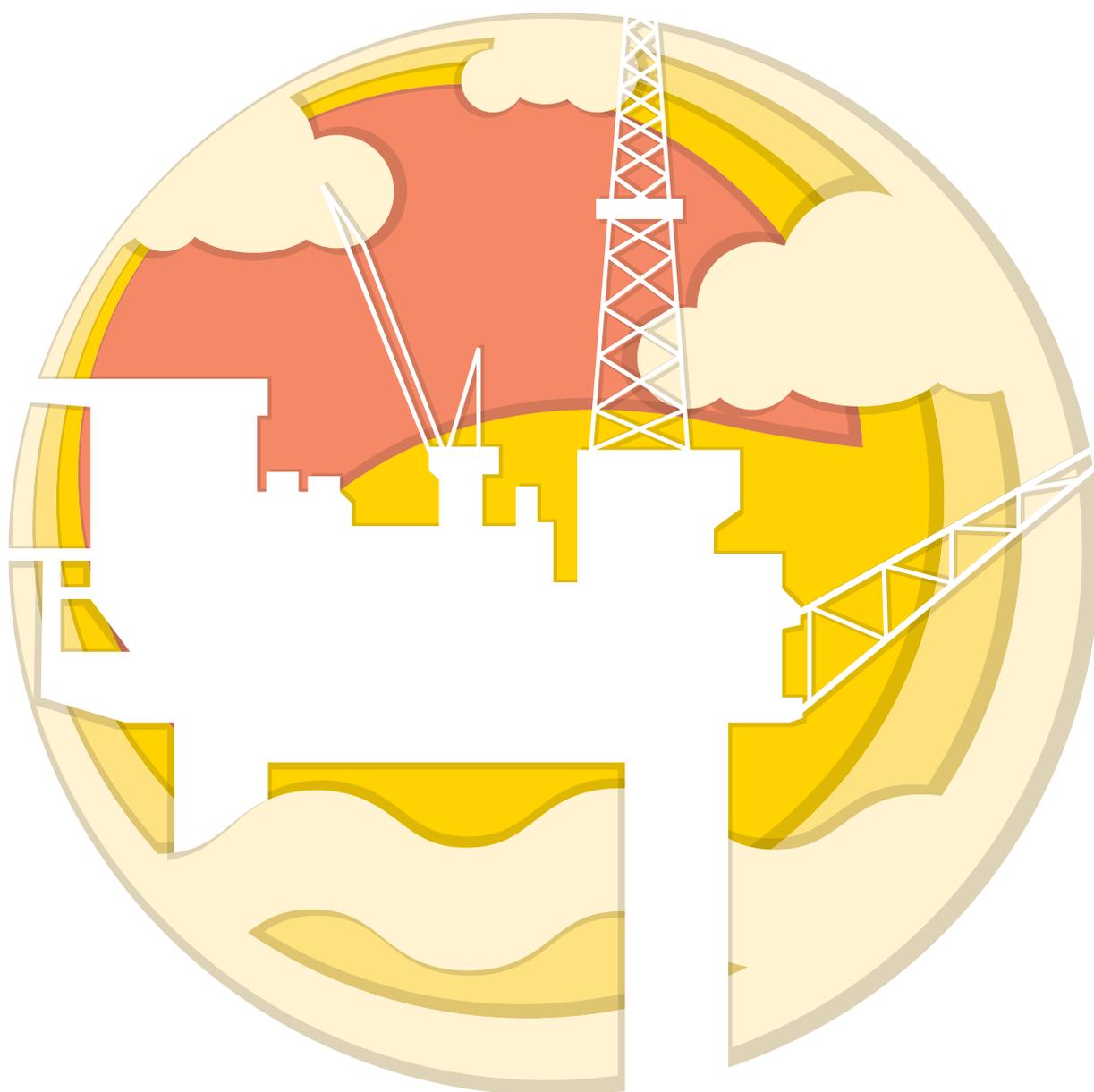




2016 Annual Environmental Statement

for Shell UK Limited Upstream



CONTENTS

INTRODUCTION	3
Terminology in this statement	3
What we do	3
SHELL COMMITMENT AND POLICY ON HSSE & SP	4
ENVIRONMENTAL PERFORMANCE	5
Our environmental goals and objectives	5
Managing emissions and discharges	6
<ul style="list-style-type: none"> ■ GHG ■ Energy Use and Resource Management ■ Oil in Produced Water ■ Operational Spills 	
Chemical Management	10
<ul style="list-style-type: none"> ■ Production Chemicals ■ Well Chemicals 	
Waste Management	12
BRENT DECOMMISSIONING	14
CONTACT INFORMATION	15
APPENDIX 1	16
Environmental data table	
APPENDIX 2	17
Drilling and other well entry locations	
APPENDIX 3	18
Abbreviations and terminology	
CAUTIONARY STATEMENT	19

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 This report has been produced in order to meet the requirements of OSPAR Recommendation 2003/5, as advised by the U.K. Government Department of Business, Energy and Industrial Strategy (BEIS), formerly known as Department of Energy and Climate Change (DECC). Where the words "Shell", "we", "us" and "our" are used in this report they refer specifically to Shell UK Upstream business. "Our facilities" or "our installations" refers to facilities or installations which we are appointed to operate on behalf of co-venturers which own the facilities or installations jointly. The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this report the expressions "Royal Dutch Shell" and "Shell group" are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general.

INTRODUCTION

This report is Shell UK Limited's annual environmental statement for 2016 prepared to fulfil the requirements of OSPAR Recommendation 2003/5. The report focuses on 2016 environmental performance data and covers our upstream business in the UK which includes operated offshore exploration and production activities in the North Sea Continental Shelf (UKCS) and onshore gas processing operations in the UK.

Following the acquisition of BG Group plc (now BG Group Limited) (BG) by Royal Dutch Shell in February 2016, three BG operated facilities in the UK Continental Shelf (UKCS) were integrated into the Shell UK portfolio of operated facilities: Armada; North Everest; and, Lomond, and environmental performance data for each of these facilities is included in this report. Whilst the acquisition took effect on February 15th 2016, environmental data relating to the three legacy BG facilities for the whole of 2016 is included in this report to align with offshore data previously reported to the UK environmental regulator via the UK Environmental Emissions Monitoring System (EEMS). Shell's Anasuria facility in the UKCS was divested in March 2016.

From a Shell safety and environmental performance perspective, we are determined not to compromise on HSE or the integrity of our onshore or offshore installations and we will continue to work to deliver safe and competitive operations here on the UKCS.

TERMINOLOGY USED IN THIS STATEMENT

Installations refer to:

- Our operated offshore oil and gas production platforms;
- Third party mobile drilling rigs in the UK whilst on contract to Shell in UK waters; and,
- Onshore gas processing plants operated by Shell UK Ltd.

Facilities refers to operating installations covering:

- Our operated offshore platforms and floating, production, storage and offloading (FPSO) vessels;
- Wells and associated subsea infrastructure; and,
- Our onshore gas processing plants.

Functions refers to services required to operate the Facilities (e.g. health, safety, security, environment and social performance management, technical and process assurance, project and development planning, logistics (vessels and helicopters), laboratory services, and office management).

Our ISO14001 certified Environmental Management System (EMS) covers upstream activities and locations in the UK and UK waters involved in exploring for, producing, and the processing of oil and gas.

