



# TALISMAN SINOPEC ENERGY UK LIMITED

2014 ENVIRONMENTAL STATEMENT



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**The goals of providing a reliable energy supply, making safe and efficient use of resources, reducing our environmental impacts and continuously improving are central to our business. These goals are at the very core of the way in which we operate and we are committed to delivering environmental performance that meets or exceeds regulations.**

Society's energy demands will continue to increase for the foreseeable future and hydrocarbons will be required to help meet those demands. Not only are we committed to meeting society's energy demands but we are also committed to doing this in a safe and environmentally-responsible way.

Efforts towards minimising the environmental impacts of energy exploration and production are demonstrated through the targets we set for ourselves each year and the rigour in which we monitor all our operations against these targets. Furthermore, our own Environmental Management System is verified by an independent third party.

This report provides an analysis of our 2014 performance and illustrates the company's commitment to communicating in an honest, transparent and responsible manner.

2014 saw an improvement in unintended releases to sea in comparison to 2013. While these releases had minor or no impact on the environment, each case was investigated to identify root causes to help prevent future reoccurrence. We are not content with the 2014 performance and will continue to drive performance in this area in 2015.

Waste performance in 2014 was comparable to 2013, with a decrease in the amount of hazardous waste generated and the proportion of waste going to landfill.

The amount of chemicals used and discharged at our production sites decreased slightly compared to 2013 while the amount of drilling chemicals rose due to increased drilling activities.

At a company level, 2014 saw a slight reduction in CO<sub>2</sub> emissions largely due to extended shutdowns at some of our offshore installations. These extended shutdowns resulted in an increase in CO<sub>2</sub> emissions per 1,000 barrels of oil equivalent (BOE). During shutdowns, little or no fuel or flare gas is burned, however power generation continues to be required and this is achieved through the burning of diesel fuel.

Although broadly similar to 2013's performance, 2014 saw a slight improvement in our concentration of oil in produced water released to sea. While it is clearly not desirable to release any oil, industry regulators place strict limitations on both the concentration and quantity of oil discharged in order to protect the marine environment. At these low concentrations, oil quickly disperses and is broken down by weathering and marine microorganisms. The internationally agreed emission limit enforced by the UK regulator (DECC) is 30mg of oil per litre (average over one month). In 2014, the average discharge concentration from our offshore facilities improved to 14.45mg/l. This was significantly below the legal performance standard and less than the UK industry average of 19.78mg/l.

**While our operations present a wide range of challenges, we take our responsibilities seriously - including environmental protection - to ensure we make a positive contribution to the communities in which we operate.**



**Garry Beattie**  
Manager, HSE

# UK OPERATIONS



## Fields & Installations

In 2014, our company produced oil and gas from 50 offshore fields, operated the Flotta Terminal and 11 offshore production installations including a Floating Production Storage and Offloading (FPSO) vessel.



**Our principal UK operating areas, (show on page 2) encompass a total of 50 fields and 12 operated assets which are detailed on Tables 1 and 2.**

## Oil & gas production

Oil reservoirs contain a mixture of oil, produced water and natural gas. A primary purpose of an offshore production platform is to separate out the extracted 'well fluids' into these three separate components using separation vessels. Once the oil has been separated from the gas and water, it is pumped to shore via subsea pipelines; or, in the case of oil from the Ross and Blake fields, shipped to shore. The gas is dried and then compressed. Some of the gas, where possible, is used to generate power to run the process equipment and the remainder of the gas is exported via pipeline to the UK mainland (see Table 1), used for gas lift, or flared.

The proportion of oil, gas and water produced from reservoirs changes over time. Oil and gas production will decrease and the volume of water will increase. The separated water, known as produced water, is treated to remove oil droplets prior to discharge to sea.

## Drilling

As the fields mature and more information about the reservoirs becomes available, more wells may be drilled or existing wells may be revisited. This can be done either from the platform, or with mobile drilling rigs. Geological information and production tests determine how many wells are needed to produce the oil and gas effectively.

**HYDROCARBON EXPORT ROUTES** Table 1

Installation	Oil	Gas
Arbroath	Via Montrose	Via Montrose
Auk	Via Fulmar	N/A
Bleo Holm	Shuttle Tanker	Frigg Pipeline
Buchan	Forties Pipeline	N/A
Claymore	Flotta Pipeline	N/A
Clyde	Norpipe Pipeline	St Fergus Line
Fulmar	Norpipe Pipeline	St Fergus Line
Montrose	Forties Pipeline	CATS Pipeline
Piper B	Flotta Pipeline	Frigg Pipeline
Saltire	Via Piper B	Via Piper B
Tartan	Flotta Pipeline	Frigg Pipeline

