



**Nuclear Decommissioning Authority
Sustainability Report
2011/2012**

Sustainability Report

Purpose

This report is intended to show the NDA's sustainability performance, alongside related financial information, as required by HM Treasury's Financial Reporting Manual (FRM)¹. It is also part of the effort to improve transparency on sustainability performance under the Greening Government Commitments (GGC)². As a non departmental public body reporting to the Department of Energy and Climate Change (DECC) we have aligned our report to their reporting standard. The boundary for this report is for the NDA administrative organisation (NDA Authority) as this covers direct operational control. There is a previously agreed exemption (by the SDiG Exemption Panel) that the NDA's subsidiaries and wider nuclear site estate are outside this reporting boundary.

Our targets

Optimising internal environment management can contribute to delivery of cost savings to the business, as well as delivering our Environmental Management System (EMS) targets and sustainability commitments to government. As part of our ISO14001:2004 certification³ NDA has had defined internal environmental performance targets since 2008/2009. Following revised guidance from government, via our sponsoring body DECC, we have re-aligned our Internal Environmental Management (IEM) targets to those GGC targets to be mandated on the wider government estate. These include:

- 25% reduction in CO₂e emissions from energy and business travel
- 25% reduction in waste arisings
- Reduce water use and aim for the 'good practice' range of 4-6m³ per FTE per year in each of our buildings
- Reduce domestic air travel by 20% and reduce paper use by 10% (2011/2012).

These headline targets are to be achieved by 2015.

Summary of Performance

Overall our environmental performance in 2011/2012 was good compared to our baseline year of 2009/2010 (this is the GGC baseline year). Some of the reduction will be due to staff reductions in 2010/2011 (74 staff) when our Organisational Effectiveness review resulted in a re-structuring of the NDA for its core processes, behaviours and

internal structures. However some of the improved performance will be due to positive staff actions and infrastructure improvements. The reduction in staff numbers has resulted in some of the efficiency/normalisation factors (resource per FTE) increasing, due to the building baseload component becoming a greater proportion, rather than directly decreasing with occupancy/staff numbers.

We reduced our scope 1 and 2 emissions by 12% this year, with a 22% decrease on the baseline year. Our total greenhouse gas footprint has increased slightly by 3% this year, but overall there is a 21% decrease on the baseline year. Having slightly increased the amount of waste we produced in 2010/2011 (due to staff clearing out their desks when leaving the organisation) we have reduced our generation of waste this year by 47%, which is a reduction of 42% on the baseline year. Our water usage has remained relatively stable over the last 4 years but the usage per FTE has increased due to the decrease in staff numbers. This indicates that our buildings have inefficient water usage (being in the poor practice benchmark range) and which is not directly dependent of the occupancy rate. We are taking steps to reduce our losses and inefficiencies. The NDA also assesses its performance against paper and printing usage as this is one of our major environmental and resource aspects. A 26% reduction in our paper usage paper purchased means that we are well below our target for this year.

¹ http://www.hm-treasury.gov.uk/frem_sustainability.htm

² <http://sd.defra.gov.uk/gov/green-government/commitments/>

³ LRQA Approval Certificate No: LRQ 4002929/A

Area		Actual	Target performance
Greenhouse gas emissions (Scopes 1, 2 & 3 Business travel including international air travel)		1,441 tCO2e	On target
Office waste	Amount	35.2 te	Target exceeded
	Expenditure	£16,451	-
Office water	Consumption	2,645m ³	On target
	Expenditure	£50,090	-
Office energy	Consumption	1.94 million kWh	On target
	Expenditure	£192,056	-
Office paper	Amount (A4&A3 reams equivalent)	3,731	On target
	Expenditure (total inc. printing)	£80,251	-
Office paper - GGC target of cutting our paper (A4&A3) use by 10% in 2011/2012 from a 09/10 baseline		- 48%	Target achieved

Performance

Green House Gas Emissions		2008/2009	2009/2010 baseline	2010/2011	2011/2012	Trend
Non Financial Indicators (t CO2e)	Scope 1 (gas & oil, owned cars)	182	185	118	103	<p>NDA GHG footprint</p>
	Scope 2 emissions (electricity)	1,068	944	878	773	
	Total scope 1 & 2 emissions	1,250	1,129	996	876	
	Total scope 1 & 2 emissions per FTE	3.43	3.23	3.18	3.28	
	Scope 3 (business travel)	708	737	479	565	
	Number of domestic flights	1,330	979	628	533	
	Total scope emissions (1,2 & 3) – te CO2e	1,958	1,866	1,475	1,441	
Financial Indicators	CRC expenditure	n/a	n/a	n/a	£1,772,240	
	Carbon offset cost	0	0	0	0	
	Business travel cost	£1,246k	£1,221k	£983k	£977k	

