiative and Energy Efficiency Boost (E2B), as set out in this document, that will build upon 2022's successes.

In this Environmental Statement, we are proud to display our transparency and accountability to our stakeholders and our dedication to employing the best environmental practices within our operations.

Nicolas Payer
Managing Director

TotalEnergies

Introduction

TotalEnergies is a broad energy company that produces and markets fuels, natural gas and electricity. Our 100,000 employees are committed to better energy that is more affordable, more reliable, cleaner and accessible to as many people as possible. Active in more than 130 countries, our ambition is being a world-class player in the energy transition.

This report is the 2022 annual environmental statement for TEPUK's activities which contains the environmental performance of our operated facilities and drilling activity in the UKCS **(Figure 1)**. The report has been prepared in accordance with the OSPAR Recommendation 2003/5 regulatory requirements.

The data provided in this report has been previously reported to the UK environmental regulator (OPRED) via the Environmental Emissions Monitoring System (EEMS) for offshore operations.

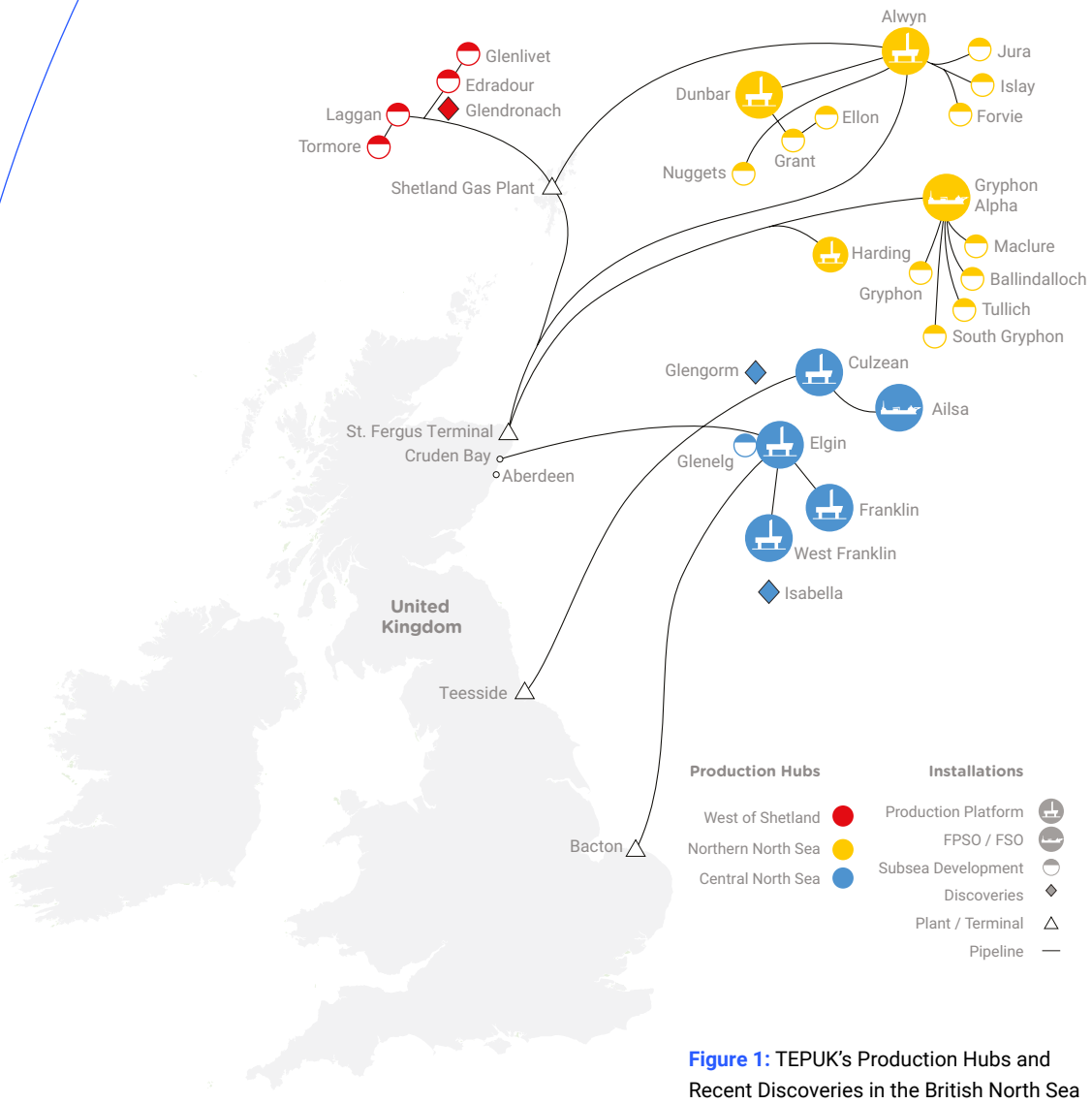


Figure 1: TEPUK's Production Hubs and Recent Discoveries in the British North Sea

TotalEnergies Energy Transition

Launched in 2022, the TotalEnergies global 'Visa' training provided an understanding to all employees of our ambition, the challenges TotalEnergies faces and how TotalEnergies aspires to fulfil growing global demand on the road to 2050.

On the foundation of Visa training, and as part of TotalEnergies global contribution to energy transition, TEPUK has entered the 'Sustainab'ALL' initiative in 2022 to engage and empower employees in contributing to the United Nations Sustainable Development Goals (SDGs). TEPUK has set an ambitious three-year target for 2023 to 2025 enhancing TotalEnergies as a growing global player of sustainable energy, developing a just transition for our people, saving natural resources and creating shared value. This is captured under ten key performance indicators (KPIs) and reported on an annual basis.

Contributing to TEPUK's mid and long term ambitions on 'Sustainab'ALL' KPIs, emissions reduction and energy transition, TotalEnergies Energy Efficiency Boost (E2B) commitment was launched in 2022, focusing on energy efficiency 'quick wins' from 2023 to 2025.

On all facilities, office, logistics base, logistics means, rigs etc., the aim is to develop initiatives that, amongst others:

- Reduce the energy demand (improving energy efficiency, optimising operations)
- Replace imported electricity with renewable electricity
- Reduce liquid fuel consumption (hybridisation and monitoring on vessels, rigs, vehicles etc.)
- Take benefit of potential sites interconnections

This plan is intended as a short-term initiative, the aim is to identify scopes which can bring energy savings within 1-2 years. Longer term initiatives can be shared as part of this exercise for future implementation.

Our commitment to employee communication and engagement, sustainability and emissions reduction puts TEPUK on track to play a key role in TotalEnergies global ambition to be a world class player in the energy transition.

Energy Transition journey has just begun

Gas as enabler of the Energy Transition | CFR of Assets | Electrification | Access to Infrastructure | Hub Strategy | Natural Based Solutions | Offshore Wind | Solar

Pathway to Net Zero by 2050

Offshore Operations

Northern North Sea

TEPUK's Northern North Sea (NNS) hub lies 160 kilometres (km) east of the Shetland Islands and 440km northeast of Aberdeen in Block 3/9a. It comprises the Alwyn, Dunbar and Gryphon Alpha installations.