**FIELDS & INSTALLATIONS** Table 2

FIELD	BLOCK	INSTALLATION
Arbroath	22/18	Arbroath
Arkwright	22/23a	Arbroath
Auk	30/16	Auk
Auk North	30/16n,t	Fulmar
Beaully	16/21	Balmoral*
Blake	13/24b	Bleo Holm
Brechin	22/23	Montrose
Buchan	21/01	Buchan
Burghley	16/22	Balmoral*
Carnoustie	22/17	Arbroath
Cayley	22/17s	Montrose
Chanter	15/17	Piper B
Claymore 14/19	14/19	Claymore
Claymore 14/20b	14/20b	Claymore
Clyde	30/17b	Clyde
Duart	14/20b	Tartan
Enoch	16/13a	Brae*
Fulmar	30/16	Fulmar
Galley	15/23	Tartan
Godwin	22/17n & 22/17s	Arbroath
Halley	30/12b	Fulmar
Hannay	20/05c	Buchan
Highlander	14/20	Tartan Alpha
Iona	15/17	Piper B
Leven	30/17b	Clyde
Medwin	30/17b	Clyde
Montrose	22/17	Montrose
Nethan	30/17b	Clyde
Orion	30/18	Clyde
Petronella	14/20	Tartan
Piper	15/17	Piper B
Ross	13/29	Bleo Holm
Saltire	15/17	Saltire
Scapa	14/19	Claymore
Shaw	22/22a	Montrose
Tartan	15/16	Tartan Alpha
Tartan North Terrace	15/16b	Tartan Alpha
Tweedsmuir	21/01a	Piper B
Wood	22/18	Montrose
Affleck*	30/19a	Clyde via Janice FPU*
Andrew*	16/27a	Andrew*
Balmoral*	16/21b,c	Balmoral*
Blane*	30/03	Ula*
Cawdor*	30/13 & 30/14	Clyde
Flyndre*	30/13 & 30/14	Clyde
Glamis*	16/21a	Balmoral*
MacCulloch*	15/24b	North Sea Producer*
Stirling*	16/21b,c	Balmoral*
Wareham*	98/06a,07a	Onshore
Wytch Farm*	98/06a,07a	Onshore

\* Not operated by the company therefore data is not included in this report.

# ENVIRONMENTAL MANAGEMENT

The company has an integrated Health, Safety and Environmental Management System (HSE MS). The environmental elements of the system have been independently verified as meeting the requirements of the Oslo-Paris Convention (OSPAR) Recommendation 2003/5 to promote the use and implementation of Environmental Management Systems by the offshore industry.

## Minimise impact and continuous improvement

Our environmental commitment, as outlined in our corporate HSE policy, is to minimise our impacts and always comply with the law or the company's standards, whichever are higher. All environmental aspects including climate change, air quality, water quality and waste are issues that receive constant attention to minimise our environmental impacts. The environmental impacts from oil and gas exploration and production activities have been minimised as far as practicable through the design of the installations and subsequent modifications made to plant and process.

## We follow a 2-phase environmental management strategy

The first phase consists of the identification and characterisation of our environmental impacts to determine their significance and how to manage them. This considers local environmental sensitivities, company and legislative performance standards and stakeholder concerns.

The second phase involves the development and implementation of environmental management strategies that are integrated with business and operational systems, and are in concert with all company performance improvement objectives: such as safety, installation integrity and security of supply.

## Targets and objectives

Our Senior Leadership Team set annual corporate and site-specific environmental targets. Each is set with a view to achieving the overarching objective of continuous improvement. To ensure all of our installations work towards achieving the targets, a performance contract is agreed with the site leadership team and company personnel.



Our Corporate HSE Policy

Environmental performance is tracked using a set of performance indicators. Each site's performance is monitored relative to its targets in areas such as Carbon Dioxide (CO<sub>2</sub>) emissions, oil in produced water, hazardous chemical use, spills and waste management.

## Permits and consents

Our conduct in the North Sea is governed by a range of legislation and we are required to hold a number of permits and consents that authorise our operations. These permits and consents come with detailed operating conditions to which we must adhere.

We track and investigate non-compliance (permit breaches) to measure and continually improve the effectiveness of our systems, processes and procedures.

# ENVIRONMENTAL MANAGEMENT BY DESIGN AND MAINTENANCE

**Our installations are designed and maintained to minimise their environmental impact.**

**Primary impact mitigation measures have been integrated into the design of the facilities and include:**

- Closed system processes to safely contain reservoir fluids in vessels and flow lines under all process conditions.
- Pressure, temperature, flow control and shutdown systems to maintain safe operating conditions at all times.
- ◆ ➤ Bunding of areas with a potential for spills.

**Secondary defence measures are those that relate to the operation of the facilities and include:**

- Corrosion prevention and monitoring programmes and preventative maintenance programmes ensure that vessels, flow lines, valves, fittings and equipment remain in a safe operating condition.
- Consideration of all potential accidental/emergency scenarios to ensure procedures and resources are in place for prevention, control and mitigation.
- Procedures to minimise operational leaks and spills and ensure availability of clean-up equipment to deal with spillages.
- Training of platform personnel to operate and maintain the above safeguards in good working order.

