



**UK ENVIRONMENTAL
STATEMENT 2021**



At TAQA, we are committed to the highest standards of health, safety, security, environmental and quality (HSSEQ) performance.

We work to respect the natural environment and to achieve our goals of ensuring that no harm comes to people; providing a safe, secure workplace; and carrying-out our activities with minimal impact on the environment. Our commitment to safe and incident-free operations goes hand-in-hand with improved operational reliability, lower costs and higher productivity.

**FOR FURTHER INFORMATION,
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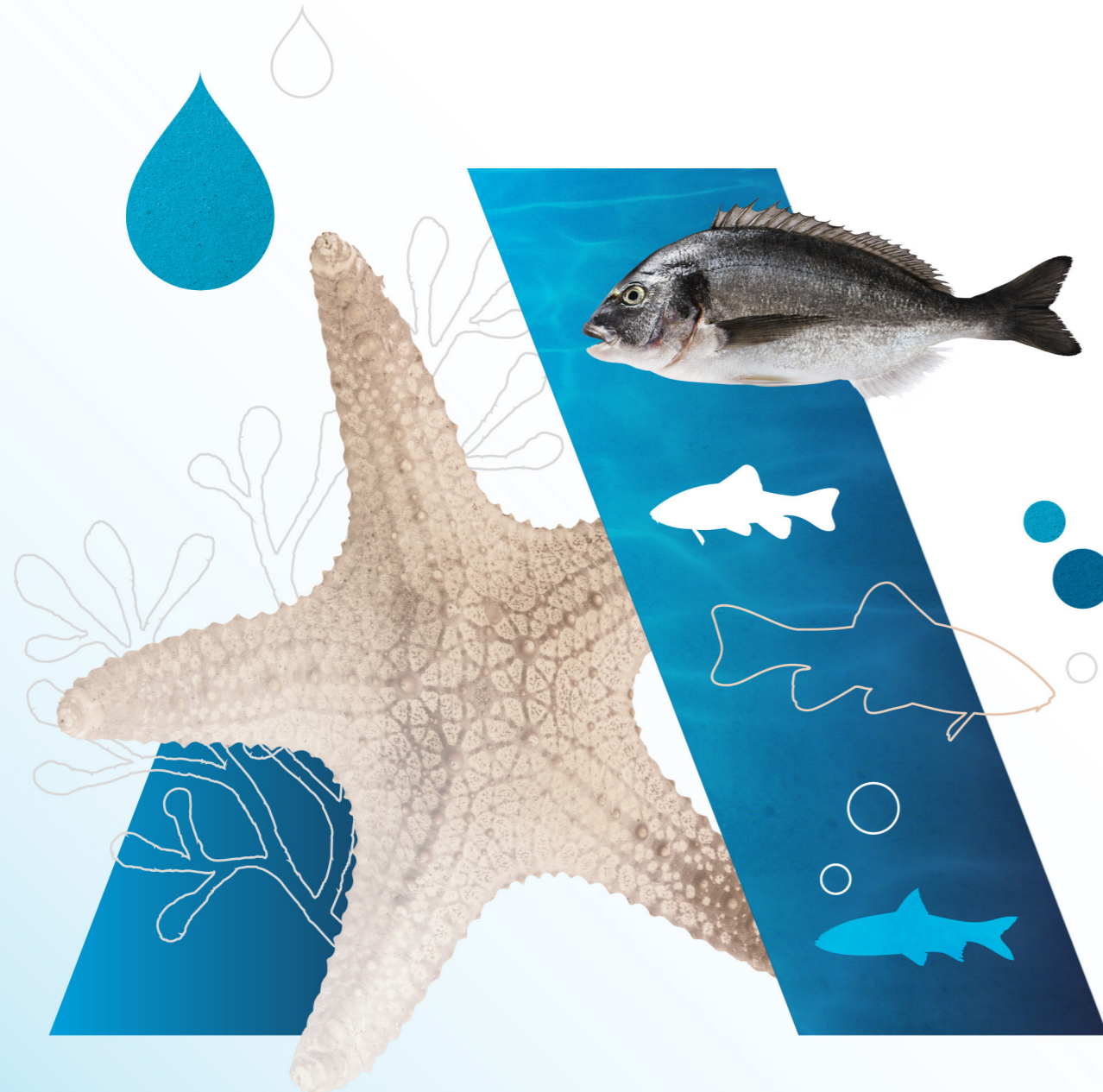
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INTRODUCTION



WELCOME TO TAQA UK'S 2021 ENVIRONMENTAL STATEMENT

I am pleased to present the 2021 Environmental Statement for TAQA's UK business and to reiterate our commitment to the highest standards of health, safety, security, environmental and quality (HSSEQ) performance.

In 2021, we continued to prioritise safe and reliable operations across our portfolio, while managing reduced offshore activities during the COVID-19 global pandemic. We also completed the transition of the Brae field following the transfer of these assets to our operatorship on 1 October 2020; successfully completed TAQA UK's first topside removal project and one of the largest decommissioning projects in the North Sea to date for the Brae Bravo platform; and finalised TAQA UK's Emissions Management Strategy.

During 2021, we continued to observe some positive trends across TAQA UK's main environmental impacts. Although 2021 data included a full-year account of Brae compared to 2020 (which included Brae data only from the last quarter due to the transfer of assets in October 2020), there was still a reduction in flaring and venting in 2021, with a reduction of 33159 m³/d and 3715 m³/d respectively. Further work is planned in 2022 to identify emissions reduction and energy saving measures under our Emissions Management Strategy.

Across our UK operations, we continued to see a reduction in overall percentage of waste sent to landfill which stood at 5.8% in 2021, compared to 6.3% in 2020. A significant proportion of this reduction relates to the Brae Bravo topsides removal project, which is targeting a 95% recycle or reuse rate. Furthermore, there was a change in the latter part of 2021 where waste from the Brae assets that would have gone to landfill, was diverted to the process of generating energy from the treatment of waste (WtE).

Optimising the reliability of late life assets, while driving excellence in decommissioning, is an important element of sustainable operations and a key focus at TAQA for driving environmental improvements across all areas of the business and implement lessons learned to ensure continued safe and reliable operations for TAQA UK.



Donald Taylor

Donald Taylor
Managing Director, TAQA Europe

HEALTH, SAFETY, SECURITY & ENVIRONMENT POLICY

The health, safety and security of our employees, contractors and the public is our highest priority; it is more important than any operational priority.

We must also:

- Ensure that our assets are operated safely
- Assure the integrity of our assets
- Respect, protect and understand the natural environment

HSSE = Health, Personal Safety, Major Accident Prevention, Security and Environment

We strongly believe that excellent business performance requires excellent HSSE performance – we recognise this as a core value.

Employees and contractors are required to focus on these four areas.

LEADERSHIP

- Everyone within TAQA understands their accountabilities for the management of HSSE
- The structure and resources necessary to achieve and measure HSSE accountabilities are provided
- Requirements of applicable legislation and standards are identified, understood and complied with
- Personnel have the required competencies and are fit for work
- Our workforce is aligned, involved and empowered in the identification and management of HSSE hazards and the achievement of our HSSE goals
- Key stakeholder groups are identified and good working relationships are maintained (understanding and addressing their issues and concerns)
- Everyone within TAQA demonstrates commitment and accountability to implement this policy and to work in accordance with the TAQA Management System Elements and Expectations

OPERATIONAL RISK IDENTIFICATION AND ASSESSMENT

- Risks are identified, assessed and appropriately managed
- Information required to support safe operation is identified, accurate, available and up-to-date

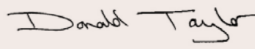
OPERATIONAL RISK MANAGEMENT

- The standards, procedures and operating manuals required to support project, maintenance and operational activities are identified, developed, understood and consistently applied
- Process and operational status monitoring and handover requirements are defined, understood and carried out
- Operational interfaces with third parties are identified, assessed and appropriately managed
- Risks arising from any form of change are systematically identified, assessed and managed
- A systematic process is in place to verify the safe condition of plant and equipment and
- To ensure that personnel are appropriately prepared (before start-up or return to normal operations)
- We are appropriately prepared for all necessary actions which may be required for the protection of the public, personnel, the environment, plant equipment and reputation in the event of an incident
- We aim to prevent pollution and protect the environment from the impact of our operations

REVIEW AND IMPROVEMENT

- We routinely monitor our activities through internal/ external audits and produce key performance indicators – we review these indicators and intervene as necessary
- Compliance with our expectations is routinely reviewed and audited to determine whether this policy remains appropriate and is being implemented effectively
- The management system is routinely reviewed for continual improvement and to enhance HSSE performance
- All incidents, near misses and opportunities for improvement are consistently reported and investigated, and identified actions and learnings are implemented on a timely basis

We all have a personal responsibility to work safely and protect the environment. We are all safety leaders, irrespective of our role or location. Everyone is empowered to challenge and stop work if they are in any doubt regarding a job they are involved in or observing.



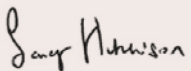
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NORTH SEA OPERATIONS



TAQA

Our roots are in Abu Dhabi with operations in the UAE and beyond. We're a top 10 integrated utilities company in the EMEA region with power and water and oil and gas operations in 11 countries around the world.

Our story begins in 1998 with the privatisation of Abu Dhabi's power and water sector, underscoring the importance of water security and provision of power to communities across the UAE. This move paved the way for TAQA's establishment as a publicly listed company on the Abu Dhabi Securities Exchange (ADX) in 2005. Since then, we've grown into a diversified company with operations in the UAE as well as Canada, Ghana, India, Iraq, Morocco, Netherlands, Oman, Saudi Arabia, United Kingdom and United States.

We are proud to be a company that provides energy and water to communities around the world.

TAQA UK

In the UK TAQA operates eight platforms, which produce from several fields spread across the northern North Sea and the central North Sea.

The majority of TAQA's UK portfolio is wholly owned and operated. In the northern North Sea it consists of 100% operated Tern, Kestrel, Eider, Otter, Cormorant Alpha, North Cormorant, South Cormorant, Falcon, Pelican, Cladhan and Hudson fields. We also have a 60% operated interest in the Cormorant East field. TAQA has a non-operated interest in the Sullom Voe Terminal and operates the Brent System, where it has a 16% interest.

In the central North Sea, TAQA has a 70% operated interest in the Harding field, 70% in the Morrone field, 88.7% in the Devenick field and 37.04% non-operated interest in the Maclure field. In the Brae area, TAQA has operated interests of 76.2% in Brae Alpha (Block 16/7a), 79.3% in East Brae and 87.8% in Braemar. It also has a 38.1% interest in the SAGE pipeline and onshore terminal.

