

# **MOD Annual Report and Accounts 2011-2012**

Annex D Sustainability Report

## MOD Annual Report and Accounts 2011/12 – Sustainable Development

1. We continue to make good progress in becoming a more sustainable organisation and delivering on our commitments. We are now focusing on mainstreaming sustainability into all Defence business to achieve our 2015 targets. A summary of performance is provided in the tables below and in the subsequent sections, which are in line with the Government reporting standard for sustainability published at [www.financial-reporting.gov.uk](http://www.financial-reporting.gov.uk). Further detail can be found in the data annex.

**Table 1 - Summary of Performance**

Sustainability Performance Overview		2009/10	2010/11	2011/12	2014/15 Target
Greening Government Commitments (GGC) Greenhouse gas emissions target (Scopes 1, 2 & Scope 3 incl UK Business travel) (000 tonnes CO <sub>2</sub> e)		1,440	1,436	1,279	1,080
Fuel (000 tonnes CO <sub>2</sub> e)		3,264	3,217	3,069	No target
International commercial air travel (domestic air travel included within GGC total above) (000 tonnes CO <sub>2</sub> e)		62	47	51	No target
GGC Estate Energy (KWh)	Consumption kwh 000	4,333,894	4,330,224	3,773,828	No target
	Expenditure £ 000	195,715 e	280,563 e	294,676 e	No target
GGC Waste (Tonnes)	Consumption t 000	185	190	197	139
	Expenditure £ 000	Not Known	Not Known	Not Known	No target
GGC Water M <sub>3</sub>	Consumption M <sub>3</sub> 000	24,974	24,550	24,659	23,225
	Expenditure £ 000	100,236	98,667	107,369	No target

**e = estimated data**

**Table 2 - Summary of normalised performance**

	Departmental Total Spend £ 000	Greenhouse Gas – 000 t CO <sub>2</sub> e	Normalisation
09/10	37,994,285	4,766	0.00013
10/11	38,116,370	4,700	0.00012
11/12	37,176,648	4,399	0.00012

2. Global environmental, social and economic pressures pose real threats to Defence's ability to meet its strategic objectives. Embracing sustainable development throughout Defence will ensure that we are prepared for challenges, such as climate change, natural resource depletion, water scarcity and energy and resource security, and that we play our part in reducing the severity of any environmental, social or economic threats to Defence capability.

3. Our strategy is to ensure that Defence capability is more resilient, effective, efficient and responsible because Sustainable Development (SD) principles are an integral part of all Defence business. MOD's SD strategy sets out how MOD plans to become increasingly sustainable between 2011 and 2030, the strategy is published here:

<http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/DefenceEstateandEnvironmentPublications/SustainableDevelopment/SustainableDevelopmentStrategy.htm>

## **Greenhouse Gas Emissions incl Operational Energy**

4. We are developing and implementing plans in partnership with the Carbon Trust to reduce estate carbon emissions. This includes five key areas for action: (1) spend to save investment injected into estate delivery; (2) embed energy management within Next Generation Estate Contracts; (3) roll-out of strategic energy management services across existing regional prime contracts; (4) implementation of an infrastructure staff behavioural change strategy; and (5) implementation of a renewables strategy for the Defence estate.

5. MOD is seeking to reduce its use of fuel for military equipment, for example in aircraft, ships and ground vehicles. A target to reduce the Armed Forces' use of fossil fuels by 18% by 2020 from a 2009-10 baseline has been set. The volume of equipment fuel used has reduced year-on-year since 2008/09, which in turn has reduced greenhouse gas emissions (GHG) and saved money. Research is being conducted into ways to reduce the amount of fuel the Armed Forces use, including collaborative work with the US Armed Forces.

6. Although business admin travel is a small proportion of our GHG emissions, we are taking steps to reduce them by avoiding travel through greater use of video and teleconferencing facilities and using a lower emission car fleet.