**ENVIRONMENTAL MANAGEMENT**

**DISCHARGES  
TO AIR**



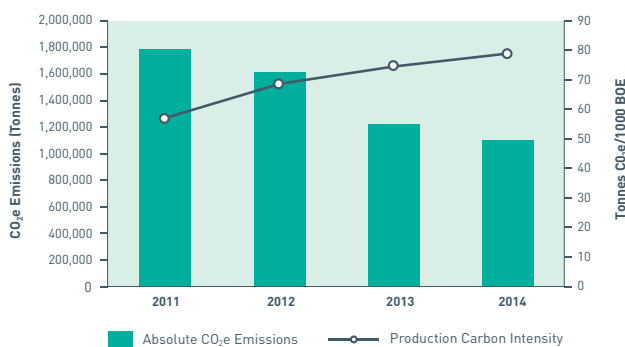


**TSEUK supports sensible, economic measures that will improve energy efficiency and reduce atmospheric emissions. We comply with all regulatory emissions limits and pursue voluntary emissions reduction opportunities by integrating energy efficiency and regulatory targets into business operations.**

During normal operations an installation burns fuel gas and diesel for power generation and flares the gas it cannot use or export for safety reasons. The combustion of hydrocarbons results in the emission of CO<sub>2</sub> and other greenhouse gases (ghg's). The level to which ghg's contribute to global warming depends on the type of gas, for example 1 tonne of methane (CH<sub>4</sub>) has an effect on the atmosphere equivalent to 21 tonnes of CO<sub>2</sub>.

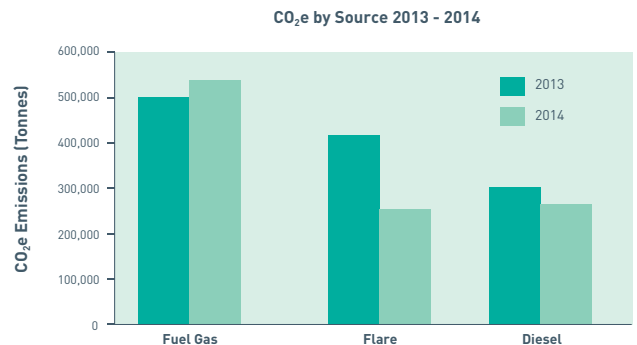
In order to comprehensively assess the impact of our operations, ghg's are combined and expressed as tonnes of CO<sub>2</sub> equivalent. CO<sub>2</sub>e / 1000 BOE has also been used as an environmental measure of production efficiency.

**Figure 1** shows a decrease in company level CO<sub>2</sub>e (CO<sub>2</sub> equivalent) emissions in 2014, primarily due to extended shutdown periods and reduced overall flaring activity. The observed increase in CO<sub>2</sub>e / 1000 BOE represents a reduction in production efficiency, also caused by extended shutdowns as the drop in production can't be offset completely by an equivalent decrease in emissions. During shutdown periods little or no fuel and flare gas is combusted however a requirement for power generation still remains. This is met by burning diesel.



**Figure 1**

CO<sub>2</sub> Equivalent emissions and production intensity annual trend

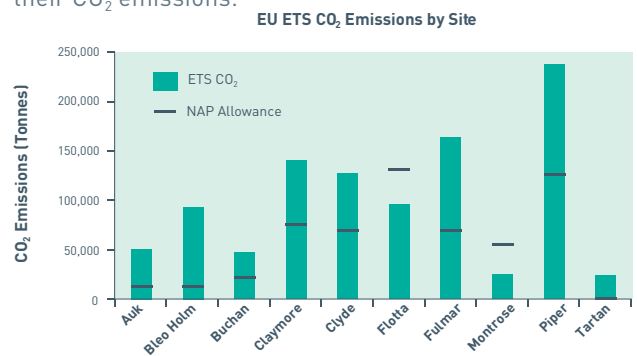


**Figure 2**

2013 CO<sub>2</sub> Equivalent emissions by source

**Figure 2** shows the contribution of CO<sub>2</sub>e from each source over the last 2 years. In 2014, emissions from diesel and flare gas decreased while emissions from fuel gas increased, reflecting slightly better gas compression uptime in 2014 compared to 2013.

The European Union Emissions Trading Scheme (EU ETS) is a cap and trade system for CO<sub>2</sub> emissions arising from fuel combustion and flaring. **Figure 3** shows how each site performed against its Government allocated allowance or 'cap' in 2014. A number of our sites exceeded their free allowances, in line with the requirements of the EU ETS, the short fall was purchased through a designated mechanism so that these sites had sufficient allowances to account for their CO<sub>2</sub> emissions.



