

# Sustainable Development Indicator Set

## CHOOSING OUR FUTURE

### Measuring Progress on Scotland's Sustainable Development Strategy

In *Choosing our future*, Scotland's sustainable development strategy the Executive set out a number of ways in which it will measure progress in meeting the commitments made in the strategy and more generally progress on sustainable development. This includes:

- measuring progress against a **wide set of indicators** that reflect our social and environmental as well as economic goals;
- reviewing the evidence on the options for **additional and improved ways of measuring progress**, reporting by the end of 2006;
- inviting the Sustainable Development Commission (SDC) to produce a **strategic assessment of performance and progress** in 2008 and report publicly on its findings; and
- commissioning an independent study of **Scotland's footprint** in 2008.

### Sustainable Development Indicators

The Executive is committed to measuring progress against a broad set of indicators that capture the different dimensions of sustainable development.

We have been reporting annually against a balanced set of indicators in 'Meeting the Needs' for the last three years. A refresh of this indicator set is needed for a number of reasons:

- to align the indicators more closely to key outcomes in Scotland's sustainable development strategy and the joint UK Framework for Sustainable Development;
- to draw on developments in data collection including indicators that are better placed to reflect our overall contribution to sustainable development;
- to replace indicators that do not adequately reflect our progress on sustainable development at a high level; and
- to move away from our original focus on three priority areas of waste, energy and transport to give a fuller coverage of sustainable developments concerns.

This refresh builds on the original set, more closely aligning the indicators to the outcomes in *Choosing our future* and the UK Framework. In developing the set we have taken into account developments in international sets including the EU and UN and the views expressed from engagement with stakeholders.

#### **A set of proposed indicators for sustainable development is set out in the next section.**

We envisage the set of indicators will continue to evolve as policy develops and the evidence base improves. Indicators on transport and sustainable energy will be reviewed / developed in the context of the forthcoming National Transport Strategy and Energy Efficiency Strategy respectively. We will also assess the applicability at the Scotland level of three new indicators that are being developed in support of the UK Framework for Sustainable Development: social justice, environmental equality and well-being.

## Sustainable Development Indicator Set

With the refreshed set we aim to improve the availability, clarity and transparency of our indicators. A key change with the refresh is the introduction of a **new system of continuous reporting on the Scottish Executive website** improving the availability of key statistics. The website is currently in development and will be up and running later this year. Background information on each indicator setting out definitions, measurement, data sources and frequency will be available on the web site aiding the overall transparency and clarity of the indicators included in the set.

The statistics presented on the website will be complemented with a short annual commentary, clearly highlighting indicator movements.

Annex A draws out the read across from this set of indicators to the UK Framework set of high level indicators and the original Scottish set in *Meeting the Needs*.

Annex B sets out the changes from the *Meeting the Needs* set of indicators.

## Sustainable Development Indicator Set

### Measuring Progress: Sustainable Development Indicators

<b>Well Being</b>	<ol style="list-style-type: none"> <li>1. <b>Health Inequality:</b> Life expectancy (by area) men/ women</li> <li>2. <b>Air Quality:</b> Air Quality Management Areas (AQMAs)</li> <li>3. <b>Economic opportunity:</b> 16-19 year olds who are not in education, training or employment</li> <li>4. <b>Economic opportunity:</b> People of working age in employment</li> </ol>
<b>Supporting thriving communities</b>	<ol style="list-style-type: none"> <li>5. <b>Community:</b> (a) Neighbourhood satisfaction (b) volunteering</li> <li>6. <b>Crime:</b> Recorded crimes for (a) vehicles (b) domestic housebreaking (c) violence (d) anti-social behaviour</li> <li>7. <b>Households:</b> (a) Childhood poverty: children in low income households (b) homeless households</li> </ol>
<b>Protecting Scotland's natural heritage and resources</b>	<ol style="list-style-type: none"> <li>8. <b>Waste:</b> Municipal waste arisings (a) total and (b) recycled / composted</li> <li>9. <b>Biodiversity</b><sup>1</sup>: composite indicator of bird populations</li> <li>10. <b>Marine:</b> Fish stocks which are within safe biological limits</li> <li>11. <b>River Quality</b><sup>2</sup>: Kilometres of river identified as "poor" or "seriously polluted"</li> </ol>
<b>Scotland's global contribution</b>	<ol style="list-style-type: none"> <li>12. <b>Climate Change:</b> Greenhouse gas emissions: total and net</li> <li>13. <b>Sustainable Energy:</b> Electricity generated from renewable resources</li> <li>14. <b>Sustainable Energy:</b> carbon emission indicator<sup>3</sup></li> <li>15. <b>Transport</b><sup>4</sup> Total vehicle kilometres</li> </ol>
<b>Learning</b>	<ol style="list-style-type: none"> <li>16. <b>Learning:</b> Eco-schools uptake and number with Green Flag</li> </ol>
<b>Context</b>	<ol style="list-style-type: none"> <li>17. <b>Economy:</b> Economic output: GDP per head</li> <li>18. <b>Demography:</b> Age profile of population</li> </ol>
<b>Indicators in Development</b> <sup>5</sup>	<p><b>Social justice:</b> new indicator being developed to support UK Framework</p> <p><b>Environmental Equality:</b> new indicator being developed to support UK Framework</p> <p><b>Well-being:</b> well being measures will be developed in support of UK Framework if supported by the evidence</p>