2021 OVERVIEW

TAQA's UK business demonstrated strong resilience throughout the sustained economic uncertainty of 2021, particularly in navigating operational challenges and demand volatility caused by the global COVID-19 pandemic.

TAQA operates eight offshore platforms in the northern and central regions of the UK sector of the North Sea, these are Brae Alpha, Brae Bravo, East Brae, Cormorant Alpha, Eider, North Cormorant, Tern and Harding.

In 2021, production from our UK operations averaged 38,000 boepd, from twenty producing fields. This was an increase in production from 31,000 boepd in 2020, predominantly driven by improved reliability across TAQA's UK assets, good shutdown delivery ahead of base plan on the Brae assets, COVID-19 related delays to the plug and abandonment (P&A) programme and increased water injection volumes on the North Cormorant platform.

In 2021, TAQA UK successfully completed its first topside removal decommissioning programme for the Brae Bravo platform over two separate campaigns. The first campaign, which began in April 2021, saw two of the world's largest semi-submersible crane vessels (SSCVs), Heerema's Thialf and Sleipnir, converge simultaneously in the field for several days to prepare and ultimately remove the flare tower, bridge and jacket. Thialf remained in the field to complete removal of the helideck, final preparatory works and module separation to allow final removal in the summer of 2021. For the second campaign, Sleipnir removed the remaining topsides during two trips to the field over the summer of 2021. The only remaining visible element of Brae Bravo

is the top of the jacket. A dedicated navigational aid has been placed on the remaining structure and a 500-metre safety zone remains in place until jacket decommissioning is executed in 2022.

During 2021, TAQA UK has continued with planning and preparations for the decommissioning of its remaining assets over the coming decade. This includes successful execution of the removal of the platform drilling derrick and associated modules on Cormorant Alpha, in preparation for the arrival of the Modular Drilling Unit in 2022 to support well P&A activity; successful commencement of P&A activities on North Cormorant, Tern and East Brae; and significant tender preparation, issue, review and evaluation activity across the portfolio in support of platform removals contracting.

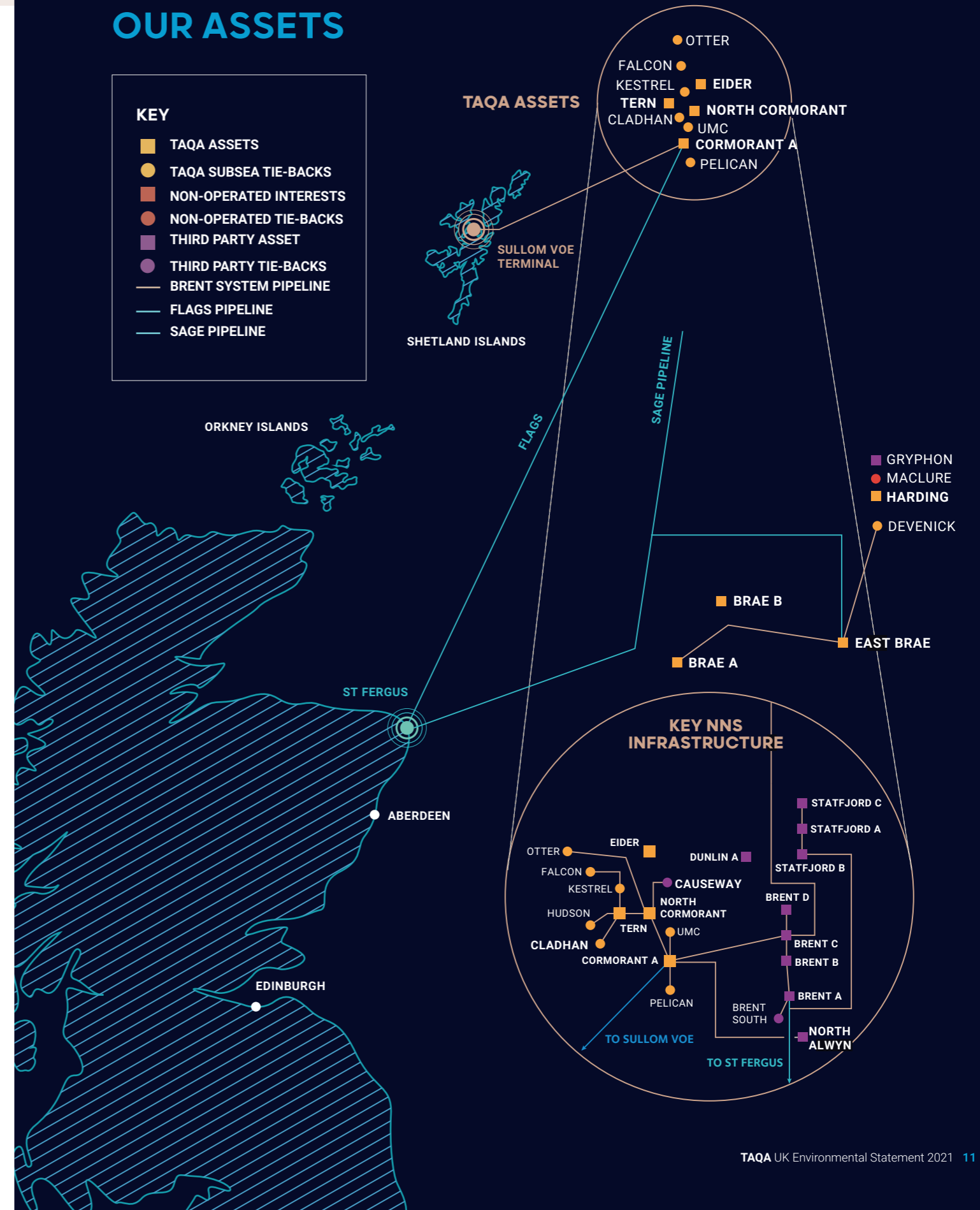
Over the course of 2021, planned shutdowns took place on the Brae Alpha, East Brae, Tern and Cormorant Alpha platforms. Brae Alpha activity included control system and compressor upgrades to improve reliability; East Brae included integrity scopes and preparation work for well P&A activities; and on Tern and Cormorant Alpha, preparations took place for topside modifications and key integrity scopes were completed.

Further to the transfer of operatorship of the Brae field assets on 1 October 2020, a key focus for TAQA UK during 2021 was the integration of procedures and processes for the Brae assets into the TAQA management system. This included harmonisation of key documentation to ensure consistency across all TAQA UK's operated assets and successful ISO14001 recertification to include the Brae fields.

Also, as part of the company's net zero alignment, during 2021, TAQA UK participated in a pilot project with Flylogix and six major energy companies to measure methane emissions from one of its offshore platforms using Unmanned Aerial Vehicles (UAVs). As well as providing robust data, the use of UAVs provided several other benefits, including reduced disruption to operations, less mobilisation of personnel and a reduced carbon footprint compared to helicopter operations.

"TAQA UK SUCCESSFULLY COMPLETED ITS FIRST TOPSIDE REMOVAL DECOMMISSIONING PROGRAMME FOR THE BRAE BRAVO PLATFORM OVER TWO SEPARATE CAMPAIGNS."

OUR ASSETS





BRAE ALPHA

POSITION:

207km (129 miles) east of Sumburgh Head, Shetland

BLOCK NUMBER:

16/7a

OPERATOR/DUTY HOLDER:

TAQA

EQUITY:

76.2% TAQA

DISCOVERY DATE:

1975

WATER DEPTH:

112m (367ft)

OIL PRODUCTION:

Oil (and natural gas liquids) are exported through the TAQA operated Brae to Forties pipeline and onwards via the Forties Pipeline System to the Kinneil reception terminal on the Firth of Forth.

GAS PRODUCTION:

Gas from the Brae area is piped to the St Fergus gas terminal via a tie-in to the Scottish Area Gas Evacuation (SAGE) pipeline system.

TYPE OF INSTALLATION:

8 legged steel jacket structure

FUNCTION:

The Brae Alpha platform is a single, integrated platform consisting of drilling rig, production, utility and accommodation facilities. Brae Alpha topside facilities process produced fluids from the South, Central and West Brae (including Sedgewick). Field reservoirs plus fluids from the Spirit Energy operated Birch, Larch and Sycamore (Trees) Field reservoirs and Enoch, operated by Repsol Sinopec.

CORMORANT ALPHA

POSITION:

161km (100 miles) north-east of Lerwick, Shetland

BLOCK NUMBER:

211/26a

OPERATOR/DUTY HOLDER:

TAQA

EQUITY:

100% TAQA (not including Brent System owners' interest)

DISCOVERY DATE:

September 1972

WATER DEPTH:

150m (492ft)

OIL PRODUCTION:

Via Brent System

GAS PRODUCTION:

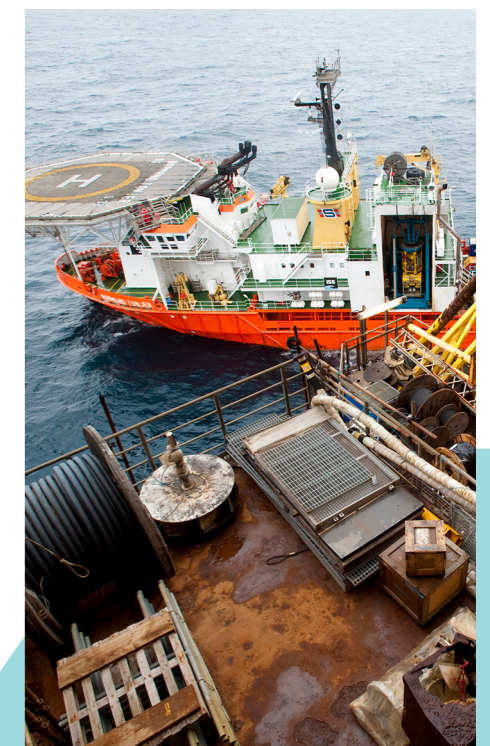
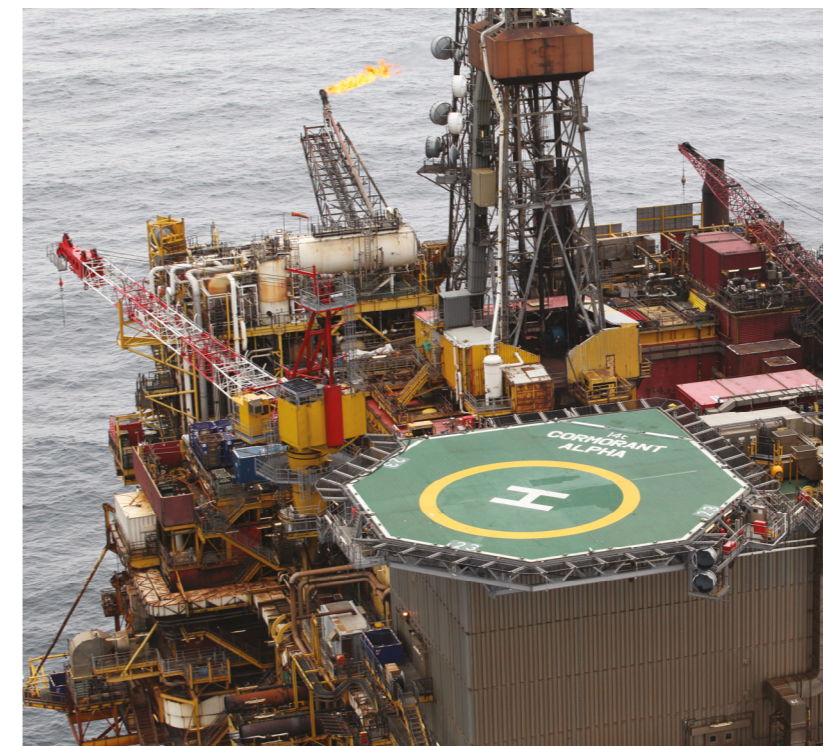
Commingled in process separation then via Western leg to FLAGS line to St Fergus.