**Figure 3**

2013 EU-ETS CO<sub>2</sub> emissions and allowance per site

**ENVIRONMENTAL MANAGEMENT**

**DISCHARGES  
TO SEA**



# OIL IN PRODUCED WATER

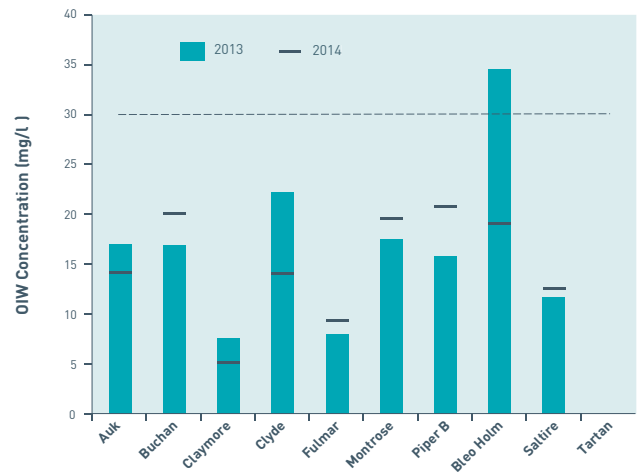
The fluid extracted from most oil wells contains a mixture of oil, gas and water. A primary function of all our offshore installations is to separate the gas and water, sending the oil ashore and safely discharging the treated water to sea. Following treatment some oil will still be present in the discharged water.

While it is clearly not desirable to release any oil, industry regulators place strict limitations on both the concentration and quantity of oil discharged in order to protect the marine environment. At these low concentrations oil quickly disperses and is broken down by weathering and marine micro-organisms.

The UK government through the “Offshore Inspectorate” of the Department of Energy and Climate Change (DECC) enforces a standard, internationally agreed emission limit value of 30mg of oil per litre of produced water discharged (average over one month). **Figure 4** shows that the average discharge concentration in 2014 improved slightly to 14.45mg/l. This is significantly below the legal performance standard and ~16% lower than the industry average of 19.78 (Oil and Gas UK).

**Figure 5** shows that the majority of our assets reduced the concentration of oil in produced water. In particular improvements in performance were seen at Buchan and Piper B who reduced the concentrations of oil in their produced water by 31% and 24% respectively. Study work is ongoing at all sites with a particular focus on sites which are close to or over 30 mg/l, to establish where process improvements can be made to reduce oil in produced water performance.

**Figure 6** shows that the total mass of oil discharged to sea in 2014 remained similar to that discharged in 2013 both of which showed significant reductions over previous years. As a company TSEUK discharged



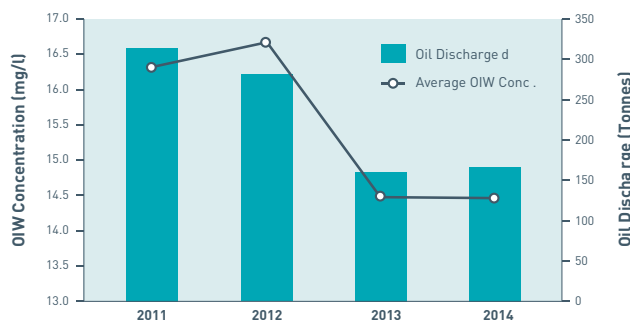
**Figure 5**

Oil in produced water concentration by site 2013 - 2014

a similar volume of produced water with a similar oil concentration in 2014 as had been the case in the previous year.

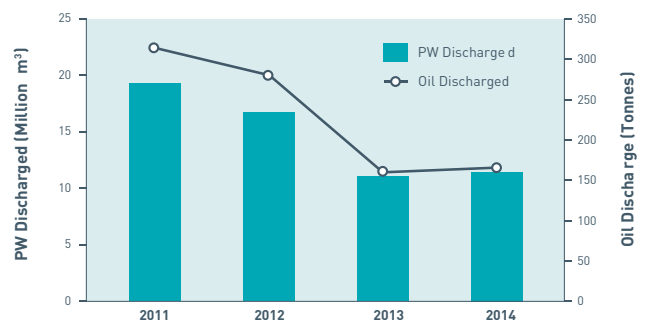
Due to the nature of produced water, discharges can give rise to an oil sheen on the sea surface around the installation. On occasions, either due to poor plant performance or calm weather, sheens can extend some distance from the discharge point. Where these sheens become more significant than normal, we are required to notify DECC. Five such notifications were raised by TSEUK during 2014.

Figures quoted relate to offshore operations only and exclude discharges from Flotta Terminal.



