2014
Annual Environmental Statement for Shell U.K
Upstream Operations
I would like to introduce you to our Annual Environmental Statement, which provides an overview of how the upstream operations of Shell U.K. Limited performed during 2014. This document looks back at our environmental performance, the challenges we faced and how we addressed them. Every year we measure, appraise and report our performance, as well as engage with our many stakeholders reflecting the broad range of our activities and impacts.

In Shell we are committed to meet the growing demands for energy and security of supply whilst minimising our impacts on the environment. In doing so we play a leading role in promoting best practice in our industry and endeavor to use material and energy efficiently in providing our products and services to the market.

2014 was a year of change for Shell UK as we carried out a broad review of our business - amid challenging external conditions and a need to improve the sustainability and competitive position of the business and the balance of onshore support to our offshore operations.

During this year of change for Shell there were no major incidents and we are also able to report that an active initiative has seen us reduce flaring across our operations. I am disappointed to say that we had an increase in the number of spills of oil or chemicals to sea, however in volume terms we recorded less than in 2013.

Although we have made some progress as a business we are not where we want to be on our environmental and safety performance and we are committed to improving our performance in relation to Hydrocarbon Releases. We have created individual facility plans each tailored to address a facility’s potential vulnerabilities and to also consider ‘human factors’ - recognising that our people are at the heart of safe operations. Working to increase production within our ever aging North Sea infrastructure we are maintaining our standards and business principles and working across the business to achieve a Goal Zero performance - zero leaks and zero harm.

We announced in November 2014 that our Brent Alpha and Bravo platforms had ceased production. From a technically innovative installation phase in the 1970’s through to a long period of operation and production, these iconic platforms have helped to sustain vital North Sea oil and gas supplies. We will now focus on safely decommissioning these assets.

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Progress continued on the Peterhead Carbon Capture and Storage (CCS) project. Three phases of public consultation on this important project took place between January 2014 and February 2015, providing local communities with regular information on the project’s evolving plans and with opportunities to give feedback. Subject to positive final investment decisions by Shell and the UK Government, and the receipt of all relevant consents and permits, the project is expected to be up and running by the end of the decade and could capture ten to 15 million tonnes of CO2 over ten to 15 years from SSE’s gas-fired power station in Aberdeenshire.

As a business focused on delivering vital UK energy supplies we will continue to work towards an improved environmental performance for both ourselves and the wider UK oil and gas industry.

Paul Goodfellow
Upstream VP for Shell UK & Ireland
Shell U.K. Limited ("Shell") is a leading operator in the UK sector of the North Sea, where our upstream business explores for and extracts natural gas and crude oil. In the UK sector of the North Sea Shell operates around 11% of the UK’s production of oil and gas, with our equity production around 6% of the UK’s oil and gas on behalf of Shell and its co-venture partners.

Shell has interests in more than 50 fields, operating more than 30 offshore installations, 30 subsea installations, two FPSO’s (Floating Production Storage and Offloading vessels), three onshore gas plants and a marine terminal for distribution of NGL’s (Natural Gas Liquids) globally.

Shell holds a key strategic position in enabling security of energy supply to the UK through infrastructure operated by us our gas plants can process up to 35% of UK demand (including 15% non-Shell exported).

We have strong energy links across Europe with the Norske Shell operated Ormen Lange field in Norway having the potential to meet 20% of the UK’s gas needs. Much of the North Sea’s hydrocarbons are processed onshore at Shell operated gas plants at St. Fergus, Bacton and Mossmorran.

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

Our business is divided into organisational units called Assets, Facilities and Functions. We use these terms in this report.

Facilities are operating installations supported by onshore teams, and cover our offshore fields, installations and associated wells, the onshore gas plants, and all associated pipelines. See the map of our UK facilities on page 6.

Assets are groups of Facilities overseen by an asset manager.

Functions typically provide a service to the Facilities and Assets such as technical and process assurance, development planning, project planning and execution, logistics for vessels and helicopters, laboratory services, drilling wells, and the management of our offices.

Additionally acronyms and abbreviations in the text are described in Appendix 4.
The Sole Pit Clipper (Clipper) is a manned installation located in the southern North Sea 66km from the Norfolk Coast.

Sole Pit Gas Field was discovered in 1969, however the first Clipper jacket (platform structure), PW, was not installed until August 1989. This was soon followed by the Clipper PT in April 1990. Production began in October 1990.

Over time 5 additional jackets have been installed to maximise natural gas recovery from the Sole Pit field. In 2014, the latest steel jacket containing a new accommodation module was installed and bridge linked to the existing jackets.

The Clipper Installation produces and processes natural gas from its own wells and also collects gas from the Barque, Galleon, Skiff, Carrack and Cutter fields. The natural gas is then exported through a pipeline to the Bacton Gas Terminal, situated on the North Norfolk coast, North West of Great Yarmouth.
The Leman Alpha is a manned installation located in the southern North Sea about 48km from the Norfolk Coast.

The Leman Gas Field was discovered in 1965 then Leman AD1 and AP platforms were installed and production started in August 1968.

The installation comprises five fixed bridge-linked platforms that contain all the wellheads, processing equipment (inc. gas compression) and accommodation. In 2014 a new jacket was installed as part of the Leman uptime compression project, which was aimed at improving the reliability and functionality.

The Leman Alpha Installation produces and processes natural gas from its own wells and collects and processes gas from the remainder of the Leman Fields Platforms, Bravo, Charlie, Delta, Echo, Foxrot and Golf and natural gas and liquids from Corvette, Brigantine, Caravel and Shamrock. Natural gas and liquids are then transported via pipelines to the Bacton Gas Terminal on the North Norfolk coast.

The Gannet development comprises one fixed drilling and production platform for all the Gannet producing fields, located in the central North Sea approximately 170 km east of Aberdeen, 77 km from the UK/Norwegian median line and in a water depth of approximately 95 m.