TYPE OF INSTALLATION:

Concrete gravity structure – 4 legs

FUNCTION:

Cormorant Alpha was designed to drill, produce, meter and pump oil and gas. Cormorant Alpha also receives oil via pipelines from Thistle, Brent C, North Alwyn and North Cormorant platforms as well as from the Underwater Manifold Centre (UMC) and Pelican subsea tie-backs. Oil from Cormorant Alpha is exported to Sullom Voe Terminal in the Shetlands via the Brent System. Gas from Cormorant Alpha also joins the Western Leg Gas Pipeline link to the FLAGS.





EAST BRAE

POSITION:

193km (120 miles) east of Sumburgh Head, Shetland

BLOCK NUMBER:

16/3a

OPERATOR/DUTY HOLDER:

TAQA

EQUITY:

79.3% TAQA

DISCOVERY DATE:

1980

WATER DEPTH:

116m (380ft)

OIL PRODUCTION:

Oil (and natural gas liquids) are exported through the TAQA operated Brae to Forties pipeline and onwards via the Forties Pipeline System to the Kinneil reception terminal on the Firth of Forth.

GAS PRODUCTION:

Gas from the Brae area is piped to the St Fergus gas terminal via a tie-in to the SAGE pipeline system.

TYPE OF INSTALLATION:

Manned 4 legged steel platform

FUNCTION:

East Brae is a single integrated platform consisting of drilling rig, production, utility and accommodation facilities, to the north of Brae Bravo. East Brae topside facilities process produced fluids from the TAQA operated East Brae and Braemar Field reservoirs. In October 2012, Devenick, was tied-back to the East Brae platform and brought online.

HARDING

POSITION:

320km (200 miles) north-east of Aberdeen

BLOCK NUMBER:

9/23b

OPERATOR/DUTY HOLDER:

TAQA

EQUITY:

70% TAQA

DISCOVERY DATE:

1987

WATER DEPTH:

110m (330 ft)

OIL PRODUCTION:

Oil from Harding is exported via 24-inch diameter oil export pipeline to a submerged tanker loading system.

STORAGE CAPACITY:

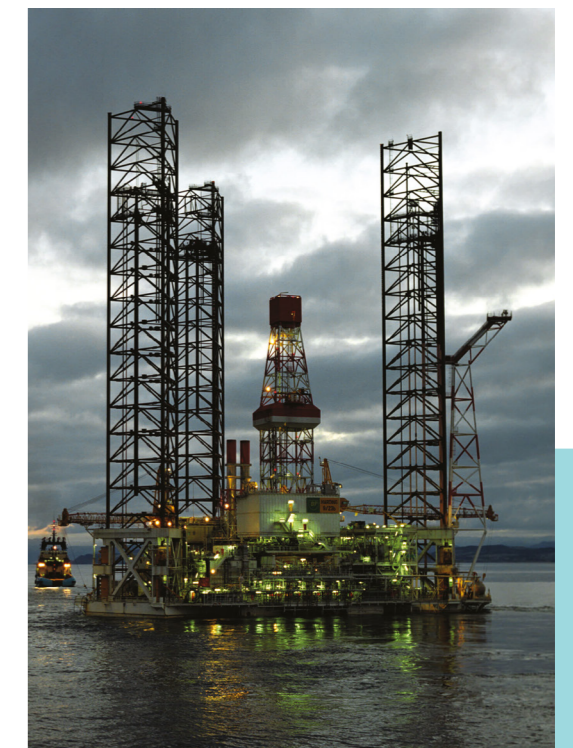
600,000 barrels

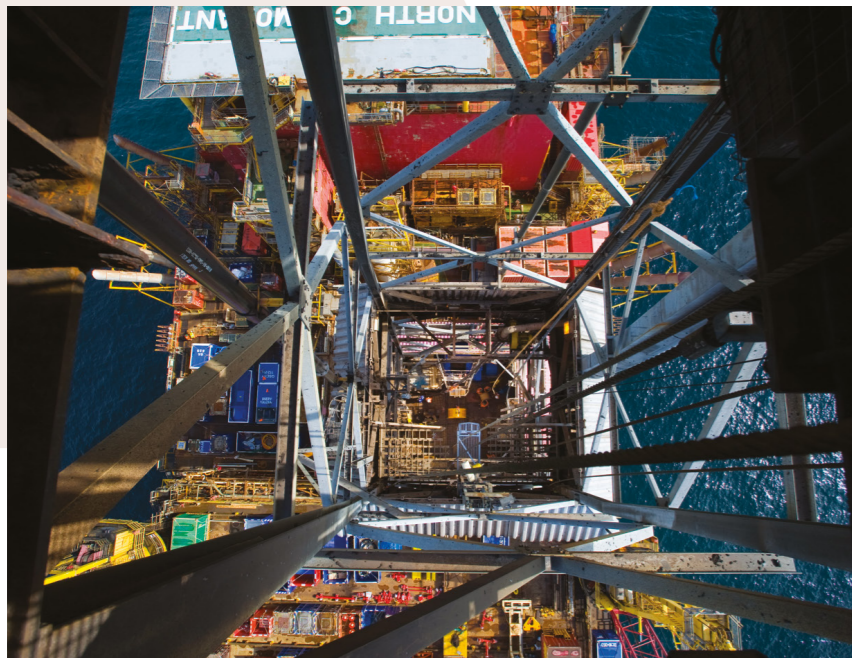
TYPE OF INSTALLATION:

Harding is a heavy-duty jack-up production unit, resting on a gravity base/storage tank.

FUNCTION:

The basis of the Harding development is a large, heavy-duty jack-up platform. It is a fully integrated drilling and production platform for the Harding field. The topsides structure sits on the Gravity Base Tank (GBT), a reinforced concrete structure that provides the foundation. The GBT is also a T-shaped storage tank, which acts as a large storage tank for the export of crude oil. Oil production is exported from the GBT around every 4-6 weeks via a short (2km), 24" pipeline and submerged Offshore Loading System (OLS) to shuttle tankers.





NORTH CORMORANT

POSITION:
177km (110 miles) north-east of Lerwick, Shetland

BLOCK NUMBER:
211/21a

OPERATOR/DUTY HOLDER:
TAQA

EQUITY:
100% TAQA

DISCOVERY DATE:
August 1974

WATER DEPTH:
161m (528ft)

OIL PRODUCTION:
Via Brent System

TYPE OF INSTALLATION:
8 legged steel jacket

FUNCTION:
North Cormorant is a drilling and production facility for the North Cormorant field. The oil is then routed to Cormorant Alpha for onward transmission through the Brent System to Sullom Voe Terminal.

Since 2012 the North Cormorant platform is also a production facility for the TAQA Cormorant East field and the third party Causeway and Fionn fields (non-producing). Since 2017 North Cormorant is also the production facility for the Otter field.

Gas is imported through the Western Leg via Brent A and the Far North Liquids and Associated Gas System (FLAGS) Pipeline to St Fergus Terminal. Crude oil, imported from Tern, is exported to Cormorant Alpha.

TERN

POSITION:
169km (105 miles) north-east of Lerwick, Shetland

BLOCK NUMBER:
210/25a

OPERATOR/DUTY HOLDER:
TAQA

EQUITY:
100% TAQA

DISCOVERY DATE:
April 1975

WATER DEPTH:
167m (548ft)

OIL PRODUCTION:
Via Brent System

GAS IMPORT/EXPORT:
Via Western Leg and Western Isles

TYPE OF INSTALLATION:
8 legged steel jacket

FUNCTION:
The Tern platform serves as a production facility for the Tern, Cladhan, Falcon, Hudson and Kestrel fields, and as a drilling facility for the Tern field. It provides gas lift facilities for the Tern, Cladhan, Falcon, Kestrel and Hudson fields and also provides water injection facilities for the Tern, Cladhan, Falcon, Kestrel and Otter fields. Crude oil is exported to North Cormorant before joining the Brent System via Cormorant Alpha. The separated gas is compressed and used for fuel gas as well as lift gas.



BRAE BRAVO

POSITION:

191km (119 miles) east of Sumburgh Head, Shetland

BLOCK NUMBER:

16/7a

OPERATOR/DUTY HOLDER:

TAQA

EQUITY:

76.2% TAQA

DISCOVERY DATE:

1976/1977

WATER DEPTH:

99m (324ft)

OIL PRODUCTION:

Production at Brae Bravo ceased in December 2018.

TYPE OF INSTALLATION:

The Brae Bravo topside modules have been removed and only the platform jacket remains in place.

FUNCTION:

The Brae Bravo platform was a single integrated platform consisting of drilling rig, production, utility and accommodation facilities. Production at Brae Bravo ceased in 2018 and the platform was disembarked in July 2019. Decommissioning activities commenced in 2021 and all topsides were removed leaving just the platform jacket in place. Removal of the jacket is planned for 2022.

EIDER

POSITION:

184km (114 miles) north-east of Lerwick, Shetland

BLOCK NUMBER:

211/16a and 211/21a

OPERATOR/DUTY HOLDER:

TAQA

EQUITY:

100% TAQA

DISCOVERY DATE:

May 1976

WATER DEPTH:

157.5m (517ft)

OIL PRODUCTION:

Production at Eider ceased in January 2018

TYPE OF INSTALLATION:

8 legged steel jacket

FUNCTION:

Eider serves as a utility platform providing power, chemical and control systems to support the Multi Phase Pump (MPP) operation for the subsea completed Otter field.

