

TOTAL E&P UK



St. Fergus 2010

.....
Environmental Statement



TOTAL

Contents

Introduction	4
Total E&P UK Gas Terminal Operations	5
Environmental Management System	8
Emissions to Air	9
Energy Efficiency.....	12
Water	13
Waste.....	15
Legal Compliance	18
Community & Biodiversity	20
SHE Vision	22
EMAS Core Indicators	26


Safety, Health, Environment & Integrity Policy Statement

TOTAL E&P UK Limited is committed to conduct its business without causing harm to people, with care for the environment and respecting the principles of sustainable development.

It is our policy to:

- Encourage a positive SHE&I culture through strong leadership from management and supervision, workforce involvement, personal responsibility and a spirit of openness and co-operation.
- Comply with all legal requirements and TOTAL Group policies.
- Ensure that all risks associated with our operations are identified and controlled and that personnel working on our sites manage these risks to ensure a safe, healthy working environment and the prevention of pollution.
- Ensure all physical assets owned or operated by TOTAL E&P UK perform their functions efficiently and effectively.
- Strive to achieve continuous improvement by setting measurable SHE&I objectives and reviewing performance through statistical analysis and audits.
- Work with those industrial and commercial partners who demonstrate a commitment to SHE&I equal to our own.
- Ensure that employees and contractors are trained and competent to meet the Company's SHE&I requirements.
- Develop, maintain and test plans for emergency preparedness.

Compliance with this policy is an important element in the performance evaluation of all employees, particularly those with line management responsibilities.



Roland Festor
Managing Director
February 2010



Introduction

I am pleased to launch the 2010 Environmental Statement for the TOTAL E&P UK Limited North Sea Gas Terminal (TEP UK NSGT) at St Fergus. This document is the 12th Environmental Statement published by the Terminal since joining the EMAS accreditation scheme in 2000.

As Terminal Manager, I am delighted that we continue to provide this Environmental Statement, which forms part of our voluntary commitment to maintain Eco-Management and Audit Scheme (EMAS) accreditation and ISO14001 certification, representing the highest international standards of environmental management. In this report you will find:

- A description of the facilities we operate and the main activities carried out on site
- Details of emissions from the TEP UK NSGT to the environment in 2010
- The 2010 objectives, targets, and our performance against them
- Our Environmental Vision including objectives and targets for 2011.

In 2010, further development was undertaken in the identification and verification arrangements in place for Environmental Critical Equipment. This was carried out as part of the work undertaken on the Operations Integrity and Verification Scheme and involved the development of detailed performance standards for secondary and tertiary containment systems onsite using the existing COMAH Environmental Risk Assessment Methodology. The work shows TEP UK NSGT commitment to implementing an integrated approach toward SHE Critical Elements on site.

The Terminal also approved the installation of two new gas-fired furnaces and associated

equipment to replace aging existing furnaces. These new furnaces will improve energy efficiency, reduce downtime, improve availability, and provide scope for future expansion.

In 2010, the Terminal was shortlisted as one of ten finalists for the 2010 European Business Awards for the Environment. An application was submitted which demonstrated our commitment to best environmental practice, sustainable development and community engagement. To reach the shortlist stage was a visible measure of success and recognition that TEP UK NSGT is achieving these goals.

We value the partnerships we have developed over the years with our various stakeholder groups and therefore organised a Stakeholder Reception in March 2011 to present our role and responsibilities as a local employer and neighbour. Slides highlighting our key areas of responsibility at the terminal were presented and St Fergus primary school's pupils spoke about their achievements in the TOTAL Green School awards and their ongoing commitment to environmental matters.