Gannet A is a drilling, production and accommodation platform installed in June 1991. The main platform facilities consist of oil and gas processing facilities together with utilities, power generation and accommodation.

Gannet A is also the host platform for the Gannet B, C, D, E, F and G subsea satellite tiebacks. Processed oil is exported through a pipeline to the Fulmar installation and gas is exported through a pipeline into the Fulmar gas pipeline to St Fergus.
UPSTREAM INTERNATIONAL

ACTIVITIES AROUND
THE NORTH SEA

This map is for illustrative purposes and has not been drawn to scale.
Leadership and Commitment

Policy and Strategic Objectives
Contains our Commitment and Policy on Health, Security, Safety, Environment and Social Performance (HSSE & SP) and provides a framework for setting our environmental objectives. One of our HSSE & SP commitments (see page 8) is to protect the environment. Our policy is to have a systematic approach to HSSE & SP management designed to ensure compliance with the law and to achieve continuous performance improvement. Our environmental objectives are shown on page 8.

Organisation, Responsibilities, Resources, Competency
Describes the organisational structure and the roles and responsibilities for environmental management. The competency of personnel carrying out roles within the EMS is addressed as are the resources necessary to ensure the EMS is in place and maintained. Communication processes around environmental issues both within and outside of Shell are detailed.

Risk Management
Covers the identification of environmental aspects and legal and other requirements related to them. It also contains the operational framework for managing significant environmental aspects. “Environmental aspects” are those elements of our activities that can interact with the environment.

Processes, Assets and Standards
Describes the processes that are undertaken to support our assets and the relevant standards. Processes and standards contain environmental information to ensure that the EMS is effectively implemented in the assets.

Planning
Contains our Health, Safety and Environmental (HSE) Plans, which contain objectives, targets and improvement programmes. In preparing our HSE Plans, we take into account our environmental aspects and legal and other requirements.

Implementation (Reporting and Monitoring)
Covers the monitoring of activities that can have a significant environmental impact as well as environmental performance.

Assurance (including Management Review)
Covers the audit and assurance process by which we check that the EMS continues to be effectively implemented. This section also covers the periodic evaluation of compliance with legal and other requirements. Management reviews are also conducted annually to ensure the EMS is effective and delivering improvements.
SHELL COMMITMENT AND POLICY ON HEALTH, SECURITY, SAFETY, THE ENVIRONMENT AND SOCIAL PERFORMANCE

COMMITMENT
In Shell we are all committed to:
- 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

Erik Bonino
UK Country Chairman

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.
Figure 3 - Environmental Aspects of Our Operations

- Noise, dust, odour or light
- Gaseous emissions
- RAW AND AUXILIARY MATERIAL
- ENERGY
- MATERIALS
- WATER
- PRODUCT EXTRACTION
- RADIATION (NATURALLY OCCURRING)
- PRODUCT
- WASTE
- LIQUID FLOWS TO WATER
- MATERIALS TO DEEP SUBSOIL
- LIQUID FLOWS TO THE SOIL/SEDIMENT
OUR ENVIRONMENTAL GOALS AND OBJECTIVES

Shell has an environmental management system (EMS) for upstream operations, which is certified to the ISO14001 standard and works for continual improvement focused on the following policy objectives:

- Protect the environment
- Use material and energy efficiently to provide our products and services
- Set targets for improvement and measure, appraise and report performance
- Play a leading role in promoting best practice in our industries
- Engage effectively with stakeholders

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

The main focus areas in 2014 were related to:

- Environmental compliance
- Increasing oil and gas production with a focus on improving the efficiency of our installations based on energy use per tonne of oil equivalent,
- Integrity management with a focus on spill reduction and managing risks from major accidents to the environment
- Preparing for the implementation of the Offshore Safety Directive (Directive 2013/30/EU on Safety of Offshore Oil and Gas Operations)

The 2014 performance of Shell’s upstream operated assets located within the UKCS is summarized in the sections below. In this report the term “installation” is used to refer to offshore oil and gas production platforms and onshore gas processing plants which are operated by Shell and our contractors, as well as third party fields that produce to these platforms, and mobile drilling rigs in the UK whilst on contract to Shell and logistics (covering air and sea operations). Additional environmental data for the years 2010-2014 are provided in Appendix 1. The majority of the data used has been reported to the UK environmental regulators via the UK Environmental Emissions Monitoring System (EEMS), for offshore, and the Pollution Inventory (England) and Scottish Pollutant Release Inventory (Scotland), for onshore.

Our achievements in 2014 included:

- Overall reduced flaring across the UK North Sea Operations
- On Brent Charlie Low Pressure Gas Compressor was returned to service which resulted in a subsequent significant reduction in flaring volumes.
- Worked with the Carbon Trust to better understand our carbon footprint better and develop a strategy for flaring and energy efficiency improvement to be run over into 2015/16.
- Review of barriers and controls to prevent spills from diesel bunkering.
- Brent Charlie introduced major modifications to the diesel bunkering station which will significantly reduce the risk of a potential release during bunkering operations.
- Shearwater improved their OIW results by trailing and introducing a new Corrosion Inhibitor. Safely completed the Gannet oil export pipeline bypass project.
- Safely completed the Gannet oil export pipeline bypass project
- Shell maintained its link with The University of Aberdeen, providing three students the opportunity of a years employment with the environment team
MANAGING EMISSIONS AND DISCHARGES
Greenhouse Gas (GHG) Management
Shell establishes annual GHG targets and these are translated into internal marks for each asset to measure performance against.

Our installations operate against permits issued under the Pollution Prevention and Control (PPC) legislation, Environmental Permitting Regulations (England) and Phase III of the mandatory EU Emissions Trading Scheme for CO₂ (EU-ETS). The EU-ETS legislation is the mechanism that the EU is using to reduce CO₂ emissions to atmosphere by requiring operators to accurately account for their CO₂ emissions and to subsequently purchase and surrender EU allowances to cover releases.

