



Environmental Statement 2023



Table of Contents

Introduction	1.1
Dana Petroleum Values	1.2
HSSE Policy	1.3
HSSE Management System	1.4
Overview of Operations	1.5
Triton FPSO	1.6
Western Isles FPSO	1.7
Drilling Operations	1.8
Environmental Performance	2
Atmospheric Emissions	2.1
Oil in Water	2.1
Chemical Use and Discharge	2.3
Waste	2.4
Unplanned Releases	2.5
Environmental Performance against Objectives	2.6
Environmental Objectives	2.7

Dana Petroleum Limited is an exploration and production company with operations and interests in the UK, the Netherlands and Egypt. Dana is a wholly owned subsidiary of the Korea National Oil Corporation.



1.1

Introduction

This statement describes the 2023 environmental performance of the UK offshore operations of Dana Petroleum (E&P) Limited. It has been prepared to satisfy the requirements of OSPAR Recommendation 2003/5 and the associated OPRED guidance (OSPAR 2003/5 DECC Guidance: Rev 5 May 2014).

Dana, a wholly owned subsidiary of the Korea National Oil Corporation, operates internationally with offices in the UK, Egypt and the Netherlands. In the UK North Sea, Dana operates two FPSOs as well as being a partner in several non-operated ventures.

One of Dana's key values is to protect the environment and to work to minimise the impact of its operations. Dana achieves this through active use of its EMS system, development of its E-Reps network and proactive engagement with offshore and operational groups. Through these routes, Dana ensures work activities incorporate current and developing legislation and initiatives shared from government and industry work groups.



1.2

Dana Petroleum Values

At Dana Petroleum Safety, Respect and Integrity are embedded in our values. We work hard to deliver the best results using our values to guide how we do business. We respect all of our operating environments wherever we are in the world.



1.3

HSSE Policy



Our policy

The safety of our people and assets, and respect for the environment are two of our core values and are an integral part of how we do business. We believe strong Health, Safety, Security and Environmental (HSSE) performance creates strong commercial performance.

Accountability

The Chief Executive Officer (CEO) has overall accountability to the Dana Board of Directors for the management of HSSE.

Scope

Our policy applies to all employees (staff, contract and temporary), officers and directors of Dana Petroleum Limited (collectively referred to as 'employees') in each of our operating units worldwide and anywhere that we conduct business or visit in the course of our business. It also extends to all our joint ventures business, in all countries in which we or our subsidiaries and associates operate. Where we have a minority interest we will encourage the application of this policy amongst our business partners including contractors, suppliers and joint venture partners.

Policy in practice

Dana strives to continually improve its HSSE performance by setting and monitoring clear objectives, supported by its HSSE Standards. This requires the commitment of everyone at Dana and a culture where people are encouraged and feel able to intervene and report on HSSE issues of concern. It is expected that each individual will recognise their responsibility to put our policy into practice.

We will:

- Provide a safe working environment that protects against injury and minimises work-related ill health
- Provide appropriate security protection for employees and assets
- Commit to protect the environment, and so minimise the impact of Dana's operations
- Ensure compliance with applicable legislation and apply Dana's standards and oil industry best practice in locations where local laws do not exist
- Identify and manage HSSE risks in a systematic way as part of Dana's risk management framework
- Create clear accountabilities and expectations for HSSE at every level of the organisation
- Provide resources to successfully manage HSSE risk
- Identify and manage any form of change in our organisation
- Ensure that our employees and contractors are competent and able to perform the work we are asking them to undertake
- Ensure that our employees and contractors understand their HSSE accountabilities and are aware of the behaviours expected by Dana
- Identify and manage operational interfaces internally and with third parties
- Communicate standards based on oil industry best practice which are consistent with legal and regulatory requirements in all operating areas
- Communicate and report openly on HSSE objectives and performance
- Actively engage with relevant stakeholders to understand and take account of their concerns
- Make sure that appropriate emergency response, crisis management and business continuity plans are in place and are regularly tested
- Investigate HSSE incidents, identify root causes, take effective action to prevent recurrence and identify opportunities for organisational learning
- Strive for continuous improvement of Dana's HSSE performance

Jongweon Choi
Chief Executive Officer

Jongweon Choi
Jongweon Choi (May 14, 2024 15:00:00)