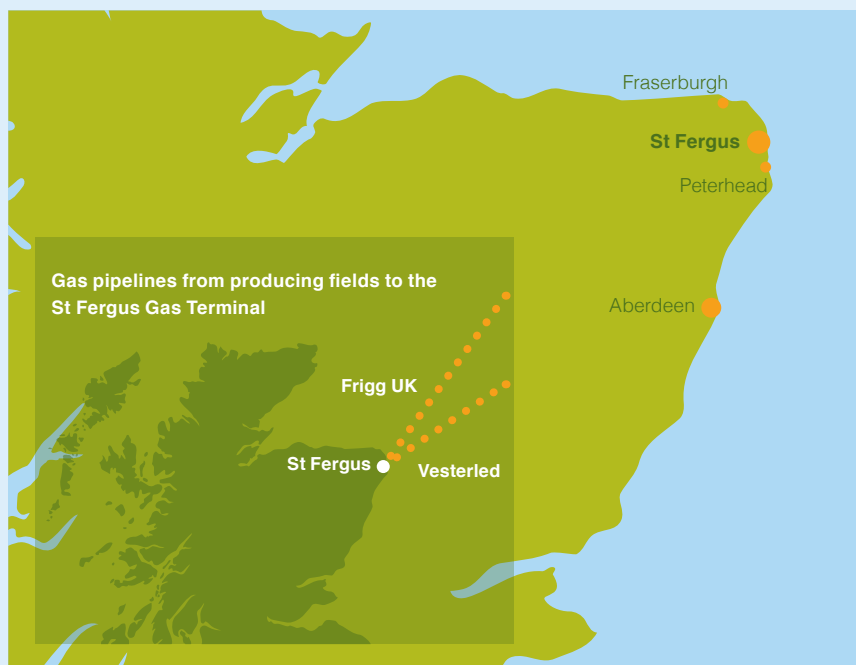
TEP UK NSGT also launched a waste minimisation process when launching the Composting Initiative of the food waste (Keenan's composting facilities) reducing the amount of waste going to landfill.

It is a pleasure for me as the Terminal Manager to share this information with you. I hope that you find this report both informative and interesting and look forward to receiving any comments you may have.

Arthur Crawford
St Fergus Terminal Manager

TOTAL E&P UK Gas Terminal Operations

The **TOTAL E&P UK North Sea Gas Terminal (TEP UK NSGT)**, operated by **TOTAL E&P UK Limited (TEP UK)**, part of the **TOTAL Group**, is situated at **St Fergus** on the north east coast of **Scotland**, seven kilometres north of **Peterhead**.



The Terminal has been operating since 1977, receiving natural gas from a number of offshore fields and processing it to meet UK National Grid network specifications for domestic and industrial use.

The gas is transported to the terminal via two offshore pipeline systems – Frigg UK and Vesterled. The Frigg UK and Vesterled pipelines are major suppliers to the UK National Grid.

Pipelines

The incoming natural gas consists mainly of methane with heavier hydrocarbons, carbon dioxide, nitrogen and small amounts of water and hydrogen sulphide.

The two incoming pipelines, Frigg UK and Vesterled, serve Phase II and Phase III treatment trains and are interlinked on the terminal site.

On entry to the Terminal, each line has a dedicated 'slug catcher' where any liquid hydrocarbons (natural gas liquids) can settle out before entering the main process. The inlet facilities receiving gas from the Frigg UK line are known as Phase I.

The inlet facilities serving each pipeline also contain 'PIG traps' for the removal of 'PIGs' (Pipeline Inspection Gauge – a device fitted with sophisticated instruments to remove any deposits and monitor the condition of the pipelines). PIGs are driven along the pipelines by the gas flow.

Processed gas from the Phase II and Phase III refining trains is exported via a land pipeline to the neighbouring National Grid compressor station. Natural gas liquids (NGLs) from Phase III, also recovered during the treatment process, are exported either to the neighbouring Shell UK Exploration and Production site and then onwards to the Shell UK Plant at Mossmorran in Fife, or to the BP Kinneil terminal via Cruden Bay.



Phase II Process Description

The Phase II slug catcher is now isolated and depressurised as there is no longer liquid production on Phase II. The gas enters the inlet facilities where it is conditioned. After heat exchange, the gas pressure is reduced and the temperature increased, and the resulting gas is metered and exported via a land line to the neighbouring National Grid site.

Phase III Process Description

The Phase III facilities contain three gas treatment trains and two liquid treatment trains. On arrival at the facilities, the gas is dried, and then chilled by pressure expansion to allow removal of NGLs. Following NGL separation, the gas is recompressed, reheated and metered, before being exported to the neighbouring National Grid compressor station.

Miller Receiving Facilities Process Description

The Miller Receiving Facilities (MRF) operated at the Terminal from 1991 to 2007. During operation the MRF received sour gas, which contained hydrogen sulphide, from the BP Miller field. The incoming gas was heated to prevent liquid condensation after pressure reduction. Miller gas was then metered and exported by land pipeline to Peterhead Power Station.