Alwyn

Alwyn

Our Alwyn North field lies at the heart of this area and first produced oil and gas in 1987. Alwyn North is the hub of the Alwyn Area and the support centre for the neighbouring Dunbar, Ellon, Grant, Nuggets, Forvie North, Jura and Islay fields. These neighbouring fields were brought onstream through innovation and technological advances, thereby extending the life of the Alwyn Area past 2020.

The field comprises two bridge-linked platforms in a water depth of 126 metres (m). North Alwyn A (NAA) provides drilling and accommodation facilities, while North Alwyn B (NAB) provides processing facilities. NAB supplies other Alwyn Area fields with power, water and chemicals via a network of subsea cables and pipelines.

Alwyn has facilities for the re-injection of produced water. Untreated oil and gas from neighbouring Alwyn Area fields is piped to NAA and across the bridge to NAB for processing and export to shore. Oil from NAB is exported to the Sullom Voe Oil Terminal in Shetland via the Cormorant Alpha platform and the Brent pipeline system. Gas from NAB is exported to the St Fergus Gas Terminal on the northeast coast of Scotland via the Frigg pipeline system.

Nuggets is a subsea field development of four gas-bearing accumulations located 20km south of Dunbar. Brought into production over 2002-2003, the gas from Nuggets is piped back to Alwyn via a 67km subsea pipeline.

Forvie North is a gas condensate development which started production in January 2006. It comprises subsea production facilities and a 32km pipeline tied back to the NAB platform.

Jura is a subsea gas condensate development located 30km south of Alwyn. The development is located in 113m water depth and consists of a two well subsea tie-back to the Forvie manifold via a 3km bundle assembly. First gas was achieved in May 2008.

Islay is a gas and condensate field located just over 30km to the south of Alwyn. The development consists of a single well tied back with a 6km gas and condensate pipeline to the Forvie subsea manifold with gas and condensate transported via the existing pipeline to NAB. First production from this field was achieved in 2012.

Northern North Sea (contd.)

Dunbar

Dunbar

The Dunbar field is situated 22km south of Alwyn and first produced oil and gas in 1994. Dunbar comprises a platform together with well and accommodation facilities. Produced oil, gas and water are pumped back to the NAB via a subsea multiphase pipeline. The platform has facilities for drill cuttings re-injection and produced water re-injection.

Ellon (a subsea oil development) and Grant (a subsea gas condensate development) are located around 9km east of Dunbar and linked to the platform by flowlines and control umbilicals. Ellon started production in 1994 and Grant followed in 1998.

Gryphon

The Gryphon Alpha floating production storage and offloading (FPSO) vessel is located in UKCS Block 9/18 approximately 169km southeast of Shetland and is permanently moored by ten anchors. To maintain position in the harsh conditions of the Northern North Sea the FPSO has a turret system integrated into the hull. This system allows the FPSO to safely weathervane around the mooring system. Consequently enabling the FPSO to position favourably against the wind so that it remains bow to wind and weather.

Production from the Gryphon field located in Block 9/18 started in 1993. The Maclure and Tullich fields locatedin Blocks 9/23 and 9/19 respectively are tied into the Gryphon Alpha FPSO and production commenced in 2001and 2002 respectively. The Ballindaloch field located in Block 9/19 was developed latterly with first production achieved in 2019.

All hydrocarbon production from the Gryphon Alpha FPSO comes from subsea wells which are tied back via a series of pipelines, manifolds and risers which terminate within the FPSO turret. The processed oil is stored in cargo tanks in the hull and a 20" diameter hose is used to transfer the cargo to shuttle tankers. The FPSO is double hulled with ballast tanks segregating the cargo storage tanks from the sea. Gas is exported via a pipeline to Beryl A and through the Scottish Area Gas Evacuation (SAGE) system to St.Fergus.

Central North Sea

TEPUK's Central North Sea (CNS) hub lies 240km from the Aberdeen coastline in Blocks 22/25, 22/30, 29/5, 29/4 and comprises the Elgin, Franklin, West Franklin, Culzean and Ailsa installations. The CNS Asset is unique due to the high-pressure, high-temperature (HPHT) nature of the fields it produces from.

Elgin

Elgin

Elgin / Franklin came into production in 2001 and it is one of the largest HPHT installations in the world. Elgin consists of central processing facilities located on a Process, Utilities and Quarters (PUQ) platform bridge-linked to two wellhead platforms (WHP); Elgin WHP A and Elgin WHP B. The PUQ is, in effect, a gas refinery with a sophisticated process plant onboard to produce commercial quality gas. Gas from Elgin/Franklin is exported to the Bacton terminal in Norfolk via the 468km Shearwater Elgin Area Line (SEAL) pipeline.

Liquids from Elgin/Franklin are exported to Cruden Bay on the northeast coast of Scotland via the Graben Area Export Line (GAEL) pipeline and Forties Pipeline System (FPS). Liquids are piped onwards to Kinneil for tanker export.

Franklin

Franklin and West Franklin

Franklin WHP and West Franklin WHP are normally unattended satellite platforms that tie back to the Elgin PUQ. Franklin is a satellite field situated approximately 5.5km south southeast of Elgin in Block 29/5b in a similar water depth. The West Franklin WHP lies approximately 6km southeast of the Elgin PUQ.

The West Franklin field is an adjacent structure to the western margin of the Franklin field in the Central Graben area of the North Sea. The structure straddles Blocks 29/4d and 29/5c and is an ultra HPHT field.

Central North Sea (contd.)

Culzean

Culzean

The Culzean field, located in Block 22/25a of the Central North Sea, is situated 235 km from the Scottish coastline and approximately 20 km from the UK / Norway median line. It was developed via six production wells drilled by a heavy-duty jack-up drilling rig, with first production started in July 2019. The field facilities comprise of a WHP bridge-linked to a central processing facility (CPF) platform, that is in turn bridge-linked to a utility and living quarters (ULQ) platform.

A 30 km 10" pipeline connects the Culzean facilities to a tie-in point on the main Central Area Transmission System (CATS) pipeline. The CATS terminal further processes the gas to meet National Grid specifications at the Teesside Terminal.

Ailsa

Ailsa

The associated Ailsa floating storage and offloading (FSO) vessel sit approximately 3km from Culzean, receives processed condensate via a pipeline from the CPF for onward transport via tanker. The facility is a new-build completed in 2018 and is moored using an internal turret that allows the vessel to freely weather vane.

West of Shetland and Shetland Gas Plant

The West of Shetland (WOS) operations (Figure 2) include the Laggan and Tormore fields and Edradour and Glenlivet fields. The Laggan and Tormore fields are situated 125km northwest of the Shetland Islands approximately 600m below sea level and the Edradour and Glenlivet fields are situated approximately 70km northwest of the Shetland Islands at a depth of 300m – 430m.

Edradour and Glenlivet tie into the Laggan and Tormore pipelines (two 18" in parallel production pipelines). The Laggan Tormore import pipelines are the longest subsea tie backs in the UK. These pipelines connect to the Shetland Gas Plant (SGP), located approximately 28 miles north of Lerwick on the Shetland Isles. The gas condensate is processed at SGP for export to the St. Fergus Gas Terminal, on the northeast coast of Scotland, via the Shetland Island Regional Gas Export pipeline, a 234km long export pipeline which connects to the existing Frigg UK Area pipeline.