Overall GHG Performance - Summary 2014
In 2014, direct GHG emissions from operations were approximately 2.34 million tonnes CO₂ equivalents (CO₂e). This is a decrease of approximately 3.7% compared to 2013 (2.42 million tonnes CO₂e). There was a slight decrease in production overall (total oil, gas and condensate) due mainly to reduced production from Shearwater and Nelson. This reduction is countered to a small extent by increased production from Brent Charlie and Curlew.

The change in CO₂ emissions between 2014 and 2013 at each installation is shown in Figure 4. Three notable changes are:

- Brent Charlie returned to relatively stable production in 2014 following intermittent production in 2012 and 2013. As a result of gas compression problems, flaring on Brent Charlie was higher than expected in 2014.
- Curlew was back in production in 2014 following a period of extended shut down. Its increased energy requirements in 2014 therefore led to elevated CO₂ emissions compared to 2013.
- Production decrease on Shearwater led to a reduction in the need for energy for gas compression. In addition, repairs to valves associated with the flare system resulted in reduced flaring.

As shown in Figure 5 approximately 80% of our total GHG emissions came from burning gas and diesel for power generation (including, mechanical drive of compressors and electricity generation) on our locations, with flared and vented gases accounting for the majority of the remaining 20%.
Flaring

Flaring from our installations is managed under consents obtained from the government (DECC). Typically an annual consent is applied for and monitored throughout the year. In cases where significant change is observed, through unforeseen circumstances, DECC are informed and recovery measures agreed. If necessary a revision to the consent may be approved by DECC. In 2014 this occurred on the following asset:

Additionally in order to closely monitor progress on the recovery of assets to normal flaring levels, DECC have issued monthly or other sub annual consents in 2014. This impacted the following asset:

Gannet

In 2014 all assets operated within original or revised consents.

In total we flared hydrocarbon gas that resulted in the release of approximately 390 kilotonnes of CO2e across our UK installations (Figure 6 shows the amount of CO2 from flaring per installation). This represents a decrease of approximately 64 kilotonnes of CO2e (~14%) when compared to that from 2013, due mainly to decreases in flaring at Shearwater, Pierce, Brent Bravo, and for Well Engineering. This reduction is countered to an extent by increased flaring at Brent Charlie.

Increased plant stability and focus on flaring at Shearwater resulted in identifying the need to carry out repairs on valves in the flare system. This work has been completed and has subsequently reduced the volume of gas passing to the flare.

Our Central and Northern assets are designed with the capability to flare, for safety and technical reasons. At Shell, most of the flaring is the result of plant upsets, trips, equipment outage and shut-down/start-up. The remainder is linked to the flare pilot/purge that is required to maintain a small flame to ignite gases should there be a safety need. Additionally on Shearwater, some flaring is required to safely dispose of acid gas containing minor amounts of H2S scrubbed from the gas before it is exported to shore.

As producing fields near their end of life, flaring generally increases as a percentage of total production. This is due to lower gas flows and pressures in certain parts of the operations that cannot be handled by the gas compressors and must therefore be safely disposed by flaring. It is generally not viable to replace or modify the existing equipment at this late stage of operations. This was the situation for much of the Brent field which has now entered its decommissioning phase (Brent Alpha, Brent Bravo ceased production by the end of 2014, Brent Delta ceased production at the end of 2011).

Venting & Fugitives

Some of our installations are designed to vent gas for safety and certain operational reasons, and we have venting consents from the government to cover this.

Venting and fugitive emissions made up around 4% of our GHG emissions in 2014. This has not changed significantly when compared to our performance in 2013. The largest amount of venting in 2014 came from our St Fergus gas plant. This was the result of the venting and purging required prior to the plant’s major shut down that year.
In addition our Shearwater installation saw a decrease in the amount of gas vented in 2014 (Figure 6) as compared to 2013; this is related to a reduction in production.

**Energy Use and Resource Management**

Increasing the stability of production from all our assets is the single most important lever to increase energy efficiency. In 2014 we continued with initiatives to sustainably improve the integrity and reliability of our installations. These initiatives integrate with our overall GHG Strategy that focuses on reliability operations and improving energy efficiency.

In 2014 Shell worked with the Carbon Trust to try and better understand our energy usage across our operations and where to focus our effort in improving energy efficiency overall. Following the Carbon Trust review we developed a plan for delivery in 2015 that focuses on improved visibility of fuel costs and identification of improvement opportunities.

When developing new reserves, our focus is on making best use of existing infrastructure (Shell and third party) so we use resources more efficiently and disturbance to the environment is minimised. In new developments the effective minimisation of GHG emissions is a key element of our project screening criteria.

Most of our energy use is from power generation on our offshore installations where we burn fuel gas or diesel to run pumps, compressors, engines, heaters and general platform services. The energy intensity of our operations are generally increasing due to the maturity of our fields, which produce and process more associated water and require only marginally less energy to export reducing hydrocarbon volumes.

In 2014 continued shut-ins in some of our fields affected the overall energy intensity of our UK operations, as the associated installations still needed to keep parts of their operations running. The improvements in energy intensity from sustaining production on Brent Charlie and returning production to Curlew was offset by reduction in production on Nelson, Shearwater and Haewene Brym (Pierce) FPSO.

**Oil In Produced Water**

Water is co-produced with the extraction of oil and gas and comes to the surface with the hydrocarbons. This is called production water. Oil reservoirs tend to produce significantly more water with the hydrocarbons than gas reservoirs and as the reservoirs mature, the proportion of water also increases. The production water is separated from the hydrocarbons before they are transported to shore. In the raw production water there are dissolved and dispersed (colloidal) oils and these need to be treated before discharged to the environment. The treated water can only be discharged through permitted discharge points and should meet the permit conditions that regulate the concentration and mass of oil released to the environment.

