

## Sustainable Development Indicators – Background Notes

The information below gives more detail on each of the indicators, including definitions, data sources and frequency of reporting.

### Sustainable Development Indicators

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## Well Being Health Inequality

<b>1. Health Inequality: Life expectancy at birth by area and gender</b>	
Definitions:	<p>Life expectancy at birth for a given time period and area is an estimate of the average number of years a new born baby would survive if he/she experienced the particular area's age specific mortality rate for that time period throughout his/her life.</p> <p>The figure reflects mortality among those living in the area in each period, rather than mortality among those born in each area. It is not the number of years a baby born in the area in the period is expected to live, both because death rates are likely to change in the future and because many of the new borns may live elsewhere for at least some part of their lives.</p> <p>Life expectancy at birth is also not a guide to the remaining expectancy of life at any given age. It reflects the fact that survival from a particular age depends only on mortality rates beyond that age, whereas survival from birth is based on mortality rates at every age. Life expectancy at birth provides a useful summary measure of mortality rates actually experienced over a given period and, for past years, provides an objective means of comparison of the trends in mortality over time, between areas of a country and with other countries.</p> <p><u><i>Supplementary information on Healthy Life Expectancy</i></u></p> <p>Healthy Life Expectancy estimates are built on the life expectancy estimates but incorporate an element of quality of life into the calculation. Health status is measured by self-assessed health using the survey question "Over the last 12 months would you say your health has on the whole been good, fairly good or not good?" Those who report "good" or "fairly good" health are defined as being healthy for the purposes of this calculation.</p> <p>Further information on the calculation of Healthy Life Expectancy is available <a href="http://www.scotpho.org.uk/home/Populationdynamics/hle/hle_data/hle_scotland.asp">http://www.scotpho.org.uk/home/Populationdynamics/hle/hle_data/hle_scotland.asp</a></p>
Data:	<p>Data for life expectancy are available annually.</p> <p>There have been some delays in the production of healthy life expectancy data due to some issues with data availability. These are expected to be resolved soon and data will be updated on an annual basis.</p>
Who produces the data:	<p>The Government Actuary's Department produces annual life expectancy estimates. Further data on life expectancy broken down by council and NHS Board areas are produced by the General Register Office for Scotland (<a href="http://www.gro-scotland.gov.uk/statistics/publications-and-data/life-expectancy/life-expectancy-at-scottish-administrative-area-and-special-area-level/index.html">http://www.gro-scotland.gov.uk/statistics/publications-and-data/life-expectancy/life-expectancy-at-scottish-administrative-area-and-special-area-level/index.html</a>)</p> <p>Healthy life expectancy estimates are produced by the Information Services Division of the NHS.</p>
Timeliness of the data:	Yearly.
Quality control:	Life expectancy at birth figures are National Statistics.
Other information:	<p>The Government Actuary's Department (GAD) has produced national life tables for the UK and constituent countries, which give statistics on expectation of life. Every ten years GAD has produced a set of graduated (smoothed) life tables for Scotland. In addition, each year ungraduated interim life tables have been produced for Scotland, based on data for a period of three consecutive calendar years. These</p>

	<p>latter are available for 1980-1982 to 2002-2004 from their website: <a href="http://www.gad.gov.uk/demography%20data/life%20tables/historic_interim_life_tables.html">http://www.gad.gov.uk/demography%20data/life%20tables/historic_interim_life_tables.html</a></p> <p>Responsibility for the production of national life expectancy figures for the UK and its constituent countries transferred from GAD to the Office for National Statistics (ONS) on 31 January 2006.</p>
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## Well Being Air Quality