## **Waste**

7. MOD is working towards becoming a zero waste to landfill organisation. We recognise this will be a challenge as our waste is generated by diverse and geographically spread activities across thousands of sites, including naval bases, garrisons, airfields and training camps. We have a considerable transient military population, which is deployed on, and returns from operations and training exercises in large numbers at unpredictable intervals. Much of our waste is managed through existing long-term legacy contracts. These were put in place before the need to manage waste sustainably and report accurate data, which prevents us making progress as quickly as we would like.

8. Our waste management strategy and delivery plan was published in November 2010. A key element of this is the development of waste management plans for all our key sites to gain a better understanding and allow better management of our waste. As part of the Defence Reform programme, we are looking to improve the next generation of infrastructure management contracts to support the improvement of waste management including the requirements for accurate weighed data and costs.

## **Use of Resources**

9. Project Aquatrine contractors manage around 90% of MOD's water consumption (by volume). They have achieved almost a 30% reduction in water consumption since 2004/2005. Aquatrine has delivered savings by transferring leakage risk to industry partners and ensuring that MOD only pays for the water it consumes. We are currently engaged in reviewing the most cost effective options to deliver consumption reduction across key sites. MOD's aim is a further 7% reduction in water consumption by March 2015 against a 2009/10 baseline across the Defence Estate. MOD will measure performance against pre-defined best practice benchmarks for the office estate.

10. In view of the likely increasing risk and frequency of water shortages, temporary bans and drought orders, MOD is reviewing schemes that will alleviate potential future shortfall, including possible water transfer between sites and increased focus on metering and demand management. MOD and the Aquatrine Service providers are continuing to liaise with site stakeholders to promote awareness and responsible water management practice as advised by the Environment Agency and Water Companies with emphasis at those sites within the most vulnerable supply areas.

11. In addition to the essential supply of water, MOD requires various minerals and metals for equipment and Defence capabilities. MOD has commissioned research to understand which natural resources; including rare earth elements, are important to MOD.

### **Climate Change Adaptation**

12. Climate change is covered in the main report at paragraph 8.65.

### **Biodiversity and Natural Environment**

13. MOD is continuing to implement its Sites of Special Scientific Interest (SSSI) improvement programme to get SSSIs from recovering condition into favourable condition. Reported condition status is currently 97% in England, Northern Ireland 100%, Scotland 94% and Wales 76%.

14. As Defence Infrastructure moves towards its new operating model, biodiversity and natural environment requirements are being integrated into its management information systems.

15. MOD is also working with various partners and Departments on meeting biodiversity obligations and enhancements. Examples of the range of projects and programmes undertaken by MOD and its suppliers and other partners can be seen in Sanctuary Magazine (MOD's Conservation magazine).<sup>1</sup>

### **Sustainable Procurement including Food**

16. MOD is working with its key suppliers to baseline their emissions, waste and water in line with the Greening Government Commitments.

17. Another priority area is to ensure SD commitments are embedded in the Next Generation of Estate contracts, and our future Soft Facilities Management contracts. This will apply a consistent approach to SD delivery across all estate partnerships.

18. The Greening Government Commitments require Government Buying Standards (GBS) are embedded in centralised and departmental contracts. Our main focus is ensuring new contracts are GBS compliant, but we will take the opportunity to amend legacy arrangements if practicable and cost effective. A new GBS for Food has been issued by DEFRA, which will be used for a major new commercial arrangement for food for the Armed Forces.

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<sup>1</sup>

<http://www.mod.uk/DefenceInternet/MicroSite/DIO/OurPublications/EstateAndSustainableDevelopment/Sanctuary.htm>.

## **Sustainable Construction**

19. All new builds and major refurbishments are subject to MOD's Defence Related Environmental Assessment Method (DREAM) or Building Research Establishment's Environmental Assessment Methodology (BREEAM) assessment. DREAM is a MOD developed tool that is specific to the defence estate and defence projects allowing the MOD to assess the environmental impacts of its construction activities. 46 DREAM assessments commenced in 2011/12.