In the UK oil in produced water discharges are regulated in line with the OSPAR Commission recommendations through the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 as amended (OPPC). Shell aims to maintain the total quantity (tonnes) of oil in the produced water discharged into the sea, within the OSPAR target set for contracting parties at 15% below the total quantity of oil in produced water discharged to sea in the year 2000. We have maintained our total oil discharges from produced water below this level since the target was introduced in 2006, and the level has reduced over the past 5 years, see Appendix 1.

Throughout 2014 Shell worked to ensure its offshore installations complied with the 30 mg/l monthly average for dispersed oil in produced water discharges. Overall the results reported to DECC throughout 2014 show that our produced water discharges were in compliance, with the exception of 1 isolated incident on Leman which stemmed from an incident during a turnaround while vessels, washing. Figure 7 shows present annualised average oil in produced water concentrations for our offshore installations.

To maintain compliance with the discharge limits we have in the past; shut in oil production, found alternative disposal routes for the water and also maintained 100 % produced water reinjection availability on 2 of our installations in the southern North Sea. Work is still ongoing on both Gannet and Shearwater to install upgrades to the water treatment systems, as well as improvements to the dosing of corrosion inhibitors.
inhibitors, used to secure the integrity of subsea pipelines, that can lead to oil being entrained in the produced water that our treatment systems, under certain operating conditions, can find difficult to separate.

Between 2013 and 2014 the volume of produced water discharged from our installations has remained static (see Appendix 1). This is as a consequence of an increase in discharge from Brent Charlie and Brent Delta being offset and a reduction in produced water discharge from Nelson. Three installations (Brent Charlie – 9.2 Mm3, Brent Bravo – 5.3 Mm3 and Nelson – 4.3 Mm3) discharged more than 80% of Shell UK’s total produced water, and therefore their availability significantly affects the volume of produced water discharged and consequently the mass of oil discharged.

Figure 8 shows the amount of oil, in tonnes, discharged to sea in produced water in 2014 from installations in the UKCS which we operate.

In 2014 total weight of oil discharged to sea, not including spills, has decreased by 41.8% in comparison to discharges in 2013. In 2013 our installations discharged 262 tonnes, while in 2014 the amount has significantly decreased to 152 tonnes.

Of all our installations Nelson discharged the highest amount of oil (83 tonnes) in 2014, however, this is a significant decrease compared to 2013 (156 tonnes).

In 2014 Shell commenced studies of all the produced water systems on its installation to determine if they can be classed as Best Available Technology (BAT). The Brent Charlie study confirmed that the system was BAT and the other studies will report out in 2015. In addition the mass of oil and presence of other components are also important factors and we are aware that the contracting parties to OSPAR now require that by 2018 all offshore installations that discharge produced water shall have undertaken an detailed assessment of the Whole Effluent Toxicity (WET) using the risk based approach developed by DECC. Shell shall be undertaking these assessments.

Operational Spills

Unfortunately, unplanned releases to sea of oil and chemical from our operations have occurred in 2014 and this is something that Shell regrets. We are working hard to understand the causes and are looking for a sustained improvement in the number and volume of spills.

Consistent with the relevant OPPC regulations, the term “releases” will be used in this section to refer to accidental spills of oil or chemicals. In case of a release does occur, contingency plans are put in place to minimise the environmental impacts.

All oil and chemical releases from our operations are
recorded and reported to the relevant authorities. The total number of all releases to the sea from our upstream activities recorded in 2014 was 87, of which 59 were classified as oil and 28 as chemicals. There were 2 additional permitted discharge PON1s, which relate to reportable releases from one of our permitted discharge points.

The total number of releases was higher in 2014 than in 2013. However, the total mass of the releases decreased significantly, from 197 tonnes in 2013 to 12 tonnes in 2014. In total oil releases contributed 0.9 tonnes and chemical releases 11.5 tonnes.

There were 2 releases greater than 2 tonnes in 2014, both classified as chemicals. The details of these incidents are as follows;

- Pierce - Loss of 2.4 tonnes of hydraulic fluid from subsea operations.
- Gannet - Loss of 6.4 tonnes of methanol from the Gannet D field during subsea operations.

Of the releases notified to the regulator in 2014 80% were less than 10 kg, 11% were 10 – 100 kg and 9% were greater than 100 kg. In addition, the majority of releases were associated with process chemicals, lube oils or liquid fuels, very few were related to releases of production fluids.

Shell supports the Step Change in Safety hydrocarbon leak reduction initiative where the offshore oil and gas industry aim for a 50% reduction in hydrocarbon leaks by 2016, based on a baseline set in 2013. In addition to this, Shell has also set a target of reducing notifiable releases by 50% over the same period.

### CHEMICAL MANAGEMENT

#### Production Chemicals

Our use and discharge of chemicals in production and drilling operations is controlled by the Offshore Chemicals Regulations 2002 as amended (OCR) and Shell’s environmental requirements. The type and volume of production chemicals used and discharged varies across our installations. Oil installations generally use more chemicals to process crude oil than gas installations use to process gas. This is mainly due to the relatively high quantities of produced water associated with oil production.

Table 2 shows the historical use of offshore chemicals across our UK Production operations, along with the percentages of those used that were discharged to the sea.

<table>
<thead>
<tr>
<th>Year</th>
<th>Production Chemical Use (Tonnes)</th>
<th>% Discharged</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4,500</td>
<td>59</td>
</tr>
<tr>
<td>2011</td>
<td>3,433</td>
<td>56</td>
</tr>
<tr>
<td>2012</td>
<td>2,246</td>
<td>52</td>
</tr>
<tr>
<td>2013</td>
<td>2,680</td>
<td>60</td>
</tr>
<tr>
<td>2014</td>
<td>3,100</td>
<td>70</td>
</tr>
</tbody>
</table>

There has been a slight increase in production chemical use over the past 2 years (see Table 2), this is mainly due to Brent Charlie being back in full production. The percentage of those chemicals discharged to sea has also seen an increase, partly due to the chemical use/discharge on Brent Charlie but also in 2014 this was due to the various operations being carried out on Haewene Brim in preparation for the hook-up of the Brynhild field. The use/discharge of production chemicals continues to be affected by counteracting factors:

- Our efforts to use more efficient chemicals that reduce treatment concentrations.
- Having access to more recent partitioning studies that more accurately determine the percentage of chemical being discharged in their respective phases.
- The effects of divesting platforms, and
- Greater consumption due to increasing water production as fields age.