<b>2. Air Quality: Number of Air Quality Management Areas (AQMAs)</b>	
Definitions:	All local authorities are required to regularly review and assess air quality in their areas against objectives for a number of air pollutants contained in the Air Quality Strategy for England, Scotland, Wales & Northern Ireland. If this work indicates that any objective will not be met by the required date, the authority concerned must declare an AQMA and produce an action plan outlining how it intends to tackle the issues identified.
Data:	Number of AQMAs currently in place. An AQMA is considered established when a local authority has issued a signed Order.
Who produces the data:	Local authorities. An overview of all current AQMAs is available on the UK Air Quality Archive website ( <a href="http://www.airquality.co.uk">www.airquality.co.uk</a> )
Timeliness of the data:	AQMAs are not declared as part of a regular cycle, but on an <i>ad hoc</i> basis as the requirement is identified through the review and assessment process. Local authorities should have AQMAs in place no later than 12 to 18 months after such a requirement is identified.
Quality control:	All review and assessment work undertaken by local authorities is independently assessed by consultants using a standard appraisal system. In addition, all monitoring and modelling data produced as part of the process are subject to detailed quality control checks.
Other information:	It is intended to replace this indicator with one based on air quality monitoring data from the UK network of monitoring stations operated by the Government and the other UK administrations. Until recently there has been an insufficient number of these stations in Scotland for such an indicator to be statistically robust. It will therefore take some time to build up enough data for the indicator to be meaningful.

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## Well Being Economic Opportunity

<b>3. Percentage of People Aged 16-19 Who are Not in Employment, Education or Training (NEET)</b>	
Definitions:	<p>The proportion of 16-19 year olds not in education, training and employment (NEET) is calculated as those aged 16-19 who are unemployed (based on International Labour Organisation (ILO) definition) or are economically inactive (excluding those who are inactive students) divided by all those aged 16-19.</p> <p>ILO definition of unemployed includes people who are out of work and want a job. Economically inactive relates to individuals who are not in employment or seeking work.</p>
Data:	<p>The Percentage of People Aged 16-19 Who are Not in Employment, Education or Training (NEET) is calculated using the Annual Population Survey (APS) which was previously known as the Annual Scottish Labour Force Survey.</p> <p>The indicator is calculated as the number of people aged 16-19 who are not in employment and who are not classed as a student divided by the number of people aged 16-19.</p>
Who produces the data:	The Office for National Statistics (ONS) carry out and publish the Annual Population Survey (APS).
Timeliness of the data:	Data from the Annual Population Survey (APS) are published quarterly on a rolling annual basis (Jan-Dec, Apr-Mar, Jul-Jun, Oct-Sep). The data are published approximately 6 months after the end of the reference period.
Quality control:	Official statistics produced by the ONS undergo regular quality assurance reviews and are produced free from any political interference.
Other information:	<p>These data are available for some Local Authorities.</p> <p>Reducing NEET is one of the Closing the Opportunity Gap Targets (target B).</p>

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## Well Being Economic Opportunity

<b>4. Percentage of Working Age People in Employment</b>	
Definitions:	Those in employment includes those who are employees, those who are self employed, those who are unpaid family workers and those who are on government training schemes. Working age is defined as males aged 16-64 and females aged 16-59.
Data:	The working age employment rate is calculated using the Annual Population Survey (APS) which was previously known as the Annual Scottish Labour Force Survey. The indicator is calculated as the number of people of working age in employment divided by the total number of people of working age.
Who produces the data:	The Office for National Statistics (ONS) carry out and publish the Annual Population Survey (APS).
Timeliness of the data:	Data from the Annual Population Survey (APS) are published quarterly on a rolling annual basis (Jan-Dec, Apr-Mar, Jul-Jun, Oct-Sep). The data are published approximately 6 months after the end of the reference period.
Quality control:	Official statistics produced by the ONS undergo regular quality assurance reviews and are produced free from any political interference.
Other information:	These data are available at Local Authority level, by urban/rural classification and by deprived/non deprived areas.

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## Supporting Thriving Communities: Community

<b>5a. Neighbourhood Satisfaction: Percentage of adult respondents to Scottish Household Survey by their rating of their neighbourhood as a place to live.</b>	
Definitions:	Percentages responding 'very good', 'fairly good', 'fairly poor', 'very poor', and 'no opinion' to the question "Thinking about the neighbourhood you live in, how would you rate it as a place to live. "
Data:	These data come from the Scottish Household Survey, which is a continuous survey of 14,000 households across Scotland carried out by face-to-face interviews.
Who produces the data:	Ipsos-MORI and TNS were commissioned to carry out the survey by the Scottish Executive. From 2007 this contract has been held by MORI, TNS and ScotCen.
Timeliness of the data:	Statistics on neighbourhood satisfaction are published annually in the SHS Annual Report, which is usually released in August the following year. Information on proportions of respondents by neighbourhood satisfaction is also published in the high level summary of statistics in the statistics section of the Scottish Government website.
Quality control:	The SHS is National Statistics-compliant
Other information:	This indicator forms part of Target J in the indicators used to monitor progress in Closing the Opportunity Gap. <a href="http://www.scotland.gov.uk/Topics/Statistics/16002/PublicationAnnual">http://www.scotland.gov.uk/Topics/Statistics/16002/PublicationAnnual</a>