20. Updated DREAM modules have been produced, a refreshed DREAM website has been designed and a Minor New Works module developed. The new website and modules will be launched early in 2013.

21. Construction Waste – Suppliers Association members signed a voluntary Waste Charter in 2008/09 agreeing to halve waste to landfill by the end of 2012, suppliers are currently on course to exceed this target. Greening Government Commitments (GGC) requires MOD to manage construction waste to best practice standards. MOD is committed to achieving this standard.

## **People**

22. The MOD conducts Sustainability Appraisals of all relocations of its civil estate offices so that the impact on staff, among other things, can be assessed. There were, however, no such relocations in 2010/11. MOD also uses sustainability appraisal of plans, programmes and projects to consider wider environmental and socio-economic impacts and opportunities. There will be increased emphasis on embedding SD into submissions and approvals through the robust use of Sustainability Appraisal to support decision-making.

23. The MOD Educational Outreach Programme mentoring scheme won the 2010 Civil Service HR policy award in the learning and development category. The Scheme, primarily staffed by MOD volunteers, was set up in 2001 to develop career and employment skills for students particularly among ethnic and minority groups. Further details can be found at

<http://www.mod.uk/DefenceInternet/AboutDefence/WhatWeDo/ReserveForcesandCadets/Cadets/YouthAndTheMod.htm> and

<http://www.mod.uk/DefenceInternet/MicroSite/DIO/WhatWeDo/EstateAndSustainableDevelopment/CommunitiesAndSocialEngagementOnTheModEstate.htm>

## **Environmental Management System (EMS)**

24. The MOD is committed to ensuring all its sites, activities and equipment will be covered by an appropriate EMS by 2015, as set out in the MOD Sustainable Development Strategy.

## **ICT**

25. In May 2011, the Chief Information Officer (CIO) joined the Government CIO Delivery Board and accepted the role of Senior Responsible Owner for delivering the Green Government: ICT Strategy. It was published in October 2011<sup>2</sup>.

26. CIO has reported against the Government ICT Strategy Green Metrics and through its Sustainable ICT Task Force, has participated in the Government Sustainable ICT

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<sup>2</sup> <http://www.cabinetoffice.gov.uk/resource-library/uk-government-ict-strategy-resources>

Maturity Model assessment pilot. MOD is currently assessed at Level 1 – Foundation, and is developing improvement plans to achieve Level 3 – Practised by 2015.

27. The MOD Information Strategy (MODIS)<sup>3</sup> has been refreshed and now includes sustainability. New ICT programmes and services must adhere to MODIS and the Defence ICT Strategy principles and, where possible, comply with GBS for ICT. Compliance is monitored through the MOD's Approval Process.

## **Governance**

28. Sustainability performance is managed through the Department's normal management processes, including the MOD's Business Plan and Defence Plan. The Chief Executive Defence Infrastructure Organisation is the owner of the SD Strategy. Business unit SD Champions are responsible for delivery and assurance in their area. Defence Internal Audit assures the processes involved.

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<sup>3</sup> [http://www.mod.uk/NR/rdonlyres/E78188A1-9EA1-407C-AA83-F38492F6D920/0/mod\\_information\\_strat2011.pdf](http://www.mod.uk/NR/rdonlyres/E78188A1-9EA1-407C-AA83-F38492F6D920/0/mod_information_strat2011.pdf)