Due to the cessation of gas production from the Miller field in 2007, a decommissioning project began. First, the pipeline and process equipments were emptied and, since March 2009, the MRF has been hydrocarbon free. The next phase of the decommissioning project (demolition and land reinstatement) is expected to commence in 2011. The team will continue their evaluation of methods for cleaning, dismantling and disposing of the facility, with the assessment of environmental impacts a key component of every stage.

Terminal throughput

The annual Gas and NGL throughput for the Terminal for years 2008, 2009 and 2010 are as below.

Annual Output(s) (Tonnes)	2008	2009	2010
Sales Gas	11,562,325	9,042,153	9,478,801
Natural Gas Liquids	460,927	356,119	473,614
Total Physical output	12,023,252 tonnes	9,398,272 tonnes	9,952,415 tonnes

Compared to 2009, there has been a slight increase in throughput in 2010 and this was mainly due to shorter annual shutdowns for maintenance both onshore and offshore. In addition to this, the plant has been optimised to achieve better flow rates and higher production.



Environmental Management System

Our Environmental Management System (EMS) is designed to ensure we comply with environmental legislation, to prevent pollution and to support continuous improvement of our environmental performance.

Our EMS achieved external certification to ISO14001 in 2001 and verification against the Eco-Management and Audit Scheme (EMAS) in 2000. Our EMS forms an integral part of our overall Company Management System (CMS).

The 2009 Statement was restructured to align with the revised EMAS Regulations and the concept of EMAS core indicators. Following successful verification last year, the same structure has been applied this year. Core indicators relate to the direct environmental aspects and other relevant environmental performance indicators, focusing on the following areas:

- Emissions to Air
- Energy Efficiency
- Water
- Waste
- Legal Compliance
- Community
- Biodiversity

Following environmental review as part of the environmental aspects evaluation process, some of the core indicators identified under the EMAS Regulations have not been reported against as they are not directly relevant or significant to Terminal activities (for example material efficiency).

There is a requirement under EMAS to present the applicable core indicators relative to production or throughput. This data has been summarised on page 27 to allow a year on year comparison of TEP UK NSGT's environmental performance.



Emissions To Air

Under normal operations, the sources of atmospheric emissions resulting from operations at the TEP UK North Sea Gas Terminal are generated by:

- Furnaces that are used to provide heat to process systems, and
- Flare facilities which are an integral part of the site safety system.

Electricity needs are met by the National Grid. Standby diesel emergency generators are available for power supplies in abnormal situations.



EU Emissions Trading Scheme

The majority of carbon dioxide (CO₂) generated on site is the result of fuel gas combustion in the site furnaces. Flaring represents another smaller source.

Carbon dioxide emitted from combustion and flaring activities is regulated via the European Union Emissions Trading Scheme (EU ETS). All data relating to our CO₂ emissions are independently verified each year by an external certification body.

During 2010, the Terminal had a target to emit 10% below the EU ETS allocation (76,500 tonnes per annum). In 2010, 60,278 tonnes of CO₂ were produced on site, 21% below the EU ETS allocation. This is a similar value to 2009 when 59,456 tonnes of CO₂ were emitted.



Total Annual Air Emissions of Nitrogen Oxides and Sulphur Dioxide

Nitrogen Oxides (NO_x) and Sulphur Oxides (SO_x) are emitted from the flue gas and flare as by-products of the combustion process; these are measured as mass emissions.

For 2009 a revised NO₂ emission factor taken from the National Air Emissions Inventory, based on kilotonnes NO_x / MTherm of fuel and flare gas consumed was used. This involved a mass to volume conversion of gas consumed. From 2010 an alternative emission factor has been selected from the EEMS Atmospheric Emissions Calculations and approved by SEPA. The emission factors used for fuel gas and flare gas are based on mass of gas consumed, so no conversion to volume is required. The NO_x emissions from 2009 have been re-calculated using the same method to give a more meaningful historical comparison.

NO_x emissions have increased from 49.22 tonnes in 2009 to 50.45 tonnes in 2010. This is due to an increase of fuel gas use linked to a higher terminal throughput.

Furnace emissions of SO₂ have decreased from 0.24 tonnes to 0.13 tonnes between 2009 and 2010 respectively. This reduction was due to the cessation of MRF operations in early 2009. MRF fuel gas had a higher sulphur content, so produced more sulphur dioxide when combusted. With MRF now being hydrocarbon free, this source has been removed and the emissions subsequently reduced.

Flare and Vent Consent

The Terminal has three flare systems, each of which has a small pilot flame for ensuring safe combustion of any gas entering the flare system.