Otter reservoir fluids are produced through the MPP, a subsea pumping station which pumps the fluids along the pipeline to North Cormorant. The fluids are processed on North Cormorant and exported via the Brent System to Sullom Voe Terminal.

BRENT SYSTEM

The Brent System is responsible for transporting around 30k bbls a day from some 12 North Sea fields. This accounts for almost 50% of the oil processed by Sullom Voe terminal and around 3% of UK offshore oil export.

30,000 barrels – Average amount of oil transported per day.

153km – Transportation distance from Cormorant Alpha to Sullom Voe.

16% – TAQA interest.

The Brent System is a joint venture between 18 participants who each own a percentage interest in the system. Brent System consists of a proportion of the processing system on, and structure of, the TAQA operated Cormorant Alpha platform, as well as the 153km pipeline connecting Cormorant Alpha to the Sullom Voe Terminal in the Shetland Islands.

TAQA has been operator of the Brent System since 2009.

HSSE MANAGEMENT SYSTEM ELEMENTS & EXPECTATIONS

LEADERSHIP

01. Leadership Involvement and Responsibility
02. Compliance with Legislation and Standards
03. Employee Competence
04. Workforce Engagement
05. Communication with Stakeholders

RISK IDENTIFICATION AND RISK ASSESSMENT

06. Hazard Identification and Risk Assessment
07. Documentation, Records and Knowledge

RISK MANAGEMENT

08. Operating Manuals and Procedures
09. Process and Operational Status Monitoring and Handover
10. Management of Operational Interfaces
11. Technical Standards
12. Management of Change and Project Management
13. Operational Readiness and Process Start-up
14. Emergency Preparedness
15. Inspection and Maintenance
16. Management of Safety Critical Devices
17. Work Control, Permit to Work and Task Risk Management
18. Contractor Management

REVIEW AND IMPROVEMENT

19. Incident Reporting and Investigation
20. Audit, Assurance and Management Review

ADOPTION OF THE BRAE ASSET RESPONSIBLE OPERATIONS MANAGEMENT SYSTEM (ROMS)

TAQA took the decision to adopt the Responsible Operations Management System (ROMS) for the Brae assets from 1 October 2020, when operatorship moved to TAQA. The decision to adopt ROMS was supported by a detailed Gap analysis which highlighted that the ROMS is largely compliant with the TAQA Group Management System, Commitment to Operational Excellence (COE).

The TAQA Europe HSSE Policy (presented earlier in this report) has also been reviewed and its expectations are met by the ROMS standards.

The formal process of integration and harmonisation of the Brae process and procedures started in 2021 and will continue through 2022.



COMMITMENT TO OPERATIONAL EXCELLENCE

HEALTH, SAFETY, SECURITY AND ENVIRONMENT (HSSE) MANAGEMENT PROGRAMME

TAQA is committed to the pursuit and attainment of a world-class health, safety, security and environmental performance. It pledges to respect the natural environment, and to work to achieve its goals of ensuring that no harm comes to people; to provide a safe, secure workplace; and to carry out its activities with minimal impact on the environment. To meet this commitment, TAQA has established an HSSE policy that describes its core principles for HSSE management.

To implement the HSSE programme, TAQA utilises 14 elements to the commitment to operational excellence. The elements correspond to the "Plan-Do-Check-Act" elements of ISO standards for health, safety, environment and quality management systems.

The HSSE programme ensures that within all of its activities and operations, TAQA will as a minimum:

- Ensure all TAQA leaders demonstrate leadership and commitment to the programme throughout the organisation, ensuring that the commitments set out in the HSE Policy are achieved
- Ensure compliance with legislation is maintained, whilst working constructively to influence proposed laws and regulations, and debate on emerging issues
- Provide assurance that personnel are competent; that they possess the requisite underpinning working knowledge, understanding, skill and attitude, and clearly demonstrate the ability to routinely undertake the tasks and activities of the designated work roles, safely, consistently and reliably to the minimum defined standard of performance
- Identify key stakeholder groups and develop and maintain a good working relationship with them, understanding and addressing their issues and concerns
- Manage risks by performing comprehensive risk assessments to provide essential decision making information. Develop and implement plans to manage significant risks to an acceptable level
- Identify, maintain and safeguard important information. Ensure personnel can readily access and retrieve information. Required standards and safe working practices are provided to support project, maintenance and operational activities
- Design, construct, install, commission, operate, maintain, assure and decommission all TAQA assets in a healthy, safe, secure, environmentally sound, reliable and efficient manner
- Manage the risk of incidents by identifying and minimising workplace and personal health risks, through implementation of robust and effective work control, permit to work and task risk management arrangements. Promote and reinforce all safe behaviours
- Identify all necessary actions to be taken to protect people, the environment, TAQA's assets and reputation in the event of an emergency or security threat
- Maintain operations stability and integrity throughout lifecycle of facility by use of clearly defined and documented operational, maintenance, inspection and corrosion control programs. Seek improvements in process and equipment reliability by systematically eliminating defects and sources of loss. Assessment of the degree to which expectations are met is essential to improve operations Integrity, maintain accountability and reliability
- Ensure that risks and exposures from proposed changes are identified, evaluated and managed to remain within pre-set (design) acceptance criteria
- Ensure contractors and suppliers perform in a manner that is consistent and compatible with TAQA policies and business performance standards. Ensure contracted services and procured materials meet the requirements and expectations of TAQA standards
- Report and investigate all incidents. Learn from incidents and use the information to take corrective action and prevent recurrence
- Confirm that TAQA processes are implemented and assess whether they are working effectively. Measure progress and continually improve towards meeting TAQA HSSE objectives, targets and key performance indicators

ENVIRONMENT



ENVIRONMENTAL MANAGEMENT SYSTEM

TAQA operates an Environmental Management System (EMS) which is set out in accordance with the requirements of ISO14001.

TAQA continued to apply the ISO14001:2015 standard to all operations in 2021, excluding the Brae assets as they required independent auditing prior to being included as part of TAQA UK's EMS. The Brae EMS sits under ROMS and has been externally verified and aligns to the principals of ISO14001:2015. TAQA integrated the Braes under the ISO14001 certification in Q1 2022.

The International Standards Organisation (ISO) is a non-governmental network of global national standards institutes. ISO14001 is the main management systems specification document in the ISO14000 series containing the essential elements that must be satisfied by an organisation seeking registration or certification for its Environmental Management System.

The EMS provides a systematic approach to help control processes or activities which may have a potential environmental impact by means of procedures, instructions, training and education. It is designed to minimise the impact to the environment from TAQA's day-to-day operations and ensuring compliance with legal obligations while ensuring the business is equipped to deal with emergency scenarios.

The key components of TAQA's ISO14001 certified EMS are:

ORGANISATIONAL CONTEXT

Structure of organisation, which also includes the scope of the EMS. Identifies processes, roles and responsibilities.

MANAGEMENT SUPPORT & REVIEW

Leadership commitment, including the HSSE Policy. Management reviews are crucial to the cycle for continuous improvement. Regular Management Review meetings initiating and evaluating improvement programmes.

LEGAL REQUIREMENTS

Identification of applicable legal regulations is an integral part of the Environmental Management System. Confirmation of operations to legal, statutory and regulatory requirements.

ENVIRONMENTAL ASPECTS

Elements or activities that may result in a positive or negative impact on the environment and how to control them.

OBJECTIVES, TARGETS AND PROGRAMMES

The TAQA 'Objectives and Targets List' with respect to environmental performance is reviewed annually then translated into plans and programmes to ensure effective and successful implementation.

TRAINING, AWARENESS AND COMPETENCE

Periodic training and awareness are cornerstones of the TAQA Learning and Development Programme.



DOCUMENT CONTROL

All EMS documentation is systematically managed to ensure it is up to date, accurate and traceable.

OPERATIONAL CONTROL

TAQA's procedures and work instructions are set up to minimise and control the impact of environmental aspects.

COMMUNICATION

Effective external and internal communication of environmental issues by TAQA contributes to the success of the EMS. This is carried out internally through regular meetings and offshore visits and externally with authorities and third parties.

EMERGENCY PREPAREDNESS AND RESPONSE

Location level response plans are in place and are designed to effectively manage a wide variety of emergency scenarios. Necessary resources are available and exercises carried out to measure effectiveness – including oil spill response and control.

MONITORING AND MEASUREMENT

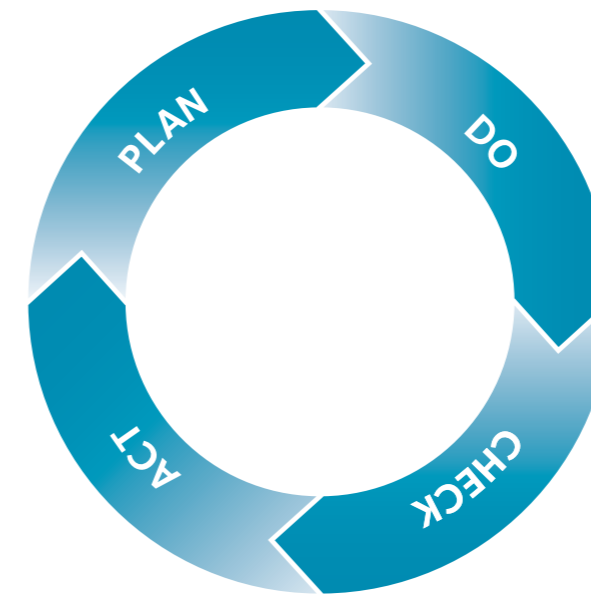
All incident reports, such as near misses, incidents and accidents are systematically recorded, root causes identified and preventative/corrective actions are tracked to ensure continual improvement.

AUDITING

Regular auditing ensures the continued effectiveness of the EMS. All internal audits are performed according to the TAQA audit procedure, results are then discussed in cross-functional meetings and corrective actions are tracked for progress.

PLAN-DO-CHECK-ACT

The ISO14001 philosophy is based on the Plan-Do-Check-Act (PDCA) management model. In continuously going through each individual step, environmental management can result in improved environmental performance. The use of the PDCA cycle helps in keeping the environmental management system a continuous process instead of an individual event.



Plan: tools for identification of targets in environmental performance.