GREENHOUSE GAS EMISSIONS		2009-10	2010-11	2011-12	Graphical Analysis
Non-Financial Indicators tCO <sub>2</sub> e 000	Total gross emissions for scopes 1, 2 & 3	4,767	4,700	4,399	
	Total net emissions for scopes 1, 2 & 3	4,640	4,597	4,232	
	Total gross emissions scope 1	3,842	3,796	3,557	
	Total gross emissions scope 2 & 3	863	857	792	
Related Energy Consumption KWh 000	Electricity: Non-renewable	1,460,770	1,464,106	1,282,421	
	Electricity: Renewable	20,440	20,486	142,491	
	Gas	2,482,017	2,475,352	1,952,488	
	LPG	80,070	80,403	82,000	
	Other	290,598	289,877	314,428	
Related Operational Energy Consumption Litres 000	Aviation fuel	827,800	792,400	767,100	
	Diesel	340,500	354,300	339,300	
	Gas oil	74,300	79,700	74,900	
	Petrol	7,000	4,600	5,800	
	Expenditure on energy	195,715	280,563	294,676	
Financial Indicators £ 000	CRC license expenditure (2012 onwards)	-	-	1	
	Expenditure on GCOF offsets	220	78	NK	
	Expenditure on official business travel	198,747	165,467	161,632	
	Expenditure on operational energy (fuel)	481,934	627,850	635,354	
	Normalisation	Total scopes 1, 2 & 3 - tCO <sub>2</sub> e 000	4,767	4,700	4,399
Defence total Spend £000		37,994,285	38,116,370	37,176,648	
Normalisation - Scope 1 & Scope 2 emissions '000 / budget '000		0.00013	0.00012	0.00012	

#### PERFORMANCE COMMENTARY (INCL TARGETS)

The new Greening Government Commitments require a 25% reduction in estate and business travel emissions by March 2015 against a 2009/10 baseline. A 11.2% reduction has so far been achieved. We have also seen reductions in GHG emissions from fuel consumed due to a reduction in the amount of aviation fuel that has been used.

The Government Carbon Offsetting Facility (GCOF) offset for 2011/12 emissions will be purchased in 2012/13. The total price will be dependant upon the prevailing price of carbon per tonne at the time of purchase.

#### CONTROLLABLE IMPACTS COMMENTARY

The main impacts are from electricity and fuel consumption. Strategies have been prepared to reduce these direct impacts through efficiency programmes which include using more efficient technologies, beneficial estate utilisation and rationalisation. We are developing and implementing plans with the Carbon Trust to reduce estate carbon emissions - this includes five key areas for action.

#### OVERVIEW OF INFLUENCED IMPACTS

We are actively working with industry partners to develop energy efficiency opportunities across a range of technologies and through our procurement specifications. We are currently retro-fitting energy services into current Facility Management contracts as a forerunner to embedded energy management capability into the next generation of estate contracts. We are working with key suppliers to encourage them to reduce their own emissions.

COMMERCIAL AIR TRAVEL	2009-10	2010-11	2011-12
Number of UK Domestic Air Flights - in 000	22	18	20

#### COMMENTARY

The Greening Government Commitments requires MOD to reduce by 20% the number of UK domestic commercial flights by March 2015 against a 2009/10 baseline. A 9% reduction has been achieved.

WASTE		2009-10	2010-11	2011-12	Graphical Analysis	
Non-Financial Indicators t 000	Total waste	185	190	197		
	Hazardous waste	Total	14	11		6
		Landfill	55	48		43
	Non hazardous waste	Reused/Recycled	91	95		122
		Composted	8	9		9
		Incinerated with energy recovery	10	18		12
Incinerated without energy recovery		8	8	5		
Financial Indicators	Total disposal cost (see notes)	NK	NK	NK		
Normalisation	Department total spend £000	37,994,285	38,116,370	37,176,648		
	Normalisation - waste arisings tonnes / total spend '000	0.000005	0.000005	0.000005		

**PERFORMANCE COMMENTARY (INCL TARGETS)**

MOD is required to reduce the volume of waste by 25%. Progress has been difficult in 2011-12, the impacts of meeting wider Government efficiency and reform commitments, Defence Reform means that achieving the waste targets will continue to be a challenge for MOD. For 2012-13, the sale of surplus stores, equipment disposal, site closures and the Armed Forces participation in the Olympics will all increase the volume of waste. Around 77% of MOD's waste is diverted from landfill with almost 68% was recycled or reused. We have monitored the disposal of ICT waste to make sure that it is reused or recycled responsibly. MOD ICT waste is disposed of centrally, from which 99% was recycled or reused.