2024

DP-OP-HS-HSQ-POL-0001, Rev 08

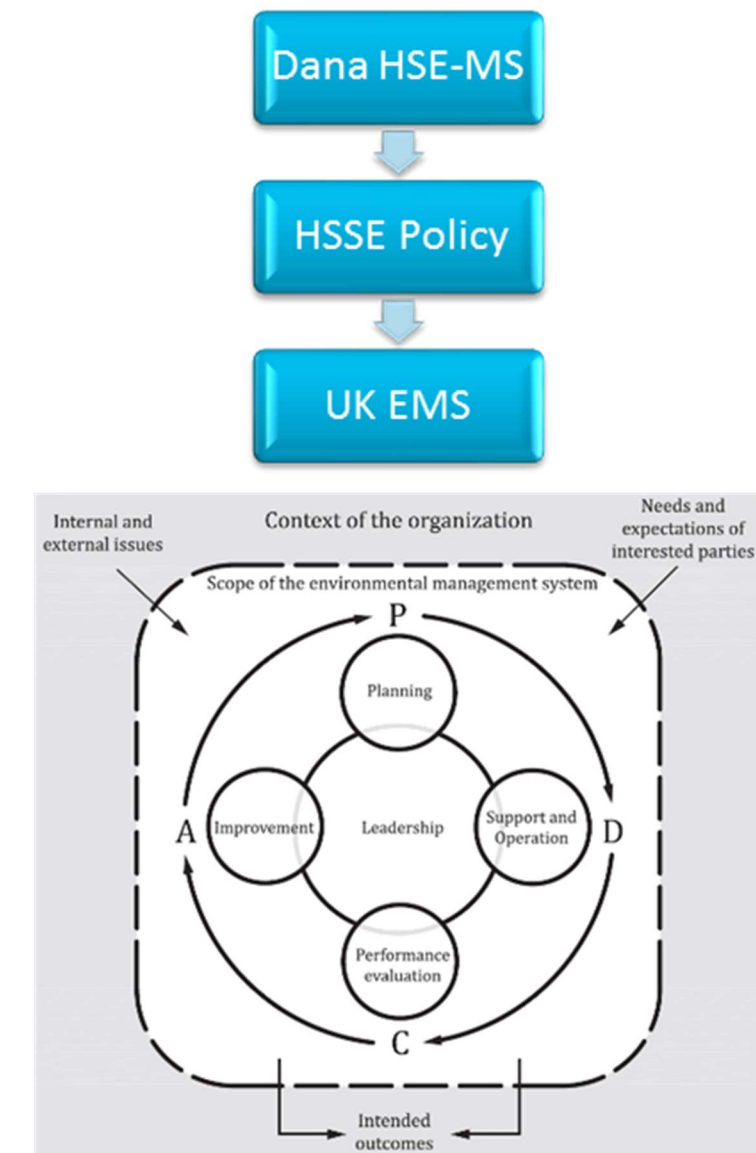
1.4

HSSE Management System

Dana is committed to protecting the environment and it manages its activities to minimise potential impacts. Dana meets this commitment within the UK via the implementation and maintenance of an Environmental Management System (EMS) within its One Dana Management System (ODMS).

The ODMS delivers the arrangements to reduce and manage risk, and to implement the company's HSSE Policy. The management system provides an essential framework and rules to ensure Dana's operations are safe, secure whilst minimising environmental impact at all times. The Dana HSSE Policy and Standards provide the framework to help deliver safe and reliable operations that are resilient over the long term and enable continual improvement.

The Dana UK EMS is structured to meet the requirements of Dana's HSSE Standards and was developed in line with elements of the Standard ISO 14001:2015 and OSPAR Recommendation (2003/5). In line with the ODMS, Dana's UK EMS follows the basic structure of "Plan, Do, Check, Act".



Overview of Operations

Dana’s portfolio in the UK is made up of various exploration, production and development activities throughout the Northern, Central and Southern North Sea. Dana has interests in 22 producing oil and gas fields with 11 operated and 18 non-operated licences. Dana operates the Triton and Western Isles FPSOs and has a large non-operated portfolio including the Tolmount area.

In the Central North Sea, Dana operates the Greater Guillemot Area (GGA) & Bittern fields that are produced through the Triton FPSO. These developments are located east of Aberdeen.