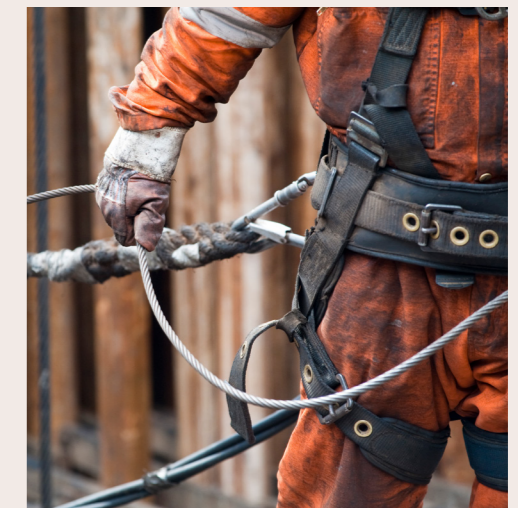
Do: tools for achieving goals of environmental management.

Check: tools for checking the effect of environmental management.

Act: tools for taking effective adjusting measures in environmental management.

Three independent ISO14001 surveillance audits were undertaken in 2021. Due to COVID 19 restrictions two of these were carried out virtually. Two of the audits carried out included onshore and offshore assets (Harding, Tern, North Cormorant and Cormorant Alpha). The mid-year audit carried out a gap analysis of Brae Assets in readiness for integration into the ISO14001 certification in 2022. All audits were extremely positive with only one minor non-conformance which was actioned and closed out soon after.

“ALL AUDITS WERE EXTREMELY POSITIVE WITH ONLY ONE MINOR NON-CONFORMANCE WHICH WAS ACTIONED AND CLOSED OUT SOON AFTER.”



ENVIRONMENTAL PERFORMANCE

The performance data presented covers all of TAQA's operating platforms, including the Brae fields, which TAQA became operator of in 2020.

ATMOSPHERIC EMISSIONS

Atmospheric emissions from TAQA's offshore activities arise primarily from the combustion of fuel gas and diesel for power generation and the flaring of associated gas that cannot be used or exported for safety reasons (an integral part of the platform safety systems).

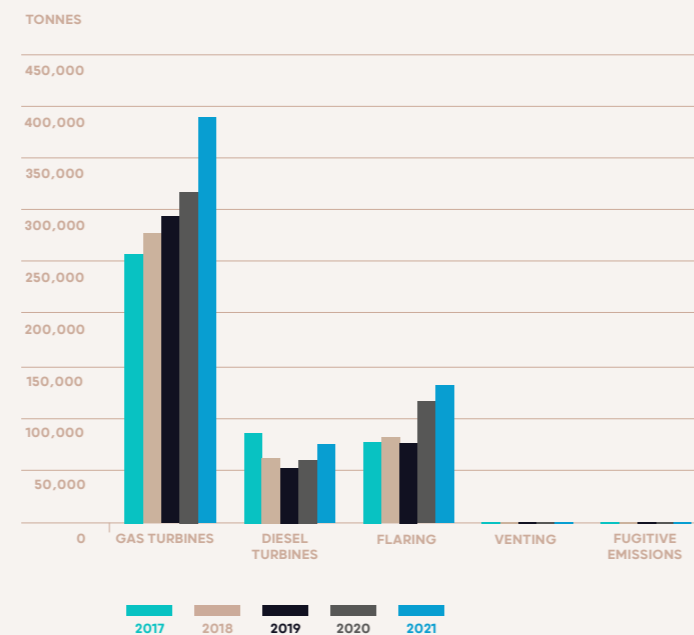
CARBON DIOXIDE EMISSIONS

The Greenhouse Gases Emissions Trading Scheme (Amendment) Regulations (2020) is the statutory mechanism used to regulate and reduce CO₂ emissions to the atmosphere which allows for an allocated allowance of CO₂ to be emitted and then allowance for all subsequent emissions must be purchased. All TAQA assets account for carbon dioxide (CO₂) emissions by means of the cap-and-trade system.

The major combustion processes on TAQA's platforms resulting in the production of CO₂ are the generation of electrical power and the compression of gas for transportation to shore. Reservoir gas provides the primary fuel source with diesel acting as back-up.

Figure 1 shows the that the largest proportion of CO₂ emissions derive from turbine gas usage. The CO₂ emissions from gas turbines has increased year-on-year since 2017. This was due to the continuation of operational initiatives such as Cormorant Alpha single Solar Turbine to change focus to using fuel gas as opposed to diesel (as can be seen from the graphs). There was a slight increase of diesel use during 2021 overall.

FIGURE 1:
TAQA CO₂ DISCHARGES BY SOURCE



NON-CO₂ ATMOSPHERIC EMISSIONS

The main combustion emission from TAQA's operations is CO₂, however smaller emissions of nitrous oxide, sulphur dioxide, carbon monoxide, methane and volatile organic compounds are also produced. Non-CO₂ atmospheric emissions from TAQA installations are regulated via legislation covering flare emissions, vent gas emissions and combustion plant emissions.

Figure 2 shows all the platforms non-CO₂ atmospheric emissions. All platforms were within the permitted allowance for all non-CO₂ atmospheric emissions permitted within the TAQA PPC permits.

It is noted that Eider is the only platform that does not have a Pollution Prevention & Control (PPC) permit because the installed combustion plant on board is below the threshold required to hold a permit.

FIGURE 2:
2021 ACTUAL NON-CO₂ ATMOSPHERIC EMISSIONS VS PERMIT ALLOWANCE



PRODUCED WATER

Produced water is created during the extraction of oil and gas from subsurface. The produced water may contain water which has come directly from the reservoir, water injected into the formation to aid the extraction of oil or gas and any chemicals added during the production/treatment process. Oil reservoirs typically produce more water during extraction compared to gas reservoirs and as the reservoirs mature the proportion of water increases. The produced water is separated from the hydrocarbons; therefore, it can contain dissolved and dispersed hydrocarbons.

The Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (OPPC) (as amended) regulate all oil discharges to sea and require that all these discharges must be permitted by the Offshore Petroleum Regulator for Environmental and Decommissioning (OPRED). OPRED place strict limitations on both the concentration and quantity of oil discharged within the produced water to protect the marine environment.

The six producing TAQA installations report a total of eleven individual discharge streams – two on Cormorant Alpha, two on North Cormorant, three on Tern, two on Harding, one on East Brae and one on Brae Alpha – all of which must meet the legal monthly oil in water discharge average

of 30mg/l. The exception to this is the second discharge stream on Harding which comprises of displacement water discharged from the Buffer cell (during oil production, water is displaced through the buffer cell and discharged to sea to a legislative limit of 40mg/l). TAQA obtained operatorship of the Hudson subsea tieback on 1 April 2021 which was previously operated by Dana Petroleum meaning, that a third discharge stream is reported for Tern for 2021.

Reporting discharge streams on an individual basis ensures that a constant focus can be maintained on the quality of each discharge stream via the required sample regime. If any deterioration in quality is observed, then subtle process adjustments can be made (e.g. skimming produced water flash drums or changing vessel liquid interface levels) to minimise the overall quantity of dispersed oil being discharged to sea.

Figure 3 shows that TAQA internal target for average oil in produced water (OIPW) concentration for each discharge stream was met in 2021, except for East Brae which exceeded the target by 3.6mg/l (23%) and 0.03 tonnes above target, this is attributed to P&A and well wax treatment work scopes. However, overall TAQA was 26% below annual targets for oil in produced water discharged in tonnes.