Additional acronyms and abbreviations used in the text are described in Appendix 3.

WHAT WE DO

Shell has been delivering vital energy, jobs and economic benefits to the UK for 50 years, through its exploration and production operations in the UK sector of the North Sea and onshore gas processing. Shell upstream activities in the UK include:

- Delivery of 13% of the UK's total oil and gas supply from its upstream offshore oil and gas production activities, including delivery of more than 20% of the UK's gas supply.
- Gas processing at three plants, including the processing of third party gas from Norway for UK energy requirements.
- Delivery of natural gas liquids around the world from an onshore marine terminal.

Shell's stated commitment and policy on Health, Safety, Security, Environment and Social Performance is included overleaf. We work to avoid and minimise impacts to the environment from our operations and projects through risk control and management and are committed to responsible stewardship and protection of the environment throughout our operations and at all locations.

For more information on Shell, visit our website at www.shell.co.uk/about-us/what-we-do

SHELL COMMITMENT AND POLICY ON HEALTH, SECURITY, SAFETY, THE ENVIRONMENT AND SOCIAL PERFORMANCE

COMMITMENT

In Shell we are all committed to:

- Pursue the goal of no harm to people;
- Protect the environment;
- Use material and energy efficiently to provide our products and services;
- Respect our neighbours and contribute to the societies in which we operate;
- Develop energy resources, products and services consistent with these aims;
- Publicly report on our performance;
- Play a leading role in promoting best practice in our industries;
- Manage HSSE & SP matters as any other critical business activity; and
- Promote a culture in which all Shell employees share this commitment.

In this way we aim to have an HSSE & SP performance we can be proud of, to earn the confidence of customers, shareholders and society at large, to be a good neighbour and to contribute to sustainable development.

POLICY

Every Shell Company:

- Has a systematic approach to HSSE & SP management designed to ensure compliance with the law and to achieve continuous performance improvement;
- Sets targets for improvement and measures, appraises and reports performance;
- Requires contractors to manage HSSE & SP in line with this policy;
- Requires joint ventures under its operational control to apply this policy, and uses its influence to promote it in its other ventures;
- Engages effectively with neighbours and impacted communities; and
- Includes HSSE & SP performance in the appraisal of staff and rewards accordingly.



Ben van Beurden
Chief Executive Officer



Sinead Lynch
UK Country Chair

Originally published in March 1997 and updated by the Executive Committee December 2009.

General Disclaimer: The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate entities. In this Policy the expression "Shell" is sometimes used for convenience where references are made to companies within the Shell group or to the group in general. Likewise, the words "we", "us" and "our" are also used to refer to Shell companies in general or those who work for them. These expressions are also used where no useful purpose is served by identifying specific companies.



ENVIRONMENTAL PERFORMANCE

OUR ENVIRONMENTAL GOALS AND OBJECTIVES

Shell is committed to protecting the environment and respecting our neighbours. We work to understand the impact Shell can have on the environment and the communities we share it with; before, during and at the end of our operations. We aim to make a positive contribution to the local environments in which we operate and seek to reduce any potential negative impacts. We follow stringent environmental standards to manage our environmental performance in our operations.

Shell works for continual improvement in our environmental performance focusing on the following objectives:

- Protection of the environment
- Use materials and energy efficiently to provide our products and services
- Setting targets for improvement and measure, appraise and report performance
- Playing a leading role in promoting best practice in our industries
- Engaging effectively with stakeholders

These objectives are translated into relevant programmes and internal targets that aim to drive continual improvement in our UK operations.

The main focus areas related to environmental performance in the UK sector of our business in 2016 included:

- Improvement in energy efficiency at our own operations by implementing several energy use reduction opportunities identified in 2015
- Development of enhanced environmental awareness training programmes for front line operations
- Enhancing refrigerant-containing equipment management at our offshore installations
- Preparation and development of the public consultation draft Decommissioning Programme and environmental impact assessment for the Brent Decommissioning Project
- Integration planning for BG North Sea facility management and performance into the Shell UK portfolio

Environmental improvement programmes and achievements in 2016 included:

- Successful delivery of 22 separate energy efficiency initiatives at various facilities by end of 2016 resulted in a reduction in GHG emissions from our operations going forward
- Recertification of our environmental management system to the ISO14001 standard covering offshore and onshore operations and projects
- Working with the Energy Institute in the development of new environmental awareness training packages for front-line operations
- A comprehensive review of all offshore facility secondary containment infrastructure for chemicals storage
- Ongoing collaboration and funding support for the INSITE Joint Industry Project on the influence of man-made structures in the ecosystem
- Completion of phases 1 and 2 of a 3 phase partnership with Marine Scotland Science on a pilot project to assess the role of subsea pipelines in the marine ecosystem

The 2016 environmental performance of Shell's upstream operated facilities located within the UKCS is summarised in this report. A summary of environmental data for the years 2012-2016 is presented in this report and in Appendix 1. It should be noted that when looking at this comparison data that 2016 includes Shell UK Limited and BG facilities which were added to the Shell UK North Sea portfolio in 2016. The BG data in this report is from January 1st 2016.

The majority of the data used has been reported to the UK environmental regulators via EEMS, for offshore, and the Pollution Inventory (England) and Scottish Pollutant Release Inventory (Scotland), for onshore.

EMISSIONS AND DISCHARGES

Greenhouse Gas Management

The main sources of greenhouse gas (GHG) emissions from our operations are presented in Figure 1 and include:

1. Emissions from the combustion of fuels (gas and diesel) for power generation, compression drives, heaters, pumps and engines. Figure 1 shows that combustion emissions from fuel gas is the largest contributor to our total GHG emissions at around 72% of the total. Emissions from the combustion of diesel, largely used in back-up generators and on mobile drilling units, amounts to 6% of the total.
2. Flaring emissions include emissions from the flare pilot flame maintained at offshore facilities to ignite hydrocarbon gases, should their safe disposal be required. In 2016, flaring events occurred in support of routine maintenance activities, equipment and plant trips, shut-down and start-up activities and bringing new wells on line until production is stabilised. GHG emissions from flaring amounted to just over 18% of total GHG emissions in 2016.

3. Some of our installations are designed to vent gas for safety reasons, this includes our unmanned gas platforms in the southern North Sea and the gas processing plant at St Fergus. GHG emissions from venting amounted to approximately 3.5% of our total in 2016.
4. GHG emissions through small fugitive losses, mainly from equipment and pipework connections amounted to 0.5% of the total in 2016.
5. Another small contribution to the GHG emissions from our operations are losses of refrigerants from various cooling equipment on our installations. A campaign to enhance the way we manage our refrigerant-containing equipment was carried out in 2016.

Direct GHG emissions from our operations in 2016 totalled 2.74 million tonnes of CO₂ equivalent (CO₂e), a 6% increase on the 2.59 million tonnes CO₂e emitted in 2015. The largest contribution to the increase in emissions in 2016 was the addition of three offshore BG producing facilities to Shell UK's operated North Sea portfolio. This offset the reduction in emissions from the sale of our Anasuria field. In addition, increased production service from new wells brought online at the Shearwater and Gannet facilities contributed to the increase as did isolated cases of plant unavailability, and equipment trips, leading to increased flaring, at specific installations.