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## Supporting Thriving Communities: Community

<b>5b. Volunteering: Proportion of people over 16 who have given up time on an unpaid basis for an organisation.</b>	
Definitions:	Formal “volunteering” is the act of devoting time on an unpaid basis for an organisation. Any adult (over 16) who has given up time in this way over the preceding 12 months is included as a volunteer. “Informal volunteering” for friends and family is not included
Data:	These data come from the Scottish Household Survey, which is a continuous survey of 14,000 households across Scotland carried out by face-to-face interviews. This question is asked (from June 2005) of half of the sample
Who produces the data:	Ipsos-MORI and TNS were commissioned to carry out the survey by the Scottish Executive. From 2007 this contract has been held by MORI, TNS and ScotCen.
Timeliness of the data:	Volunteering statistics are published annually in the SHS Annual Report, which is usually released in August the following year
Quality control:	The SHS is National Statistics-compliant
Other information:	<p>The 2005 indicator was derived from a different methodology, so is not directly comparable with previous years. The methodology changed again in 2006, the original 2004 methodology was used, plus an additional prompt about organisations that the interviewee may have helped.</p> <p>Further statistics relating to volunteering, and breakdowns of this indicator by gender, area, employment status and urban/rural classification are available in the SHS Annual Report available in <a href="http://www.scotland.gov.uk/Topics/Statistics/16002/PublicationAnnual">http://www.scotland.gov.uk/Topics/Statistics/16002/PublicationAnnual</a>.</p>

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## Supporting Thriving Communities: Crime

<b>6. Crime: recorded crimes for (a) vehicles (b) domestic housebreaking (c) violence (d) anti-social behaviour.</b>	
Definitions:	Police forces are under a statutory requirement to supply Scottish Ministers with information about the number of crimes recorded. Over 300 crime codes are used, the indicator shows those thought to be most relevant to the general public. Included in recorded crimes for: (a) vehicles – theft of and from motor vehicles (includes attempted theft) (b) domestic housebreaking – theft by housebreaking from a domestic property ie dwelling (includes attempted housebreaking) (c) violence – brings together main crimes of violence, including sexual crimes of violence (d) anti-social behaviour – relevant crime statistics eg breach of the peace, vandalism.
Data:	Crimes recorded by the police
Who produces the data:	Supplied to Justice Analytical Services by the 8 Scottish police forces.
Timeliness of the data:	Data are published on a financial year basis, currently in September of that year.
Quality control:	National Statistics status.
Other information:	The information is currently available at a local authority level

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## Supporting Thriving Communities: Households

<b>7a. Child Poverty Measure proportion of children living in low income households (as developed by the Department for Work and Pensions)</b>	
Definitions:	<p>The New Child Poverty measure consists of three tiers:</p> <p>Tier 1 – <b>Absolute low income</b>: number and proportion of children in households whose equivalised income before housing costs is below 60% of inflation adjusted median income in 1998/99. This is a measure of whether the poorest families are seeing their incomes rise in real terms.</p> <p>Tier 2 – <b>Relative low income</b>: number and proportion of children in households whose equivalised income before housing costs is below 60% of median income in the same year. This is a measure of whether the poorest families are keeping pace with the growth of the incomes in the economy as a whole.</p> <p>Tier 3 – <b>Material deprivation and low income combined</b>: Number and proportion of children that are both materially deprived and are in households whose equivalised income before housing costs is less than 70% of the median in the current year. This is to provide a wider measure of children's living standards.</p>
Data:	The data for the new child poverty measure is collected from the DWP run Family Resources Survey.
Who produces the data:	The Department for Work and Pensions publish the data annually, the Scottish Government publish the Scottish estimates annually.
Timeliness of the data:	The data are published about 7 months after the last surveys have been in the field for the survey year.
Quality control:	Data collection is by household interview. Data are quality checked by DWP.
Other information:	<p>The new measure forms the basis of a joint DWP/HM Treasury child poverty target of halving child poverty by 2010 and eradicating child poverty by 2020.</p> <p>The first 2 tiers were published in March 2006. The third tier has been published by DWP/HM Treasury.</p>