In 2014 there was a slight increase due to Brent Charlie being back in full production. This has resulted in higher volumes of produced fluids that required treatment and therefore an increased volume of production chemicals required to treat them.

The regulator (DECC) has highlighted certain hazardous chemicals to be phased out from use by means of Substitution Warnings (Sub Warnings). Reducing the use of these chemicals can be challenging, especially for those that have been engineered for specific fields or applications.
Approximately 16% of the production chemicals used by Shell have Sub Warnings, however their use has declined over the last 5 years in line with our phase out plan agreed with DECC (Figure 9).

The overall reductions have been 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.

Wells Chemicals

In 2014 we used a total of 11,787 tonnes of chemicals in wells activities as shown in Table 3. Of this figure approximately 28% of chemicals were discharged to the marine environment. The volume of chemicals used and discharged is directly related to the type and number of wells activities undertaken, and 2014 saw a decrease in drilling and abandonment activity. The main activities in 2014 included drilling on Shearwater & Guillemot, well abandonment in the Brent field and SKUA and Galleon well suspension. Further details on wells drilled can be seen in Appendix 3.

Waste Management

Waste is closely controlled across all our UK operations with our installations actively segregating their waste streams to ensure legal compliance and allow for more environmentally acceptable routes of disposal. Our Environmental Representatives (E-Reps, see section below) are involved with the checking of compliance and working with the people on site, so that they understand the requirements for segregating wastes during activities at the installations.

Table 3: Wells Chemicals Use and Discharge (2008-2014)

<table>
<thead>
<tr>
<th>Year</th>
<th>Well Chemical Use (Tonnes)</th>
<th>% Discharged</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>20,424</td>
<td>15</td>
</tr>
<tr>
<td>2009</td>
<td>28,293</td>
<td>25</td>
</tr>
<tr>
<td>2010</td>
<td>9,778</td>
<td>17</td>
</tr>
<tr>
<td>2011</td>
<td>9,046</td>
<td>15</td>
</tr>
<tr>
<td>2012</td>
<td>8,102</td>
<td>17</td>
</tr>
<tr>
<td>2013</td>
<td>17,163</td>
<td>28</td>
</tr>
<tr>
<td>2014</td>
<td>11,787</td>
<td>28</td>
</tr>
</tbody>
</table>

In 2014, around 1% of the total weight of chemicals used was made up of chemicals which carry Sub Warnings. Around 0.1% of the total weight of chemicals discharged in 2014 was made up of chemicals which carry Sub Warnings.

Table 4: Mass (tonnes) of wastes (hazardous and non-hazardous) generated by our UK upstream operations between 2010 and 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Hazardous Waste (tonnes)</th>
<th>Non-Hazardous Waste (tonnes)</th>
<th>Total Waste (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>27,625</td>
<td>15,550</td>
<td>43,175</td>
</tr>
<tr>
<td>2011</td>
<td>28,085</td>
<td>19,047</td>
<td>47,132</td>
</tr>
<tr>
<td>2012</td>
<td>30,020</td>
<td>28,769</td>
<td>58,789</td>
</tr>
<tr>
<td>2013</td>
<td>38,490</td>
<td>53,456</td>
<td>91,946</td>
</tr>
<tr>
<td>2014</td>
<td>23,354</td>
<td>29,992</td>
<td>53,346</td>
</tr>
</tbody>
</table>

Overall waste mass was lower than in 2013 (a decrease of 39%), with a decrease in both hazardous and non-hazardous waste mass in 2014. The main movement came from a reduction in the amount of produced water being disposed from Bacton Gas Plant and Curlew FPSO. The volume of water from Bacton decreased due to lower...
produced water coming in with the gas and condensation. The waste water treatment plant at Bacton is being commissioned and going forward. This will allow production water to be treated on site rather than shipped for offsite treatment and disposal. Additionally, water disposal from Curlew reduced as the installation had low water production resulting from significant periods of shut in between 2013 and 2014.

Hazardous waste in 2014, which includes drilling mud and cuttings from our drilling activities, contaminated water and sludge from onshore and offshore operations, waste oil, paint and chemicals, decreased by approximately 15,000 tonnes compared to 2013. The main contribution came from process water removed from Bacton Gas Plant which is mainly categorised as hazardous waste and was treated and disposed of offsite, as mentioned above.

Overall the non-hazardous waste, which includes scrap metals, wood, paper, plastics, cans, general waste and also produced water from on and off-shore installations, also decreased in 2014. The mass of waste recycled increased for the third year, with over 22,000 tonnes of waste recycled in 2014.

In summary, waste tonnage decreased in 2014 with Waste Water treatment and disposal the highest volume from Bacton and drilling wastes mainly coming from Shearwater.

**Figure 10:** Mass (tonnes) of wastes generated by location in 2014

**Figure 11:** Difference of mass of waste disposed of/recovered to various routes between 2013 and 2014. “Other” includes treatment and disposal of production water onshore.
UK regulations and Shell’s HSSE & SP control framework set standards for managing risks to biodiversity and ecosystems arising from our activities. Biodiversity and presence of critical habitats is a key consideration in our environmental impact assessments for new projects and significant modifications to the existing facilities.