**Figure 4**

Annual total oil and produced water to sea



**Figure 6**

Total oil and produced water discharged to sea 2011 - 2014

# PRODUCED CHEMICALS

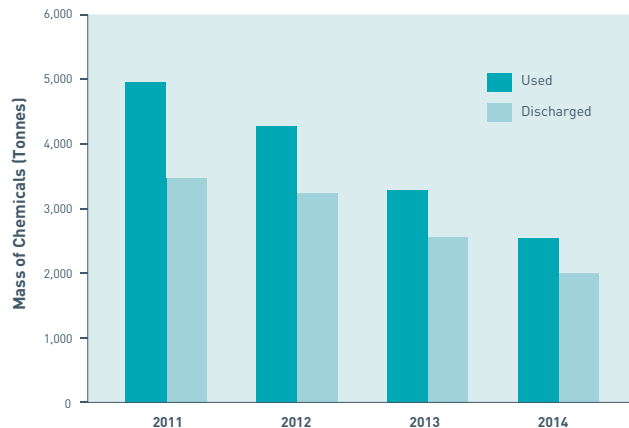
We utilise a variety of chemicals within the production process to optimise efficiency. Chemicals are used to improve the flow of fluids from the reservoir, aid separation, prevent corrosion and remove deposited solids within vessels topsides. Production chemicals are then either exported with oil to shore, or discharged to sea from the produced water stream.

The use and discharge of production chemicals is heavily regulated by DECC through the approval of a Life Permit for each asset and regulatory limits are integrated into our operations. DECC regulates chemical use and discharge through the Offshore Chemicals Regulation (OCR) 2002 (as amended). These regulations implement the OSPAR Decision 2000/2 on a Harmonised Mandatory Control System (HMCS) for the Use and Reduction of the Discharge of Offshore Chemicals on the UK Continental Shelf. The HMCS decision details requirements for the comprehensive testing, ranking, hazard assessment and risk management of chemicals and in addition the substitution of certain chemicals by less hazardous alternatives. The use and discharge of substitution chemicals is directly affected by two main factors; uptime of the individual assets and swap out of substitution chemicals for more efficient, less hazardous alternatives.

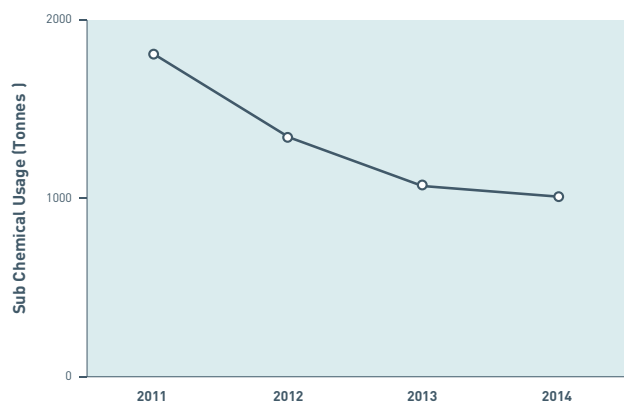
**Figure 7** shows a year on year reduction in the use and discharge of production chemicals. This trend is attributable to reduced production through full shutdown of one site for the whole of 2013 & 2014, significant shutdowns associated with 3 other sites for the majority of 2014 and extended annual shutdowns on several of the remaining sites.

Some chemicals have a substitution warning meaning they contain a component that may present a hazard to the marine environment. An important part of the HMCS is the substitution of these harmful chemicals through a phased out approach.

**Figure 8** shows a decreasing trend in substitution chemical usage over time. This trend has been achieved through replacement of chemicals with less hazardous chemicals, removal of unused products from permits, reclassification of chemicals which gain or lose the substitution warning as new data becomes available and the impact of reduced production resulting in less chemicals being used.



**Figure 7**  
Production Chemicals Used & Discharged



**Figure 8**  
Usage of Chemicals with Substitution Warning 2011 - 2014

# DRILLING & PIPELINE CHEMICALS

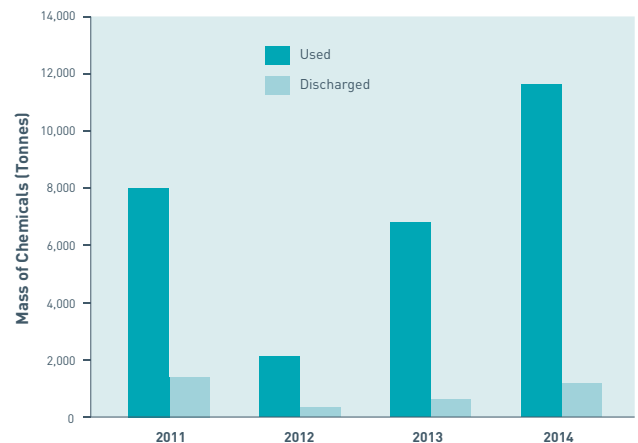
Drilling fluids, cement chemicals and rig chemicals are required for the safe drilling and construction of subsea wells. Chemical usage increased from 2013 to 2014 as observed in Figure 9 below, this can be attributed to increased drilling activity.