Venting systems are present in Phase II of the Terminal and venting occurs during annual maintenance inspections of meter tubes.

The annual gas flared and vented in 2010 was 5,278 tonnes, well below the Terminal's flare and vent consent of 5,843 tonnes per annum as set by DECC. In 2010 the total vent gas represented less than 1% of the total annual gas flared and vented.

The table below summarises performance against the Terminal's flaring consent. Due to the effective use of nitrogen as a purge gas on Phase II and the decommissioning of the MRF, flaring reduced from 2008 to 2010.

	Annual gas flared & Vented mass (tonnes)	Annual Flaring & Venting Consent from DECC (tonnes)
2008	7,747	9,979
2009	5,972	9,557
2010	5,278	5,843

Total Annual Greenhouse Gas Emissions

Greenhouse Gases (GHG) contribute to global warming. By measuring the total mass of these gases, the global warming potential can be calculated.

The Terminal has calculated the total annual emission of GHG in terms of a carbon dioxide (CO₂) equivalent expressed in tonnes. By multiplying the Global Warming Potential of Carbon Dioxide, Nitrogen Oxides, Nitrogen Dioxide, Carbon Monoxide, Methane and Volatile Organic Compounds, the CO₂ equivalent was calculated.

In 2010 the total annual emission of GHG was 80,555 tonnes and in 2009 was 77,243 tonnes. These values include GHG emissions associated with gas consumption, gas flaring, gas venting, diesel consumption, electricity use and fugitive sources. There were higher overall emissions from these sources in 2010 compared to 2009 mainly due to higher gas throughput in 2010.



Energy Efficiency

A core indicator of environmental performance at the Terminal is the total annual energy consumption, which includes the total thermal energy of diesel fuel, fuel gas, pilot gas, pilot assist gas and purge gas consumed as well as the electrical energy imported.

The total energy consumption for 2009 was 338,737 MWh whereas the 2010 value was 340,097 MWh. This rise was due to increased fuel gas and electricity imported due to an increase in Terminal throughput. The energy consumption from diesel fuel was slightly higher in 2010, and the energy consumed by flaring activities was reduced, in line with our overall reduction in mass and volume flaring.

The energy efficiency could be represented by the ratio of this core indicator divided by the Terminal throughput: in 2010, this ratio (34kWh/t) was reduced compared to 2009 (36kWh/t) showing an improvement in our energy efficiency.



Water

Water Consumption

Most of the Terminal's site water consumption is dedicated to domestic use including the canteen and washroom facilities. The Terminal's total annual water consumption decreased from 16,508 m³ in 2009 to 10,086 m³ in 2010 due to a smaller number of people on site and repairs to a leaking water supply pipe.

Water Collection and Treatment System

Rainwater and water generated by site activities are collected by a network of site drains and routed to the Water Treatment System. Clean water resulting from surface water run-off is collected by open drains and diverted to concrete basins, which allow any suspended solids to settle out. Water originating in areas where oil may be present is collected by a separate drainage system and any separated oil is recovered. The treated waters from the clean and oily area drains are combined with overflows from the site septic tanks and discharged under consent to the Scottish Water Authority public sewer. Recovered oil from the Water Treatment System is collected in a sump and disposed



offsite by a specialist contractor.

Water Quality Discharges

Discharge of the combined site waters to the public sewer is regulated by Scottish Water and the Scottish Environmental Protection Agency (SEPA).

The quality of the water discharged from the treatment system is regularly monitored by TEP UK NSGT to ensure compliance with the Pollution Prevention & Control (PPC) Permit. A summary of those limits are presented in the table below as well as the yearly average sample results and exceedances.

	Emission number point	XTOM 1	XTOM 2	XTOM 3	XTOM 4	XTOM 5
Source of Emission	Source of Emission	Treated surface water from the firewater pond	Treated surface water from non process areas and process areas	Storm Basin overflow surface water from non process areas	Treated surface water from the MRF Firepond	Treated surface water from MRF process area and non process area
	Destination	Blackwater Burn	Sewer	Blackwater Burn	Blackwater Burn	Sewer
Average 2010 analysis results (and PPC Permit limits)	pH	7.9 (5 - 9)	7.6 (5 - 9)	7.9 (5 - 9)	7.6 (5 - 9)	-
	BOD mg/l	3 (20)	15 (50)	4.6 (20)	3 (20)	2.9 (40)
	THC mg/l	1.1 (5)	1.8 (5)	1.2 (5)	1.1 (5)	1.2 (5)
	COD mg/l	-	43.7 (100)	-	-	14.1 (100)
	Suspended Solids mg/l	18.6 (30)	19 (50)	16 (65)	5 (30)	6.3 (50)
PPC Permit Exceedances	pH	-	-	-	-	-
	BOD mg/l	-	70	-	-	-
	THC mg/l	-	6.2	-	-	-
	COD mg/l	-	-	-	-	-
	Suspended Solids mg/l	60 and 57.4	-	74.6	-	-