Assessment of potential presence of sensitive species or habitats has become a standard practice for any of our drilling or project activities. In 2014 we carried out detailed habitat investigations at Puffin, Penguins, Carrack West, and Leman BH fields to ascertain presence or absence of protected or sensitive habitats, such as Methane Derived Authigenic Carbonate (MDACs), stony or biogenic reefs, and sandbanks that could be affected by proposed activities. The results of the habitat assessment around Leman BH platform, located within the North Norfolk Sandbanks and Saturn Reef Sites of Community Importance (SCI), indicated an extension of large Sabellaria spinulosa aggregation originally identified at Leman A in 2012-2013, with the total area estimated at over 0.87 km².

In 2014 we embarked on the development of a Biodiversity Action Plan (BAP) for our assets and activities located in the North Norfolk Sandbanks and Saturn Reef SCI. The BAP is aimed at helping us manage our biodiversity impacts using a more systematic approach that allows integrating biodiversity conservation priorities with the Company’s environmental management system and aligning these with the national strategies and plans. With this information we can look for ways to minimize our impacts, support the management objectives of such areas and inform consultations with relevant local and national agencies. The outcome of this BAP will also inform the ongoing revision of our current offshore seabed monitoring program.

We started a review of our offshore environmental seabed monitoring program in order to identify opportunities to optimize the program in the light of a review of Shell benthic data gathered to-date, establishment of various marine conservation areas and new legislation coming into force. We believe it is opportune to review the current approach to ensure it is aligned with the business objectives, supports our understanding of the impact of our operations whilst providing data/information that benefits our project and development objectives.
**INNOVATION AT WORK**

**Brent Decommissioning**

The decommissioning of the Brent Field and facilities is one of the most significant 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. Through a consultation process, we aim to identify optimal solutions for decommissioning Brent facilities, driven by what is safe, technically achievable, environmentally and socially sound, and financially responsible. To this end an Independent Review Group (IRG) has reviewed the science and conclusions of the many technical studies that have been commissioned and their final report will be available along with the Decommissioning Programme.

Brent Delta ceased production on December 31st 2011, and Brent Alpha and Brent Bravo ceased production on 1st November 2014. Work has been completed to plug and make safe the wells on Brent Delta, and general engineering preparations for the topsides removal are continuing. The work to plug and make safe the wells on Brent Bravo commenced in 2014.

Investigation and evaluation of the content within the Brent Delta Gravity Based Structure are ongoing. The Cell Survey Project is progressing and samples were obtained from 3 cells on Brent Delta in 2014.

The Environmental Impact Assessment (EIA) process, that supports the overall Brent Field decommissioning programme, is well underway and the EIA scoping report is available for stakeholders to read. This scoping report represents the first stage in the preparation of the detailed Environmental Impact Assessment for the project.

Under the current plan Shell will be the first operator to use the 382 metres long and 124 metres wide vessel, Pioneering Spirit, to remove and bring to shore the platforms’ topsides for Brent’s Alpha, Bravo and Delta platforms, together with Brent Alpha’s steel jacket.

All the topsides and Brent Alpha steel jacket are planned to be taken for dismantling to the Able UK Limited, yard near Hartlepool, UK. The target is for at least 97% of the facilities to be recycled and Able anticipates the creation of 100 jobs over an 18 month period to support the strengthening of the quay in advance of the first topside being received with a further 100 jobs required when the recycling work begins.

A dedicated Brent Decommissioning website (www.shell.co.uk/brentdecomm) is available including a ‘Contact Us’ facility, where comments, queries or requests for information can be submitted directly to the project team.

**Carbon Capture and Storage (CCS)**

Throughout 2014 Shell, with the support of SSE Generation Limited (SSE), have been working on the design for the world’s first fully integrated gas fired power station with carbon capture and storage (CCS) at the Peterhead Power Station, Aberdeenshire, Scotland. The Peterhead CCS Project (the Project) aims to demonstrate CCS technology at full industrial scale in the UK, and will be a significant step towards the decarbonisation of the UK’s power sector.

If the project proceeds to completion, it is expected to be up and running by the end of the decade.

The Project broadly consists of three main components:

- Constructing and operating a CO2 capture (known as, carbon capture) plant at the existing Peterhead Power Station. The CC plant will capture CO2, which would otherwise be released to the atmosphere from one of the Power Station’s existing gas turbines. It will then compress and dry the captured CO2 in preparation for onward transportation.
Transporting the CO2 via a combination of new and existing pipelines to the Shell operated Goldeneye platform in the North Sea some 100 km to the north east of Aberdeen. A new direct offshore pipeline, approximately 20 km in length, will tie-in to the existing disused pipeline to the Goldeneye platform that runs from the Shell St. Fergus Gas Terminal north of Peterhead.

Injecting the CO2 into the depleted Goldeneye gas reservoir for permanent geological storage. The Goldeneye reservoir has the key geological features required for storing CO2: a body of high quality porous rock overlain and surrounded by layers of impermeable rock, which provide effective barriers to keep the CO2 securely contained deep beneath the seabed.

ENVIRONMENTAL REPRESENTATIVES

Environmental Representatives, or “E-reps”, are volunteer members of the worksite community on all of Shell’s oil & gas installations, both onshore and offshore, who step forward as champions for environmental performance.

Since publication of the Maitland report in 2012 there has been an industry wide drive in the UK to increase the workforce involvement with environmental management. This has also included increasing interconnection and cross-learning from E-reps across the industry initially focused around industry training programmes and an annual “E-Rep Forum”. Shell has supported the training programme and has had active representation at all the forums.

The E-rep programme has been an integral part of Shell UK’s environmental management for a number of years and there has been a concerted effort since 2013 to build and strengthen this network so that it will be one of the cornerstones for delivering compliance and future improvements.

The Shell E-Rep forum continued to grow and develop with the onshore meetings tying in with the HSE plan activities such as spill reduction – with emphasis on spills from bunkering and how improvements can be made. The work of the E-reps continues to aid and assist the facilities to make improvements and fulfil environmental initiatives both on and offshore. The E-reps forum continues to be a valuable medium for sharing learnings and good practice across the Shell business.