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## Supporting Thriving Communities: Households

<b>7b. Number of households assessed as homeless by local authorities</b>	
Definitions:	Scottish local authorities have a statutory duty to provide a minimum of temporary accommodation, advice and assistance to all households they assess as homeless. Homelessness in this context is as defined by the Housing (Scotland) Act 1987, as amended by the Housing (Scotland) Act 2001.
Data:	Information on the operation of the homeless persons legislation in Scotland is collected electronically from local authorities, via completion of the HL1 form. The data collection system introduced in December 2001 allows analysis by individual households and the identification of repeat applications/assessments. The HL1 has recently been revised to reflect legislative change with the new version scheduled to be operation from Spring 2007. An annual statistical bulletin containing data relating to the previous financial year is published each Autumn.
Who produces the data:	Scottish Government publish an annual bulletin relating to the previous financial year each Autumn - in the interim a 6 monthly release is published each Spring. All data reflected in these publications is received directly from local authorities.
Timeliness of the data:	Scottish Government publishes data within 6 months of period to which it relates.
Quality control:	National Statistics status.
Other information:	

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## Natural Heritage and Resources: Waste

<b>8. Waste: Municipal waste a) arisings and b) percentage recycled or composted.</b>	
Definitions:	<p>“Municipal waste” is defined as waste from households and commercial premises, recycling centres and recycling points, street and beach cleansing and recovery of fly-tipped waste (whether collected directly by the authority or by others on behalf of the authority). Abandoned vehicles and industrial waste are not relevant for this target unless collected as part of a mixed waste collection.</p> <p>Recycling (including organic waste which is composted) is defined as in the Producer Responsibility Obligations (Packaging Waste) Regulations 1997. The definition is that ‘recycling means the reprocessing in a production process of the waste materials for the original purpose or for other purposes including organic recycling but excluding energy recovery’.</p>
Data:	Local authorities (LAs) provide estimates of waste arisings based on the amounts of waste sent to waste reprocessors, amounts landfilled and amounts incinerated. The reprocessors supply details to local authorities on amounts recycled and composted. Since April 2006 LAs have entered data quarterly into the Waste Data Flow (WDF) system which is operated in Scotland by SEPA.
Who produces the data:	SEPA publishes results quarterly and these are available at: <a href="http://www.sepa.org.uk/waste/waste_data/waste_data_reports/landfill_allowance_scheme.aspx">http://www.sepa.org.uk/waste/waste_data/waste_data_reports/landfill_allowance_scheme.aspx</a>
Timeliness of the data:	SEPA publishes data within approximately six months of the end of each quarter.
Quality control:	SEPA check local authority returns entered onto WDF for consistency.
Other information:	<p>The target for municipal waste arisings is to stop growth by 2010.</p> <p>The target for recycling/composting is to reach 30% in financial year 2007/08. Data are available at local authority level. In some cases, historic data may be corrected by local authorities, for example when returns from waste reprocessors for a previous quarter are received. Since April 2004 and prior to April 2006 local authorities provided similar information to SEPA using the Landfill Allowance Scheme Quarterly Monitoring Return form.</p>

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## Natural Heritage and Resources: Biodiversity