In the northern North Sea Dana operates the Harris and Barra fields that produce through the Western Isles FPSO. This development is located north-east of Shetland.

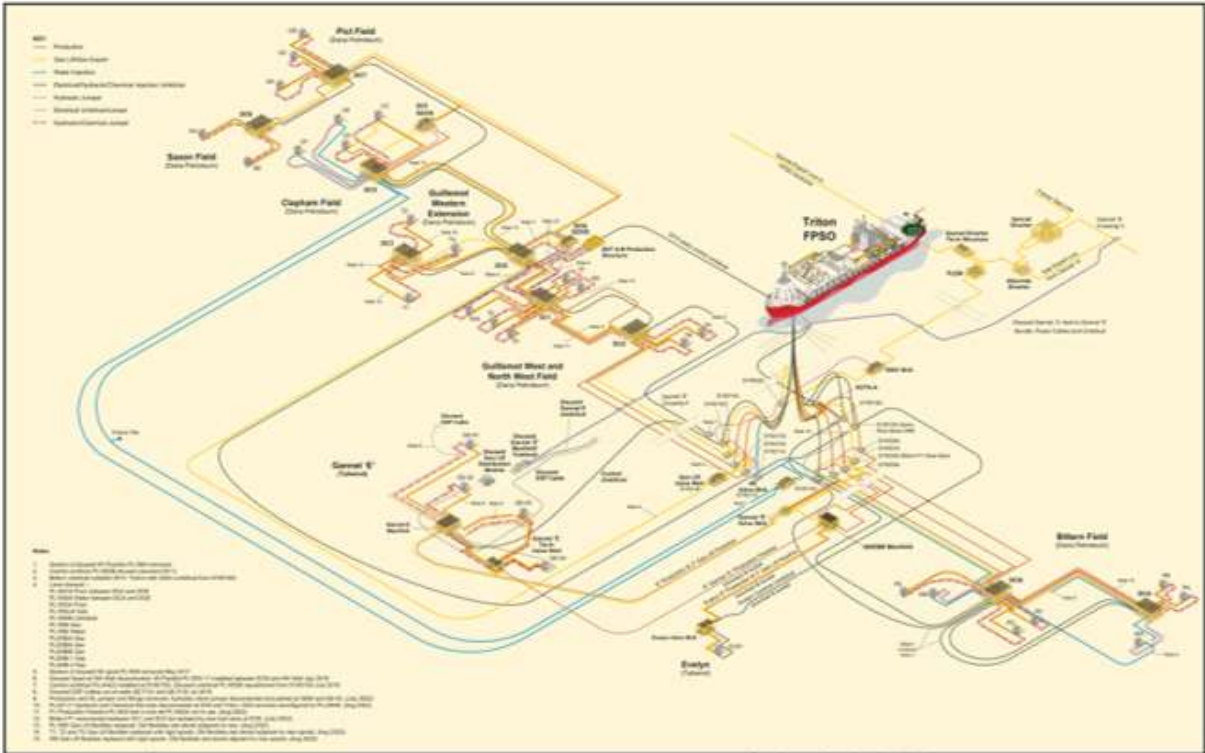
Dana also has equity in a number of other non-operated assets throughout the North Sea.