Figure 1:
GHG Emissions by source in 2016

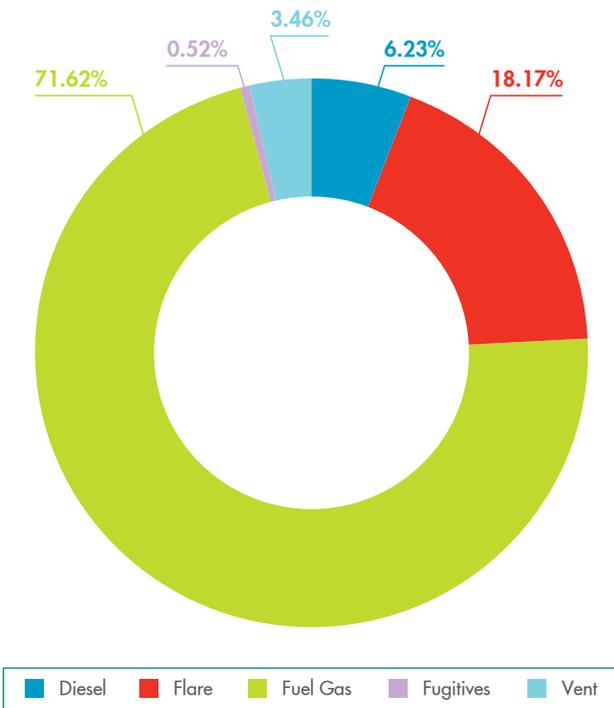


Figure 2 shows the total greenhouse gas emissions by source at each operated facility from Shell's UK North Sea portfolio in 2016. There was limited emissions contribution from Anasuria as this was divested early in 2016, as well as at Brent Delta where production has stopped and the installation is being decommissioned.

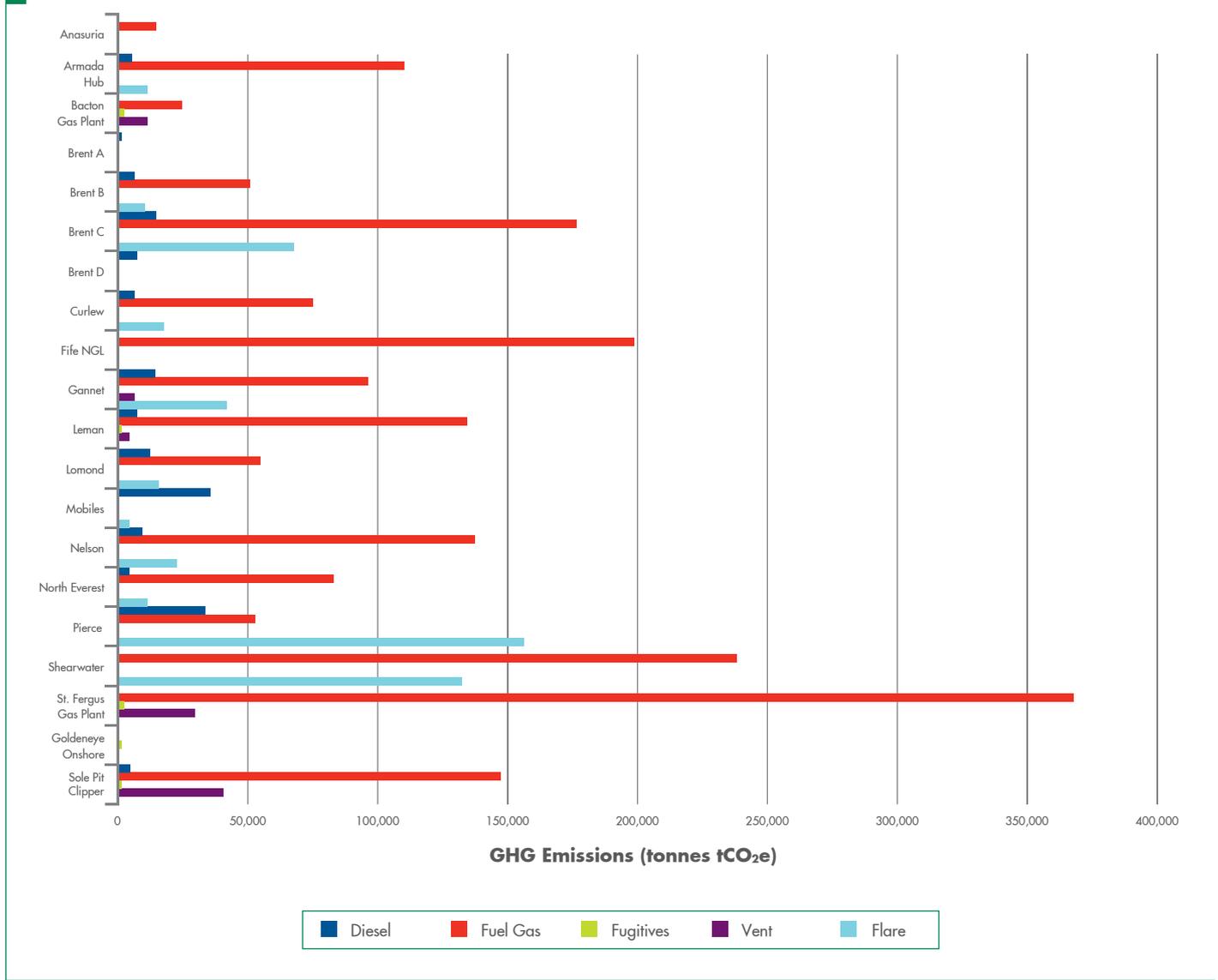
Our total GHG emissions from flaring amounted to 499 kilotonnes of CO₂e, representing an approximate 16% increase in comparison to GHG flaring emissions in 2015. The higher contribution from flaring at Pierce was due to the unavailability of the fuel gas system in the first half of 2016 when gas normally used for fuel had to be disposed of safely by flare. The higher proportion of flaring at Shearwater and Gannet compared to other facilities can be attributed to the new wells brought on-line at these facilities as they are connected to the production stream.

The amount of venting in 2016 decreased slightly when compared to 2015 mostly due to the implementation of an energy efficiency improvement project at Clipper in the southern North Sea.

St Fergus gas processing plant is the highest individual contributor to GHG emissions in our portfolio. This is due primarily to the high energy requirements to process the significant throughput at this plant. The plant is a low emissions simple gas separation facility and emissions intensity (proportion of emissions per unit of gas processed) is very low and well within high performance industry benchmarks for this type of facility.



