



Forestry Commission Scotland  
Coimisean na Coilltearachd Alba

# Annual Sustainability Report

Financial Year 2015/16



# Annual Sustainability Report 2015-16

## OVERVIEW

2015-16 has seen further improvement in Forestry Commission Scotland's (FCS) Environmental Management System (EMS) and drive to minimise the impact of our activities. In line with FCS's Public Bodies Duties, annual targets will continue to be applied in key areas such as reducing emissions resulting from travel and energy use, and minimising the organisations water consumption and waste generation.

The purpose of this report is to summarise FCS's environmental performance during 2015/16 in line with Scottish Government guidance<sup>1</sup>.

## Our Environmental Management System (EMS) & Governance

Building on from our Business Sustainability work in 2014/15, there has been a noticeable development in staff awareness over the past year. This is due in part to the increase of internal audits and support visits, across the Forest Districts and Conservancies. Staff are more appreciative of the aspects and impacts of our EMS due to these visits and workshops.

An internal audit timetable, with a rolling programme for audits was arranged. Cost centres can also request an informal review, checking performance and potential improvements. Over the last year, seven internal audits and two informal visits were completed, as well as two LRQA audits at ten locations. One LRQA visit was to assess the compliance of the management system of Forestry Commission Scotland against ISO14001:2004 as defined in the audit planning documentation. Our continual improvement continues to maintain travel, energy and waste related minimisation plans. The system has been developed since the last LRQA auditors visit including further information being added to the Business Sustainability Scotland webpage and the development of an EMS template for record keeping.

## Support for staff

The FC Scotland Business Sustainability intranet site is maintained by a designated member of staff ensuring recent developments are publicised. The website provides up-to-date, relevant information for staff across Scotland. Business Sustainability support roles are well defined and staff know who to contact in relation to a specific enquiry.

The Business Sustainability Enquiries Outlook mailbox is well used by staff; ensuring queries are answered promptly by a knowledgeable member of staff. Two Business Sustainability workshops were held in February; ensuring all staff associated in the inputting of Business Sustainability data could attend. There were also meetings with the internal auditors and the systems managers concurrently.

The Business Sustainability Co-ordinator will carry out site visits and training as necessary, on request to confirm data is being input correctly to the database and recycling is being done as efficiently as possible.

<sup>1</sup>Public Sector Sustainability Reporting – Guidance on the Preparation of Annual Sustainability Reports 2011-12. (Scottish Government, January 2012).

## **ISO14001 Certification**



The independent certification of our EMS by Lloyds Register Quality Assurance (LRQA) is a key part of our environmental policy and, alongside the certification of the National Forest Estate under the UK Woodland Assurance Scheme, means FCS is able to demonstrate that all its business operations are run on a sustainable footing.

LRQA maintained their own ongoing audit and assessment programme throughout the year to ensure all our activities continue to meet the benchmark ISO14001 international environmental management standard.

In 2015, LRQA assessed Forestry Commission England and Scotland independently for the first time and FC Scotland retained its ISO 14001 accreditation. The last of the ISO14001 External Audits was held the first week in January 2016.

The FES and FCS Management Boards have concluded that both Forestry Commission Scotland and Forest Enterprise Scotland wish to withdraw from ISO 14001 certification and will not seek re-approval when the current certificate expires in June 2016.

## **Environmental Performance Monitoring & Reporting**

FCS has improved the accuracy of recording vital environmental data; monthly reports are issued to Forest Districts and Conservancies for monitoring by experienced staff, ensuring any discrepancies are actioned. These reports give a detailed breakdown of the data input to the Business Sustainability database by staff at a range of locations across the National Forest Estate. Discrepancies are highlighted and designated staff, in FC Scotland National Office and FE Scotland Head Office ensure any discrepancies are followed up. Staff input quarterly, in line with the financial year, which ensures the reports generated are more accurate.





The accuracy of these figures was made possible by the issue of standard bins in 2014 to the main Forest District and Conservancy offices. Several outstations and more remote offices are now also using standard bins to assist them in the accurate recording of their waste.




There has been a marked increase in local Business Sustainability teams getting advice from the BS Co-ordinator, enhancing their knowledge and proliferating across the organisation.

The continual improvement to systems, including a more organised approach to communicating business sustainability requirements, via notice boards and workshops as well as a more systemic approach to records management was commented upon by the LRQA external auditor. At a Country level objectives and targets relating to carbon, waste and water continue to be in place with site level actions demonstrable in contributing towards these objectives.

Further details of our performance is shown in tables 1 & Appendix 1.