The environmental management system in place at SGP ensures that strict environmental monitoring and performance standards can be achieved. This is regulated by the Scottish Environment Protection Agency (SEPA). Environmental performance data is not included for SGP in this report.

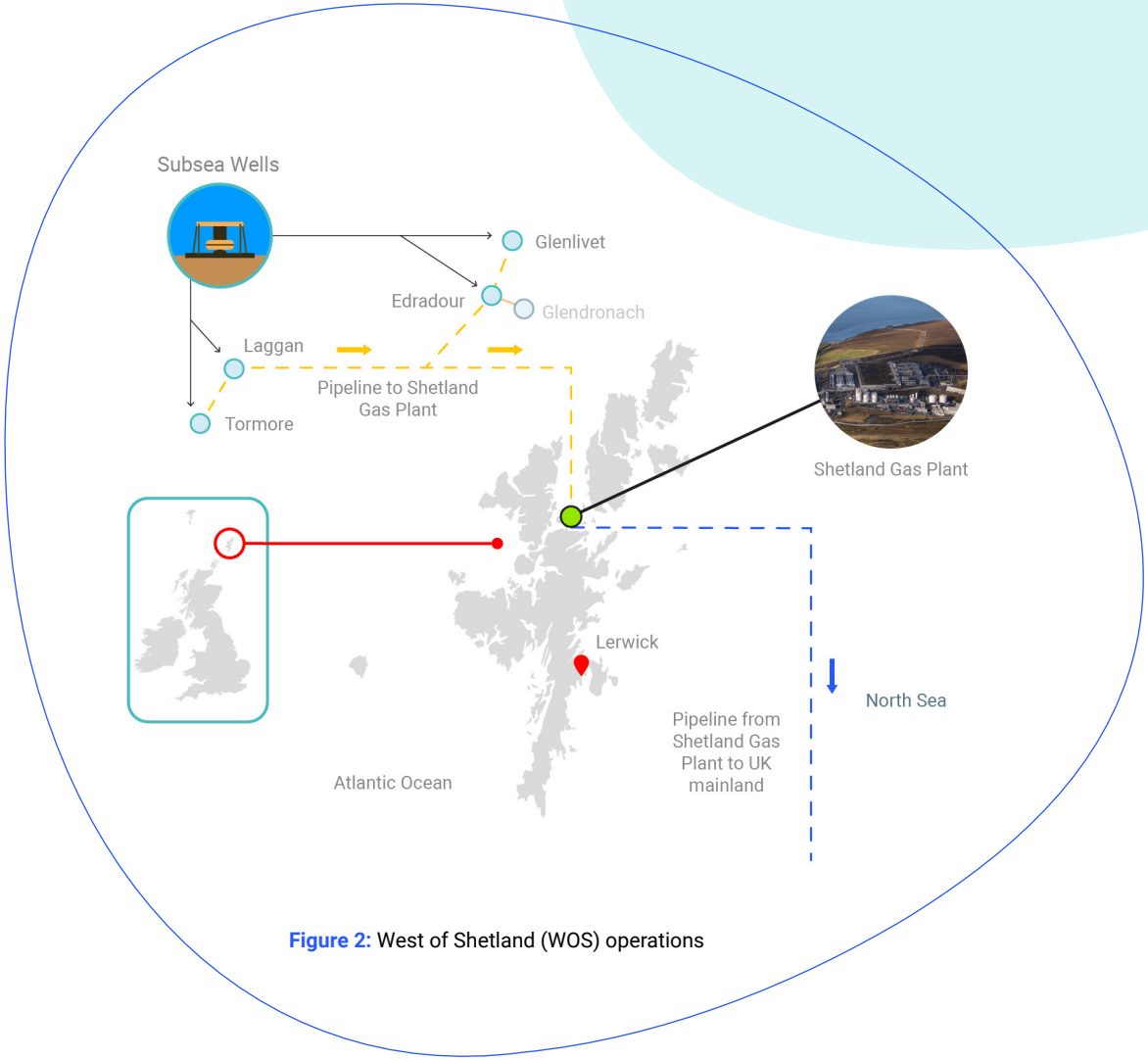


Figure 2: West of Shetland (WOS) operations

Well Operations

TEPUK delivered a wells programme of drilling and well intervention operations during in 2022, which were completed successfully and safely across all TEPUK assets.

In the Central North Sea area, drilling of the Isabella appraisal well commenced during Q3 2022. Drilling operations continued on the Alwyn platform with the TNE-1 well (N58z) in the Northern North Sea which was completed during 2022, this was followed by the start of drilling of the Alwyn East exploration well at the end of 2022.

Additionally, the remaining four Janice wells were plugged and abandoned as part of the final stages to deliver the Janice field decommissioning programme.

Environmental Goals and Objectives

Environmental Goals – 2022 (Achieved)

Aspect	Objectives	Targets	Programmes
Continuous Improvement	Assign on-site Environmental Representatives on operational facilities	Communicate low carbon culture, drive environmental awareness and implement improvement projects	Environmental Representatives trial ongoing at various sites; with environmental and low carbon culture awareness drive continuing throughout TEPUK as part of our global initiative.
Decommissioning Emissions	Modelling of all pertinent emissions, as defined under scope 1 perimeter	Produce Decommissioning Emissions Model Template for all assets	Models have been developed for various installations and these will inform asset decommissioning plans.
Atmospheric Emissions	Embed Carbon Footprint Reduction (CFR) requirements into contracting process	Develop and roll out a Supply Chain Emissions Assessment Tool; Host major vendor supply chain workshop	An assessment tool has been developed and internal procedures and templates are drafted. Major vendor supply chain workshop was held. This has led to 936 suppliers being identified for comment on climate responsible commitments.
Atmospheric Emissions	Address requirement for TEPUK's Assets to Meet Zero Routine Flaring and Venting by 2030	Identify projects to meet ambition and add to future Long Term Plans	Projects have been identified within the Long Term Plan exercise, and planned for sanction between 2023 and 2025.
Atmospheric Emissions	Quantify and reduce methane emissions from operating assets	Deliver the Methane Action Plan to meet Oil and Gas Methane Partnership (OGMP 2.0) Gold Standard; Capture methane envelop from operating installations using drone technology	TotalEnergies achieved accreditation to the Gold Standard in 2022. TEPUK are pursuing actions to improve methane quantification; We successfully carried out 5 methane measurement surveys using drone technology on all the qualifying assets. Analysis of data is ongoing to provide input to measurement methodology best practice.
Atmospheric Emissions	Create Emissions Reduction Action Plans and identify the key projects required to reduce site emissions	Emission Reduction Action Plans created for all sites	Emission Reduction Action Plans have been created for all sites. These include an outline of carbon reduction initiatives and projects to lower carbon intensity.
Energy Efficiency	Implement specific projects to improve energy efficiency of our sites by end of 2025 (E2B projects)	Identify projects to improve energy efficiency	TEPUK has identified usages for sensors which use IIOT (industrial internet of things) to monitor emissions output. A site 'quick look' assessment was carried out on 2 sites to identify opportunities for emissions reductions through process optimisation. Implementation planned for 2023.
Biodiversity/ Environmental Protection	Study impacts of peat restoration at various sites at Shetland	Complete postdoctoral research project	Research published and the outcome will form part of our decommissioning plan for site.
Discharges to Water	Comply with UK Risk Based Approach (RBA) to produced water management	Sample all the qualifying assets in 2022	RBA samples for all assets have been analysed, risk profiles have been generated, and action plans, where required, will be implemented.