Figure 2:
GHG emissions by source per facility in 2016
(tonnes CO₂e)



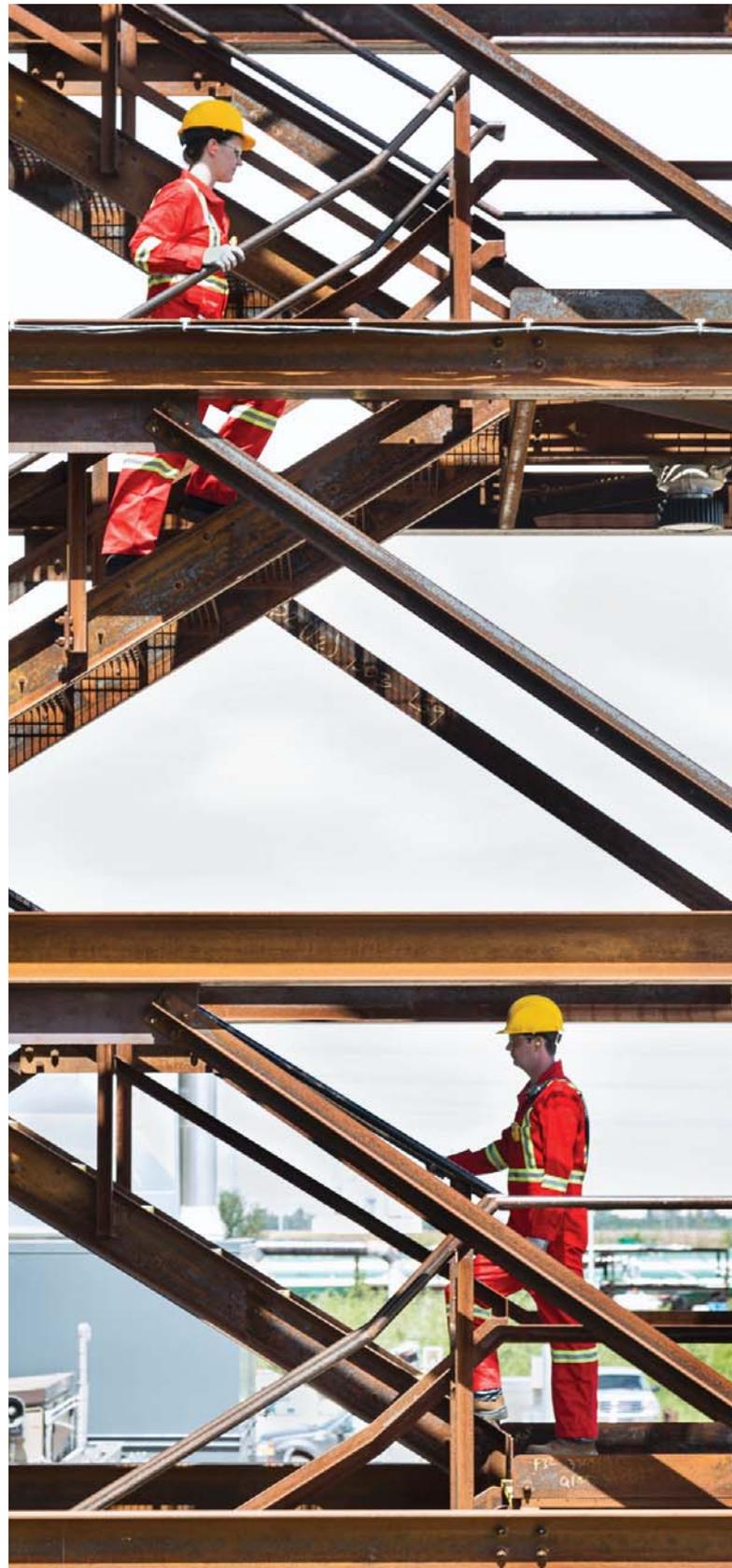
Energy Use and Resource Management

Shell strives for improved energy efficiency and a reduction in GHG emissions across all of its operations. We continue to develop strategies to optimise and further improve energy use and operational emissions intensities. Improving the stability of production from all our facilities is a key factor in increasing our energy efficiency. In 2016 we continued with initiatives to improve the reliability of the equipment on our installations and enhance our maintenance activities to increase system availability.

In addition, Shell implemented a number of cost-beneficial energy efficiency improvement projects at its facilities in 2016. These energy use improvement opportunities were identified, as part of the company's GHG and energy management strategy, during energy efficiency reviews carried out in 2015 as part of the UK's Energy Savings Opportunity Scheme (ESOS).

Examples of completed energy saving opportunities delivered in 2016 include:

- Curlew, where reductions in export recycle have resulted in reduced GHG emissions, estimated to be a reduction in circa 24 ktCO₂e each year, with attendant energy savings and significant production gains
- Shearwater, where a turbo expander was reinstated to reduce fuel gas consumption and increase condensate recovery. Reduced GHG emissions as a result of this reinstatement were estimated to be circa 8 ktCO₂e each year
- Clipper, where purge flows on two vent stacks have been significantly reduced and monitoring of compressor and turbine efficiencies have been enhanced; the former initiative is estimated to reduce GHG emissions each year by 130 ktCO₂e, the latter by 40 ktCO₂e
- Brent Charlie, where compressor controls optimisation, including the upgrade of recycle valve positioning to new technology, is estimated will reduce GHG emissions by 15 ktCO₂e each year



Oil in Produced Water

Water produced with oil and gas and separated from the hydrocarbons during offshore production operations contains dispersed oils that are treated to permitted levels before discharge. The OSPAR Commission recommendations are regulated through the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations. In 2006 OSPAR set a reduction target in total oil in produced water quantities for 15% below levels discharged to sea in the year 2000. We have maintained our total oil in produced water below this level since the target was introduced.

Figure 3 shows the amount of oil, in tonnes, discharged to sea in produced water in 2016 from installations which we operate in the UKCS. Levels are within the amounts agreed with the regulator and the total amount of oil discharged was a reduction compared to 2015 levels, 235 tonnes in 2015 compared to 202 tonnes in 2016.

Annual average concentrations of oil in water at each facility are presented in Figure 4. Monitoring has shown that our operations were typically in compliance with the limit in 2016 apart from on a few occasions when the monthly average limit of 30 mg/l (parts per million) was breached due to process upsets, system maintenance or operational issues relating to the water treatment units. Each non-compliance with the limit was reported to the regulator. Key learnings from such non-compliances were shared internally with the aim of preventing recurrences. Specific water treatment issues on the Shearwater installation in the latter part of 2016 were experienced when high water content from new wells coming online challenged the treatment system. To address this issue, a new and upgraded water treatment package was designed for the installation with new equipment installed and commissioned in late 2016.



Figure 3: Total Volume of produced water and mass of oil discharged to sea from each Shell operated offshore installation in 2016