Targets and Discussions

NDA's target is to reduce its emissions by 25% by 2015 compared to a 2009 baseline – this is in line with the GGC target. Although our emissions increased by 3% this year, we remain on target with a 21% decrease on the baseline year. The increase was due to our Scope 3 international travel emissions. There is a GGC target to cut the number of domestic business flights by 20% by 2015 from a 2009/2010 baseline – we have achieved a reduction of 45% currently.

Due to a regulatory decision NDA had to take on the CRC responsibilities for the Sellafield nuclear site's electricity usage and CHP gas emissions (due to a strict application of the "landlord/tenant" rule). This has required NDA to become a Full Participant under CRC. Sellafield Ltd drops down to an 'Information Discloser' and does not have to provide any further information or buy allowances. Therefore the NDA's CRC costs in 2011/2012 are an estimate of CO2 from the energy use for NDA and Sellafield at £12 te – split £12,240 and £1,760,000 respectively. Our CRC reporting scope is a subset of our total sustainability reporting scope. At present NDA does not carbon offset.

Direct & indirect impacts summary

The main impacts are from buildings energy use and from fuel for business travel. We have IEM annual targets for both these aspects. The NDA does not include commuter or relocation mileage in its scope 3 emissions. However economical driving techniques are included, as well as safety aspects, as part of a driver training programme for our higher mileage staff. NDA's electricity is purchased through the Government Procurement Service contract. Procurement follows treasury rules and guidance. FM services procurement includes efficiency as part of the criteria judged. We do not account for supply chain or embedded emissions from purchased products or services. We continue to work with our suppliers as part of our sustainable procurement to reduce our impact to the environment from energy usage.

Waste		2008/2009	2009/2010 baseline	2010/2011	2011/2012	Trend	
Non Financial Indicators (tonnes)	Total waste arisings (t)	119.2	61.3	66.7	35.2		
	Total waste arisings (t) per FTE	0.33	0.18	0.21	0.13		
	Hazardous waste (t)	Total	-	-	-		-
		Non hazardous waste (t)					
	Landfill	45.3	19.0	23.6	15.8		
Reuse/ Recycle	73.9	42.2	43.1	19.4			
Recycling rate	62%	69%	65%	55%			
Financial Indicators	Total disposal cost	£14.7k	£14.3k	£16.1k	£16.4k		

Targets and Discussions

NDA's target is to reduce its waste arising by 25% by 2015 compared to a 2009 baseline – this is a GGC target. We have already achieved a 42% reduction on baseline by changing our organisational behaviours and by getting our packaging waste taken away and re-used/ recycled by our suppliers. We intend to try to improve the quality of our waste data, increase our recycling rate and also maintain this level of performance. Our redundant ICT is re-used or recycled by our service provider and therefore is not included in these figures.

Direct & indirect impacts summary

About half our waste generated is paper and cardboard. What we can't re-use internally we recycle.
 If an item if ICT cannot be re-used internally it is then put through one of a number of processes by our ICT service provider
 -It's offered to the wider estate for re-use
 -It's made available for charity if it would be useful to them
 -It's recycled
 -It's destroyed to the relevant standards (security and environmental standards, etc.) if there is no residual value
 As new local waste treatment facilities become operational we intend to use them rather than send our waste to landfill. In 2012 we have changed our facilities management provider and will be working with them to improve the quality of our data and continue to improve our waste management arrangements.
 We continue to work with our suppliers as part of our sustainable procurement to reduce our impact to the environment from waste.

Finite Resources - Water		2008/2009	2009/2010 baseline	2010/2011	2011/2012	Trend
Non Financial Indicators (m³)	Water used (only 3 rd part supply) m ³	2,927	2,690	2,813	2,645	
	Waste use per FTE	8.0	7.7	9.0	9.9	
Financial Indicators	Total cost (all rates)	£21.7k	£19.9k	£17.4k	£13.4k	
	Cost per FTE	£59.62	£56.86	£55.47	£50.09	

Targets and Discussions

The Greening Government Commitments target is to reduce water consumption by 2014-15 compared to a baseline of 2009/2010. We will also be reporting against the following benchmarks for water consumption per FTE per annum:

- More than 6m³ = poor practice
- Between 4m³ and 6m³ = good practice
- Less than 4m³ = best practice

Our water usage has remained relatively stable over the last 4 years but the normalised usage per FTE has increased due to the decrease in staff numbers. This indicates that our buildings have inefficient water usage (being in the poor practice benchmark range) and which is not directly dependent of the occupancy rate. This year water usage has reduced by nearly 2% on the baseline year.