LATERAL LEARNING AND COOPERATION

Shell expects to participate in various stakeholder, government and industry forums to support processes with the objective of consistent environmental improvement in the oil and gas activities in the UKCS. These include contributions to government consultation processes, both individually and as part of the industry associations such as Oil and Gas UK (OGUK).

We participate in a number of OGUK working groups and forums which include the Oil Spill Response Group, Environment Forum and Well Fluids Working Group, as well as taking an active part in the steering committee for the Upstream Environment Group of the Energy Institute (EI). The EI have been working on various industry-wide projects related to environmental performance improvement, including; developing guidance for bunding requirements offshore and environmental awareness training CBTs (Computer Based Training).

During 2011 and 2012, Oil & Gas UK led the ‘Decommissioning Baseline Study’ joint industry project (JIP) to gather knowledge and experience in the decommissioning of offshore structures and pipelines. The environmental work stream within the JIP identified that gaps exist in the data set used to describe the influence of man-made structures on the North Sea ecosystem.

In May 2013 in response to this situation, Oil & Gas UK facilitated the creation of a scientifically-led, long-term environmental JIP aimed at improving scientific knowledge across all aspects of the ecosystem. In April 2014, Shell UK Ltd and seven other energy company sponsors signed the JIP Agreement, marking the start of the programme. To demonstrate independence and transparency, the programme sponsors are committed to engage proactively with the broader stakeholder community of the North Sea and to make the findings available in the public domain.

Known as the ‘INSITE’ (INfluence of Structures In The Ecosystem), this JIP is a major initiative, which seeks to provide all stakeholders with the science needed to better understand the effect of man-made structures on the North Sea and hence better inform any decision making process. More information about the INSITE programme can be found on the following link: http://www.insitenorthsea.org/about/
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 Communications department.

Shell U.K. Limited
1, Alten Farm Road
Aberdeen AB12 3FY
01224 882000
APPENDIX 1

SUMMARY OF ENVIRONMENTAL DATA (2010-2014)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG (tonnes CO₂ equivalent)</td>
<td>2,748,043</td>
<td>2,306,496</td>
<td>2,092,394</td>
<td>2,424,984</td>
<td>2,335,621</td>
</tr>
<tr>
<td>Total Fuel Gas (tonnes)</td>
<td>789,908</td>
<td>580,049</td>
<td>486,240</td>
<td>552,055</td>
<td>554,612</td>
</tr>
<tr>
<td>Total Diesel (tonnes)</td>
<td>31,781</td>
<td>42,621</td>
<td>100,864</td>
<td>98,120</td>
<td>99,050</td>
</tr>
<tr>
<td>Total Hydrocarbon to Flare (tonnes)</td>
<td>177,074</td>
<td>141,750</td>
<td>107,599</td>
<td>131,747</td>
<td>112,071</td>
</tr>
<tr>
<td>Oil to Sea (tonnes) (discharged in produced water)</td>
<td>445</td>
<td>238</td>
<td>142</td>
<td>240</td>
<td>153</td>
</tr>
<tr>
<td>Hazardous Waste Generated (tonnes)</td>
<td>27,625</td>
<td>28,175</td>
<td>30,020</td>
<td>38,490</td>
<td>23,354</td>
</tr>
<tr>
<td>Non-Hazardous Waste Generated (tonnes)</td>
<td>15,550</td>
<td>16,968</td>
<td>28,769</td>
<td>53,456</td>
<td>29,992</td>
</tr>
<tr>
<td>Production Chemical Use (tonnes)</td>
<td>4,500</td>
<td>3,433</td>
<td>2,246</td>
<td>2,680</td>
<td>3,100</td>
</tr>
<tr>
<td>% Discharge</td>
<td>59</td>
<td>56</td>
<td>52</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Wells Chemical Use (tonnes)</td>
<td>9,778</td>
<td>9,046</td>
<td>8,102</td>
<td>17,163</td>
<td>11,787</td>
</tr>
<tr>
<td>% Discharge</td>
<td>17</td>
<td>15</td>
<td>17</td>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

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 3rd Party fields that produce to them, plus onshore plants and mobile rigs in the U.K. – all as reported by Shell to the U.K. Environmental Emissions Monitoring System EEMS.
APPENDIX 1

SUMMARY OF ENVIRONMENTAL DATA (2010-2014)

Oil to Sea (Tonnes) (Discharged in Produced water) Annual totals 2010-2014

Total Hazardous and Non Hazardous Waste 2010 -2014

Annual Wells Chemicals Used (Tonnes) and Percentage Discharged (2010-2014)
APPENDIX 2

E-PON1S REPORTED 2014 AND DETAILS OF RELEASES >2 TONNES

| Notifiable (PON1) Oil and Chemical Spills - Number | 86 |
| Notifiable (PON1) Oil and Chemical Spills - Total Mass (tonnes) | 12 |

<table>
<thead>
<tr>
<th>Incidents and Response*</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pierce, loss of hydraulic fluid during subsea operations</td>
<td>2.4</td>
</tr>
<tr>
<td>Gannet, loss of methanol on Gannet D field during subsea operations</td>
<td>6.4</td>
</tr>
</tbody>
</table>

PON 1 = Petroleum Operations Notice No.1

We are required to notify the relevant authorities of all visible sheens and accidental/unplanned discharges or spills of oil or chemicals to sea, regardless of volume, using a PON1 to:

- Nearest Coastguard Station
- Department of Energy and Climate Change (DECC);
- Joint Nature Conservation Committee (JNCC)
- Any relevant Statutory Nature Conservation Agency

The list of spills above shows only those greater than 2 tonnes, this figure was used in previous Annual Environmental Statements and retained for 2014 to maintain consistency.
### APPENDIX 3

**WELL ACTIVITIES IN 2014**

#### Wells Drilled in 2014

<table>
<thead>
<tr>
<th>Installation / Rig</th>
<th>Shell Well Name</th>
<th>Well Start Date</th>
<th>DECC Permit Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noble Al White</td>
<td>Galleon PG-11</td>
<td>27 February 2014</td>
<td>DRA/52</td>
</tr>
<tr>
<td>Noble Hans Deul</td>
<td>SW09s3*</td>
<td>22 September 2014</td>
<td>DRA/161</td>
</tr>
<tr>
<td>Noble Al White</td>
<td>Sean PD02**</td>
<td>22 November 2013</td>
<td>PON15B/870</td>
</tr>
</tbody>
</table>

* Completed in 2015.
** Although operation began in 2013, the operation was not completed until 2014.