<b>9. Biodiversity: Composite indicator of bird populations</b>	
Definitions:	The number of terrestrial breeding birds, non-breeding waterbirds and breeding seabirds. The indices give equal weighting to each species.
Data:	<p>Terrestrial Breeding Birds – The principle data source is the breeding bird survey (BBS). Other data has been obtained utilising single species surveys.</p> <p>Waterbirds – The principle data source is the Wetlands Bird Survey (WeBS) with additional data obtained from Non-Estuarine Surveys which have been periodically undertaken.</p> <p>Seabirds – The principle data source is the Seabird Monitoring Programme. Data is obtained from a variety of sites annually as well as national survey covering the entire coastline approximately every 15 years.</p>
Who produces the data:	<p>British Trust for Ornithology (BTO) publishes BBS and WeBS data annually. JNCC publish Seabird Monitoring Programme results annually.</p> <p>BBS is jointly run by BTO, Royal Society for the Protection of Birds (RSPB) and the Joint Nature Conservation Committee (JNCC). WeBS is jointly run by the BTO, The Wildfowl and Wetlands Trust, RSPB and JNCC. The lead partners of the SMP are JNCC, RSPB and Shetland Oil Terminal Environmental Advisory Group.</p>
Timeliness of the data:	The data used for the reporting of this indicator will be updated annually for terrestrial breeding birds and waterbirds and every three years for seabirds.
Quality control:	JNCC and BTO undertake rigorous checks of the data during analysis. Further quality assurance is undertaken through the SNH Quality Assurance Process.
Other information:	Further information on the indicator development can be obtained from the SNH Environmental Audit Unit.

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## Natural Heritage and Resources: Marine

<b>10. Marine:</b> Key commercial fish stocks at full reproductive capacity and harvested sustainably	
Definitions:	<p><b>This indicator has been revised; originally the indicator showed Proportion of fish stocks which are at full reproductive capacity. (see below for details)</b></p> <p>This indicator provides a measure of the success of Scotland in establishing EU-wide catch limits at levels which ensure the sustainability and profitability of the 13 key Scottish commercial fisheries.</p> <p>The indicator monitors the forecasted stock condition based on ICES and/or STECF advice and commits the Scottish Government to use its best endeavours to attain pan-European agreement to moderate fishing levels on key Scottish commercial stocks.</p> <p><b>Key Scottish commercial fish stocks :</b> North Sea Cod, North Sea Haddock, North Sea Nephrops, North Sea Herring, West of Scotland Cod, West of Scotland Haddock, Rockall Haddock, West of Scotland Nephrops, West of Scotland Herring, Western Channel Mackerel, Atlanto-Scandic Herring, North Sea Monkfish.</p> <p><b>Stocks at full reproductive capacity and harvested sustainably:</b> advice from ICES / STECF indicates for each fish quota stock a TAC limit which, if adhered to, would ensure optimal numbers of fish able to breed and which would allow harvesting at a rate that optimises the economic benefits to the Scottish industry.</p> <p><b>Total Allowable Catch ( TAC):</b> Limit of annual EU catch allowed for species caught in particular sea areas (quota stock) set each year by the EU Council of Ministers, based on scientific advice from ICES, though not necessarily following the recommended limits.</p> <p><b>ICES:</b> International Convention on Exploration of the Sea.</p> <p><b>STECF:</b> Scientific, Technical and Economic Committee on Fisheries</p>
Data:	<p>The indicator is based on a simple count of value of catch landed reported by fishermen and Buyers and Sellers, as required by EU legislation. The indicator is the value of catch landed by Scottish fishing vessels of key Scottish stocks where the TAC limit is consistent with the ICES guidance, expressed as a percentage of the value of all the key Scottish stocks landed by Scottish vessels.</p> <p>Indicator = value of catch landed by Scottish fishing vessels of key Scottish stocks where the TAC limit is consistent with the ICES guidance/total value of all the key Scottish stocks landed by Scottish vessels multiplied by 100, calculated on a three-year moving average.</p>
Who produces the data:	<p>Advice from ICES / STECF indicates a best practice guideline figure for TAC in tonnes for each quota species. This information is quantitative and based on best international scientific knowledge but is not a National Statistic. The data is provided by ICES / STECF.</p>