Direct & indirect impacts summary

We are taking steps to reduce our water losses and inefficient practices by undertaken actions such as water audits and seeking to make improvements during office relocations. The NDA has no abstracted water use i.e. only scope 2 water usage. We do not account for supply chain or embedded water usage from purchased products or services. We continue to work with our suppliers as part of our sustainable procurement to reduce our impact to the environment from water consumption.

Finite Resources - Energy		2008/2009	2009/2010 baseline	2010/2011	2011/2012	Trend	
Non Financial Indicators (kWh)	Total energy consumption	2,692,963	2,613,826	2,170,925	1,944,637	<p>The chart 'Energy use' displays kWh on the left y-axis (0 to 3,000,000) and per FTE on the right y-axis (0 to 8,000). It shows stacked bars for Electricity (blue), Gas (red), and Heating oil (yellow) from FY08/09 to FY11/12. A line graph with triangles represents Energy per FTE, which shows a general downward trend from approximately 7,400 in FY08/09 to 4,500 in FY11/12.</p>	
	Total energy consumption per FTE	7,398	7,468	6,936	7,279		
	Energy consumption	Electricity non-RE	1,653,620	1,562,140	1,450,056		1,287,201
		Electricity RE*	183,736	173,571	161,117		185,429
		Gas	828,591	843,007	530,748		427,041
	Oil	27,016	35,108	29,004	44,966		
Financial Indicators	Total energy expenditure	£292.9k	£246.0k	£165.3k	£192.1k		

Targets and Discussions

NDA's scope 1 & 2 emissions are dominated by emission from energy. Our own stretch target is to reduce its energy emissions by 37% by 2014/2015 compared to a 2009 baseline. We have made good progress with a reduction of 25%. We are undertaking optioneering studies to identify actions to continue with our good performance.

Direct & indirect impacts summary

The majority of our energy use is directly metered but for some of our smaller offices we are in shared facilities, for which we are allocated by the landlord a proportion of the total energy use based on the pro rata floor space which is generally greater than the equivalent occupancy rate.

We do not account for supply chain or embedded energy usage from purchased products or services. We continue to work with our suppliers as part of our sustainable procurement to reduce our impact to the environment from energy consumption.

Finite Resources – Paper & Printing		2008/2009	2009/2010 baseline	2010/2011	2011/2012	Trend
Non Financial Indicators (million sheets)	Total paper purchased	1.79	2.51	1.79	1.80	<p>The chart 'Paper Purchased' displays million sheets on the left y-axis (0.00 to 3.00) and sheets per FTE per day on the right y-axis (0 to 35). It shows blue bars for Paper used and a line graph with squares for sheets per FTE per day from FY08/09 to FY11/12. Paper used shows a downward trend from 1.79 million sheets in FY08/09 to 1.80 million sheets in FY11/12. Sheets per FTE per day shows an upward trend from approximately 20 in FY08/09 to 31 in FY11/12.</p>
	Total sheets used per FTE per working day	22	33	26	31	
	A4 & A3 reams (equiv) used - GGC metric	N/A	7,193	5,044	3,731	
Financial Indicators	Paper cost	N/A	£19.2k	£13.6k	£11.6k	
	Printing cost	N/A	£187.6k	£143.6k	£68.7k	

Targets and Discussions

We have achieved the GGC target of cutting our paper use by 10% in 2011/2012 from a 2009/2010 baseline. We also have an internal stretch target of cutting our paper use by 64% by 2014/2015 from a 09/10 baseline. We have currently achieved a 48% reduction.

Direct & indirect impacts summary

About half our waste generated is paper and cardboard. What we can't re-use internally we recycle. We are looking at options for introducing tablet devices for some staff as alternatives to hardcopy reports. We are also measuring our total printing costs such as toners, other consumables and hardware.

We continue to work with our suppliers as part of our sustainable procurement to reduce our impact to the environment from paper consumption.