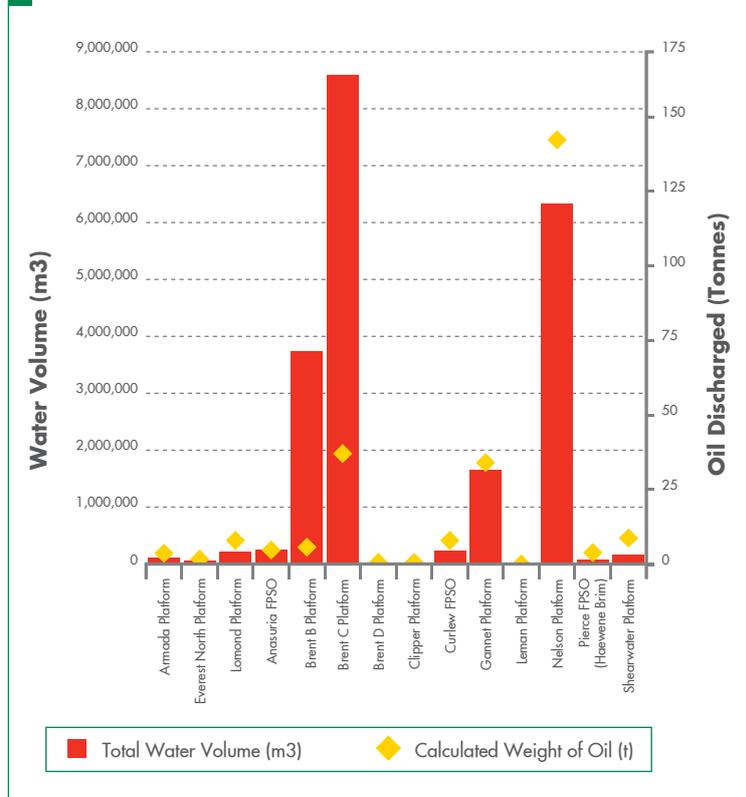
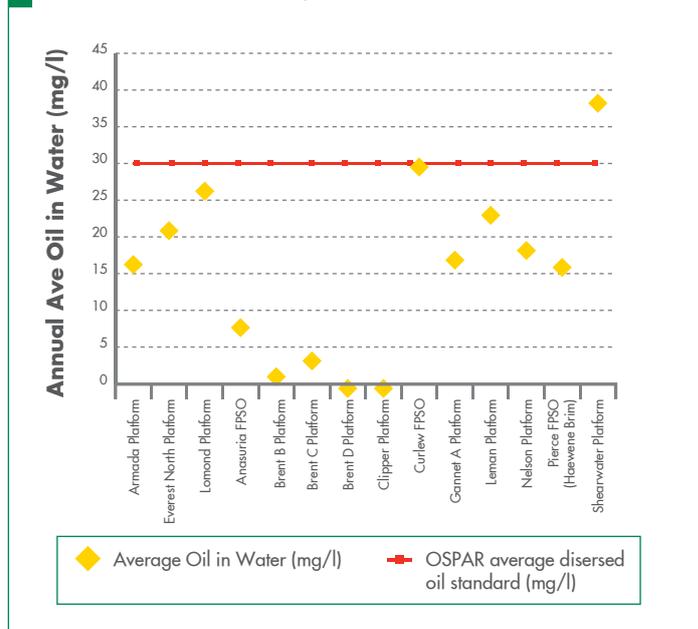


Figure 4: Annual average dispersed oil concentrations in produced water from each Shell operated offshore installation in 2016



Operational Spills

All oil and chemical spills from Shell UK operations are recorded and reported to the offshore environmental regulator (BEIS), however small the volume. Spills are reported individually to the regulator at the time of the spill using a Petroleum Operations Notice (PON1) and BEIS publish an annual list of PON1s for all operators in the North Sea. Table 1 below presents the total number and mass of spills from Shell UK operations over the last five years. A total of 59 unplanned releases to sea of oil and chemicals from our operations occurred in 2016, a reduction in the number of spills compared to 2015. At the time of writing this report, five of the 59 spills reported in 2016 are still under review by BEIS.

Spill reduction continues to be an area of focus for all our facilities and efforts are ongoing to reduce the number of any unplanned releases.

The total mass spilled in 2016 amounted to 27 tonnes; an increase in volume of 35% compared to 2015. 35 of the 59 spills recorded were small operational spills of less than 10 kg (< 0.01 tonne), 15 were greater than 10 kg but less than 100 kg (0.1 tonne), with 9 spills of greater than 100 kg recorded. Two separate events totalling 22.2 tonnes of chemicals spilled were primarily responsible for the total volume of accidental releases in 2016. The details of these spills are as follows:

- Loss of 11.2 tonnes of cooling medium fluid from a faulty seal on a cooling system. The fluid consists of triethylene glycol (TEG) containing a corrosion inhibitor. Once discovered, the system was isolated and the faulty seal repaired. A full investigation was carried out and the results shared with BEIS.
- A subsea loss of methanol, estimated at 11 tonnes. The loss was at the wellhead and the fault repaired. The investigation report is currently under review by BEIS.

The TEG and methanol spilled during these two events are both Offshore Chemicals Notification Scheme (OCNS) group E rated which under the Offshore Chemicals

	2012	2013	2014	2015	2016
Number of Oil & Chemical Spills (Includes spills <100kg)	44	76	87	64	59 <small>5 Under Review</small>
Mass of Oil & Chemical Spills (tonnes)	13	197	12	20	27

Table 1
Number and Mass of Spills to Sea (2012-2016)

Regulations (OCR) are considered to have least potential for an environmental hazard. Further still, methanol is classed as a PLONOR chemical which under the OSPAR commission are considered to pose little or no risk to the marine environment.

CHEMICAL MANAGEMENT

Production Chemicals

The type and volume of production chemicals used in our operations varies across our facilities depending on their function and production chemicals data is affected by various factors, including:

- Use of more efficient chemicals that reduce amounts and concentrations required;
- Continually improving partitioning studies that more accurately determine the percentage of chemical being discharged in their respective phases (i.e discharged in the water phase); and,
- Greater consumption due to increasing water production as fields age.

Chemical use in production and drilling operations is regulated in UK offshore waters by the Offshore Chemicals Regulations 2002. Table 2 shows the historical use of offshore production chemicals across our UK production operations, along with the proportion that may have been potentially discharged to the sea through the offshore production process as estimated by the partition characteristics of the chemical used. The data shows that production chemical use in 2016 increased by 20% compared to 2015 although the percentage of these chemicals that may have been discharged, based on partitioning data, decreased by 3% since 2015. The increase in chemical usage is mainly attributed to the addition of the three offshore facilities acquired following the combination of Shell and BG in February 2016, plus increased chemical requirements to support the additional processing of increased production volumes. Although a reduction in use will have resulted from the sale of Anasuria.

	2012	2013	2014	2015	2016
Production Chemical Use (tonnes)	2261	2680	3100	4159	4989
% Discharged	52	60	70	56	53

Table 2
Production Chemicals Use and Discharge (2012-2016)

The Regulator has highlighted certain chemicals to be phased out from use by means of substitution warnings (sub warning chemicals). Reducing the use of these chemicals can be challenging, especially for those that have been engineered for specific fields or applications, although Shell UK has been working to phase in alternative chemicals to replace sub warning chemicals as they become available.

The sub warning chemical phase out plan continues, and Shell UK is committed to this work. We work with our suppliers to identify more environmentally acceptable alternatives to those chemicals with sub warnings. The overall reduction of sub warning chemicals is achieved through a combination of factors:

1. Replacement of chemicals by less hazardous versions.
2. Removal of unused products from permits.
3. Divestment/decommissioning of the installations where particular product was used; and
4. Reclassification as chemicals gain or lose the sub warning as new data become available and as hazard thresholds that dictate the warning change.

The use of chemicals with sub warnings by Shell UK has, in the main decreased over the last few years (Figure 5) and this trend is in line with our phase out plan. Approximately 13% of Production Chemicals used are chemicals which have a sub warning. The acquisition of BG in February 2016 meant that additional sub warning chemicals were added to the list that we currently use. In 2016 we placed a number of additional sub warning chemicals onto our permits as a contingency. This resulted in a total of 43 sub

warning chemicals listed, however 10 of these chemicals were never used and were returned to the vendor in 2016. And so there were a total of 33 sub warning chemicals used in 2016, as shown in Figure 5.