TotalEnergies

Environmental Goals – 2023 (Planned)

Aspect	Objectives	Targets
Atmospheric Emissions	Meet the OGMP 2.0 obligation to better monitor, report and reduce methane emissions	Improve reporting accuracy and transparency of methane emissions in TEPUK through a documented methane quantification methodology, and a quantification improvement and reduction action plan. 11 drone surveys and an onshore site methane fugitive emissions assessment are planned 2023.
Atmospheric Emissions	Develop and approve Emissions Reduction Roadmap for all sites, departments, and emission streams within TEPUK	Publish and communicate agreed Roadmaps and progress the actions therein.
Environment Management System	Mapping of TEPUK's chemical management process to identity improvements	Improvements documented, communicated and adopted. Rationalisation of chemical usage and reduction in discharge.
Atmospheric Emissions	Develop plan to ensure sustainable energy solutions are explored and maximised for offices, warehouse, and quayside, as part of 'Sustainab'ALL' initiative	Undertake energy review of onshore office locations and implement findings where appropriate to reduce energy consumption and consider additional green energy options.
Biodiversity/ Environmental Protection	Identification and evaluation of the TEPUK's main impacts or risks to biodiversity as part of 'Sustainab'ALL' initiative	Produce a biodiversity action plan for TEPUK operated sites.
Environment Management System	To reduce impact on the environment through waste management improvement as part of 'Sustainab'ALL' initiative	Engage with supply chain to reduce waste at source and to move waste streams to more favourably managed routes, i.e., recycling and re-use.

Environment and Energy Management System

TEPUK is certified to the international standard for environment management ISO 14001:2015 and energy management ISO 50001:2018. In 2022, we integrated our two systems and had a successful re-certification.

The standards specify the requirements for establishing, implementing, maintaining and improving environment and energy management systems following a systematic approach to enhance and drive continual improvement throughout the organisation.

Consistent with our HSE Policy, the intended outcomes of the organisation's environment and energy management systems includes:

- Enhancement of environment and energy performance
- Fulfilment of compliance obligations
- Achievement of environment and energy management objectives

The scope of both ISO 14001:2015 and ISO 50001:2018 certification includes all TEPUK's operational assets and onshore support functions.

Environmental Performance

Atmospheric Emissions

Atmospheric emissions are generated from several sources on our installations. The sources are detailed below and are required to support the processes related to exploration and production of hydrocarbons.

- Combustion of fuels (gaseous and liquid) in turbines and generators that are used for power generation and compression.
- Flaring, which is an integral part of the installation safety systems.
- Venting of both hydrocarbon and inert gases from the process plant.
- Venting of sour gas which is removed from the product to ensure pipeline entry specification is achieved.

TEPUK is required to report their production operation combustion emissions (fuel gas, liquid fuel and flare gas) annually under the UK Emissions Trading System scheme (UKETS). This data is independently verified. All atmospheric emissions, from both combusted and vented sources for all TEPUK, are required to be reported to OPRED via EEMS on an annual basis.

To help us understand the overall environmental impact from our activities and to drive improvement in line with our targets, we measure our emissions to the atmosphere and then convert this data into a carbon dioxide equivalent (CO_2e). In 2022, we undertook a strategic project to better understand our methane emissions, which included aerial measurements. This work continues into 2023.

The atmospheric legislation applicable to the UK aims to achieve a reduction in greenhouse gas emissions. TEPUK has developed an ambitious emission reduction strategy to reduce its greenhouse gas emissions in support of the legislation and the Net Zero ambition set by the UK Government in 2019. The TEPUK strategy includes reduction through equipment optimisation, digitalisation, introduction of new technologies and implementation of alternative power sources (e.g. power from shore or offshore renewables). This strategy has been developed in line with our certified Energy Management System ISO 50001:2018.

Atmospheric Emissions (contd.)

Figure 3 illustrates the CO_2e emissions to atmosphere from all TEPUK activities over the last four years.

Note that 2021's figure should not be compared side by side with the other years' due to extended shutdowns during that year. Normalised trending shows a decrease in emissions.

Figure 3: CO_2e emissions (tonnes) from TEPUK operating facilities between 2019-2022.