Triton FPSO

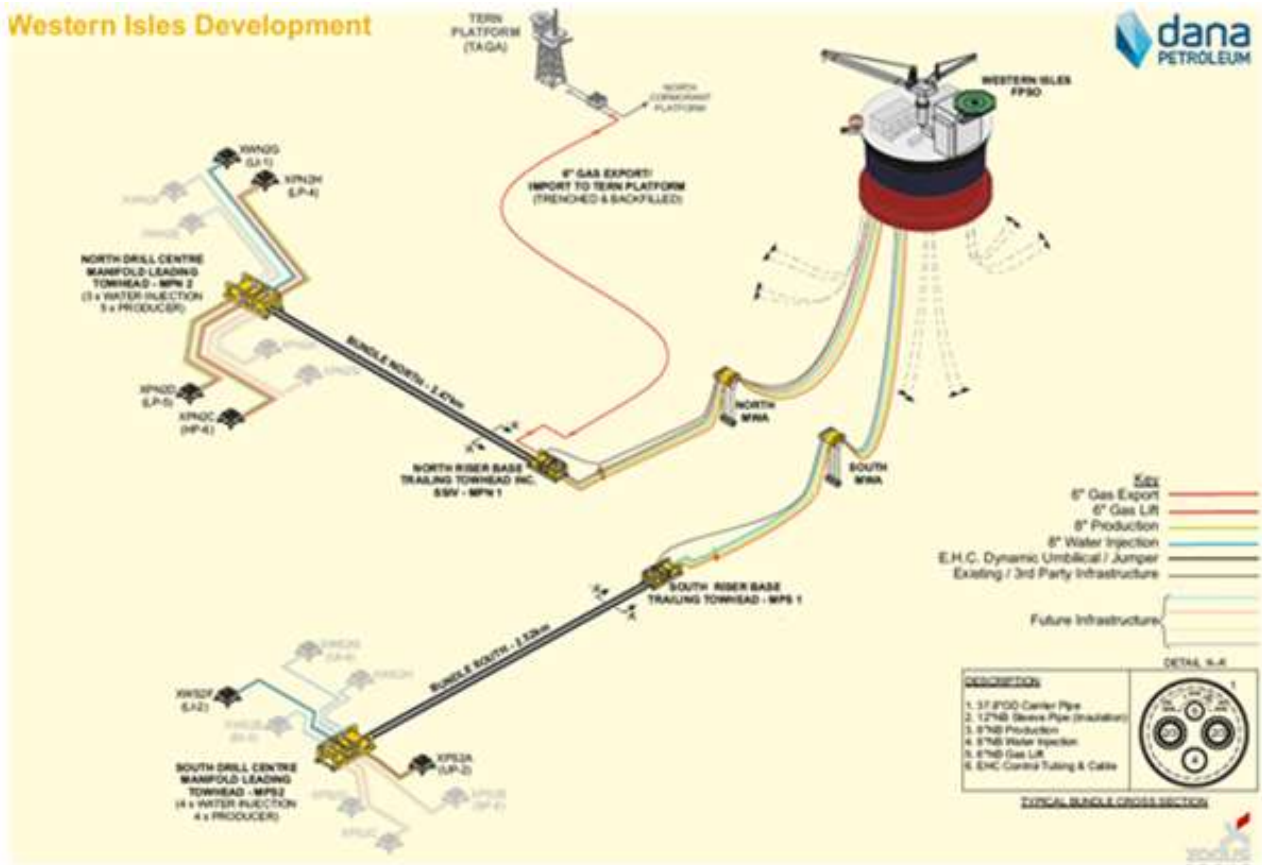
Dana has been operator of the Greater Guillemot Area (GGA) since October 2010, of the Triton FPSO since October 2012 and of Bittern since 2018. The Triton FPSO is located in the central North Sea (in Block 21/30) approximately 170 km east of Aberdeen.

The Triton FPSO services the oil and gas fields of the Gannet E, Evelyn and Bittern fields and the Greater Guillemot Areas (GGA). The GGA consists of the Guillemot West and North West, Clapham, Pict and Saxon fields. In 2019, production from the Gannet E field was re-routed from the Gannet A platform to the Triton FPSO. Evelyn came online in 2022, both Gannet E and Evelyn wells are operated by Petrofac on behalf of Serica Energy Chinook Limited, with Dana being the operator of the Gannet E and Evelyn pipelines to/from Triton FPSO.



Western Isles FPSO

The Western Isles FPSO is located in UKCS Block 210/24 approximately 90 km northeast of Shetland. Two subsea templates connect production and water injection wells to the FPSO from where oil is exported via shuttle tanker. The Western Isles fields (consisting of the Harris and Barra fields) came on stream in November 2017.



Drilling Operations

Dana drilled the Earn development well during 2023. Two wells were plugged and abandoned at Triton GGA, two at Platypus and one at Western Isles. Dana did not conduct any decommissioning operations during 2023.

Environmental Performance

Dana is fully committed to supporting the achievement of emissions reduction targets and to minimise our environmental impact.

Dana ensures the availability of resources to establish, implement, maintain and continually improve our environmental performance. Resources include human resources and specialist skills, organisational, infrastructure, technology, financial resources and visible commitment from managers.

To enable ongoing assessment of performance, key performance data is collated and presented in monthly, quarterly and annual performance reports. The performance report is reviewed by our Executive Committee (ExCo), the Senior Leadership Team (SLT) and local Country management teams.