Wells Chemicals

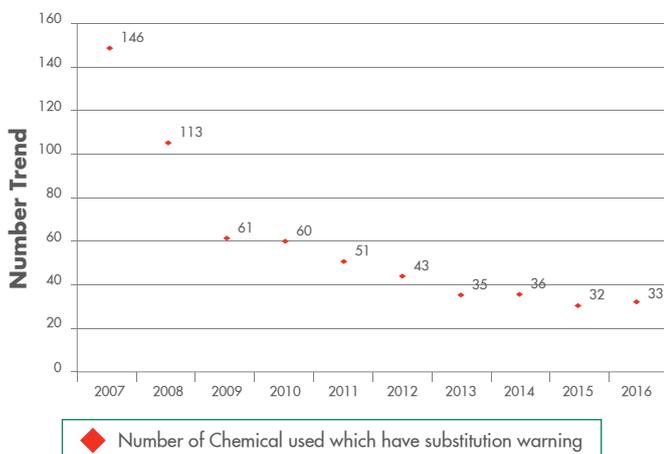
In 2016 we used a total of 12,818 tonnes of chemicals in well activities as shown in Table 3. Of this figure approximately 16% of the chemicals were discharged to sea in accordance with the allowances of approved chemical permits. The volume of chemicals used and discharged is directly related to the type and number of well activities undertaken. A large part of the well activity in 2016 was related to well drilling in the Shearwater field, and the plugging and abandonment of wells associated with the Brent decommissioning programme and in the Everest field. Further details on wells drilled can be seen in Appendix 2.

	2012	2013	2014	2015	2016
Wells Chemical Use (tonnes)	9203	21095	11787	13784	12818
% Discharged	25	27	30	11	16

Table 3
Wells Chemicals Use and Discharge (2012-2016)

In 2016, approximately 3% of the total weight of well chemicals use was made up of chemicals which carry sub warnings. This is a reduction of 2% from 2015 levels.

Figure 5:
Trend in Numbers of production Chemicals used by Shell with Substitution Warnings (2007-2016)



WASTE MANAGEMENT

Waste is controlled across all our UK operations with our installations segregating their waste streams to ensure compliance with company standards and with legal requirements. Effective segregation of wastes also allows for more environmentally acceptable routes of disposal. Waste contractors are involved with the checking, compliance and working with the operators on site, so that they understand the requirements for segregating wastes during activities at the installations. In accordance with the waste hierarchy, we always look first at reducing waste volumes at source and minimising any waste generated.

Despite the addition of waste data from the newly acquired BG facilities in 2016, the overall waste mass for 2016 was lower than in 2015. There was an 8% drop on total waste for the year, although there was an increase in the amount of hazardous waste produced in 2016 compared to 2015. Table 4 shows the total waste produced over the last 5 years.

	2012	2013	2014	2015	2016
Hazardous Waste (tonnes)	30020	38490	23353	14792	27708
Non-Hazardous Waste (tonnes)	28769	53456	29992	33704	17088
Total Waste (tonnes)	58789	91946	53345	48496	44796

Table 4
Mass (tonnes) of wastes (hazardous and non-hazardous) generated between 2012 and 2016

Hazardous waste, which includes drilling mud and cuttings from our drilling activities, contaminated water and sludge from onshore and offshore operations, waste oil, paint and chemicals, increased in 2016 after a steady decline over the previous 3 years. Oil based mud and scrap metal recycling decreased in 2016 on Brent Bravo due to changes in plug and abandonment methods. Bacton had an overall reduction in waste produced in 2016, due to less waste being produced by the ongoing rejuvenation project.

Non-hazardous waste, which includes scrap metals, wood, paper, plastics, cans, general waste and also most produced water treated and disposed of onshore from onshore and off-shore installations, decreased in 2016 by almost half compared to 2015. Curlew, for example, no longer ships produced water to shore for treatment as the facility is now able to treat the water and discharge at source.