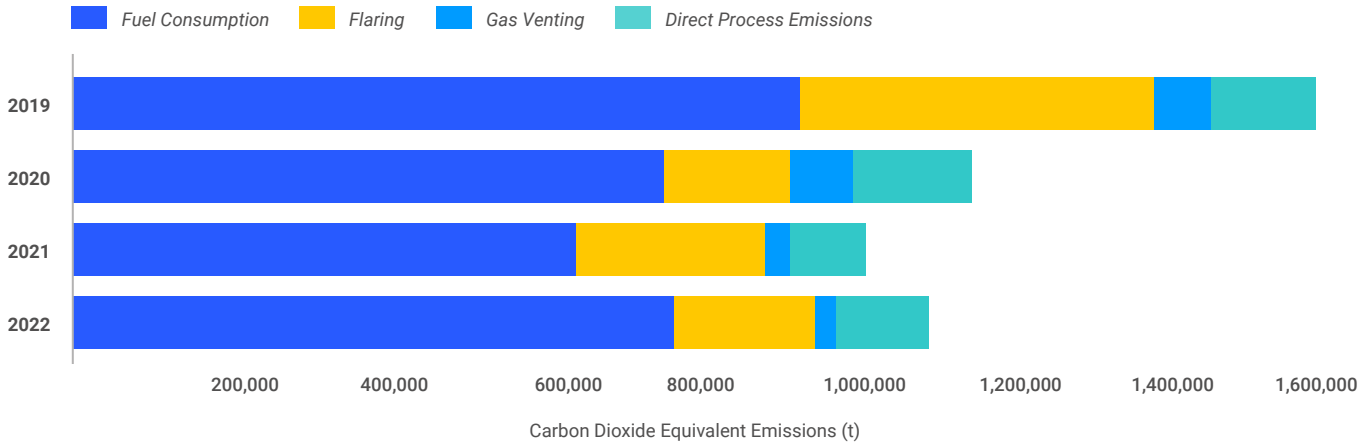


Figure 4: CO_2e emissions (tonnes) from each TEPUK operating facility in 2022

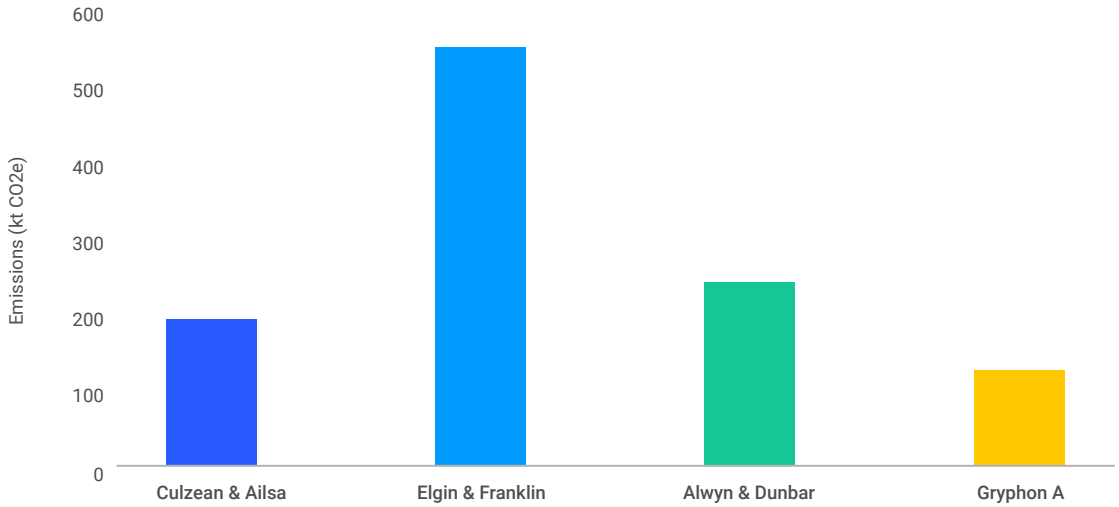


Figure 4 shows the CO_2e emissions from each TEPUK operating facility in 2022. A number of reduction projects were implemented during the year including optimisation of the Gryphon power management strategy (approx. 4kt CO_2e) and the Elgin Start-up Optimisation (approx. 1kt CO_2e).

Permitted Discharges

Oil in Produced Water

Produced water is extracted from the reservoir along with oil and gas, which after processing contains trace amounts of oil. The produced water is either reinjected or discharged to sea in accordance with the environmental permit regulated under The Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005.

Figure 5 illustrates the total quantity of produced water discharged to sea and the average oil in water content for the last four years.

Figure 5 Total quantity of produced water discharged to sea and the average oil in water content from TEPUK operating facilities between 2019-2022

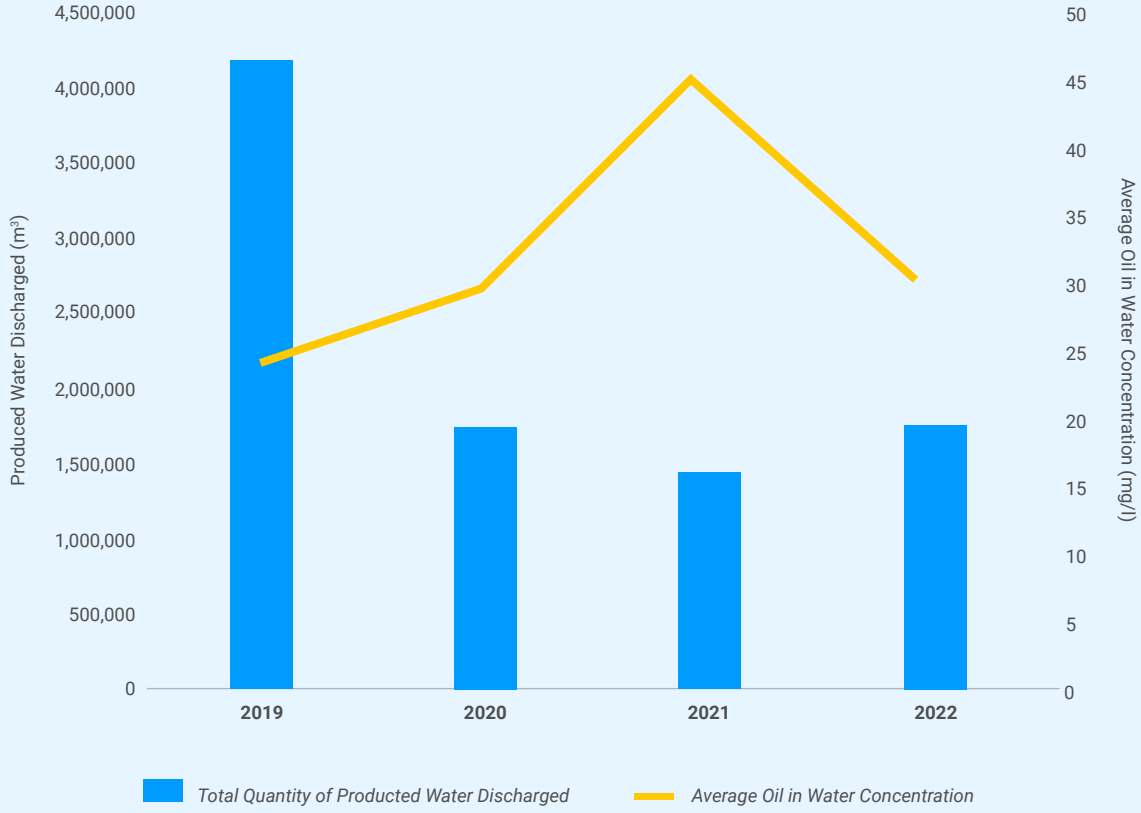
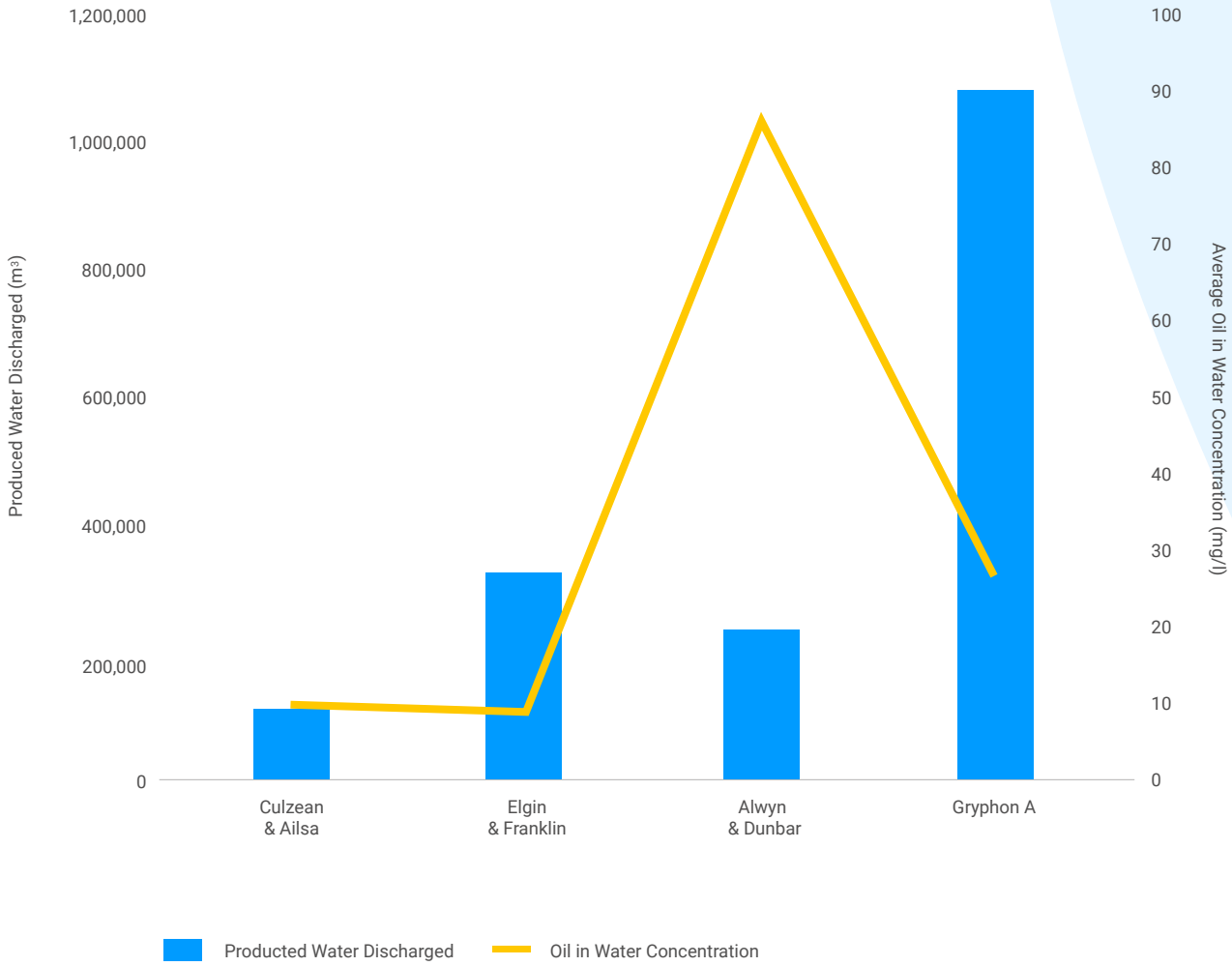