- 1 Composite indicator on bird populations is in development with SNH, which will include breeding seabirds, wintering water birds, farmland and terrestrial birds. If the data is not available to support this, an indicator based on the UK Biodiversity Action Plans will be included.
- 2 Under Water Framework Directive, SEPA is developing indicators of the status of water bodies in Scotland. It is expected that these indicators will supersede the current indicator of kilometres of river length of good water quality.
- 3 Indicator being developed to measure the relative reduction in carbon emissions achieved through measures contained in the Energy Efficiency Strategy
- 4 Indicator to be reviewed following National Transport Strategy consultation
- 5 Indicators in development will be introduced into the set if applicable at the Scotland level

# Sustainable Development Indicator Set

## Annex A

### Well- Being

- Increased economic opportunities for all
- An environment that provides the conditions for health and well-being
- A focus on the promotion of good mental health and well-being

Grouping	Choosing Our Future Indicators	Relationship to other sets of Indicators	
		UK Framework	Meeting the Needs
Health Inequality	1. life expectancy (by area) men/ women	<ul style="list-style-type: none"> <li>• Health inequality: (a) infant mortality by socio-economic group (b) life expectancy (by area) men/women</li> </ul>	<ul style="list-style-type: none"> <li>• Life expectancy at birth (years)</li> </ul>
Air Quality	2. Number of Air Quality Management Areas (AQMAs)	<ul style="list-style-type: none"> <li>• Ecological impacts of air pollution: UK habitat area sensitive to acidification/eutrophication</li> </ul>	<ul style="list-style-type: none"> <li>• Number of Air Quality Management Areas (AQMAs)</li> </ul>
Economic opportunity	3. Percentage of 16-19 year olds who are not in education, training or employment	<ul style="list-style-type: none"> <li>• 19 yr olds with level 2 quals and above</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of 16-19 year olds who are not in education, training or employment</li> </ul>
	4. People of working age in employment	<ul style="list-style-type: none"> <li>• People of working age in employment</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of unemployed working age people</li> </ul>

## Sustainable Development Indicator Set

### Supporting thriving communities

- Well connected places
- The regeneration of local environments
- People at the heart of change

Grouping	Choosing Our Future Indicators	Relationship to other sets of Indicators	
		UK Framework	Meeting the Needs
Community	5. (a) Neighbourhood satisfaction (b) volunteering	<ul style="list-style-type: none"> <li>• volunteering at least once a month</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of people taking part in voluntary activities</li> </ul>
Crime	6. Total number of recorded crimes for (a) vehicles (b) domestic housebreaking (c) violence (d) anti-social behaviour	<ul style="list-style-type: none"> <li>• crime survey and recorded crime for vehicles, domestic, burglary, violence</li> </ul>	<ul style="list-style-type: none"> <li>• Total number of crimes, crimes recorded by the police</li> </ul>
Households		<ul style="list-style-type: none"> <li>• Workless households: popn living in workless households (a) children and (b) working age</li> </ul>	
	7. (a) Childhood poverty: children in low income households (b) homeless households	<ul style="list-style-type: none"> <li>• Childhood poverty: relative low income households before and after housing costs</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of children living in workless households</li> <li>• Number of homeless households entitled to permanent accommodation</li> </ul>
		<ul style="list-style-type: none"> <li>• Pensioner poverty: relative low income households before and after housing costs</li> </ul>	<ul style="list-style-type: none"> <li>• Total number of households living in fuel poverty</li> </ul>