As a minimum the environmental elements present data on the following parameters:

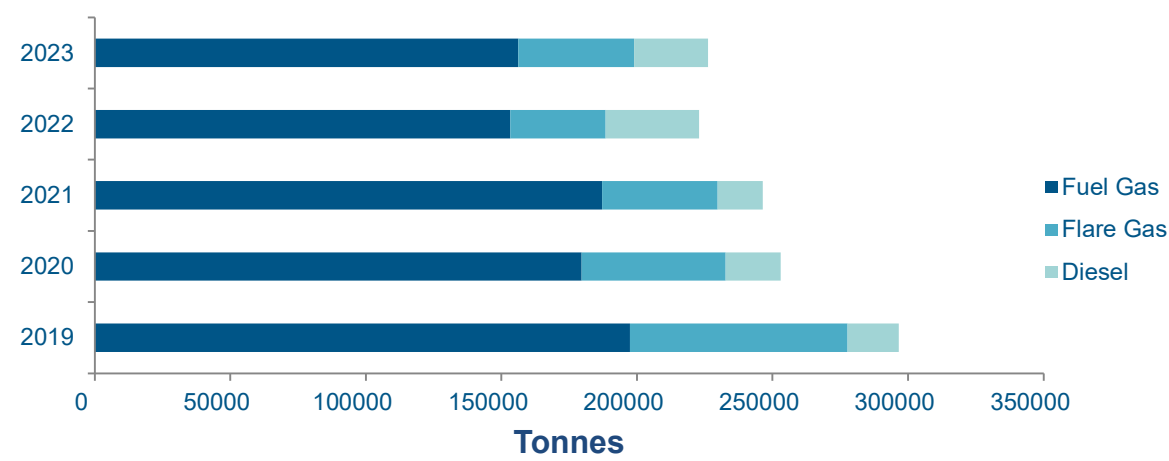
- Quantity of oil in produced water
- Cumulative amount of oil discharged
- Daily hydrocarbon flaring
- Cumulative monthly and annual total of Greenhouse gases (GHG) emitted (CO₂ (te))
- Number of oil and chemical spills and non-conformances.



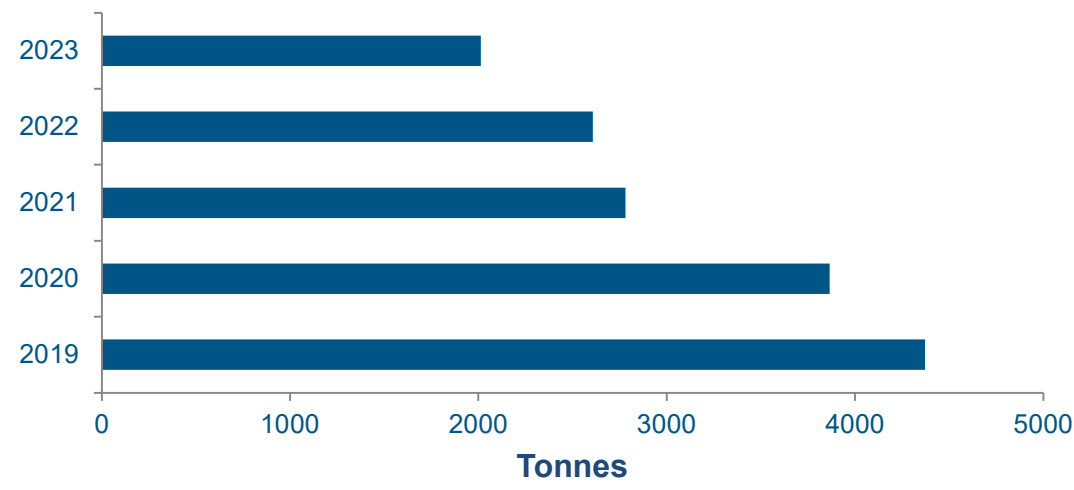
2.1

Atmospheric Emissions

Fuel combustion and flaring operations are the principle sources of atmospheric emissions from the oil and gas industry. Carbon dioxide (CO₂) is the main exhaust gas but combustion also results in emissions of CO, CH₄, NO_x, SO_x and VOC's. The largest proportion of Dana's CO₂ emissions is generated by the combustion of fuel gas for power generation. Dana's 2019-2023 combined emissions for Triton and Western Isles are shown below.