Figure 6: Total quantity of produced water discharged to sea and the average oil in water content from each TEPUK operating facility in 2022



Oil in Produced Water

Figure 6 shows that the Alwyn asset had the highest average oil in water concentration for 2022 compared to the other assets. This was due to the unplanned discharge of produced water to sea with an oil content >30mg/l (permitted limit) during the unavailability of one of the reinjection wells. Activities are planned in 2023 to improve re-injection and oil in water (OIW) quality on Alwyn.

Gryphon FPSO discharged the highest volume of produced water in 2022, however, the average oil in water content remained below the permitted threshold of 30mg/l. On Gryphon, TEPUK are undertaking operational refinements to re-inject produced water on a more consistent basis and to reduce OIW concentration, thus reducing volume of produced water and mass of oil discharged.

Chemical Use and Discharge

TEPUK uses and discharges chemicals as part of the offshore exploration and production process. The use and discharge of chemicals is regulated under the Offshore Chemicals Regulations 2002 (as amended).

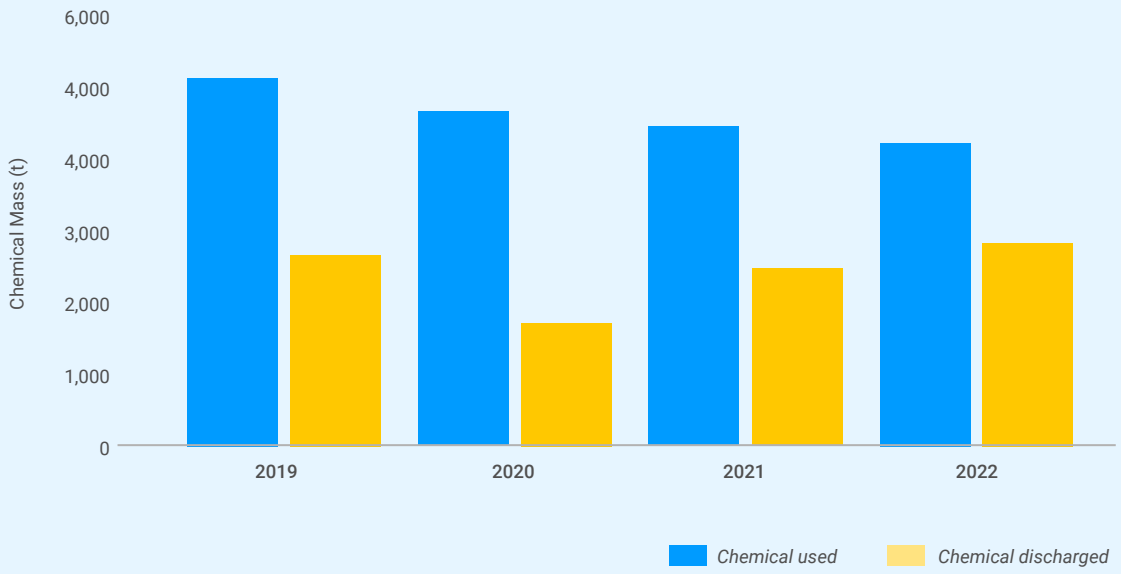
OSPAR recommendation 2006/3 was enabled in the UK by the issue of the 'UK National Plan for the Phase out of Substances Identified as Candidates for Substitution'. TEPUK carried on with the development and implementation of its Environmental Chemicals Management Strategy and successfully changed out several of its chemical applications for more acceptable substitutes. This strategy outlines the process TEPUK has in place to take into account the UK National Plan and the environmental impacts associated with chemical use and discharge. The use of this process enables TEPUK to prioritise the elimination of harmful substances with less harmful alternatives over a given time period.

Figure 7 shows the total production chemicals used and discharged for TEPUK operating facilities between 2019-2022.

Alwyn re-injection issues began in 2021 and has resulted in the increased discharge of produced water and chemicals to sea. Re-injection efficiency still remains higher than 60% thus limiting amount of chemicals discharged. Works continue to ensure restoration of full or almost full re-injection on Alwyn.

Discharge of produced water on Gryphon has increased from 2021 as part of the reservoir management, this has partially led to the increase in chemical discharge.

Figure 7: Total production chemicals used and discharged (t) for TEPUK operating facilities between 2019-2022



Chemical Use and Discharge

Alwyn and Dunbar are mature installations that require more chemical usage in comparison to other TEPUK installations. In 2022, a significant proportion of chemical usage related to the additive used in water injection systems as part of microbiological control, corrosion treatment and the management of hydrogen sulphide on the Alwyn asset **(Figure 8)**.
TEPUK have instigated a review of our chemical processes with an intent to reduce the amount, discharge and concentration of chemicals used, whilst working in conjunction with our suppliers to further green the supply chain.