## Sustainable Development Indicator Set

### Protecting Scotland's natural heritage and resources

- Biodiversity loss halted
- Natural resources are managed sustainably
- The environment is protected effectively

Grouping	Choosing Our Future Indicators	Relationship to other sets of Indicators	
		UK Framework	Meeting the Needs
Waste	8. Total municipal waste arisings and percentage recycled / composted	<ul style="list-style-type: none"> <li>• arisings by sector and method of disposal</li> </ul>	<ul style="list-style-type: none"> <li>• Municipal waste arisings in million tonnes of waste</li> </ul>
			<ul style="list-style-type: none"> <li>• Percentage of total household waste recycled</li> </ul>
			<ul style="list-style-type: none"> <li>• Biodegradable municipal wastes landfilled in million tonnes</li> </ul>
Biodiversity	9. Composite indicator of bird populations	<ul style="list-style-type: none"> <li>• Bird populations: bird pop. Indices farmland birds/woodland birds/coastal and estuarial birds/wintering wetland birds</li> </ul>	<ul style="list-style-type: none"> <li>• Percent of Bio-diversity Action Plan species /habitats which are identified as stable or increasing</li> </ul>
Marine	10. Proportion of fish stocks which are within safe biological limits	<ul style="list-style-type: none"> <li>• Fish stocks around UK within safe biological limits</li> </ul>	<ul style="list-style-type: none"> <li>• Proportion of fish stocks which are within safe biological limits</li> </ul>
River Quality	11. Kilometres of river identified as "poor" or "seriously polluted" (SEPA is developing indicators on the status of water bodies in Scotland that may supersede this)	<ul style="list-style-type: none"> <li>• River quality good biological/ chemical quality</li> </ul>	<ul style="list-style-type: none"> <li>• Kilometres of river identified as "poor" or "seriously polluted"</li> </ul>

## Sustainable Development Indicator Set

### Scotland's global contribution

- Have reduced our greenhouse gas emissions
- Are reducing the ecological impact
- Are contributing to the Millennium Development Goals

Grouping	Choosing Our Future Indicators	Relationship to other sets of Indicators	
		UK Framework	Meeting the Needs
Climate Change	12. Greenhouse gas emissions: total and net	<ul style="list-style-type: none"> <li>• Greenhouse gas emissions: Kyoto target and CO2 emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Index of CO2 emissions divided by GDP (1990=100)</li> </ul>
Sustainable Energy	13. Percentage electricity generated from renewable resources		<ul style="list-style-type: none"> <li>• Percentage electricity generated from renewable resources</li> </ul>
	14. Carbon emissions indicator (being developed to measure the relative reduction in carbon emissions achieved through measures contained in the Energy Efficiency Strategy)		<ul style="list-style-type: none"> <li>• Gas consumed by domestic customers and electricity consumed (TeraWatt hours)</li> </ul>
Resource use		<ul style="list-style-type: none"> <li>• Domestic material consumption and GDP</li> </ul>	
Transport	15. Total vehicle kilometres (to be reviewed following National Transport Strategy consultation)	<ul style="list-style-type: none"> <li>• Trips per person by mode / annual distance travelled by broad trip purpose</li> </ul>	<ul style="list-style-type: none"> <li>• Total vehicle kilometres</li> </ul>
			<ul style="list-style-type: none"> <li>• Freight industry (tonne kilometres moved and GDP)</li> </ul>
			<ul style="list-style-type: none"> <li>• Percentage of journeys to work not using car</li> </ul>
			<ul style="list-style-type: none"> <li>• Percentage of Scottish households within 6 minutes of a bus stop</li> </ul>

## Sustainable Development Indicator Set

### Learning to make Scotland sustainable

- Learning for sustainable development is a core function of the formal education system
- There are lifelong learning opportunities to learn
- The sustainable development message is clear and easily understood

Grouping	Choosing Our Future Indicators	Relationship to other sets of Indicators	
		UK Framework	Meeting the Needs
Learning	16. Eco-schools uptake and number with Green Flag		