**Table 1: Summary of Our Performance**

Area	Performance in 2015/16	Status
<b>Energy</b>	Emissions from energy use have been reduced by an average of 14% compared with 2010/11	
<b>Waste</b>	More accurate waste recording has shown an increase in waste generated in 2015/16. As a result, we will re-establish the base line using the 15/16 outturn.	
<b>Transport &amp; Travel</b>	Emissions from travel have been reduced by 2.5% compared with 2014/15	
<b>Water</b>	There has been a marked increase in our efforts at reducing consumption, against forecast, and interrogating sites relating to the installation of water meters.	

-  Target met
-  2015- 16 to act as baseline
-  Target not met



## **ACTIONS TAKEN DURING 2015-2016 TO IMPROVE SUSTAINABILITY**

### **Environmental protection and waste management**

Investigations of our septic tanks at Borgie House and Deer larder have been carried out to include water sampling, both upstream and downstream of our soakaway entering the River Borgie, which is an SAC for Salmon, Fresh Water Pearl Muscle and Otter. Improvements will be carried out this financial year.

### **Energy Efficiency and carbon reduction**

In Moray & Aberdeenshire, we rationalised office units from five locations to three, closing our Craibstone and Bennachie units. This has reduced costs and utilised our Energy Bills. The target for CO<sub>2</sub> emissions was exceeded due in part to our use of pool vehicles, a practice we now intend to introduce at our Durriss office, which should help reductions further.

Similarly, in North Highland FD, we improved the layout of our Contin outstations to accommodate nine desks instead of four, allowing us to close the Ardross Depot and move the staff from substandard accommodation to modern energy efficient buildings. The works included LED lights for the office instead of florescent tubes, fully integrated networked display equipment to allow better use of the project working space. At Tarlogie, we replaced a 15 year old central heating system and replaced an electric shower with a domestic hot water system with water heated via the new combi boiler. Log boiler systems at two FC houses in Betty Hill and Rogie were re-plumbed to enable more hot water for less wood burnt during summer months, reducing the requirement for the emersion tank to be on all year round.

We improved energy efficiency by replacing the biomass system at Smithton and installing new heating systems at our workshop in Aberfoyle. Energy efficient LED lighting has been installed at our Fort Augustus office and also at Kirroughtree Visitor Centre where energy usage has reduced to nearly 50%

Energy consumption in Highlands and Islands Conservancy has been reduced by 13% on the previous year and has come in 0.6% under the travel target. CO<sub>2</sub> emissions have also gone down following the purchase of a paper shredder, which has reduced the no of uplifts required for confidential waste.

In Scottish Lowlands 'Efficiency Saving Tips' have been displayed next to light switches, taps' etc. throughout the office.

### **Measuring, Monitoring and Management Information**

FCS has continued to make improvements in the accuracy and availability of key environmental management data to cost centres.

In Lochaber FD, use of the Stark energy reports has been used to monitor energy usage and help decision making on the refurbishment of Strontian outstation.



Alongside monitoring travel emissions and energy use, new reporting and metering systems for waste and water management are enabling more reliable information to be reported on waste generation and water consumption.

Water meters were installed at a number of new sites and we have been collating better information on our water usage.

Work has continued in 2015-16 on the value-added use of Automatic Meter Readers (AMR's) ensuring they are installed where possible.

## **Waste and Recycling**

The standardising of recycling procedures within FCS has made recording more accurate, ensuring that the information collated is now comparable across the organisation.

Following the Windows7 roll-out, some offices have ensured a default print-setting to double-sided b/w as well as a change of paper supply to the recycled undyed eco paper recommended by Scottish Government.

Other offices have come up with local ideas such as implementing food waste bins where possible and "no glass" policies in offices where glass is not routinely collected. Other improvements such as use of Eco-Kettles, tin crushers and recycling of food waste as well as replacement cutlery and crockery for office use being obtained from charity shops, recycling outlets and donations.

Aerosol cans, used across the Forest Districts for tree marking, require to be disposed of responsibly by an approved recycling process. The designated contractor collects from two collection points (Dunkeld, Ae and Highland Council) on a regular basis. Due to more local councils and waste providers collecting aerosol cans as part of their routine recycling collection we are reviewing the current contract, which should reduce costs significantly.

## **Reducing travel emissions**

During 15-16 a new cycle shed was installed at our Oban office to accommodate an increasing number of staff cycling to work – this has further encouraged an additional number of staff to cycle to work.

In 2015/16 FCS managers have continued to make the CO<sub>2</sub> and other emissions a key part of the decision making process when deciding on replacement vehicles.

In addition to considering our vehicles, further video conferencing facilities have been installed and are used with increasing frequency. Central Conservancy and Inverness, Ross & Skye Forest District have had VC facilities installed this year. Travel Plans have been circulated to staff to provide examples on how we could reduce travel costs as well as CO<sub>2</sub>.