CO₂ emissions from combustion of fuel gas, flare and diesel for the period 2019-2023 from Triton and Western Isles



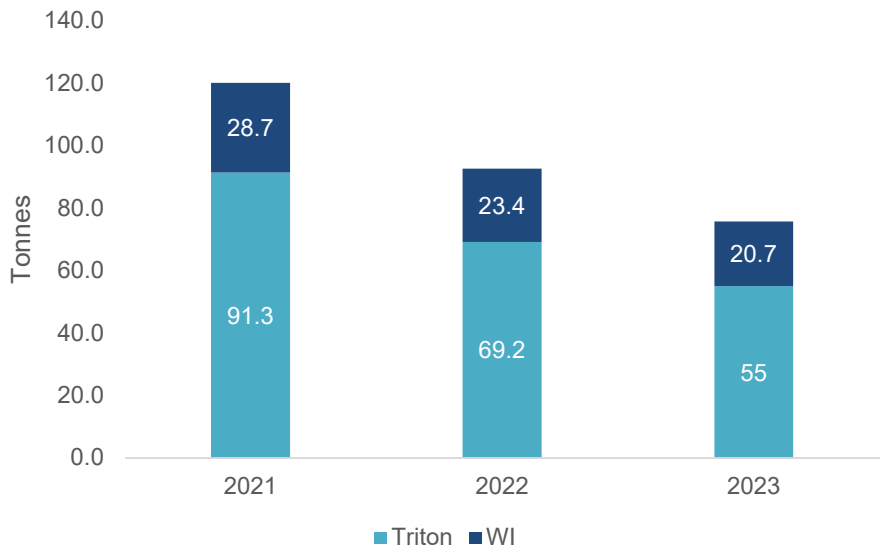
Other atmospheric emissions (NO_x, SO_x, VOCs & CH₄) combined from combustion of fuel gas, flare and diesel for period 2019-2023 from Triton and Western Isles

2.2

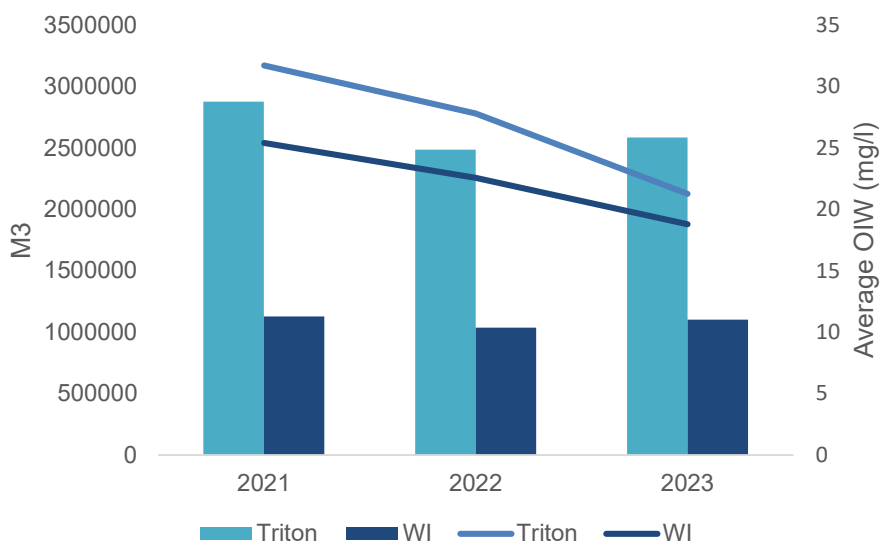
Oil in Water

Dana's Oil Discharge Life Permits allow the discharge of produced water from both the Triton and Western Isles FPSO's, provided its oil concentration does not exceed a limit of 30 mg/l (monthly average) for Triton and 25 mg/l for Western Isles.

During 2023, the total volume of produced water discharged from Triton and Western Isles was approximately 3,686,740 m³ and that resulted in approximately 75.76 tonnes of oil being discharged to sea from both assets. Below charts show the downward trend of the total oil being discharged in the produced water from both assets.