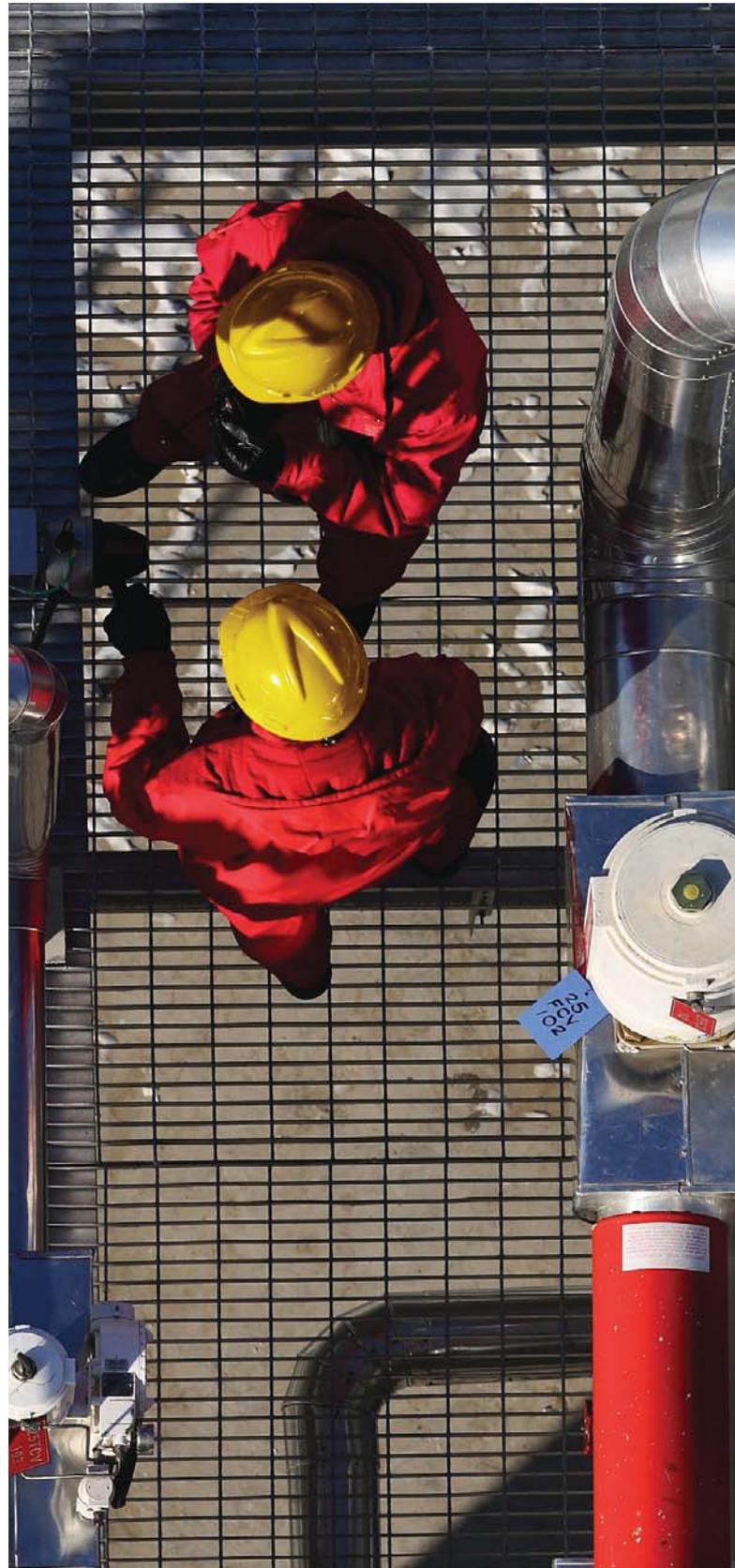
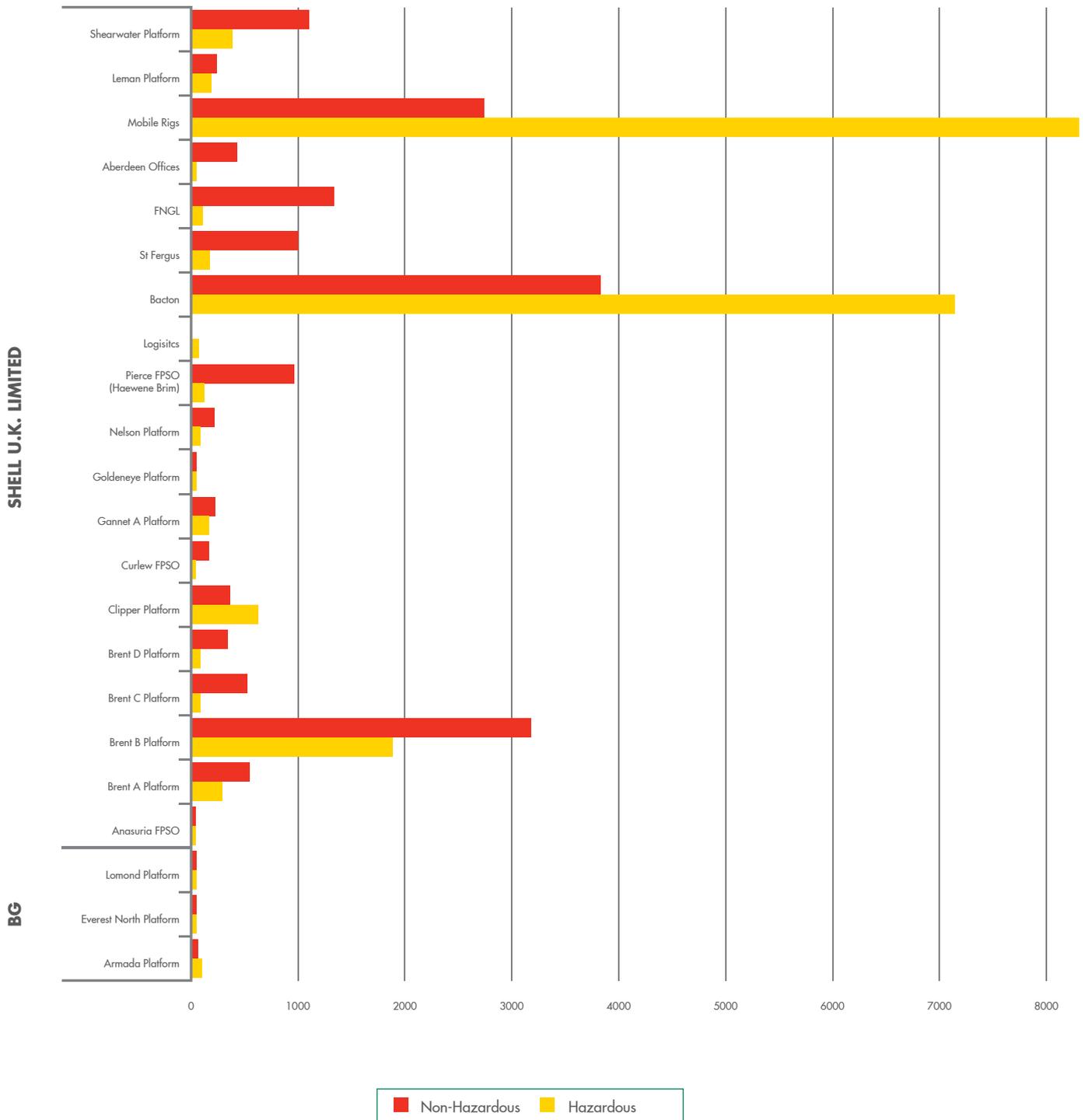


Figure 6:
Mass (tonnes) of waste generated by location in 2016



BRENT DECOMMISSIONING

The Brent oil and gas field, and its pipeline systems are located in Block 211/29 of the UK sector of the North Sea, approximately 136 km north east of the Shetland Islands, and has been a cornerstone of the UK's hugely successful oil and gas industry for over 40 years. It is one of the largest fields in the North Sea and has four large platforms - Alpha, Bravo, Charlie and Delta.

The Brent field is a prolific national asset and has created and sustained thousands of jobs across the UK, and since 1976 has produced around three billion barrels of oil equivalent. At its peak it was producing more than half a million barrels a day. During this time, it has also generated around £20 billion of tax revenue (in today's money). The Department of Environment and Climate Change (now the Department for Business, Energy and Industrial Strategy - BEIS) granted permission for the cessation of production from Delta in 2011, and Alpha and Bravo at the end of 2014. Production from Brent Charlie is expected to come to an end within a few years.

The Brent Decommissioning Project is unique, due to the

sheer scale and age of the field, the complex infrastructure, and the challenges of how to decommission the concrete legs and cells, and the cell contents. The field infrastructure is extensive and comprises: four topsides with a combined weight of over 100,000 tonnes; three gravity based structures weighing more than 300,000 tonnes each; 31,500 tonnes of steel jacket; 103 km of pipelines. A total of 146 wells have been drilled from the 154 Brent platform well slots, and 3 subsea wells have been drilled at Brent South.

The decommissioning of the Brent Field and facilities is one of the most significant decommissioning projects in the North Sea and is likely to span well over a decade. Shell began decommissioning studies in 2006, long before cessation of production, and communication and engagement with a wide range of stakeholders has continued since 2007.

Decommissioning in the UK sector of the North Sea takes place under a mature regulatory process that is stipulated in the UK's Petroleum Act and regulated by BEIS, and in



accordance with the framework of the OSPAR (Oslo/Paris Convention) 98/3 Decision. This requires that, at the end of their life, qualifying offshore installations must be removed from the sea. However, within both the UK and OSPAR regulatory framework it is recognised that there may be particular difficulties associated with the removal of large steel structures or the gravity bases of concrete platforms. In such situations operators are able to make a case for exemption from the general rule of complete removal, known as a 'derogation'.

In 2014, with approval from the regulator Shell made the decision to bring forward submission of a Decommissioning Programme for the Brent Delta topside – ahead of a Programme for the remainder of the Brent Field infrastructure. The Brent Delta topside Decommissioning Programme was approved in July 2015.

Public Consultation for the full Brent Field Decommissioning Programme lasted 60 days and took place between 08 February and 10 April 2017. Our recommendations contained within this Programme are the result of 10 years of exhaustive studies, the completion of a detailed comparative assessment process and extensive stakeholder engagement.

In order to understand the environmental impact of the recommendations an Environmental Impact Assessment (EIA) has been prepared by DNV GL and was presented in the Brent Field Decommissioning Environmental Statement (ES), supporting the Decommissioning Programme.