**Appendix 1: Summary of Performance**

Area	Actual Performance 2015-16	Target
<b>Green House Gas emissions (Scope 1, 2 &amp; 3 Emissions)</b>	<b>3,844 tonnes Co2<sup>1</sup></b> [2,084 Co2 travel + 1,760 t Co2 energy use]	--
<b>CRC Energy Efficiency Scheme related expenditure</b>	<b>£20k</b>	--
<b>Total travel emissions</b>	<b>2,084 tonnes Co2</b>	A 2.5% reduction from 2014/15. Target Met ✓
<b>Total travel expenditure</b>	<b>£3,505k</b>	--
<b>Total energy consumption</b>	<b>5,491 M kWh</b>	A 1% reduction from 2014/15 Target Met ✓
<b>Total energy expenditure</b>	<b>£413k</b>	--
<b>Total waste tonnage</b>	<b>1,072 tonnes</b> [Includes construction waste]	Due to significant changes in waste recording, 2015/16 will act as the baseline year for future reporting
<b>Office waste recycling</b>	<b>35% recycling rate<sup>2</sup></b>	--
<b>Total waste expenditure</b>	<b>Estimated at £112k</b>	--
<b>Water consumption</b>	<b>Total estimated<sup>3</sup> at 4,384 m<sup>3</sup></b>	5.5m <sup>3</sup> per person per yr in our key office buildings by 2020
<b>Water expenditure</b>	<b>Estimated<sup>3</sup> at £50k</b>	--



**Appendix 2: Core Sustainability Information 2015-16**

<b>Greenhouse Gas Emissions &amp; Energy</b>		<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>
<b>Non Financial Indicators (tonnes Co2) <sup>4</sup></b>	Total Gross Emissions	4,066	3,847	3,934	<b>3,844</b>
	Total Net Emissions	4,066	3,847	3,934	<b>3,844</b>
	Gross Emissions Scope 1	1,766	1,934	1,848	<b>1,847</b>
	Gross Emissions Scope 2 & 3 (indirect impacts)	1,882 +418	1,451 462	2,085	<b>1,997</b>
<b>Related energy consumption (kWh)</b>	Electricity non-renewable	2,916k	n/a	1996k	<b>n/a</b>
	Electricity Renewable	324k <sup>1</sup>	3,279k <sup>2</sup>	2955k	<b>3,027k</b>
	Gas	477k	491k	500k	<b>610k</b>
	LPG	-	132k	161k	<b>202k</b>
	Other (Gas Oil)	1,118k	1,098k	306k	<b>335k</b>
<b>Financial indicators (£k)</b>	Expenditure on Energy	498k	385k	409k	<b>413k</b>
	CRC license Expenditure	n/a	n/a	n/a	<b>n/a</b>
	Expenditure on business travel – official travel & fleet costs	3,809	3,532	3,334	<b>3,505</b>

**Note**

The 2014/15 figures for energy and CO2 were adjusted on the 2015/16 annual report to reflect the changes made by FAS.





Waste		2012/13	2013/14	2014/15	2015/16	
<b>Non Financial Indicators (tonnes)</b>	Total volume of waste (not incl. construction)	1735	325	534	<b>1072<sup>5</sup></b>	
	Hazardous/Special waste	Total	44	5.5	9.68	<b>58</b>
	Non-Hazardous waste	Landfill	747	260	351	<b>577</b>
		Re-used /Recycled	914	144	172	<b>379</b>
		Incinerated /energy from waste	30	4	2	<b>116</b>
<b>Financial indicators (£k)</b>	Total waste disposal cost		172	73.4	108	<b>112</b>
	Hazardous/special waste disposal cost		20	3.5	4	<b>10</b>
	Non- Hazardous Waste – total disposal cost	Landfill	92	45.5	56	<b>69</b>
		Reused /recycled	52	25	46	<b>37</b>
		Incinerated /energy from waste	8	1	3	<b>7</b>

Water		2012/13	2013/14	2014/15	2015/16
<b>Non Financial Indicators (m<sup>3</sup>)</b>	Supplied	90,000	90,000	88,000	<b>4,384<sup>4</sup></b>
	Disposed	*	*	*	<b>*</b>
<b>Financial indicators (£k)</b>	Water supply costs	88	51	50	<b>5<sup>4</sup></b>

Notes:

<sup>1</sup> Co2 estimates based upon revised energy use kWh/co2 conversion factors published by DEFRA for use from 2013-14

<sup>2</sup> 2015-16 will now act as the baseline year as a result of the introduction of new metering and reporting systems during the year

<sup>3</sup> Estimated due to the continuing water meter, installation programme

<sup>4</sup> Based on 100 % Green Energy from EDF Energy supplier under Scottish Government supply contract.

<sup>5</sup> Increase due to tyre recycling and possible keying error

\* unknown