footprint support
for local authorities

Local Footprints is a joint project between WWF Scotland and the Sustainable Scotland Network, with funding and support from Eco Schools Scotland, the Improvement Service, the Scottish Government and ScottishPower.

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LFP Briefing

Single Outcome Agreements and the Ecological Footprint

In November 2007, COSLA and the Scottish Government signed a concordat setting out the terms of this new relationship based on Single Outcome Agreements. The concordat sets out a framework for local government to contribute to the delivery of the national Strategic Objectives, outcomes, indicators and targets, and in this way to support the Scottish Government in the delivery of its overarching Purpose.

Local government will develop a menu of local outcome indicators which can be drawn upon to 'populate' the single outcome agreements between each council and the Scottish Government, so as to demonstrate progress in delivering the national priorities while reflecting local priorities and circumstances;

One of the National Outcomes is: "We reduce the local and global environmental impact of our consumption and production" and the national indicator which contributes to this is: "reduce overall Ecological Footprint'. This briefing explains how the Ecological Footprint can form a useful part of the Single Outcome Agreement.

Ecological Footprint as an Indicator

Several local authorities have contacted SSN and the Local Footprints Project[1] for advice on using the footprint as an indicator, in line with the national indicators. Ecological Footprint (EF) analysis is currently being used by four councils across Scotland, with another five authorities receiving training in March 2008. A further eight councils will participate in the Local Footprints project commencing October 2008.

Ecological Footprint results for all local authorities in the UK are freely available to download from the Stockholm Environment Institute (SEI) website and a sample report

[1] The Local Footprints Project (LFP) helps local authorities and schools make an effective contribution to reducing Scotland's global environmental impact through the use of footprint analysis to inform policy and practice, to raise awareness, and to change behaviour. LFP is a joint project between WWF Scotland and the Sustainable Scotland Network, with funding and support from Eco Schools Scotland, the Improvement Service, the Scottish Government and ScottishPower. For more information on LFP visit www.localfootprints.org

is attached[2]. These results link to and compare with Ecological Footprint results for the UK, devolved countries and regions.

The Local Footprints Project has a key role to assist local government in utilising the footprint results as a baseline that will identify key areas for improvement and provide the basis for monitoring performance over time. Local Footprints is working with local government to ensure that footprint analysis results are considered in policy and development decisions.

Ecological Footprint indicator is

- *Outcome based:* It helps local authorities decide how they wish to allocate resources and deliver against their targets. Using the footprint software, REAP[3], allows local authorities to test how different combinations of policies could deliver reductions in the Ecological Footprint, as well as whether consumer trends may create risks.

- *Attributable to local authority action*: The Ecological Footprint results reflect the geography of local authority areas and the characteristics of the local population as well as local and national level policies implemented at that time. REAP can be used to take account of trends and changes driven by local and national government collectively of separately.

- *A driver of behaviour change:* The Ecological Footprint can be directly related to behaviour change in all aspects of people's lifestyle and at an individual, household and community level.

- *Aligned to other policy objectives:* The scope of the Ecological Footprint makes it possible to link climate change and resource use to a number of other local agendas including access to services, planning decisions, health, fuel poverty, housing conditions and waste management.

- *Measurable in a cost effective fashion:* The freely available online Ecological Footprint data creates no additional reporting requirement. However, by investing in the software tool, REAP, give local authorities flexibility to include locally sourced data and monitor real change.

- *Comparable over time and between local authorities:* The online Ecological Footprint data provides a sound comparison of global environmental impact between different local authority areas and the Scotland-wide figure. The online data will be updated on an annual basis. REAP users can also update their baseline,

[2] Footprint results are available at http://www.sei.se/reap/download_login.php?region=I

[3] Information on the REAP software tool is available on www.sei.se/reap

using locally specific information, but this takes away the direct comparability at a national or regional level.

- *Auditable:* The Ecological Footprint data available online requires no input from local authorities and data collection and analysis is carried out by SEI. REAP technical reports outline the methodological approach and all data sets are provided by Government departments, the Office for National Statistics or CACI's Acorn socio-economic local authority profiles.

- *Collaborative:* The range of issues the Ecological Footprint touches on encourages partnership working within and between local authorities and community partners.

The following annexes provide the technical information on the Ecological Footprint.

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Annex I: The components of the Ecological Footprint

The Ecological Footprint results, provided by SEI, can be broken down in three ways:

1. **By top level final demand categories**

    i. Household spending

    ii. Government spending

    iii. Capital investment (spending on fixed assets such as land and buildings)

2. **By policy theme**

    i. 'Food' covers spending by government and households on food and drink including catering, eating out and alcoholic beverages.

    ii. 'Housing' covers gas, electricity and fuel use in the home but also includes construction, rental and maintenance of dwellings

    iii. 'Transport' incorporates car use and maintenance, as well that of other private vehicles and public transport.

    iv. 'Consumables' covers annual expenditure on 17 categories of household consumption item including clothing, tobacco, newspapers and household appliances

    v. 'Private Services' covers annual expenditure on 13 categories of service from insurance to financial advice to private education

    vi. 'Public Services' covers the remainder of spending by government not addressed by the above themes. This includes public administration, health and education

    vii. Capital Investment covers the remainder of capital spending not addressed by the above themes

3. **By detailed consumption category**

    The total footprint can be divided in detail by COICOP category. COICOP stands for 'Classification of Individual Consumption According to Purpose'. It covers everything people spend money on; this also includes expenditure on services. COICOP was jointly developed by the statistical office of the OECD and Eurostat and was first published in 1999. It is a widely used United Nations statistical classification. In some areas (specifically transport services), the categories have been broken down still further. This further breakdown is not part of the official COICOP Classification.