Climate Change Adaptation

We aim to minimize the detrimental effects on climate from greenhouse gases and ozone depleting substances in any relevant work we do, and maximize our resilience and adaptability to climate change. We have implemented a Business Continuity Management System to ensure that critical business functions and key resources are identified, and measures put in place to recover them within an acceptable time frame should a disruptive event or events occur, such as from adverse weather conditions.

Sustainable Procurement including food

The NDA is mandated to utilize the Government Procurement Service (GPS) frameworks where a suitable framework exists. Both GPS and the NDA is committed to sustainable procurement, paying particular attention to ensuring that value for money is obtained and procurement processes are streamlined. The NDA appoints its contractors on the basis of balanced criterion including elements such as financial stability, health, safety & environmental management, quality management etc. The NDA bulks commodities where appropriate and buys collaboratively with the nuclear estate and/or public sector where suitable opportunities exist. It works with its supply chain to eliminate waste and manage environmental impacts and actively encourages relevant contractors to be more energy efficient. It requires its supply chain to undertake environmental assessments, producing annual environmental reports where appropriate. The NDA ensures stakeholder engagement is maximized and seeks to ensure that any burden on the supply chain is minimised.

Our catering services provider who runs our canteens has a sustainability policy which includes a 'green purchasing policy' which includes an active effort to find sustainable and responsible suppliers for the sourcing of organic, Fair Trade and sustainable products.

Environmental Management System

NDA operates an Environmental Management System (EMS) to ensure that we operate within our stated environmental policy, associated objectives and targets, and have processes for monitoring and controlling our environmental impacts. The EMS is approved to the requirements of BS EN ISO 14001:2004 by LRQA. Objectives and targets are set to maintain continual improvement in environmental performance across the organisation and to raise awareness of environmental issues.

Environmental Compliance

This year we have not had any environmental incidents and not been subject to any enforcement action or fines.

Biodiversity & Action Plans

The NDA does not have a Biodiversity Action Plan. However we encourage tenants on our (non-designated) land to participate in environmental stewardship programmes where appropriate. It is also a contractual requirement for the Site Licence Companies managing our nuclear sites to have in place suitable Biodiversity Action Plans.

Our People

In response to Government imperatives to use public property more efficiently, we re-located our London office into the DCLG building and transferred our staff and INS' Cumbria staff from a small office near Sellafield to our headquarters building, with the benefit of increasing our resource efficiency especially for water and energy.

The Health & Safety team, after consulting with HR on occupational health issues, decided to promote the health and well being of our staff as they are one of NDA's critical resources. This year we established Health Promotion Campaigns which will be delivered on a quarterly basis promoting health and well being on a variety of topics. In addition to the promotional campaigns, in the coming year we will be training our staff in Stress Awareness and Stress management.

Notes:

1. This report has been prepared with reference to guidelines laid down by HM Treasury in 'Public Sector Sustainability Reporting' published at www.financial-reporting.gov.uk.
2. Scope 1 – includes all gas and oil energy including those apportioned pro rata in a shared building. It also includes pool car mileage under control of NDA.
3. Scope 2 – values calculated from monthly supply meter readings.
4. Scope 3 – Aircraft flight information includes domestic, short and long haul – international travel is not excluded. International air travel emissions include an uplift factor of 1.9 to account for radioactive forcing, in accordance with Government Carbon Offsetting Facility (GCOF) rules. Component from taxis claimed as expenses assessed using cost of a 5 mile journey using average fare data. Supply chain or embedded emissions from purchased products or services are not included.
5. We have not reported components where these are not separately identified in tenant service contract charges i.e. some water and waste disposal charges which are not separately billed for.
6. Due to problem in obtaining data after a change in service provider, flight data and information for 2009/2010 has been calculated as an average between 2009/2010 and 2010/2011 data.
7. CRC costs in 2011/2012 are an estimate of CO₂ from the energy use for NDA and Sellafield at £12 te CO₂ – split £12,240 and

£1,760,000 respectively. The energy figure will be entered into the CRC registry in July 2012 to calculate the allowance costs. Note that for this metric the financial boundary does not coincide with the sustainability reporting boundary.

8. During 2011/2012 one NDA shared office was relocated and one further building closed resulting in changes to the sustainability reporting boundary.
9. Waste masses are assessed by a combination of direct measurement and calculation based on standard waste containers dependent on the type of waste. The data does not include ICT values as these items are returned through our service provider, mainly for re-use or recycling.
10. For a full description of which of our offices our meters and their reporting scope see <https://www.nda.gov.uk/news/arac-2011-2012.cfm>