Discharges remained within the consented limits throughout 2010 with the exception of five events. Most of the exceedances were due to adverse weather conditions (heavy rainfalls) increasing unexpectedly and rapidly the volume of water to be treated. There were 5 events in 2009 as well.

Therefore, following on from two incidents in 2009 and two in 2010, which all identified elevated Suspended Solids levels from, it was agreed with SEPA that TEP UK NSGT should look at an improvement plan for this discharge point. TEP UK NSGT looked at different options and submitted to SEPA the final improvement plan proposing to remove XTOM 1 by rerouting the piping infrastructure to the existing water treatment plant; this was agreed by SEPA in December 2010. The civil works are planned to be undertaken in Q1 2011.

Waste

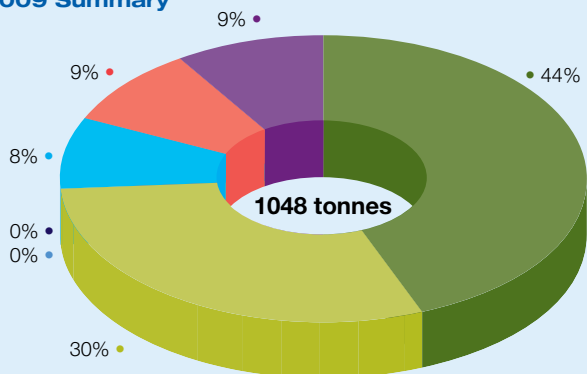
Operational Wastes

Waste management is one of the most significant environmental challenges facing the oil and gas industry, particularly during a decommissioning project.

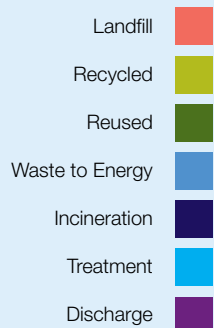
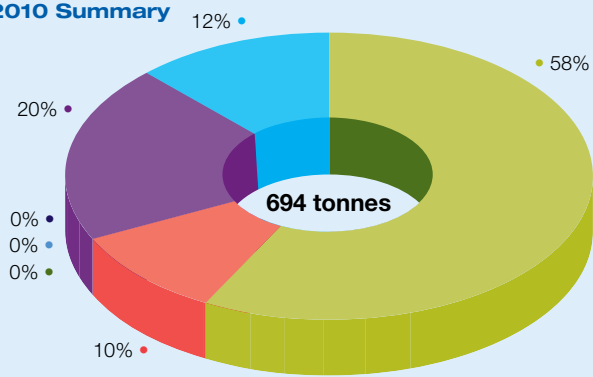
As part of our ongoing commitment to improve the waste culture on site, we aim to minimise the tonnage of waste sent to landfill, maximise waste segregation and optimise opportunities for re-use and recycling of materials.



2009 Summary



2010 Summary



During 2010, 10% of the total waste generated was sent to landfill, this is a similar performance to the previous year when 8.9% of waste was sent to landfill. The table below summarises the total volume of waste generated as well as the volume of hazardous wastes generated,

Waste Type (tonnes) / Year	2008	2009	2010
Hazardous	133	179	111
Non Hazardous	904	868	573
Other	1	1	11
TOTAL	1037	1,048	694

The volume of waste generated was significantly reduced between 2009 and 2010. It is mainly due to high quantity of tar generated by excavation works onsite in 2009 and sent offsite for reuse. Of the total waste generated in 2010, 16% was hazardous with - a small decrease compared to 2009, when 17% of the total waste generated was hazardous, owing to an annual variation in waste generation.