During the course of 2014, TSEUK drilled 5 wells in the UKCS 4 development and 1 appraisal well; by contrast 4 wells were drilled in 2013. We have also conducted numerous well interventions to improve performance of the wells and several pipeline maintenance operations.

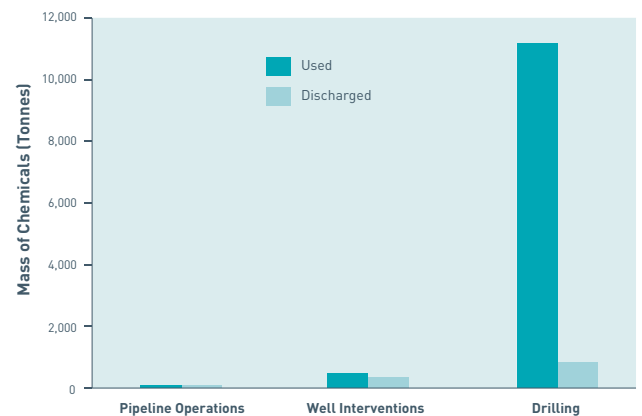
**Figure 10**, shows a marked contrast in quantities of chemicals used and discharged when comparing Pipeline operations and Drilling activities. Drilling operations use large quantities of chemicals but only a small proportion are discharged to sea. Pipeline operations in contrast, by their nature, will discharge most chemicals through flushing but the quantities involved are low compared to well operations.

The reduction in the number of substitution chemicals used during drilling operations, including platform drilling, continued to be a key focal area during 2014. TSEUK is continuing to work closely with chemical vendors and the drilling contractors to replace a number of substitution chemical products with less hazardous alternatives.

Oil Base Mud (OBM) cuttings are treated onshore to recover valuable base oil which is then recycled. The amount of OBM cuttings to landfill is dependent on the complexity of the well drilled. We continue to trial the latest developments in drilling fluid technology to reduce the number of well sections that have to be drilled using OBM.



**Figure 9**  
Drilling & Pipeline Chemicals Used & Discharged 2011 - 2014



**Figure 10**  
Drilling & Pipeline Chemicals Used & Discharged by Operation - 2014

**ENVIRONMENTAL MANAGEMENT**

**ACCIDENTAL  
RELEASES**

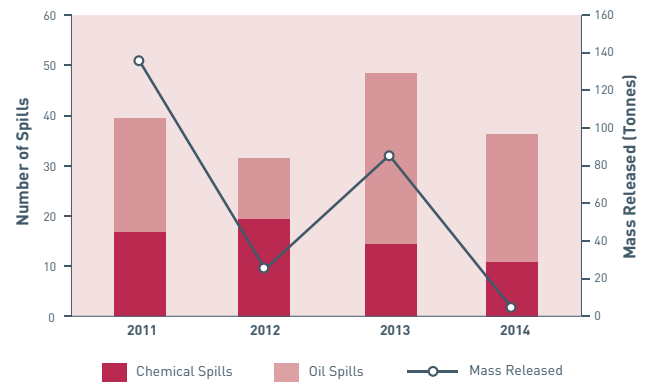


**Spill prevention is core to how we operate and receives constant attention throughout the business. We focus on prevention by ensuring that our people are aware of spill risks, are competent to perform their duties and adhere to TSEUK operating procedures and environmental permit requirements. The assurance of plant integrity is seen as critical to the ongoing prevention of spills across our assets.**

In 2014 spill prevention remained a central focus of onshore and site teams. Through this continued focus the 2014 total number of spills improved from 48 in 2013 to 36. More significantly the total mass spilled reduced from 84 tonnes in 2013 to 3.7 tonnes in 2014. Encouragingly, the 2014 quarterly spill count also followed an improving trend (Q1-13, Q2-9, Q3-7, Q4-7) while our identification and reporting culture of environmental releases remains at an excellent level across our sites with 8 of the 36 spills reported in 2014 having a mass of  $\leq 1$  kg.

Following a number of incidents associated with drainage systems in 2013, a significant focus has been placed on this by the site management and reinforced through the environmental audit process. This increased focus contributed to a decrease from 14 spills associated with drainage systems in 2013 to 3 in 2014. This is an area which remains key to the long term TSEUK spill prevention effort.

Spill prevention was a focus area for 2014 and will continue to be during 2015 at TSEUK sites. The prevention of oil, gas and chemical leaks is the first Talisman Sinopec Golden Rule. The TSEUK Environment team works closely with colleagues both on and offshore as well as our contractors to ensure an integrated approach to environmental, safety and operational integrity management.