The Department is unable to report the disposal cost for waste. Waste in most cases is part of a larger facilities management contract or a service delivered by a PFI (private finance initiative) partner. As part of the Defence Reform programme, we are looking to improve the next generation of infrastructure management contracts to support the improvement of waste management including the requirements for accurate weighed data and costs.

**CONTROLLABLE IMPACTS COMMENTARY**

Our main impacts are from general waste management at our sites. Used military equipment and construction waste are also significant.

**OVERVIEW OF INFLUENCED IMPACTS**

The Department is working with suppliers to improve waste management performance and encourage them to manage their waste more sustainably.

CONSTRUCTION WASTE	2009-10	2010-11	2011-12
Percentage of Construction waste diverted from landfill	74%	75%	80% e

**COMMENTARY**

The Greening Government Commitments require MOD to manage construction waste to best practice standards. The Government target is to halve waste to landfill by 2012. In 07/08, the baseline year, 54% of MOD construction waste was diverted from landfill. The MOD target is to divert 80% of construction waste from landfill. This target has been met. The target is set as a percentage because waste varies from year to year dependant on the number and size of projects funded in that particular year. The waste diverted from landfill (woods, aggregate, metals, glass, etc.) is either re-used on site, recycled or re-used off site and does not go to landfill.

FINITE RESOURCE CONSUMPTION - Water				2009-10	2010-11	2011-12	Graphical Analysis
Non-Financial Indicators M <sup>3</sup> '000	Water consumption (office estate)			206	186	193	
	Per FTE			12.4	11.8	12.3	
	Water consumption (office & non office estate)			24,974	24,550	24,659	
Financial Indicators £ '000	Water supply costs (whole estate)			100,236	98,667	107,369	
	Department total spend £000			37,994,285	38,116,370	37,176,648	
Normalisation	Normalisation - emissions m3 '000 / budget '000			0.00066	0.00064	0.00066	

**PERFORMANCE COMMENTARY (INCL TARGETS)**

The Department has achieved around a 28% reduction in water consumption between 2004/05 and 2009/10. The large saving was achieved primarily from leakage reduction across the Defence estate. Going forward the Department's target is to achieve a further 7% reduction in water consumption (from a 2009/10 baseline) by March 2015. A 1% reduction has been achieved. Many of our office sites are not owned by MOD therefore to improve water efficiency at these sites MOD is looking at improved utilisation and staff education and awareness.

**CONTROLLABLE IMPACTS COMMENTARY**

The major impacts in terms of water consumption are by driving down 'in building' consumption through targeted water saving initiatives. This will be done in partnership with current service providers and the intention is to co-ordinate these activities with the Next Generation Estates Contracts.

**OVERVIEW OF INFLUENCED IMPACTS**

Aquatrine (PFI contract - see explanatory notes) are exploring ways of expanding the Aquatrine model to other Government Organisations. We are working with out key suppliers to encourage them to reduce their use of water.

Notes:

1. This table must be read in conjunction with the explanatory notes document
2. e is for where the data has been estimated
3. NK is where data is Not Known