Another key initiative that took shape during 2010, and an excellent example of closed-loop recycling, was the composting of food waste from the Terminal, in partnership with TEP UK's waste contractor Enviroco, and facilities management contractor ESS. All food waste from the Terminal's canteen is now sent to Keenan Recycling, where it is composted in special temperature-controlled biodigesters. Once sufficiently biodegraded to meet the required standards, TEP UK then purchase the resulting high-quality compost and donate it to the Willowbank Adult Training Centre, where it is used to grow bedding plants, and also to community gardens and local schools. The terminal further supports Willowbank by buying bedding plants for use in on-site landscaping.



Waste Food from St Fergus Canteen



Processed at Keenan's Recycling into compost



Utilised at Willowbank Adult Training Centre for bedding plants



Purchased by ESS (FM) for planting at St Fergus Gas plant

2009 saw the launch of TEP UK NSGT's Resource Area, which is a dedicated area for resources including aggregates and sand. This supports TEP UK's philosophy to reduce landfill by ensuring that a material that would have otherwise been sent to landfill is reused. During 2010, 490 tonnes of aggregates were diverted from landfill into the Resource Area.

Moreover numerous donations of goods that would otherwise have been sent to landfill were made to the local community.

Decommissioning Wastes

The data presented in the graphs and table above excludes waste generated from the MRF decommissioning project which began during 2009. This was kept separate to ensure good comparison year on year of "routine" waste streams generated by the site.

MRF decommissioning activities in 2010 resulted in 326 tonnes of waste being generated, all of which was non-hazardous sludge and liquids.

Specialist waste management contractors were selected to undertake the work to treat and discharge the liquids under consent through their effluent treatment plant and process the remaining sludges via a stabilisation plant and then sent to landfill for disposal.

Legal Compliance

In October 2007, the Terminal was authorised to operate under a Pollution Prevention and Control (PPC) permit (ref PPC\A\1012811) which contains strict conditions regulating all site operations, including emissions to land, air and water, as well as conditions relating to noise and odour.

The PPC Permit requires all incidents to be reported to the SEPA, including spills, unplanned flaring or venting, or smoky flares. The table on the following page summarises the events that were reportable to SEPA at the time of the incident according to the condition in the PPC Permit.



	No. of events	Event Types
2009	13	<p>Six events associated with notifications to SEPA regarding major flaring events</p> <p>One smoky flare associated with MRF decommissioning</p> <p>Five events associated with excursions above limits for discharges to the water environment</p> <p>One minor spill</p>
2010	8	<p>Five events associated with excursions above limits for discharges to the water environment;</p> <p>Three minor spills.</p>

During 2010, eight events occurred. One of those included an overflow of 0.136 m3 of hydraulic oil from a buffer tank serving GOV1576B which was caused by a component failure. Immediate action has been taken to minimise the extent and effect of the spill, and the resulting clean up was undertaken with no material reaching drain or ground. As it was contained on hardstanding (concrete), there was no environmental harm. Investigation was undertaken into fault mechanism and lessons learned applied to avoid a repeat of incident.

In 2010 the SEPA Compliance Assessment Scheme reviewed the Terminal's performance against the PPC Permit. The Terminal achieved an overall compliance result of 'Excellent' and was accredited as a high performer when assessed for Environmental Management Condition compliance. SEPA also noted that the Terminal works above and beyond the requirements of the PPC permit, employing supplementary systems on site to ensure compliance.



Biodiversity & Community

Community

TEP UK NSGT continues to develop and maintain strong and sustainable partnerships in our effort to engage with local community groups within the area in which we operate. TEP UK NSGT is committed to working together with local businesses, youth groups, community organisations and charities.

In 2010 TEP UK NSGT supported an initiative led by Grampian Police called the Junior Warden Scheme. The scheme allows between 10 and 15 school children to work alongside Community Wardens, Police Officers & the Fire Service during their school holidays. As part of their week's activities and tours, the children visit the Terminal to learn about our operations and the need for protecting and securing an area of such vulnerability and high economic importance. The tour finishes with a visit to the Ministry of Defence Police HQ located within the Terminal complex.



Wherever possible, TEP UK NSGT and facilities contractor ESS seek to utilise local suppliers to meet the catering needs of the Terminal. Initially launched in 2007, this initiative is now firmly embedded, leading to a reduction in food miles and a boost for numerous local businesses, including a butcher, fishmonger and fruit and vegetable mart.