**Figure 11**  
Total number of oil and chemical spills and mass released 2011 -2014

**ENVIRONMENTAL MANAGEMENT**

**WASTE  
MANAGEMENT**



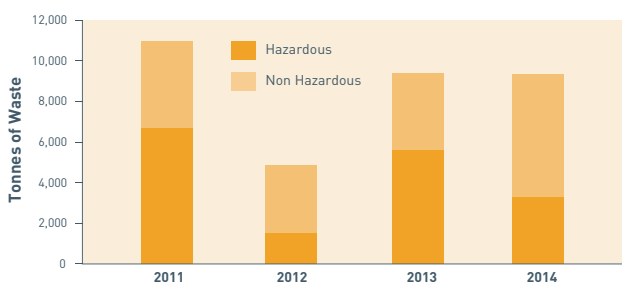


**Waste Management is a key topic for the energy industry. TSEUK utilises materials that will generate waste which include drill cuttings, metals, waste chemicals, waste oil, paper, glass and wood. In line with our environmental policy, we work to move our wastes up the waste hierarchy.**

In order to drive improvements in waste disposal practices each site are set targets. If these targets are not being achieved, various methods for improvement are discussed. These include the provision of more waste bins at the assets or increasing waste segregation awareness among the workforce.

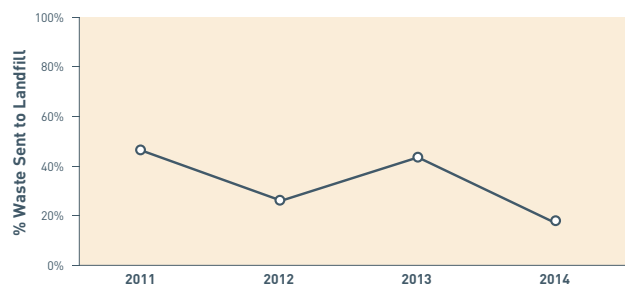
**Figure 12** shows that total waste generated in 2014 was comparable to 2013. However, a greater proportion of the total was non-hazardous when compared to 2013. This can be explained by the fact that the drill cuttings which were disposed of in 2014 could all be classified as non-hazardous waste.

Drill cuttings are brought onshore for treatment and disposal. The cuttings are treated to remove and recover the oil based mud prior to disposal. The cleaned solids are then disposed of to landfill. TSEUK works closely with its drilling contractors to minimise the amount of waste generated and sent to landfill as a result of drilling activities.



**Figure 12**

Total Hazardous & Non Hazardous Waste Produced 2011 - 2014



**Figure 13**

21% Waste Sent to Landfill

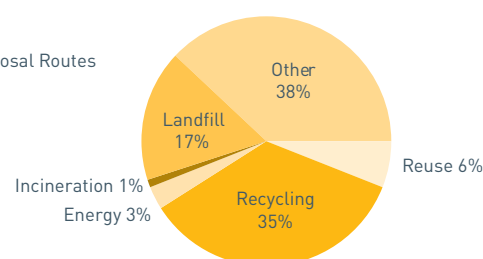
As shown in **Figure 13**, the proportion of waste material sent to landfill has decreased considerably, this is largely due to increased drilling activities which generate a large amount of liquids and Oil Based Mud Cutting (as described above) which are treated and therefore categorised in the 'Other' category offsetting the amount of waste landfilled.

Waste materials generated offshore are segregated by type and shipped to shore for re-use, recycling, or safe disposal by a licensed waste company in full compliance with UK Waste Legislation. We actively pursue ways of managing our waste streams up the waste hierarchy; this involves taking advantage of opportunities to reduce, reuse, recycle, recover energy, or responsibly dispose of waste.

**Figure 14** shows the 2014 waste disposal routes with 35% of waste being recycled and 6% of waste being reused for the year. The percentage of waste recycled is in line with the industry average in 2014.

**Figure 14**

2014 Waste Disposal Routes



# GLOSSARY

<b>BLP</b>	Bridge Linked Platform
<b>CEFAS</b>	Centre for Environment, Fisheries & Aquaculture Science
<b>CH<sub>4</sub></b>	Methane
<b>CO</b>	Carbon monoxide
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2</sub>e</b>	Carbon dioxide equivalent
<b>DECC</b>	Department of Energy and Climate Change
<b>EEMS</b>	Environmental Emissions Monitoring System
<b>EMS</b>	Environmental Management System
<b>EU-ETS</b>	European Union Emissions Trading Scheme
<b>FPSO</b>	Floating Production, Storage, Offload vessel
<b>GHG</b>	Greenhouse Gas
<b>HMCS</b>	Harmonised Mandatory Control System
<b>JNCC</b>	Joint Nature Conservation Committee. This is the statutory advisor to the UK Government on national and international nature conservation.
<b>JV</b>	Joint Venture
<b>KPI</b>	Key Performance Indicator
<b>MAR</b>	Montrose Area Redevelopment
<b>N<sub>2</sub>O</b>	Oxides of Nitrogen
<b>NM VOC</b>	Non-Methane Volatile Organic Compounds
<b>NO<sub>x</sub></b>	Nitrogen Oxide
<b>OBM</b>	Oil Based Mud
<b>OCR</b>	Offshore Chemicals Regulation 2002
<b>OGUK</b>	Oil & Gas UK is the leading representative body for the UK offshore oil and gas industry.
<b>OPEP</b>	Oil Pollution Emergency Plan
<b>OSPAR</b>	The Convention for the Protection of the marine Environment of the North East Atlantic.
<b>PON1</b>	Petroleum Operations Notice 1. This is the form used by operators to report any oil or chemical spills or sheens or unpermitted discharges
<b>PPC</b>	Pollution Prevention & Control Act 1999 and Offshore Combustion Installations (Prevention and Control of Pollution) Regulations 2001
<b>SEPA</b>	Scottish Environment Protection Agency
<b>SO<sub>x</sub></b>	Oxides of Sulphur
<b>TSEUK</b>	Talisman Sinopec Energy UK
<b>UKCS</b>	UK Continental Shelf
<b>WBM</b>	Water based Mud