	<p>The actual TAC set by the Council of Ministers in tonnes is also quantitative but is not a National Statistic. These data are provided by the EU.</p> <p>The value of catch of Scottish vessels by quota species is obtained from Scottish Sea Fisheries statistics - these are National Statistics provided by Marine Directorate of the Scottish Government.</p>
Quality control:	
Other information:	<p>It should be noted that stock prices can vary from year to year affecting profitability. Fuel cost increases can also impinge significantly on annual profits. Other external trends, such as climate change, can affect fish stock levels.</p> <p><b>Important points to note:</b></p> <ul style="list-style-type: none"> <li>• Stocks have been counted as if the TAC was not set within the scientific advice if there was no advice for them that year.</li> <li>• Stocks have been counted as if the TAC was not set within the scientific advice if the advice for that year is unclear.</li> </ul>

**ORIGINAL INDICATOR****10. Marine: Fish stocks of particular interest to the Scottish fishing industry which are at full reproductive capacity and harvested sustainably**

Definitions:	<p><b>This indicator is under development</b></p> <p>As an interim indicator we have updated the sustainable development indicator last reported in 2005 “Proportion of fish stocks which are within safe biological limits”. The terminology to describe the status of fish stocks has been revised by the International Council for the Exploration of the Sea (ICES) and this now equates directly to: <b>“Proportion of fish stocks which are at full reproductive capacity”</b>. The description following relates to this interim indicator not the indicator which is under development.</p> <p>Stocks are classified as having full reproductive capacity when scientific analysis has established there are sufficient mature fish in the stock to avoid the risk of it being unable to replace itself. Where scientific analysis is incomplete or inconclusive, it is not possible to assert that a stock has full reproductive capacity. Hence whilst some of these stocks definitely have reduced reproductive capacity, others suffer from a degree of uncertainty as regards their status. Full reproductive capacity is defined by a minimum safe stock size. The stock size is measured in terms of 'spawning stock biomass' (SSB) which represents the total weight of spawning fish each year. The reference points for SSB are <math>B_{lim}</math> (a limit below which the SSB has been observed to lead to poor recruitment or below which the stock dynamics are unknown) and <math>B_{pa}</math> (a precautionary reference point sufficiently greater than <math>B_{lim}</math> to ensure that any point estimate of SSB at or above <math>B_{pa}</math> has a very high probability of being above <math>B_{lim}</math> given the precision of such estimates). A fish stock is considered to be at full reproductive capacity if the spawning stock biomass (SSB) is greater than the <math>B_{pa}</math>.</p> <p>The definitions of the reference points are given by the Advisory Committee on Fishery Management (ACFMICES ICES <a href="http://www.ices.dk">www.ices.dk</a>). This is an committee and copies of the relevant reports can be found on the website .</p>
Data:	<p>The 21 monitored fish stocks included in this indicator are: North Sea cod, west of Scotland cod, North Sea haddock, west of Scotland haddock, Rockall haddock, North Sea whiting, west of Scotland whiting, North Sea and west of Scotland saithe, northern hake, North Sea and west of Scotland anglerfish (monkfish), North Sea herring, western mackerel, North Sea mackerel, North Sea Norway pout, North Sea sandeel, blue whiting and, from ICES Sub-area VI: blue ling, tusk, roundnose grenadier, black scabbardfish and orange roughy.</p>
Who produces the data:	<p>Data on the status of fish stocks are compiled by Fisheries Research Services (FRS) from information supplied by ICES. ICES also supplies data for the international catch of fish taken from the assessed stocks. For more information see <a href="http://www.frs-scotland.gov.uk/">http://www.frs-scotland.gov.uk/</a> and <a href="http://www.ices.dk/indexnofla.asp">http://www.ices.dk/indexnofla.asp</a></p>