**R. Coutts, Butcher,
Peterhead.**

Local Meat

Excellent Quality

Comparable Cost

Environmentally Best



**J.H. Milne, Fishmonger,
Peterhead.**

Local Fish

Excellent Quality

Comparable Cost

Environmentally Best



**Fruit Mart, Green
Grocer, Longside (Social
Enterprise)**

Locally Produced Fruit &
Vegetables

Employs Willowbank
Trainees

Excellent Quality

Comparable Cost

Environmentally Best

TEP UK NSGT also support Peterhead Projects Limited – a not for profit charitable development trust, owned and led by members of the community. Its aim is to initiate and develop new projects within and for the local community. The Terminal has developed a close working relationship with Peterhead Projects, and all old office furniture is now donated to their '2ReUse' project, a recycling initiative which aims to reduce the amount of waste going to landfill, and increase accessibility to affordable household items.

Biodiversity

Biodiversity is an important environmental issue for TEP UK NSGT. Located at the Terminal is a firepond which is required for water supply in the event of an emergency. Birdlife inhabit this pond and the surrounding wooded areas, making the area attractive to local wildlife.

Some sensitive species such as kestrels, buzzards or hares are known to be found within the grounds of the Terminal.

TEP UK NSGT core indicator for the biodiversity is the surface of built up areas in the Terminal. In 2010, the Terminal buildings, process areas and roads take up 187,327 m² (please put 2 in superscript) which represents 26% of the Terminal total area.

SHE Vision

Safety, Health and Environment is integrated into the day to day management of our business. Mechanisms to help ensure continual improvement in SHE matters are the TEP UK annual corporate Safety, Health and Environment (SHE) Plan and at a local level, the TEP UK NSGT SHE Plan.

Environmental objectives and targets are identified on an annual basis, broadly based around the Terminal's environmental aspects as well as other environmental topics. A summary of our 2010 performance against the environmental objectives and targets identified in these plans, as well as an outline of our 2011 environmental goals, are shown on the following pages:



2010 Environmental Performance

Objective	Target	Programme	Performance
Reduce emission to air	<p>To meet 10% below DECC flare and vent consent</p> <p>To meet 10% below EU ETS CO2 allocation</p>	<p>Continued implementation of energy efficiency study improvements</p> <p>Implement nitrogen purging on Phase III flare</p>	<p>Terminal achieved 10% below DECC flare and vent consent</p> <p>Terminal achieved 21% below EU ETS CO2 allocation</p> <p>Ongoing review of recommendations from energy efficiency assessment.</p> <p>Study for the installation of nitrogen purging unit on Phase III flare ongoing</p>
Reduce emissions to water	Reduce impact of emissions to water	<p>Continued implementation of suitable improvements for waste water treatment, handling and monitoring</p> <p>Continued implementation of ground water monitoring regime</p>	<p>Septic tank review completed</p> <p>Installation of waste water meter ongoing</p> <p>One set of ground water monitoring carried out in 2010. Results of which show that terminal is not negatively impacting ground water at site, 2nd set differed to 2011</p>
Reduce waste production and move waste up the waste hierarchy		<p>Composting of food waste initiative</p> <p>Phase II of the St Fergus Office Waste Recycling Initiative</p> <p>Trial washable oily rags</p> <p>Trial washable boot covers</p> <p>Waste management refresher training</p>	<p>10% of total waste generated on site was sent to landfill. Target of 15% achieved</p> <p>Phase II of the office recycling initiative postponed to 2011</p> <p>Food waste composting initiative launched in 2010</p> <p>Waste management refresher training postponed to 2011</p>



2010 Environmental Performance (Cont'd)

Objective	Target	Programme	Performance
Minimise environmental impacts associated with decommissioning	Closure of MRF with all environmental issues being considered	Ongoing development of closure plan for MRF with environmental considerations thoroughly assessed	Decommissioning process ongoing Environmental considerations deployed throughout
Working together with the local community	Continue to implement programme for enhanced integration with our stakeholders	Continued support with local schools for participation in Green School Awards	Local school involved with Green School awards (for example St Fergus Primary School). Several school visits to terminal during 2010
Improve pollution control measures on site	Improve raw material storage on site	Implement recommendations from Best Available Technique (BAT) assessment carried out in 2008 on oil and chemical bunding. Carry out Pollution Prevention and Spill Training. Develop Fire Water Management Strategy	Ongoing implementation of recommendations from raw material storage assessment. Pollution prevention training rolled out to site to raise awareness of workforce Emergency Response Plan Review and Spill training postponed to 2011
Reduce impact of noise emissions from the terminal	Minimise environmental noise emissions from the terminal	Maintain close co-operation with other site operators regarding noise emissions and noise reduction programmes	St Fergus Intra-terminal Environmental meetings held quarterly with other operators.
Enhance environmental culture	Improve environmental awareness culture on site	Advanced Environmental leadership and awareness training	Spill response awareness performed in Jan 2011