FIGURE 3:
2021 TAQA ACTUAL OIPW VERSUS TARGET OIPW CONCENTRATIONS

Including Hudson

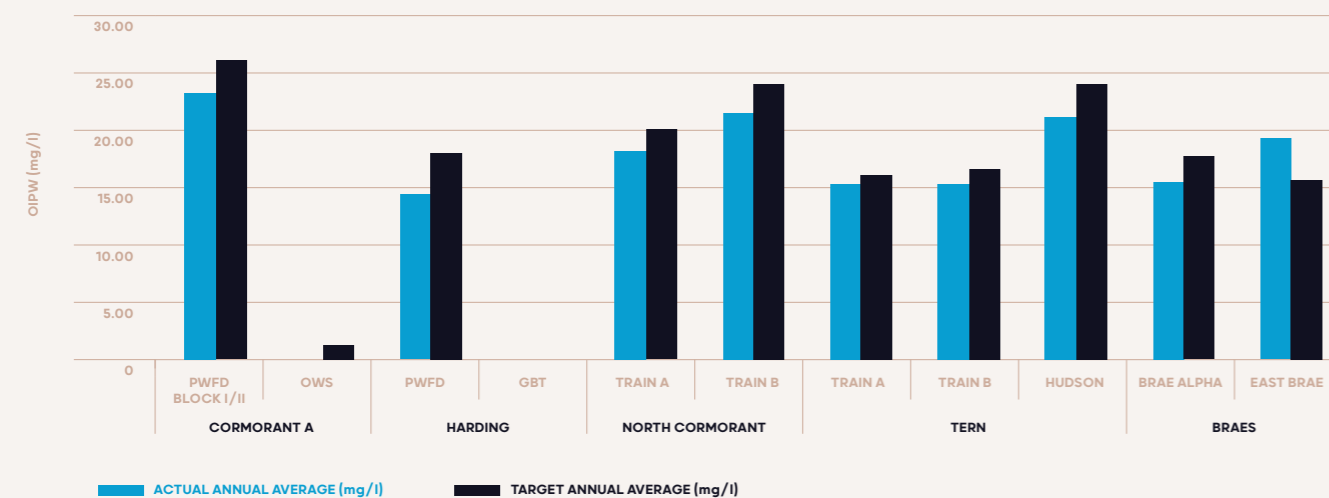


FIGURE 4:
2021 TAQA ACTUAL VERSUS PRODUCED WATER DISCHARGE

Including Hudson

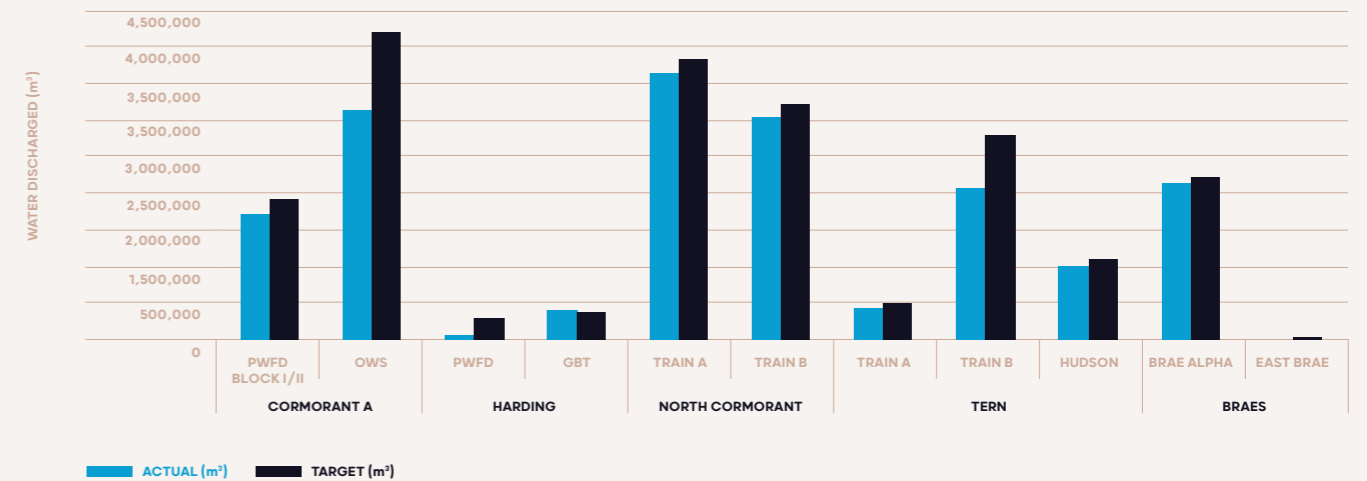


Figure 4 illustrates that all platforms met their internal produced water targets for 2021. TAQA assets discharged 17,231,101 m³ of produced water in 2021 (17% less than permitted values) having set updated targets for 2021. The total volume of discharged water increased 24% in 2021 compared to 2020 as TAQA now have a full year's data to report from Brae Alpha and East Brae. Harding is the only platform that has the capability to re-inject produced water and in 2021, 99% (6,119,955³) of the total produced water was re-injected into the reservoir which decreases the volume discharged to sea. 401,206³ of displacement water was released from GBT in 2021, however no oil was released within this water.

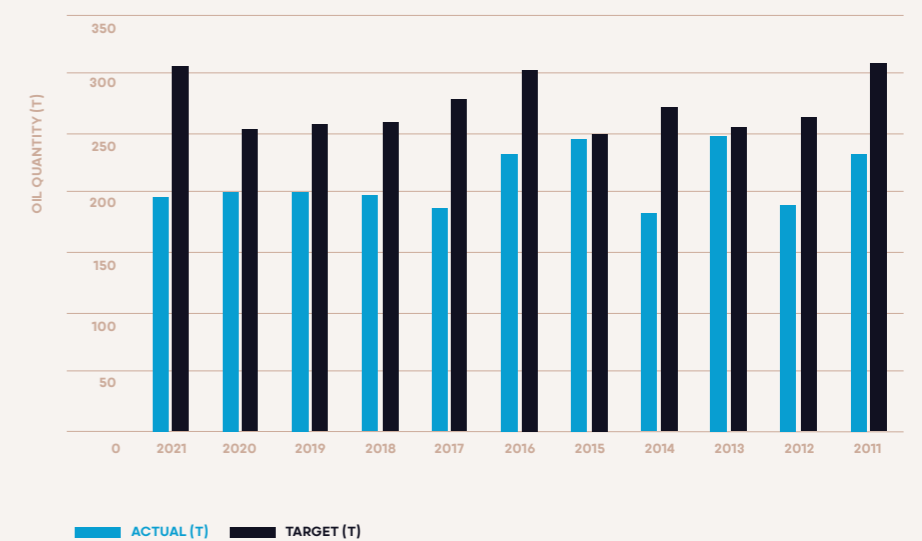
Figure 5 shows the actual quantity of oil discharged to sea via produced water for all TAQA platforms during 2021 compared to internal targets. A total of 269 tonnes of dispersed oil was discharged to sea which is 21% below permitted levels. A 71 tonne increase from the amount that was discharged in 2021 was recorded and is due to a full year's data recorded from Brae Alpha and East Brae.

In addition to the platform production produced water discharge streams there were three term-based permits in place during 2021. Two were in relation to pipeline operations including a contingency for impulse line cutting at UMC manifold and the disconnection of a pipeline between West Brae and Central Brae.

The two pipeline permits resulted in 0.2749 tonnes of oily waste being discharged. The third term-based permit was in relation to well intervention operations using MSV Seawell, however zero oil in fluids were ultimately discharged in 2021 for this operation.

FIGURE 5:
TAQA 2011 - 2021 ACTUAL VERSUS TARGET TOTAL OIL IN PRODUCED WATER

Including Hudson



WASTE

The Merchant Shipping (Prevention of Garbage) Regulations 1998 prohibits overboard discharge of offshore waste. All waste is therefore segregated offshore and disposed of onshore via a variety of routes including re-use, recycling, waste-to-energy (WtE), landfill and incineration.

A variety of solid and liquid hazardous wastes are produced from TAQA's offshore operations, including drill cuttings, waste chemicals, tank washings, waste oil, paper, scrap metal, glass and wood. To ensure legal compliance, all TAQA platforms actively segregate their waste streams which reduces contamination of disposal routes and minimises environmental impact by reusing, recycling and using waste in waste-to-energy plants (where possible), following the waste hierarchy (figure 6).

Figure 7 details the tonnage of TAQA waste going to each disposal route over the last five years. In 2018, TAQA changed the incumbent waste management company which allowed a greater quantity of waste to be sent to WtE and recycled. There has been a significant increase in waste volume in 2021 partly due to Brae Asset data inclusion but mainly due to Brae Bravo topside removal which accounted for 85.4% of overall waste and contributed to an increased tonnage recycled of 13,939 from 2020.

FIGURE 6: TAQA WASTE DISPOSAL HIERARCHY



FIGURE 8: TAQA 2021 WASTE DISPOSAL ROUTE BY LOCATION

Figure 8 gives an overview of the percentage of different waste disposal routes generated by the TAQA offshore locations during 2021. The proportion of waste recycled increased from 71.8% in 2020 to 86.3% in 2021 due to Brae Bravo topsides removal. In addition, 212 tonnes of TAQA's waste went for reuse in 2021 compared to 1.7 tonnes in 2020.

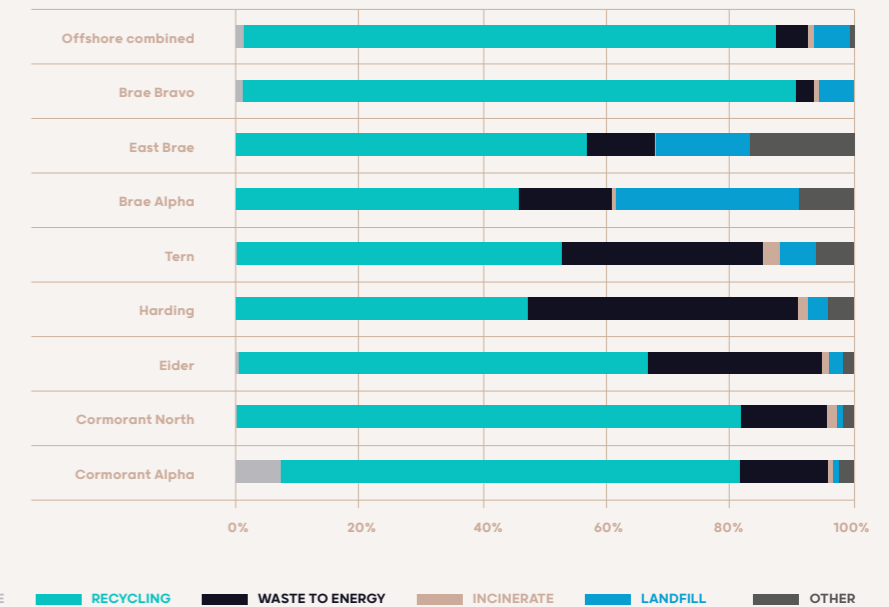
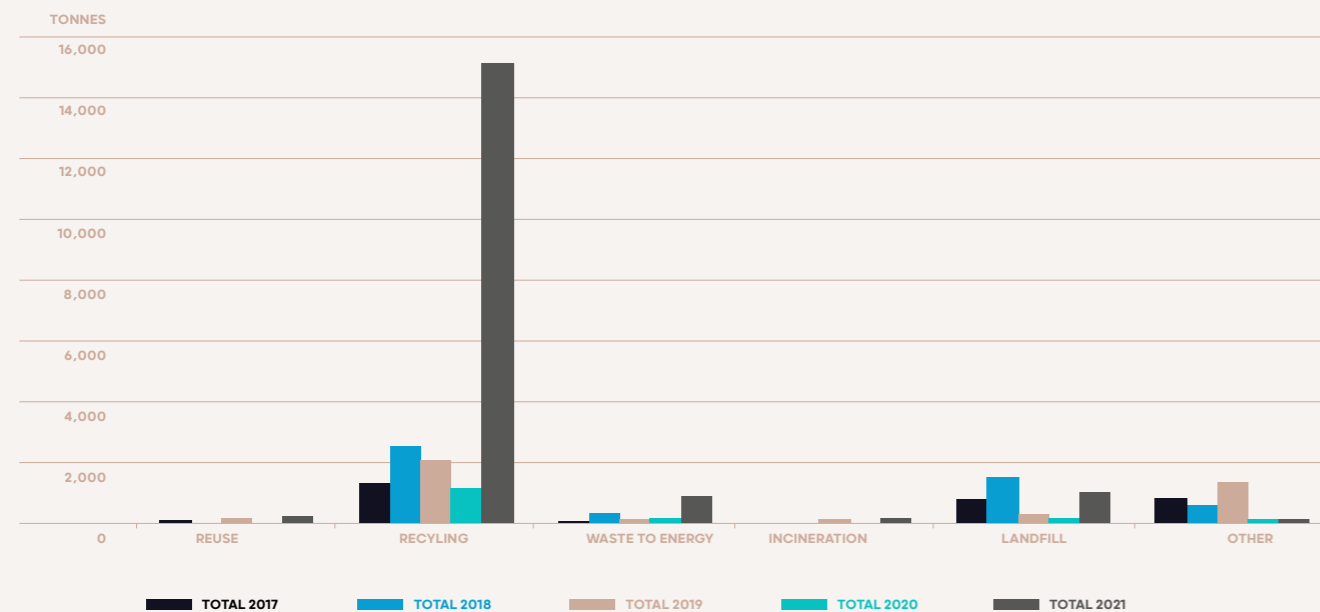


FIGURE 7: TAQA 2021 WASTE DISPOSAL ROUTE COMPARISON



CHEMICALS

Chemical use and discharge is regulated under the Offshore Chemical Regulations 2002 (as amended) (OCR). A permit must be obtained from OPRED prior to the use and discharge of chemicals associated with production, drilling, well interventions and pipeline operations offshore.