Oil in produced water discharged for 2021 - 2023 from Triton and Western Isles



Average oil in produced water discharged and Volume of produced water discharged for 2021 – 2023 for Triton and Western Isles

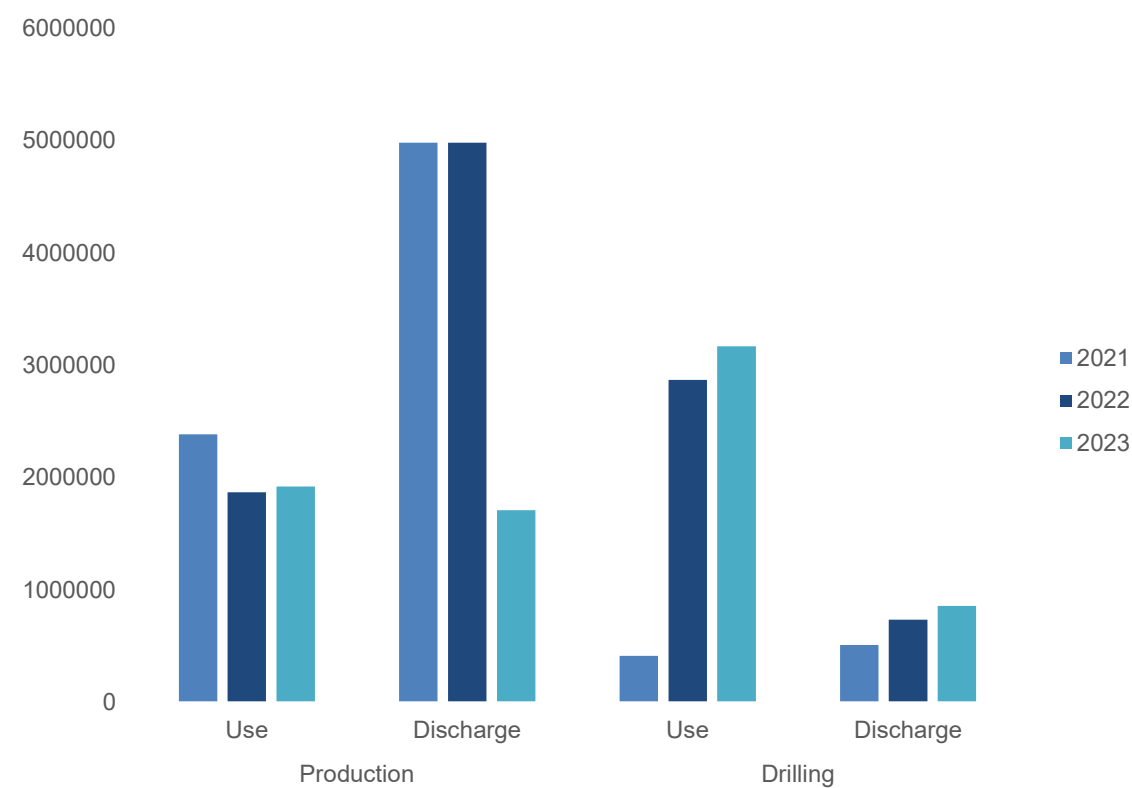
2.3

Chemical Use and Discharge

A wide range of chemicals are required during wells, subsea and production operations, the use of which is rigorously risk assessed as part of the permit approval process. The use of chemicals that are deemed to present a greater risk to the environment are restricted as far as possible and detailed justification provided. A number of chemicals have been identified as candidates for substitution (SUB), and wherever possible these chemicals are replaced with alternatives.

In addition to production operations, Dana conducted a number of campaigns including maintenance and repair of subsea infrastructure and well interventions that resulted in the use and discharge of chemicals. Approximately 31% of the total chemical discharge for 2023 was as a result of chemicals containing a substitution warning, of which, the corrosion inhibitor on Triton contributes to the majority of this discharge.

The total production chemical discharge from Triton and Western Isles is detailed below from 2021 – 2023.