Stakeholder engagement has been integral to the development of the Decommissioning Programme, and over the last 10 years the Project has engaged with over 180 organisations, including: local and national environment groups, fishermen's associations, key government agencies, national and local government, industry bodies, academics and media. A detailed Stakeholder Report was submitted as part of the Public Consultation process.

Decommissioning Operations

On Brent Delta and Bravo the plug and make safe of the wells has been completed, and is underway on Brent Alpha. The topside on the Brent Delta platform, weighing 24,200 tonnes, was successfully removed as one piece by the Pioneering Spirit on 28 April 2017, and towed in to Able UK's Seaton Port yard, Hartlepool on 2 May 2017. It is estimated that over 97% of the topsides will be recycled. This was the world's heaviest offshore lift, using the world's largest construction vessel.

CONTACT US

This report summarises our environmental performance in relation to our HSSE & SP policy, goals and objectives in Shell U.K. Limited's upstream operations and activities.

This report is updated and published annually on our external website at www.shell.co.uk

For further information, please call the Shell office in Aberdeen on 01224 882000 and ask for the external relations department.

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Aberdeen AB12 3FY

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APPENDIX 1

Summary of environmental data (2012-2016)

	2012	2013	2014	2015	2016
GHG (tonnes CO ₂ equivalent)	2,092,394	2,424,984	2,335,621	2,593,723	2,743,723
Oil to Sea (tonnes) (discharged in produced water)	142	240	153	235	202
Hazardous Waste Generated (tonnes)	30,020	38,490	23,354	14,792	27,708
Non-Hazardous Waste Generated (tonnes)	28,769	53,456	29,992	33,704	17,088
Production Chemical Use (tonnes)	2,246	2,680	3,100	4,159	4,989
% Discharge	52	60	70	56	53
Wells Chemical Use (tonnes)	8,102	17,163	11,787	13,782	12,818
% Discharge	17	28	28	11	16

Data may have changed from previous years reports as revisions of the data can happen after the reports are finalised.

The figures shown above relate to all offshore installations operated by Shell U.K. Limited, and third party fields that produce into them, plus onshore plants and mobile rigs in the UK - all as reported by Shell in the U.K. Environmental Emissions Monitoring System (EEMS). Data for 2016 also includes BG and although acquired in February, data is taken from January 1st 2016.

APPENDIX 2

Well activities in 2016

Wells Drilled in 2016

Installation / Rig	Shell Well Name	Well Start Date	DECC Permit Reference
Noble Hans Deul	SW07s1	04/03/2016	DRA/315
Noble Hans Deul	SW04s1	03/08/2016	DRA/389
Ocean Patriot	Pierce A12	16/01/2016	DRA/304
Ocean Patriot	Belinda 21/30-27	08/09/2016	DRA/397

Wells Abandoned in 2016

Installation	Shell Well Name	Completed/ Abandonment Date	DECC Permit Reference
Brent Bravo	BB28s2	12/04/2016	WIA/351
Brent Bravo	BB13	01/05/2016	WIA/351
Brent Bravo	BB14s5	18/05/2016	WIA/351
Brent Bravo	BB04s2	12/06/2016	WIA/351
Brent Bravo	BB05s2	24/06/2016	WIA/351
Brent Bravo	BB18	21/08/2016	WIA/351
Brent Bravo	BB03s2	15/09/2016	WIA/351
Brent Bravo	BB33	02/11/2016	WIA/351
Brent Bravo	BB35s1	20/11/2016	WIA/351
Brent Bravo	BB36s2	21/12/2016	WIA/351
Swift 10	Carrack West 101	06/09/2016	WIA/380
Everest Field	22/10a-4	21/10/2016	WIA/430
Everest Field	22/09-2	06/11/2016	WIA/430
Everest Field	22/10a-5	19/11/2016	WIA/430
Everest Field	22/09-3	03/12/2016	WIA/430
Brent Alpha	BA02	08/12/2016	WIA/410

APPENDIX 3

ABBREVIATIONS AND TERMINOLOGY

BEIS	Department of Business, Energy and Industrial Strategy (replaced DECC)
CNNS	Central and Northern North Sea Assets
EEMS	Environmental Emissions Monitoring System (Oil & Gas U.K.)
EMS	Environmental Management System
EPR	Environmental Permitting Regulations (England and Wales)
ESOS	Energy Savings Opportunity Scheme
EU ETS	Council Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading with the community. European Emissions Trading Scheme
F-Gas	Fluorinated greenhouse gases
FPSO	Floating Production, Storage and Offloading vessel
GHG	Greenhouse gases (mainly carbon dioxide, methane, nitrous oxide and HFC's)
HSE	Health, Safety and Environment
HSSE & SP	Health, Safety, Security, Environment and Social Performance
INSITE	INfluence of man made Structures In The Eco-system
IPPC	Integrated Pollution Prevention and Control (Scotland)
ISO14001	International Standard Specification for Environmental Management Systems.
NSP	Northern Systems and Plant
OCNS	Offshore Chemicals Notification Scheme
OCR	Offshore Chemical Regulations
OIPW	Oil in Produced Water
OPPC	Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic. In 1998 this replaced the Oslo Convention (for the Prevention of Marine Pollution by Dumping from Ships and Aircraft) and the Paris Convention (for the Prevention of Marine Pollution from Land-Based Sources).
PON1	Petroleum Operations Notice type 1. BEIS requires Operators to report any oil or chemical spills, sheens, or excessive discharges to their Offshore Inspectorate using a PON1 form available on their website at https://www.og.berr.gov.uk/regulation/pons/index.htm
PPC	Pollution Prevention and Control Act 1999 and Offshore Combustion Installations (Prevention and Control of Pollution) Regulations 2001
SEPA	Scottish Environmental Protection Agency
SNS	Southern North Sea Assets
UKCS	United Kingdom Continental Shelf

CAUTIONARY STATEMENT

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this report "Shell group" and "Royal Dutch Shell" are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. In this report all references to "Shell" refers specifically to Shell UK Upstream business. In addition to the term "Shell" in this report "we", "us" and "our" are also used to refer to Shell UK Upstream business in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular company or companies. "Subsidiaries", "Shell subsidiaries" and "Shell companies" as used in this report refer to companies over which Royal Dutch Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Royal Dutch Shell has joint control are generally referred to as "joint ventures" and "joint operations" respectively. Entities over which Royal Dutch Shell has significant influence but neither control nor joint control are referred to as "associates". The term "Shell interest" is used for convenience to indicate the direct and/or indirect ownership interest held by Royal Dutch Shell in a venture, partnership or company, after exclusion of all third-party interest.

This report contains forward-looking statements concerning the financial condition, results of operations and businesses of Royal Dutch Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Royal Dutch Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "will" and similar terms and phrases. There are a number of factors that could affect the future operations of Royal Dutch Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this report, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Royal Dutch Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h)

risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; and (m) changes in trading conditions. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this report are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Royal Dutch Shell's 20-F for the year ended December 31, 2016 (available at www.shell.com/investor and www.sec.gov). These risk factors also expressly qualify all forward looking statements contained in this report and should be considered by the reader. Each forward-looking statement speaks only as of the date of this report, June 1, 2017. Neither Royal Dutch Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this report.

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