These permits describe the selection, deployment, discharge route and environmental impact assessment for chemicals that are either used continuously or on a batch (ad-hoc) basis.

A key objective of the OCR Regulations is "to identify chemicals that might be considered hazardous and to ensure wherever possible their substitution by less hazardous on non-hazardous chemicals".

Classification of chemicals is undertaken via the Offshore Chemical Notification Scheme (OCNS). This scheme assigns a substance a risk/hazard category. This is either a colour or letter (dependent on the method used to model the risk), based on the varying levels of hazard/risk to the receiving environment associated with its discharge (see table 1).

Table 1 shows the relative quantities of chemicals used and discharged according to their classification under the OCNS. The quantities of chemicals used (6,513 tonnes) and

discharge (4,739 tonnes) cover all activities and pipeline operations. There was a decrease of 5,404 tonnes of chemicals used overall - compared to 2021. The quantity of chemicals discharged increased in 2021 by (22%) as the proportion of production chemicals increased and the use of well intervention chemicals decreased.

A substitution warning is assigned to an offshore chemical if it is considered by CEFAS to be harmful to the environment, i.e., the chemical or one of its components fails to meet set criteria with respect to biodegradation, bioaccumulation potential or toxicity.

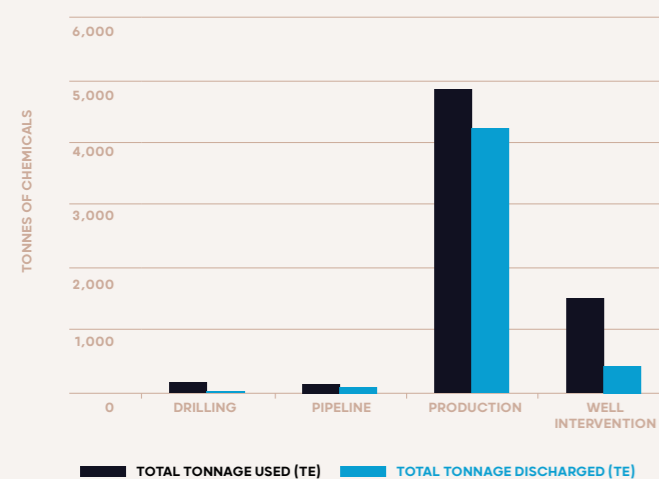
It should be noted that of the 4,739 tonnes of chemicals discharged to sea during 2021, 95.1% of this was a discharge of either the lowest risk CHARM (Chemical Hazard Assessment and Risk Management) category Gold, or the Non-CHARM lowest risk category E - an 8.71% decrease from 2020. An increase in production chemicals discharged to sea can be attributed to the inclusion of a full years' Brae asset data. Of the chemicals discharged to sea during 2021, 10% comprised of chemicals which carry a substitution warning - this is a slight increase from the 9% in 2020 and was due to a reduction in drilling chemical use and total quantities of production chemicals used remaining consistent.

TABLE 1:
2021 CHEMICAL USAGE AND DISCHARGE QUANTITIES ACCORDING TO OCNS CATEGORY

CHEMICAL RANKING	TOTAL USAGE (KG)	TOTAL DISCHARGE (KG)
A	796.06	796.06
B	0.00	0.00
C	65,203.55	64,381.65
D	29,750.25	29,388.01
E	1,837,945.46	596,332.31
White	0.00	0.00
Silver	189,553.63	137,831.44
Gold	4,389,895.74	3,910,216.80
TOTAL (kg)	6,513,144.69	4,738,946.27

Figure 9 highlights that production operations used the largest amount of chemicals during 2021 (44%) compared to 2020 (35%) whereas in 2020 well abandonment/intervention chemicals were highest (5283 tonnes). Well intervention related chemicals use reduced significantly in 2021 by 71% from 2020, however a quantity of P&A chemicals was introduced (163.18 tonnes).

FIGURE 9:
2021 TAQA CHEMICAL USAGE AND DISCHARGE



ACCIDENTAL SPILLS

All offshore operations must be covered by an approved Oil Pollution Emergency Plan (OPEP). These plans describe the procedures and notifications that must be undertaken in the event of a release. They are regularly tested and exercised by offshore and onshore response teams to ensure they are robust and fit for purpose. All unplanned discharges to sea of oil and chemicals, regardless of volume, must be reported to relevant authorities (OPRED, Marine Scotland, MCA and JNCC) via a Petroleum Operations Notice 1 (PON1).

At TAQA, there are a variety of systems and procedures in place to mitigate against and reduce the potential of the unplanned releases to sea. If a loss of containment does occur whether it reaches the sea or is recovered at the location, it is captured in the company's incident reporting database. The release is then subject to investigation to identify the root cause.

Table 2 shows the number of PON1s submitted by TAQA during 2021, detailing if it was an oil or chemical release and the corresponding quantity. A total of 25 releases occurred from TAQA operations in 2021, 2 more than 2020 (noting this includes 2 further assets with a full years data). Six of these spills were hydrocarbon and totalled 0.307 tonnes, meaning a reduction of 0.703 tonnes from 2020. In regards to chemical releases, an increase of 45.81 tonnes was recorded owing to a methanol leak from Devenick Methanol line (97.8% of total).

TABLE 2:
ACCIDENTAL SPILLS TO SEA

PLATFORM	DESCRIPTION OF OIL (GREY ENTRIES) OR CHEMICAL SPILL (BLUE ENTRIES)	MAX QUANTITY SPILLED (TONNES)
CORMORANT ALPHA	IRS/2021/682/PON1 filter pot seal failure on diesel bunkering filter. Filter situated an enclosed corridor however hole in deck allowed spill to sea	0.0177
	PON1/8503 V.30 Pelican P-22 Brayco SV3 leak from wellhead - no source	0.519
	PON1/10347 Ver 5 hydraulic fluid leak on returns line at P2, UMC	0.037
	PON1/10492 occurred during the removal of redundant pipework	0.0078
EIDER	PON1/10114 oily water mix pour down overflow section of drain	0.0177
BRAE ALPHA	PON1/10366 whilst bunkering diesel on the West side of the platform there was a small discolouring observed in the water at one of the hose couplings	0.0002
	PON1/10168 spill of RBW80243 (water clarifier/deoiler) from overflow of the fixed storage tank in MOD14 to open drains during chemical transfer operation	0.0936
	PON1/10180 spill of hydraulic fluid castrol hispin AWH-M15 from a valve actuator on the Central Brae ESDV CF-002 vent line/port	0.0034
EAST BRAE	PON1/10218 subsea hydraulic fluid leak from Braemar SSIV 0160	0.1000
EAST BRAE DEVENICK	PON1 10377 probable subsea loss of Methanol from Devenick Methanol line	47.5480
TERN	PON1/10231 diesel observed weeping from coupling during bunkering operations	0.0004
HARDING	PON1/10448 during hose-end valve replacement works the subsea downline valves pressure was vented and an oily discharge observed by the ROV	0.001776
	PON1/10293 erifon 818 was lost to sea from slot 12 GI1 cylinders 1 and 2 and Slot 24 IC6 Cylinder 3	0.0877
	PON1/10355 erifon 818 was lost to sea from slot 24 Well IC6 Slot 24 cylinder 4	0.0105
	PON1/10356 erifon 818 was lost to sea from conductor tensioner unit system Well WS 1 slot 17 cylinder 2.	0.0950
	PON1/10413 erifon 818 was lost to sea from slot 17 (WS 1 cylinder 4) and slot 4 PNE2 cylinder 4	0.035
	PON1/10478 erifon 818 was lost to sea from slot 2 Well PN1, cylinders 1,3 and 4	0.098
	PON1/10506 erifon 818 was lost to sea from slot 4 (cylinder 1) & 23 (cylinder 3)	0.043
	PON1/10559 erifon 818 was lost to sea from slot 9 Well WS2, cylinders 2 and 4	0.035
	PON1/10620 erifon 818 was lost to sea from slot 1 Well IC 4, cylinder 1	0.021
	IRS/2021/97/PON1 erifon 818 was lost to sea (22.5l) from slot 5 Well WC 1, cylinder 2	0.024
IRS/2021/141/PON1 erifon 818 was lost to sea (32.5l) from slot 8 Well IC 2, cylinder 2	0.035	
NORTH CORMORANT	IRS/2021/162/PON1 crude oil leak in oil process module 5 mezzanine level from fiscal metering oil export Prover Loop	0.2874
	PON1/10544 lube oil was observed coming out of the breather/vent on the casing that houses the non-drive end bearings of water injection pump	0.0002
	PON1/10362 diesel hose parted during crane top up	0.0002

* It is noted that all but one of the chemical PON1 reports submitted in 2021 by Harding were attributed to losses of hydraulic fluid from the conductor tensioner system due to historical design issues. A rolling program of improvements are ongoing.

ENVIRONMENTAL OBJECTIVES

Each year several key objectives are set. The purpose of these objectives is to help achieve and demonstrate continual improvement in the environmental performance of TAQA UK. Each objective consists of several individual targets.

Table 4 provides an overview of the status of the 2021 objectives at year end.