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Annex II: Technical Information for using EF as an indicator

Headline indicator	**Reduce ecological footprint**
Relevance of the indicator / contribution to sustainable development	The Ecological Footprint is an estimate of the land and area needed to provide all the energy, water, transport, food and materials we consume. The footprint gives a picture of the impact of our consumption patterns and a complete picture of the resources we use, wherever the product or service came from. A local authority's Ecological Footprint represents the amount of biologically productive land and water its residents use. Ecological Footprints in Scotland range from 5.00-5.76 gha/capita. The Scottish Executive has committed to reducing Scotland's Footprint in their 2005 Sustainable Development Strategy - Choosing Our Future. The Scottish Budget Spending Review and Performance Framework 2007 have identified 'reduce overall Ecological Footprint' as a national indicator.
Measurement / definition	The Ecological Footprint of a region is defined as the productive area (land and sea) that would be required to sustainably maintain current consumption, using prevailing technology.
Unit of measurement	Global hectares / capita. The footprint is measured in a standardised area unit equivalent to a world average productive hectare (abbreviated to global hectares or gha). This permits comparisons between countries and regions.
Data sources	The Global Footprint Network has national standards and methods to ensure that the National Footprint Accounts are a comprehensive and comparable. Details on the standard methods can be found on www.globalfootprintnetwork.org. Two approaches are used to ensure a local footprint: top down and bottom up data sources. ▪ A top down approach to data collection uses aggregate economic input-output and household expenditure data to derive footprints for large-scale areas, such as Scotland. ▪ The bottom up data approach uses locally specific data (e.g. waste arisings and passenger kilometres travelled per mode) to generate a local area footprint. The main data sources are PRODCOM, detailed trade data and expenditure statistics. Final consumption patterns follow both SIC and the COICOP classification. Spatial disaggregation of national data is possible down to the local authority level. In 2008, other data will be added to the footprint software model to ensure compatibility with national data. Local authority energy consumption data will be updated using AEA Technology data (currently used by Defra for their experimental CO2 inventory for LAs). The Stockholm Environment Institute in York used the above data to develop a model (REAP) with baseline of Carbon and Ecological Footprints for all Scottish local authorities. Local authorities can use this database to develop scenarios and input more local data to provide more detailed local footprints.
Data geography	local authority and national level
Base Data	2003
Indicator reported elsewhere and National comparison	All UK Local Authority Footprint are available at www.sei.se/reap The Welsh Assembly Government reports on Wales Ecological Footprint as a national headline indicator. All Scottish local authority Ecological and Carbon Footprints have been calculated and Living Planet Report produced by WWF shows national Ecological Footprints.
Type of indicator	Aggregate
Potential for development	The Footprint tool can provide CO2 emissions data as well.

Annex III: Sample local authority Footprint results

For all Scottish LA footprint results visit www.sei.se/reap/download_login.php?region=l

	Ecological Footprint (gha/cap)	Carbon Footprint (t/cap)
Food		
Private Households		
Food	0.62	0.32
Non-alcoholic beverages	0.05	0.05
Alcoholic beverages	0.05	0.05
Catering services	0.36	0.41
Capital investment	0.07	0.12
Total	**1.15**	**0.94**
Transport		
Private Households		
Purchase of vehicles	0.10	0.31
Operation of personal transport equipment	0.10	0.30
Transport services	0.20	0.76
UK resident holidays abroad	0.10	0.16
Private transport (car fuel)	0.30	1.07
Capital investment	0.08	0.21
Total	**0.90**	**2.81**
Housing		
Private households		
Actual rentals for housing	0.03	0.05
Imputed rentals for housing	0.07	0.12
Maintenance and repair of the dwelling	0.06	0.10
Electricity and gas distribution	0.57	1.54
Goods and services for routine household maintenance	0.01	0.02
Domestic fuel and land consumption	0.50	1.41
Capital investment	0.26	0.61

Total	**1.50**	**3.86**
Consumables		
Private households		
Tobacco	0.03	0.02
Clothing	0.03	0.11
Footwear	0.01	0.03
Furniture, furnishings, carpets and other floor coverings	0.06	0.15
Household textiles	0.01	0.04
Household appliances	0.14	0.30
Glassware, tableware and household utensils	0.01	0.03
Tools and equipment for house and garden	0.02	0.05
Medical products,appliances and equipment	0.01	0.03
Telephone and telefax equipment	0.00	0.00
Audio-visual, photo and inf. processing equipment	0.07	0.17
Other major durables for recreation and culture	0.00	0.01
Other recreational items & equipment	0.17	0.17
Newspapers, books and stationery	0.03	0.08
Personal care	0.03	0.08
Personal effects n.e.c.	0.11	0.22
Capital investment	0.01	0.03
Total	**0.76**	**1.50**
Private services		
Private households		
Water supply and miscellaneous dwelling services	0.00	0.01
Out-patient services	0.00	0.01
Hospital services	0.00	0.01
Postal Services	0.00	0.00
Telephone and telefax services	0.02	0.06
Recreational and cultural services	0.04	0.10
Package holidays	0.00	0.00
Education	0.02	0.04
Accommodation services	0.04	0.04
Social protection	0.02	0.05

Insurance	0.04	0.10
Other services n.e.c.	0.02	0.05
Financial services n.e.c.	0.03	0.09
Capital investment	0.05	0.15
Government spending		
Central government	0.11	0.29
Local government	0.01	0.01
Total	**0.41**	**1.01**
Public Services		
Capital investment	0.07	0.15
Government Spending		
Central government	0.14	0.37
Local government	0.17	0.42
Total	**0.37**	**0.93**
Capital investment	**0.24**	**0.60**
Other	**-0.01**	**0.08**
TOTAL	5.32	11.74