Figure 8: Total production chemicals used and discharged (t) for TEPUK operating facilities for 2022

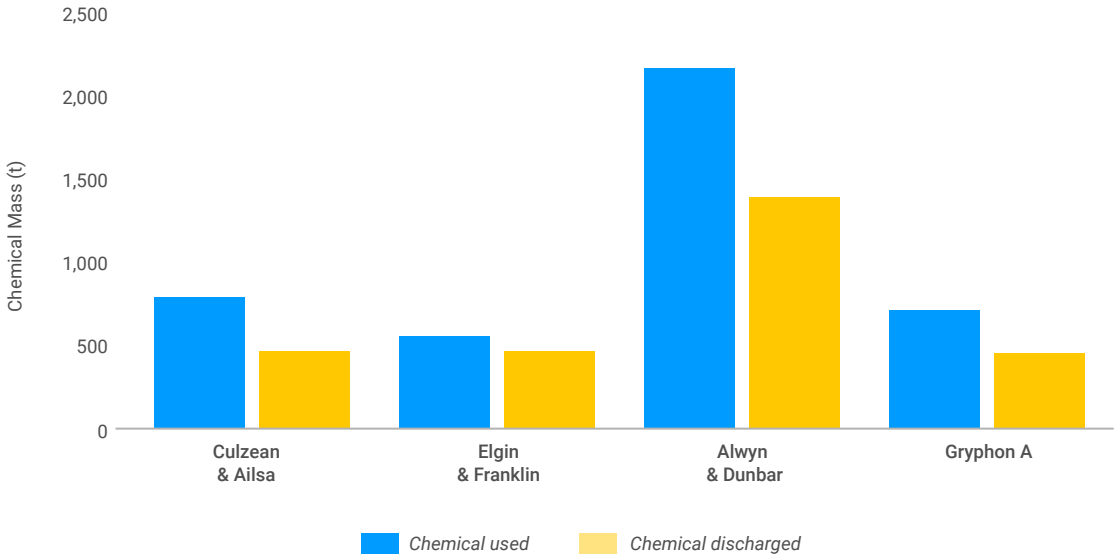
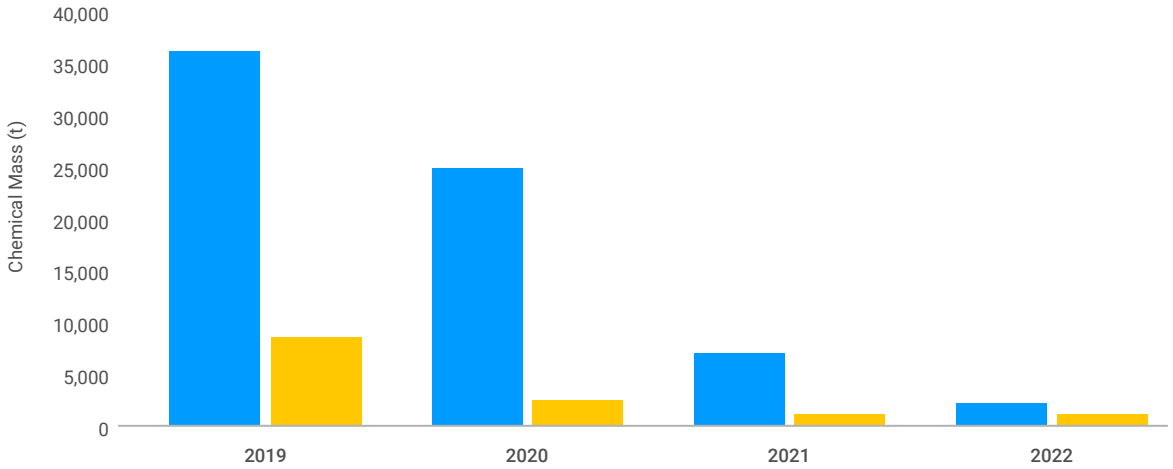


Figure 9: Total well chemicals used and discharged (t) for TEPUK operating facilities between 2019-2022



As shown in **Figure 9**, approximately 2,336 tonnes of chemicals were used as part of the TEPUK's drilling and well intervention operations, including plug and abandonment, in 2022 with approximately 1,029 tonnes discharged in accordance with the environment permits. 98% of the chemicals were associated with well operations which pose little or no risk to the environment (PLONOR) as classified by OSPAR. The use and discharge of chemicals are commensurate with the drilling activities ongoing. TEPUK endeavour to reduce our chemical burden throughout our drilling programme.

Releases to the Environment

One of TEPUK's key focus areas is reducing spills to the environment from our activity in the North Sea. Unpermitted releases of oil and chemicals, regardless of volumes, are recorded and investigated internally and reported to the regulator.

In 2022, there was a total of twenty-five unplanned releases to sea of which twenty-one were oil related and four were chemical related. This led to losses which amounted to a total mass of 9.96 tonnes **(Table 1)**.

The largest release totalled 8.4 tonnes of chemical as a result of a hydraulic fluid leak from Nuggets system. Production from the system has been suspended in order to ensure there is no leak to the sea. Next steps regarding production restart are to be confirmed by end of 2023.

Year	Number of Oil Spills	Mass (t)	Number of Chemical Spills	Mass (t)
2019	26	15.80	19	3.6
2020	20	4.65	4	23.40
2021	15	1.80	7	3.36
2022	21	1.10	4	8.86

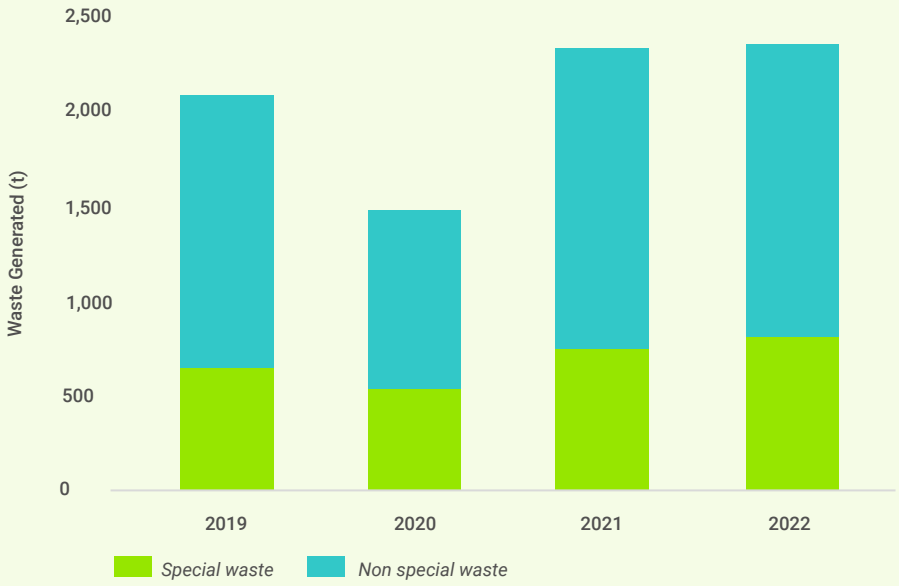
Table 1: Total number and mass (tonnes) of oil and chemical unplanned releases to sea from TEPUK activities between 2019-2022

Waste Management

TEPUK's operations consume materials that generate special and non-special waste. Waste is managed from 'cradle to grave' following company procedures and applicable legal requirements.

Figure 10 illustrates the amount of waste (special and non-special) that was generated from our operational activities over the last four years. The majority of our landfill waste has been routed to waste to energy with the converted energy providing power to local domestic and industrial facilities, only 2% of our waste went to landfill in 2022. In addition, TEPUK has a 'Sustainab'ALL' waste management KPI set to re-route our waste to more favourable disposal routes, including, reduction, re-use, and recycling.

Figure 10: Mass (tonnes) of special and non-special waste generated by TEPUK's operating facilities between 2019 - 2022



Waste Management (contd.)