TABLE 4: 2021 ENVIRONMENTAL OBJECTIVES SUMMARY

OBJECTIVE		STATUS																																
1	Environmental project/assurance activities	99%																																
2	Offshore operations improvements	85%																																
3	Environmental engineering control improvements	100%																																
4	Waste management continuous improvements: Reduction of waste to landfill for offshore only due to COVID-19 working from home restrictions and limited onshore waste in 2020 (see below):	100%																																
	<table border="1"> <thead> <tr> <th></th> <th>Diverted Waste Target</th> <th>Landfill Limit</th> <th></th> </tr> </thead> <tbody> <tr> <td>Harding (HAR)</td> <td>91%</td> <td>9%</td> <td>HAR (96%/5%)</td> </tr> <tr> <td>Cormorant Alpha (COA)</td> <td>90%</td> <td>10%</td> <td>COA (97%/4%)</td> </tr> <tr> <td>North Cormorant (NCO)</td> <td>92%</td> <td>8%</td> <td>NCO (98%/2%)</td> </tr> <tr> <td>Tern Alpha (TEA)</td> <td>92%</td> <td>8%</td> <td>TEA (93%/7%)</td> </tr> <tr> <td>Eider Alpha (EA)</td> <td>90%</td> <td>10%</td> <td>EIA (97%/3%)</td> </tr> <tr> <td>Brae Alpha (BRA)</td> <td>65%</td> <td>35%</td> <td>BRA (70%/30%)</td> </tr> <tr> <td>East Brae (EBR)</td> <td>62%</td> <td>38%</td> <td>EBR (85%/15%)</td> </tr> </tbody> </table> <p>Only Tern Alpha missed its landfill target with an outcome of 6.2%</p>		Diverted Waste Target	Landfill Limit		Harding (HAR)	91%	9%	HAR (96%/5%)	Cormorant Alpha (COA)	90%	10%	COA (97%/4%)	North Cormorant (NCO)	92%	8%	NCO (98%/2%)	Tern Alpha (TEA)	92%	8%	TEA (93%/7%)	Eider Alpha (EA)	90%	10%	EIA (97%/3%)	Brae Alpha (BRA)	65%	35%	BRA (70%/30%)	East Brae (EBR)	62%	38%	EBR (85%/15%)	
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East Brae (EBR)	62%	38%	EBR (85%/15%)																															
5	Braes integration plan	98%																																
6	Environmental management system continuous improvements	95%																																

■ COMPLETED/ACHIEVED (>90%)
 ■ PARTIALLY COMPLETE (>75%)
 ■ INCOMPLETE/NOT ACHIEVED (<75%)



In summary, all six of the objectives in 2021 were fully or partially completed, a summary of each is provided below:

- **Environmental project/assurance activities** involved supporting several business units including decommissioning and projects, in particular the Cormorant Alpha Substructure Abandonment (CASA), D3 inventory checks for Harding, NNS assets and Environmental Appraisals for the respective Decommissioning Programmes, Plan and commencement of Devenick and Hudson survey requirements and Brae Bravo Topside Decommissioning topside project support.
- The **waste management targets** were based on diversion of waste from landfill, the least favoured option on the waste hierarchy. Overall, most offshore assets achieved the targets, with the highest land fill rate in 2021 at Brae Alpha with 29.53% of all waste going to landfill. Waste to energy in 2021 was only available to Brae Assets during the latter part of 2021, 2021, so we expect this percentage to fall.
- The **environmental engineering controls** during 2021 included a full review of the Environmental Risk Management Procedure and Engineering Project Delivery Procedure to incorporate elements of the Emissions Management Strategy was carried out.
- The **Offshore operations improvements** were to try to maintain and improve E-rep engagements and communications with offshore.

- The **Braes integration plan** in 2021 reviewed the Brae EMS documents against ISO14001 and TAQA EMS. A plan was developed to transition into the TAQA format, DNV carried out a Brae Asset pre-certification audit and the roll out of TAQA E-Learning to Brae Assets commenced. A review of Brae OPEP's began to transition into TAQA OPEP format. Also completed ETS verification alignment, emissions reduction alignment, alignment of Brae E-Rep roles, NORM waste management contract aligned, Collabro Tracker for F-Gas rolled out to Brae Assets.
- **EMS continuous improvements** included the SOSREP exercise, sustainability measures including emissions reduction strategy development and communication, identification of GHG sources, definition of carbon and energy Intensity baselines, support and roll out OEUK MAP objectives, Flylogix methane survey on Harding, green procurement process and emissions reduction hopper. 2021 also saw the integration of Brae Assets into the Annual Environmental Statement and EMS management system.

In 2022, TAQA is again continuing its efforts on focussed objectives in five key areas:

1. Environmental projects/assurance activities
2. Offshore operations continuous improvement
3. Waste management continuous improvement
4. Brae asset integration plan
5. Environmental management system continuous improvement

DECOMMISSIONING



DECOMMISSIONING

2021 saw the continuation of TAQA UK's preparation for and execution of decommissioning activities. The following summarises the main areas of activity in 2021.

SUPPORT DURING PREPARATIONS AND PLANNING

- Environmental baseline and habitat surveys.
- Harding asset topside hazardous materials inventory survey.
- Decommissioning programme and environmental appraisals.
- Development of environmental and waste management scopes for northern North Seas (NNS) asset topside and jacket removal projects.
- Close-out of the Cormorant Alpha Derrick removal project Active Waste Management Plan (AWMP).

CORMORANT ALPHA DERRICK REMOVAL

- 610 tonnes of material produced from the derrick removal in 2021.
- In total, 724 tonnes were returned to shore from the entire removal project (2020-2021).
- 98% reused and recycled versus the environmental appraisal target of 97%. Excellent legislative compliance and zero waste-related incidents.
- Waste returns recorded separately from operational waste returns for the decommissioning close-out report.



Brae Bravo topsides removal

WELL PLUG AND ABANDONMENT

- Eight wells safely and successfully plugged on East Brae.
- Commencement of multi-year well P&A activity on North Cormorant and Tern with four wells successfully abandoned on North Cormorant and two on Tern.

BRAE BRAVO DECOMMISSIONING

- Brae Bravo topsides removed in 2021. Large-scale operation involving two Semi-Submersible Crane Vessels (SSCVs) to remove the Brae Bravo topside modules.
- Campaign 1 (April to May) – Helideck removed by SSCV Thialf. Flare bridge, flare tower and flare jacket removed by SSCV Sleipnir. Total removed was around 3,000 tonnes.
- Campaign 2 (July) – SSCV Sleipnir removed the remaining topsides modules. Total removed was around 33,000 tonnes.

DISPOSAL OF BRAE BRAVO - VATS BASE ROGALAND, NORWAY

- Disposal activities began in May and will be ongoing until March 2024.
- All 28 of the Brae Bravo modules scheduled for dismantling and processing for reuse, recycling or disposal. A target of **95%** re-use/recycling has been set for the entire Brae Bravo decommissioning project.
- Total weight sent to Vats is more than 36,000 tonnes with a further 12,000 tonnes due in 2022 when the remaining jacket is removed.

ONSHORE INITIATIVES



“2,249 CHILDREN HAVE BEEN INVOLVED IN THE PROGRAMME THROUGH 73 PLAYGROUND VISITS, 6 RIVERBANK VISITS, 85 VIRTUAL CLASS SESSIONS IN SCHOOLS FROM BRAEMAR TO ABERDEEN.”

MACDUFF MARINE AQUARIUM

As part of the company's community investment programme, TAQA continued its long-standing relationship with the Macduff Aquarium in Aberdeenshire. With our support, the aquarium started a new Saturday club to build environmental awareness amongst children in the North-East of Scotland. Led by the aquarium's marine biologists and educators, the club focusses on environmental themes with engaging, hands-on activities, trips to the aquarium's rocky beach, crafts and exclusive access to explore the aquarium before it is open to visitors, all with the goal of engaging and educating children.

RIVER DEE TRUST EDUCATION PROGRAMME

The River Dee Trust is a conservation charity that works to preserve and communicate the importance of the River Dee. Through our community investment programme, TAQA and others provided funding for an Education Support Officer to deliver a programme to build environmental awareness to children and young people. Now halfway through its second year, 2,249 children have been involved in the programme through 73 playground visits, 6 riverbank visits, 85 virtual class sessions in schools from Braemar to Aberdeen.

GREYHOPE BAY

TAQA is a founding 'Admiral' funder of the Greyhope Bay project at Torry Battery - a site with a unique heritage and views of the city's bottlenose dolphins. The project seeks to engage communities on marine ecosystems. The building and facility operations act as a flagship in sustainable practice, modelling innovation in technology, the circular economy and low-impact behaviours with the aim of sharing understanding and emulating changes we can make to protect our marine environment.

IT EQUIPMENT DONATION

Surplus IT equipment was converted into a cash donation to Aberdeen City Council to help support digital poverty across Aberdeen City and Aberdeenshire. Our partnership with specialist provider Re-Tek saw our redundant equipment refurbished and made available through a variety of channels for re-use. This in turn generated a rebate to TAQA of £26,900 which was used by the local authority to increase access to IT for people who would benefit from such support.

AGILE WORKING MODEL

In 2021 TAQA introduced an agile working model to allow flexible working for its employees and provided the additional benefit of minimising travel time for employees and therefore fuel combusted.

GLOSSARY

ADX

Abu Dhabi Securities Exchange

AWMP

Active Waste Management Plan

BAT

Best Available Technique

boed

Barrels Oil Equivalent per Day

BRA

Brae Alpha Platform

BRE

East Brae Platform

CASA

Cormorant Alpha Storage cells Abandonment

CEFAS

Centre for Environment, Fisheries and Agricultural Science

CH₄

Methane

CHARM

Chemical Hazard Assessment and Risk Management

CO

Carbon Monoxide

CO₂

Carbon Dioxide

COA

Cormorant Alpha Platform

COE

Commitment to Operational Excellence

CON

North Cormorant Platform

EIA

Eider Platform

EMS

Environmental Management System

ESG

Environmental, Social & Governance

ETS

Emissions Trading Scheme

FLAGS

Far North Liquids and Associated Gas System

GBT

Gravity Base Tank

HAR

Harding Platform

HSSEQ

Health, Safety, Security, Environment and Quality

ISO 14001

International Standards Organisation 14001 – specifies the requirements for an environmental management system

JNCC

Joint Nature Conservation Committee

MAP

Methane Acton Plan

mboe/d

Thousand Barrels Oil Equivalent per Day

MCA

Maritime and Coastguard Agency

MPP

Multi Phase Pump

NNS

Northern North Sea

NORM

Naturally Occurring Radioactive Material

NO_x

Oxides of Nitrogen

OBM

Oil Based Mud

OCR

Offshore Chemicals Regulations (2002) (as amended)

OCNS

Offshore Chemical Notification Scheme

OGA

Oil & Gas Authority

OIPW

Oil in Produced Water

OLS

Offshore Loading System (oil export system installed at the Harding Field during 2016)

OPEP

Oil Pollution Emergency Plan

OPPC

Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations (2005) (as amended)

OPRED

Offshore Petroleum Regulator for Environment and Decommissioning

OWS

Oily Water Separator

P&A

Plug & Abandonment

PDCA

Plan-Do-Check-Act cycle for environmental management and improvement

PON

Petroleum Operations Notice

PPC

Offshore Combustion Installations (Pollution Prevention and Control) Regulations (2013)

PWFD

Produced Water Flash Drum

ROMS

Responsible Operations Management System

ROV

Remotely Operated Vehicle

SAGE

Scottish Area Gas Evacuation pipeline system

SDG

Sustainable Development Goals

SCM

Subsea Control Module

SO₂

Sulphur Dioxide

SOSREP

Secretary of State's Representative

SSCV

Semi-Submersible Crane Vessel

SSIV

Subsea Isolation Valve

TEA

Tern Platform

TH

TAQA House

UKCS

United Kingdom Continental Shelf

UMC

Underwater Manifold Centre

VOC

Volatile Organic Compound

WEEE

Waste Electrical & Electronic Equipment

WtE

Waste-to-Energy



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