## **Annual Reports and Accounts 2011/12 – Sustainable Development Explanatory Notes**

1. The data in these tables are not National Statistics because they have not been assessed as such by the UK Statistics Authority.
2. The data contained in this report is based on the baselines agreed for Greening Government Commitments (GGC). The GGC targets are for UK data. The MOD has tried to include as much of the UK data as possible and for some data sets, we have included data from our overseas estate.
3. Definition of emission scopes:
  - a. Scope 1 emissions occur from sources owned or controlled by the organisation. Examples include emissions as a result of combustion in boilers owned or controlled by the organisation. This includes emissions from organisation-owned fleet vehicles.
  - b. Scope 2 emissions result from energy consumed which is supplied by another party (e.g. electricity supply in buildings or outstations), and purchased heat, steam and cooling.
  - c. Scope 3 relate to official business travel directly paid for by an organisation (i.e. not business travel re-charged by contractors).
4. DEFRA conversion rates have been used to account for carbon
5. Carbon data in this report is shown as CO<sub>2</sub>e; this is the six greenhouse gases covered by the Kyoto Protocol. They are: Carbon Dioxide (CO<sub>2</sub>); Methane (CH<sub>4</sub>); Nitrous Oxide (N<sub>2</sub>O); Hydro fluorocarbons (HFCs); Perfluorocarbons (PFCs) & Sulphur Hexafluoride (SF<sub>6</sub>)
6. GGC and HM Treasury reporting rules allow Departments to leave out bodies that fall below the de-minimis criteria. The department has been granted exemption not to include Non Departmental Public Bodies and other MOD funded bodies.
7. The MOD is large and complex with around 400 main sites and around 4000 sites in total. A site may contain a single building or dozens of buildings. MOD's Sustainable Development (SD) baselines include as much of the estate as possible but for reasons that include insufficient manpower and old contracts that do not provide the data required our baselines covers from around 75% to 90% of the Defence estate. The finance data covers spend for a budget item and this may exceed the scope of the SD data being reported.
8. SD data for: (1) travel, (2) waste and (2) water includes data from MOD's Trading Fund Agencies i.e. Defence Support Agency, Defence Science and Technology Laboratory and United Kingdom Hydrographic Office.
9. **Estate Energy**
  - a. The Department of Energy and Climate Change agreed that the 25% Greenhouse Gas target should apply to the 398 core establishments which MOD has decided to retain for the long term. Achievement against the target will include 6% savings, which will be achieved from decarbonisation of the National Grid.
  - b. The 398 sites are located in the UK and overseas. These core sites account for around 80% of MOD's energy consumption.
  - c. MOD's Trading Fund Agencies are not included in the 398 core sites.
  - d. Estate energy data is not weather corrected.
  - e. Energy costs are calculated from an indicative costs for each energy type multiplied by the KWh consumed.
10. **Operational Energy**
  - a. Operational Energy is fuel consumed by vehicles, ships, aircraft and generators in the UK and overseas. However, fuel used to provide energy at MOD sites (excluding operational sites i.e. Afghanistan) is reported under estate energy.
  - b. It is not possible to obtain a complete account of fuel issued for charter flights and so consumption has been estimated using calculated distances for each journey and average burn rates for each aircraft used. These calculations have been validated by comparisons with data on fuel issued where available, to ensure a reasonable level of accuracy.

- c. The fuel consumption of fixed and rotary wing aircraft has been calculated using average burn rates and flying hours, provided by Air Command.
- d. There were a number of gaps in the fuel data for 2010/11. In particular, there was incomplete data for ground and aviation fuel by Defence Fuels Group. Here, estimates of fuel consumption have been based either on the 2010/11 data that was available, or on information from previous years.