Special waste includes paints, contaminated drums and containers, oily waste, chemicals, and aerosols. Quantities of special waste generated by our operating facilities and the disposal routes used are shown in **Figure 11**.

Non-special waste includes segregated recyclables (plastics, wood, paper, cardboard), general waste (textiles, some galley waste) and scrap metal. **Figure 12** shows the non-special waste produced by each TEPUK operating facility in 2022.

Table 2: Drill cuttings discharged offshore between 2019-2022

	2019	2020	2021	2022
Water Based Drill Cuttings discharged overboard (tonnes)	6,692	888	873	901
Oil Based Drill Cuttings treated and discharged overboard (tonnes)	4,472	2,444	790	1075
Cuttings, slurry, brine and slops re-injected (tonnes)	758	0	0	0

Table 2 shows the drill cuttings generated between 2019 and 2022 by our operations which were managed offshore and discharged to the marine environment under permit or re-injected into the reservoir. This is industry Best Available Technique (BAT) for the management of these waste types. Drill cuttings and muds disposed of onshore are treated where the oil is recycled.

Figure 11: Mass (tonnes) of special waste generated by each TEPUK operating facility in 2022 and the disposal routes used

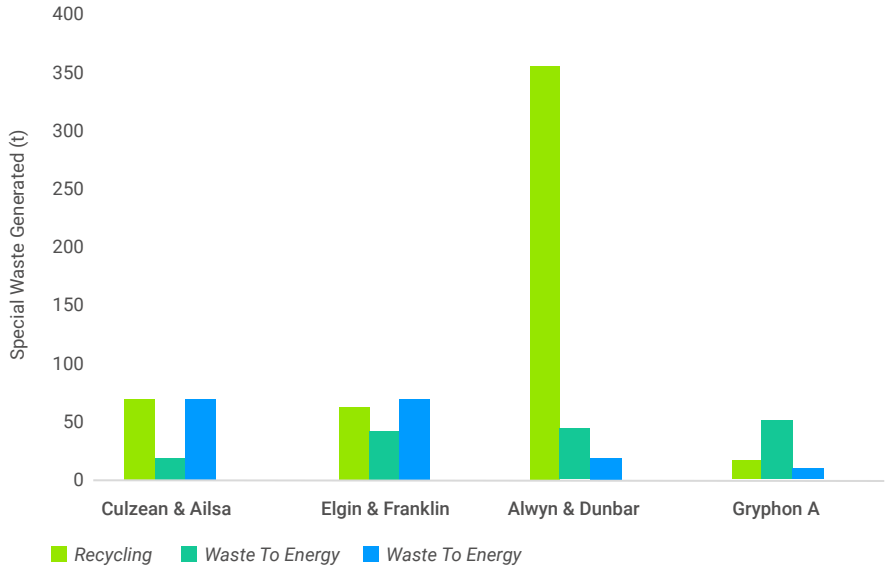
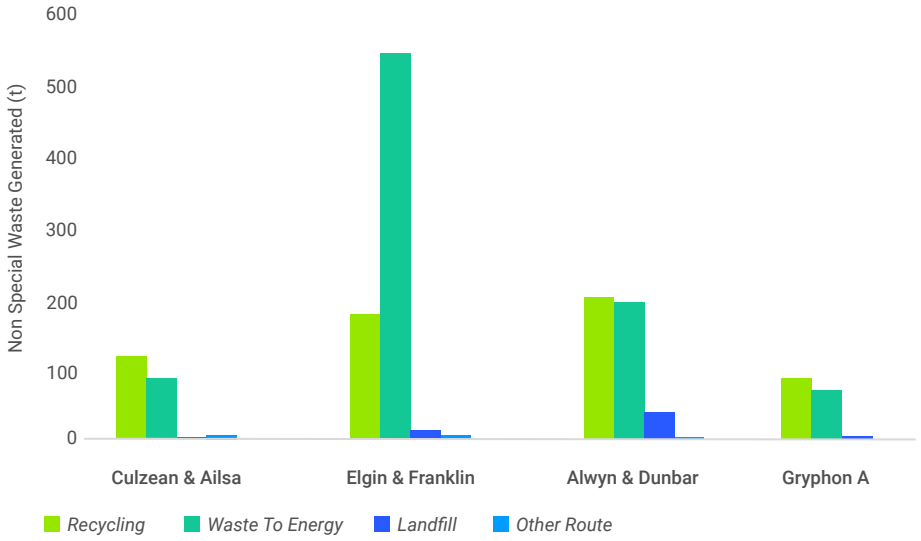


Figure 12: Mass (tonnes) of non-special waste generated by each TEPUK operating facility in 2022 and the disposal routes used



HSE Policy

TotalEnergies

Health, Safety and Environment

Policy Statement

TotalEnergies E&P UK (TEPUK) as a subsidiary of TotalEnergies, is committed to delivering our business objectives whilst prioritising a safe working environment for our employees, contractors and other stakeholders; safeguarding the environment and preventing pollution; maximising energy efficiencies; complying with laws and regulations and preventing Major Accident Hazards. This commitment is visibly demonstrated through implementation and compliance with the Company Management System (CMS) and measured via the setting of annual targets and establishment of company objectives:

It is our stated policy to:

- Maintain safe, energy efficient and regulatory compliant operations in all our activities by providing assets, facilities and equipment that have been efficiently designed and procured in accordance with BATNEEC and installed, commissioned and maintained, in accordance with TEPUK and TotalEnergies company procedures.
- Systematically identify for all activities, the hazards to which people, the environment and assets are exposed, evaluate the risks and define the measures for eliminating or reducing them to as low as reasonably practicable (ALARP).
- Provide adequate resources and information to execute our activities whilst meeting our local, national and international compliance obligations, along with TEPUK and TotalEnergies company procedures.
- Continue to develop a positive HSE culture through strong visible leadership, active involvement of the workforce, individual accountability and a spirit of co-operation.
- Monitor the health of all employees to ensure they are not adversely affected by the work environment.
- Adopt the principles of continuous improvement by setting measurable business objectives and targets, monitoring and reviewing performance through independent audits and statistical analysis of results.
- Ensuring our emergency response capability is suitable for responding to hazards and regularly testing the effectiveness of this response by controlled exercises.
- Work with our contractors and suppliers to ensure they understand our HSE requirements, whilst being prepared to listen to suggested improvements in areas where they have highly developed knowledge, in order to deliver mutually beneficial results.

Laurent Parra
Strategy & Business Director

Michael Ziegler
Director People and Transition

Dean Henderson
Technical Services Director

Stephane Decubber
Finance Director

Jeannie Dannock
West of Shetland (WOS) Asset Director

Gregoire Poupard
Northern North Sea (NNS) Asset Director

Sylvain Peytier
Central North Sea (CNS) Asset Director

Mhairi Finnie
HSE Director

Nicolas Payer
Managing Director TEPUK

May 2023
L1-MD-02-001 Rev 22

FOR ME, FOR YOU, FOR ALL
SAFETY
TotalEnergies

TotalEnergies

If you have any comments, or would like further information on our environment or energy management please contact:
Corporate Communications

TotalEnergies E&P UK Limited
TotalEnergies House
Tarland Road, Westhill
Aberdeenshire, AB32 6JZ

www.services.totalenergies.uk

TotalEnergies