2.4

Waste

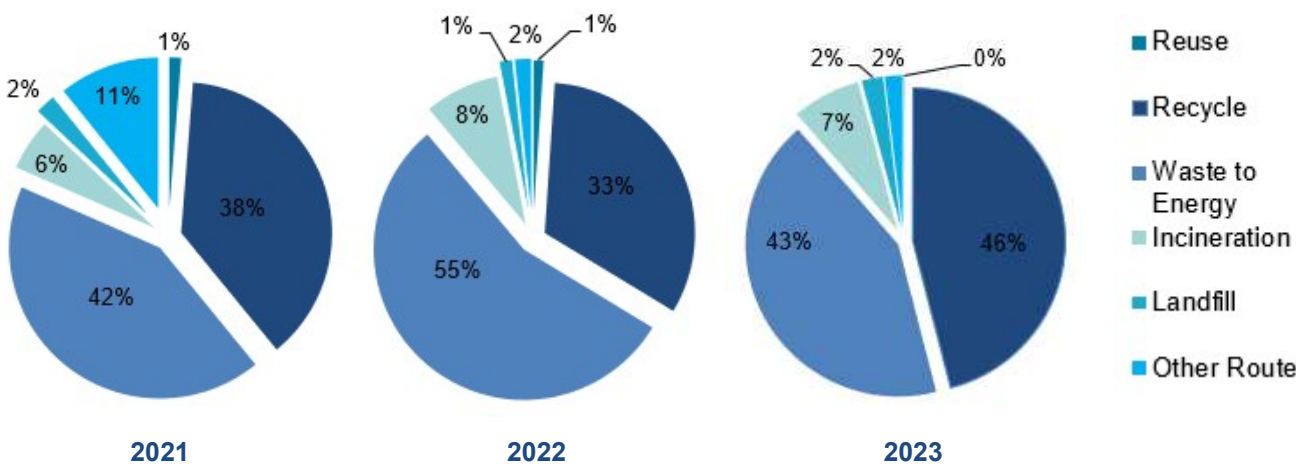
Waste management is an important part of how we manage our environmental responsibilities. We aim to:

- Ensure the management of all waste materials in a way that is mindful and protective of people and the environment
- Ensure the management of all waste materials in compliance with relevant legislation and regulations
- Promote the waste hierarchy in order to minimise the impact on the environment.

All staff and contractors have a responsibility to ensure the safe and effective handling of waste in line with the waste hierarchy. This protects the welfare and safety of personnel and in the waste receiving facilities. All personnel should be aware of the requirements of any site specific instructions as well as those for the handling and disposal of all waste generated from personal use.

As a waste producer we apply the waste hierarchy as a priority to the management of all waste. To do this, we classify, segregate and contain, with minimal contamination, our waste into different waste streams for onward recycling or recovery. Operations undertaken by Dana will actively seek to reduce and/or eliminate waste streams in order to continuously improve environmental performance.

In 2023, a total of approximately 301 tonnes of waste was generated from Dana’s offshore production operations. The 48% of this waste was reused or recycled and 43% was converted to energy.



Waste disposed from Triton and Western Isles in 2021 – 2023

2.5

Unplanned Releases

Dana makes every effort to prevent unplanned releases of chemicals or hydrocarbons and has a number of mitigation measures in place to help prevent spills occurring. Additionally, Dana has Regulator approved Oil Pollution Emergency Plans (OPEP) for each asset, as required under the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Conventions) Regulations 1998. An OPEP sets out clearly the procedures that Dana would follow in the event of a spill.

Dana reported five unplanned releases, two of chemicals and three of oil (Table 1). In addition, in 2023 a number of occurrences where oil in water concentration exceed the permitted level were reported to the Regulator.

Asset / year	OPPC >100 mg/l	OPPC monthly average exceeded	PON1	PON2
Triton 2023	5	2	3	2
WI 2023	1	1	1	0
Drilling 2023	0	0	1	1

Table 1: Unplanned releases and Regulatory Non-Compliances in 2023



2.6

2023 Environmental Performance

During 2023 Dana completed a number of environmental achievements. The following Key Performance Indicators, Metrics and Measures were successfully completed.

2023 Objective	Performance
Re-certification of the EMS	Completed successfully
Drilling operations to be completed without environmental incident	Completed although with 2 unplanned releases
Completion of an ESOS assessment	Completed successfully
Completion of internal audit of EMS	Completed successfully

Table 2: Objectives and Performance for 2023

2.7

2024 Environmental Objectives

Dana has developed the following environmental objectives for 2024:

- Conduct quarterly environmental audits on each asset
- Completion of drilling and subsea operations without environmental incident
- Develop MAP
- Develop maintenance scheduling for env critical aspects