2011 Environmental Goals

Objective	Target	Programme
Reduce emission to air	To meet 10% below DECC flare and vent consent	Continued implementation of energy efficiency study improvements
Reduce emissions to water	Reduce impact of emissions to water	Continued implementation of suitable improvements for waste water treatment, handling and monitoring (meter, drain survey) Continued implementation of ground water monitoring regime
Reduce waste production and move waste up the waste hierarchy	Send no more than 14% of total waste generated on site to landfill	Completion of waste BAT Assessment and roll out recommendations Waste management refresher training Develop a site specific Waste and resource management procedure Phase II of the office recycling initiative roll out
Minimise environmental impacts associated with decommissioning	Closure of MRF with all environmental issues being considered	Ongoing decommissioning of MRF with environmental considerations thoroughly assessed
Working together with the local community	Continue to implement programme for enhanced integration with our stakeholders	Work with local schools & organisations on a wide range of environmental initiatives in order to benefit the local community
Improve pollution control measures on site	Improve raw material storage on site	Implement recommendations from Best Available Technique (BAT) assessment carried out in 2008 on oil and chemical bunding Carry out Spill Training Develop Fire Water Management Strategy Update Emergency Response Plan
Reduce impact of noise emissions from the terminal	Minimise environmental noise emissions from the terminal	Carry out Noise assessment survey in conjunction with other site operators



EMAS Core Indicators

As described in the Environmental Management Section of this Statement there is a new requirement under the revised EMAS Regulations to report EMAS core indicators relative to production or throughput. This measure of environmental performance allows environmental performance to be compared year on year as well for benchmarking purposes.

The ratio has been calculated for example by dividing the annual energy use by the production throughput of that particular year.



A summary of the 2008, 2009 and 2010 EMAS core indicators ratios are listed in the table below:

Core indicator ratio	2008 Ratio	2009 Ratio	2010 Ratio	Unit
Ratio of total annual Greenhouse Gas Emissions (GHG) to total annual physical throughput	0.00760338	0.00821746	0.00808231	Tonnes/Tonne
Ratio of total annual air emissions of Nitrogen Oxides (NO _x) to total annual physical throughput	0.00000456	0.00000524	0.00808231	Tonnes/Tonne
Ratio of total annual air emissions of Sulphur Dioxide (SO ₂) to total annual physical throughput	0.00000004	0.00000003	0.00000001	Tonnes/Tonne
Ratio of total direct energy use to total annual physical throughput	0.03468221	0.036042477	0.03417231	MWh/Tonne
Ratio of water consumption to total annual physical throughput	0.00113913	0.001756493	0.00106346	m ³ /Tonne
Ratio of total waste generation to total annual physical throughput	0.00008628	0.00011148	0.00808231	Tonnes/Tonne
Ratio of total hazardous waste generation to total annual physical throughput	0.00001105	0.00001905	0.00001112	Tonnes/Tonne
Ratio of total built up area to total annual physical throughput	–	–	0.01882227	m ² /Tonne

Due to the type of activities of the Terminal, material inputs are mainly energy (gas and electrical energy) and water, therefore, no material efficiency indicator is reported as it is fully represented by the energy efficiency and the water consumption indicators.

Total waste generation, total hazardous waste and water consumption is not directly related to production throughput, they are dependant on the number of personnel and their associated work scopes and activities. The ratios above for waste and water show a downward trend when compared with production.

Similarly the ratios associated with GHG, NO_x and Energy Efficiency are all smaller for 2010 than 2009. Physical gas throughput during 2010 was higher than 2009 reducing those ratios.





This Statement has been validated by Caterina Pagani of ERM CVS (EMAS environmental verifier registration number: UK-V-0013, UKAS Accreditation No: 067) on the 4th-5th of May 2011.

Feedback

If you have any comments, or would like further information on our environmental impacts or performance, please contact: Public Affairs and Corporate Communications

To view this statement online please visit: www.uk.total.com



TOTAL E&P UK Limited
Crawpeel Road, Altens,
Aberdeen AB12 3FG
Tel: +44 (0) 1224 297000
Fax: +44 (0) 1224 298999
www.uk.total.com

Printed on Revive Uncoated 100% recycled