11. **UK Business Travel**

- a. The GGC target is for administrative business travel by Departments. We have defined business admin travel as business journeys on behalf of MOD. Greenhouse gas emissions from other travel i.e. operations, support for operations, training for operations, welfare etc have been removed where possible.
- b. Road travel consists of administrative businesses car journeys in either (1) a leased fleet vehicle; (2) personnel using their own personal car (grey fleet); and (3) hire cars
  - i. Leased fleet vehicles: This data includes some non-business administrative use because it not possible to separate out all journeys. Calculation of the lease fleet emissions are estimated based on an average mileage of 18,000 miles per car (from sampled data) multiplied by the average CO2 emissions of all the vehicles in the fleet.
  - ii. Grey Fleet includes travel by civilian and Armed Forces personnel using their own cars. Emissions are calculated using an "average" car from the DEFRA GHG conversion factors and the motor mileage distance claimed.
  - iii. Hire car fleet emissions are based on an estimated journey of 250 miles per hire (based on sampled data) and DEFRA Greenhouse Gas Conversion (GHG) factors for the size of vehicle hired. If a vehicle type is unavailable any upgrade is not recorded.
- c. Rail travel. We monitor rail travel mileage booked centrally using the mandated contract. The emissions data is calculated for all journeys but we are able to exclude travel related to armed forces recruitment. The cost of rail travel includes all rail travel regardless of reason for travel.
- d. The travel data is from live databases. The data is correct on the date the report was made and cannot be replicated.
- e. The data given is for commercial air travel, it does not include:
  - i. Military aircraft or
  - ii. Charter aircraft i.e. used for troop transport.
- f. The travel data includes travel by MOD civilians, Armed Forces personnel and the Trading Fund Agencies (Defence Science and Technology Laboratory; UK Hydrographic Office and Defence Support Group).
- g. The number of UK domestic flights includes journey that start and finish in the UK. Domestic flights for onward connection to international flights have not been included.
- h. The expenditure data for travel is for all MOD travel, the following notes apply:
  - i. excludes Trading Fund Agencies.
  - ii. includes travel that is beyond the scope of GGC Business Administrative Travel.
  - iii. the expenditure includes international air travel.

12. **Waste**

- a. Waste data shown is against the agreed GGC baseline, this is around 75% of MOD known waste. The 25% excluded is unreliable data because:
  - i. the waste contractor does not provide weighed waste data. The current contracts were signed before weighed waste data was required
  - ii. sites have insufficient manpower to monitor waste and estimate tonnage based on volume.

- b. The waste data is from weighed waste data and volumetric conversion factors. Volumetric conversion estimates the weight of the waste based on the type of waste and size of the skip.
- c. The Department is not able to report the expenditure for waste. Long-term contracts were let several years ago with industry partners to provide a range of estate services under one contract (either Private Finance Initiatives (PFI) or multi activity contracts). It has not been possible to isolate the cost of waste from the other tasks services by the contractor.
- d. The waste data excludes the scrapping and recycling of ships. Ship recycling is not a regular occurrence and their large tonnage would adversely slew figures in either the baseline or the reporting year.
- e. The 10/11 waste data excludes the disposal of the Nimrod aircraft fleet. This was a one-off exceptional disposal. We have included disposals that are part of fleet upgrade/replacement i.e. Hercules c-130 aircraft and truck fleet replacement.
- f. Waste data covers the UK, Trading Fund Agencies and sites in Germany.

13. **Finite Resources**

- a. Water is provided by Aquatrine, an MOD-wide Water and Wastewater PFI project delivered through three separate contracts known as 'Packages'. Package A covers the Midlands, Wales and South West England, Package B covers Scotland, and Package C covers the North and East of England. Aquatrine provides water to over 4000 site groups, which is approximately 90% of the Department's consumption.
- b. The Department's office estate (administrative buildings that are not part of a military establishment) is relatively small, being 13 sites. The full Time Equivalent (FTE) is the number of personnel established at these sites and does not include (1) on site contractors and (2) visitors (MOD/Armed Forces personnel based elsewhere, public and other contractors).

14. **Government Carbon Offsetting Facility (GCOF)**

- a. The Government is committed to offsetting all emissions arising from official and Ministerial air travel. To meet this commitment, a Government Carbon Offsetting Facility (GCOF) was developed in November 2007 to help central government departments offset their travel emissions in a simple, cost-effective way.
- b. The Department offsets commercial air travel by civilian and Armed Forces personnel assigned to MOD's Centre budget area. This budget group includes several sites across the UK. The air travel offset includes UK domestic, short haul and long haul air travel.