# 2014 DATA TABLES

2014 Data Table 1	Power Generation (Tonnes)		Other (Tonnes)		Atmospheric Emissions (Tonnes)						
	Diesel	Fuel Gas	Gas Flaring	Gas Venting	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	SO <sub>x</sub>	NO <sub>x</sub>	CO	NM VOC
Arbroath Platform	257	0	0	0	820	12	0	1	15	4	14
Auk A Platform	8,144	0	8,886	1,711	51,404	297	3	16	178	76	1,550
Blane	0	0	0	0	0	0	0	0	0	0	0
Buchan A Platform	9,961	280	7,212	0	46,928	49	3	20	385	125	65
Claymore A Platform	2,410	42,274	7,228	0	138,877	126	11	5	371	207	67
Clyde A Platform	16,108	12,738	15,008	4,826	127,326	2,583	8	33	460	184	2,382
Flotta Terminal	12,921	14,414	4,269	0	95,007	14	6	26	429	123	9
Fulmar A Platform	5,324	34,534	19,239	0	162,260	152	10	11	288	244	246
Montrose A Platform	4,640	2,939	2,451	0	25,235	20	2	9	114	33	29
Piper B Platform	3,418	66,710	25,282	0	236,434	339	17	8	566	395	142
Ross FPSO Bleo Holm	6,492	21,094	6,362	0	93,242	124	7	13	347	146	22
Saltire A Platform	347	0	290	0	1,880	16	0	1	21	7	16
Tartan A Platform	7,552	0	0	0	24,098	51	2	15	320	74	30
Pipeline Operations	n/a	n/a	n/a	n/a	0	0	0	0	0	0	0
Mobile Drilling	16,412	0	0	0	52,354	111	4	33	695	161	65
Non Operated Subsea Tiebacks	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Total</b>	<b>93,986</b>	<b>194,983</b>	<b>96,227</b>	<b>6,537</b>	<b>1,055,865</b>	<b>3,894</b>	<b>73</b>	<b>191</b>	<b>4,189</b>	<b>1,779</b>	<b>4,637</b>

2014 Data Table 2	Produced Water			Chemicals (Tonnes)		Waste Generated (Tonnes)		Spills		
	Average Oil In Water (mg/l)	Total Water Volume (m <sup>3</sup> )	Oil Discharged Weight (Te)	Used	Discharged	Hazardous	Non-Hazardous	# Oil Spills	# Chemical Spills	Mass Released (Kgs)
Arbroath Platform	0	0	0	7	0	18	154	1	0	0
Auk A Platform	17	513,982	9	32	21	9	108	2	0	59
Blane	0	0	0	0	2	n/a	n/a	0	0	0
Buchan A Platform	17	239,087	4	47	40	24	144	3	1	904
Claymore A Platform	8	977,674	7	351	250	34	410	1	1	32
Clyde A Platform	22	902,308	20	195	183	480	400	2	0	9
Flotta Terminal	2	4,873,709	12	n/a	n/a	70	374	3	0	23
Fulmar A Platform	8	3,521,617	28	262	197	31	305	1	0	275
Montrose A Platform	17	4,428	0	5	5	44	301	0	0	0
Piper B Platform	16	4,489,064	71	651	414	67	372	1	3	224
Ross FPSO Bleo Holm	34	738,585	25	988	884	26	150	2	0	4
Saltire A Platform	12	74,611	1	18	15	11	94	3	0	805
Tartan A Platform	0	0	0	1	1	321	228	1	0	800
Pipeline Operations	n/a	n/a	n/a	26	24	n/a	n/a	0	0	0
Mobile Drilling	n/a	n/a	n/a	11,626	1,178	1,782	2,480	5	5	570
Non Operated Subsea Tiebacks	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	0	79
<b>Total</b>	<b>10.83</b>	<b>16,335,065</b>	<b>177</b>	<b>14,209</b>	<b>3,214</b>	<b>2,917</b>	<b>5,520</b>	<b>26</b>	<b>10</b>	<b>3,784</b>

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