#### Wells Abandoned in 2014

<table>
<thead>
<tr>
<th>Installation</th>
<th>Shell Well Name</th>
<th>Completed/Abandonment Date</th>
<th>DECC Permit Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean Guardian</td>
<td>Skua-S1</td>
<td>17 July 2014</td>
<td>WIA/139</td>
</tr>
<tr>
<td><strong>ABBREVIATIONS AND TERMINOLOGY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Asset</strong></td>
<td>Used internally in Shell to describe a collection of locations and supporting services; also includes onshore plants and interconnecting pipelines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Associated Gas</strong></td>
<td>Gas liberated from oil as the pressure is reduced from subsurface conditions to the surface separation facilities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Benthos / Benthic</strong></td>
<td>Flora (plants) and fauna (animals) found at the bottom of ocean, sea or lake.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bentonite</strong></td>
<td>Natural clay used to thicken well engineering and completion fluids.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CCS</strong></td>
<td>Carbon Capture and Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CEFAS</strong></td>
<td>Centre for Environment, Fisheries &amp; Aquaculture Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CFC</strong></td>
<td>Chloro-Fluoro-Carbon. A substance containing chlorine, fluorine and carbon, used in refrigeration systems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CI</strong></td>
<td>Corrosion Inhibitor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CMS</strong></td>
<td>Corporate Management System</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CNNS</strong></td>
<td>Central and Northern North Sea Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>COMAH</strong></td>
<td>Control of Major Accident Hazards Regulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CoP</strong></td>
<td>Cessation of Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DECC</strong></td>
<td>Department of Energy and Climate Change (formerly BERR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>De-oiler</strong></td>
<td>Chemical used in the production process to promote separation of oil from produced water</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EEMS</strong></td>
<td>Environmental Emissions Monitoring System (Oil &amp; Gas U.K.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EMS</strong></td>
<td>Environmental Management System</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EP</strong></td>
<td>Exploration and Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EPR</strong></td>
<td>Environmental Permitting Regulations (England and Wales)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EU ETS</strong></td>
<td>Council Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading with the community</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F-Gas</strong></td>
<td>Fluorinated greenhouse gases</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FPSO</strong></td>
<td>Floating Production, Storage and Offloading vessel</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GHG</strong></td>
<td>Greenhouse gases (mainly carbon dioxide, methane, nitrous oxide and HFC’s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HCFC</strong></td>
<td>Hydro-Chloro-Fluoro-Carbon. A substance containing hydrogen, chlorine, fluorine and carbon, used in refrigeration systems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HSSE &amp; SP</strong></td>
<td>Health, Safety, Security, Environment and Social Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HQ</strong></td>
<td>Hazard Quotient</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IPPC</strong></td>
<td>Integrated Pollution Prevention and Control (Scotland)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>KPI</strong></td>
<td>Key Performance Indicator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JNCC</td>
<td>Joint Nature Conservation Committee. Public body that advises the U.K. Government and devolved administrations on nature conservation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCA</td>
<td>Maritime and Coastguard Agency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEG</td>
<td>MonoEthylene Glycol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUI</td>
<td>Normally Unmanned Installation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSP</td>
<td>Northern Systems and Plant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCNS</td>
<td>Offshore Chemical Notification Scheme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OGUK</td>
<td>Oil and Gas U.K., U.K. offshore oil industry association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OIPW</td>
<td>Oil in Produced Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPEP</td>
<td>Oil Pollution Emergency Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPPC</td>
<td>Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSPAR</td>
<td>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).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PON1</td>
<td>Petroleum Operations Notice type 1. DECC 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 <a href="https://www.og.berr.gov.uk/regulation/pons/index.htm">https://www.og.berr.gov.uk/regulation/pons/index.htm</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPC</td>
<td>Pollution Prevention and Control Act 1999 and Offshore Combustion Installations (Prevention and Control of Pollution) Regulations 2001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PWRI</td>
<td>Produced Water Re-Injection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAC</td>
<td>Special Area of Conservation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEPA</td>
<td>Scottish Environmental Protection Agency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SERPENT</td>
<td>Scientific and Environmental ROV Partnership using Existing iNdustrial Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SICI</td>
<td>Scale Inhibitor/Corrosion Inhibitor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNS</td>
<td>Southern North Sea Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOSREP</td>
<td>Secretary of States Representative, for Maritime Salvage and Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>Social Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEG</td>
<td>TriEthylene Glycol (antifreeze)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UKCS</td>
<td>United Kingdom Continental Shelf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBM</td>
<td>Water Base Mud</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCI</td>
<td>Site of Community Importance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate 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 operations. In addition to the term “Shell” in this report “we”, “us” and “our” are also used to refer to Shell UK Upstream operations in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. “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. Companies over which Shell has joint control are generally referred to as “joint ventures” and companies over which Shell has significant influence but neither control nor joint control are referred to as “associates”. In this report, joint ventures and associates may also be referred to as “equity-accounted investments”. 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 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. 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, 2014 (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, 2015. 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.

We may have used certain terms, such as resources, in this report that United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 20-F, File No. 1-32575, available on the SEC website www.sec.gov.