### Context

Grouping	Choosing Our Future Indicators	Relationship to other sets of Indicators	
		UK Framework	Meeting the Needs
Economy	17. Economic output: GDP per head	<ul style="list-style-type: none"> <li>• Economic output: GDP</li> </ul>	
Demography	18. Age profile of population		<ul style="list-style-type: none"> <li>• Proportion of population which is working age</li> </ul>

## Sustainable Development Indicator Set

### Annex B

#### Changes from the indicators presented in Meeting the Needs

	Choosing Our Future Indicators	Changes from Meeting the Needs
Health Inequality	1. life expectancy (by area) men/ women	<ul style="list-style-type: none"> <li>Widening indicator to look at gender breakdown and area.</li> </ul>
Air Quality	2. Number of Air Quality Management Areas (AQMAs)	<ul style="list-style-type: none"> <li>No change</li> </ul>
Economic opportunity	3. Percentage of 16-19 year olds who are not in education, training or employment	<ul style="list-style-type: none"> <li>No change</li> </ul>
	4. People of working age in employment	<ul style="list-style-type: none"> <li>Moved focus to employment (from unemployment) bringing into line with the Executive policy (Smart Successful Scotland) and UK Framework indicator</li> </ul>
Community	5. (a) Neighbourhood satisfaction (b) volunteering	<ul style="list-style-type: none"> <li>New indicator to reflect community regeneration and connectedness.</li> <li>Volunteering no change.</li> </ul>
Crime	6. Total number of recorded crimes for (a) vehicles (b) domestic housebreaking (c) violence (d) anti-social behaviour	<ul style="list-style-type: none"> <li>Widen focus to give breakdown by type of crime</li> </ul>
Households	7. (a) Childhood poverty: children in low income households (b) homeless households	<ul style="list-style-type: none"> <li>Replacing previous household indicators with indicator aligned to UK/Scottish headline target to eradicate child poverty &amp; Executive's Closing the Opportunity Gap approach</li> <li>Shifting in homeless indicator to look at number rather than entitlement (children living in workless households and number of households living in fuel poverty)</li> </ul>
Waste	8. Total municipal waste arisings and percentage recycled / composted	<ul style="list-style-type: none"> <li>Bringing indicator into line with waste targets for recycling and composting</li> </ul>
Biodiversity	9. Composite indicator of bird populations (if there are any data issues an indicator based on UK BAP will be included)	<ul style="list-style-type: none"> <li>moving to an annual indicator that gives an overview of biodiversity</li> </ul>
Marine	10. Proportion of fish stocks which are within safe biological limits	<ul style="list-style-type: none"> <li>No change</li> </ul>
River Quality	11. Kilometres of river identified as "poor" or "seriously polluted"	<ul style="list-style-type: none"> <li>No change</li> </ul>

## Sustainable Development Indicator Set

	(SEPA is developing indicators on the status of water bodies in Scotland that may supersede this)	
Climate Change	12. Greenhouse gas emissions: total and net	<ul style="list-style-type: none"> <li>• Broaden indicator to give both total and net greenhouse gas (previously CO2 emissions by GDP)</li> </ul>
Sustainable Energy	13. Percentage electricity generated from renewable resources	<ul style="list-style-type: none"> <li>• No change</li> </ul>
	14. Carbon emissions indicator (being developed to measure the relative reduction in carbon emissions achieved through measures contained in the Energy Efficiency Strategy)	<ul style="list-style-type: none"> <li>• Replacing gas and electricity consumption to wider indicator on carbon emissions</li> </ul>
Transport	15. Total vehicle kilometres (to be reviewed following National Transport Strategy consultation)	<ul style="list-style-type: none"> <li>• No change, although may revise following NTS consultation</li> <li>• Following NTS consultation may include one other indicator on transport replacing freight industry, households within 6 minutes of bus stop and journeys to work using a car</li> </ul>
Learning	16. Eco-schools uptake and number with Green Flag	<ul style="list-style-type: none"> <li>• New</li> </ul>
Economy	17. Economic output: GDP per head	<ul style="list-style-type: none"> <li>• New (previously CO2 emissions divided by GDP)</li> </ul>
Demography	18. Age profile of population	<ul style="list-style-type: none"> <li>• No change</li> </ul>