<p>Quality control:</p>	<p>ICES and the various national fisheries research institutes seek continuously to develop and apply quality assurance procedures where feasible. National fisheries administrations generally retain responsibility for the basic fish landings data, including the control and enforcement of national fish quotas. Where possible, national institutes seek to inform ICES of suspected misreporting or under-reporting of fish landings. ICES working groups have implemented a number of stock assessment methods that seek to account for unreliable fisheries data. ICES may inform data sources of relevant quality issues and, although the ICES Data Centre may perform some data quality control, the national data sources retain complete responsibility for data quality.</p>																		
<p>Other information:</p>	<p>Prior to 2004, ICES used the terms within or outside “safe biological limits” to describe the status of fish stocks. In 2004, the phrase “within safe biological limits” was replaced by “at full reproductive capacity” and the corresponding descriptions of being “at risk of reduced reproductive capacity” or “suffering reduced reproductive capacity” were used to replace “outside safe biological limits”. ICES has emphasised the change in language does not imply any change in judgement regarding the seriousness of the situation when a stock is outside its precautionary limits.</p>																		
<p>Original webpage</p>	<p>Of the 21 fish stocks monitored for reproductive capacity, those for which the status was known was 17 in 2005, with the number of stocks assessed varying from year to year. So it is not possible to make a reliable trend assessment. Of the stocks assessed in 2005, 41% were at full reproductive capacity.</p> <div data-bbox="300 1059 1409 1731" data-label="Figure"> <p style="text-align: center;"><b>Fish stocks at full reproductive capacity 1998-2005</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Number of stocks at full reproductive capacity</th> </tr> </thead> <tbody> <tr> <td>1998</td> <td>4</td> </tr> <tr> <td>1999</td> <td>4</td> </tr> <tr> <td>2000</td> <td>3</td> </tr> <tr> <td>2001</td> <td>3</td> </tr> <tr> <td>2002</td> <td>4</td> </tr> <tr> <td>2003</td> <td>5</td> </tr> <tr> <td>2004</td> <td>5</td> </tr> <tr> <td>2005</td> <td>7</td> </tr> </tbody> </table> </div>	Year	Number of stocks at full reproductive capacity	1998	4	1999	4	2000	3	2001	3	2002	4	2003	5	2004	5	2005	7
Year	Number of stocks at full reproductive capacity																		
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2002	4																		
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## Natural Heritage and Resources: River Quality

<b>11. River Water Quality: Kilometres of river length identified as “poor” or “seriously polluted”.</b>	
Definitions:	The Scottish Environment Protection Agency (SEPA) classifies river water quality on a composite indicator taking account of chemical and biological factors. River water is classified into excellent, good, fair, poor or seriously polluted. The composite classification is that of the “lowest” (more polluted) of the components of the index. ( <a href="http://www.sepa.org.uk/water/monitoring_and_classification.aspx">http://www.sepa.org.uk/water/monitoring_and_classification.aspx</a> )
Data:	River quality is classified by length in kilometres.
Who produces the data:	Published by SEPA on their website. ( <a href="http://www.sepa.org.uk">http://www.sepa.org.uk</a> )
Timeliness of the data:	SEPA publishes data within six months of the end of each year.
Quality control:	SEPA data collection is subject to internal quality control. Data are checked for consistency.
Other information:	Target is to achieve a reduction of 350 kilometres in the river length classified as poor or seriously polluted by the end of 2006. There are similar classification systems and targets for estuaries and coastal waters. Under the 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.

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## Scotland's Global Contribution: Climate Change

<b>12. Net greenhouse gas emissions in Scotland including Land Use, Land Use Change and Forestry (LULUCF) and emissions excluding LULUCF</b>	
Definitions:	The emissions are the subset of UK emissions reported to United Nations Framework Convention on Climate Change (UNFCCC) that are allocated to Scotland. As such they exclude unallocated emissions such as international aviation and shipping. The following greenhouse gases are included in the estimate: carbon dioxide, methane and nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Emissions are expressed as million tonnes of carbon equivalent and take account of the different global warming potential of each gas.
Data:	Annual data is published in the Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland.
Who produces the data:	Data produced under contract to the UK Government and the devolved administrations (AEA Energy and Environment currently holds the contract).
Timeliness of the data:	Data published annually in the autumn. 2004 data was published in autumn 2006 (approx 2 year time lag).
Quality control:	UK greenhouse gas inventory data is subject to strict quality control under the UNFCCC. The disaggregation of this data to Scotland represents the best available estimates of Scottish greenhouse gas emissions at the time.
Other information:	Each year the methodology is reviewed and if necessary emission estimates are revised for the whole period back to 1990. In Scotland the category LULUCF is a net sink (i.e. removals are greater than emissions); this is not the case for all countries. Changes to the format of the inventory, together with international convention, mean that it is both simpler and more appropriate to publish Net emissions including LULUCF and Emissions excluding LULUCF rather than Total emissions and Net emissions.

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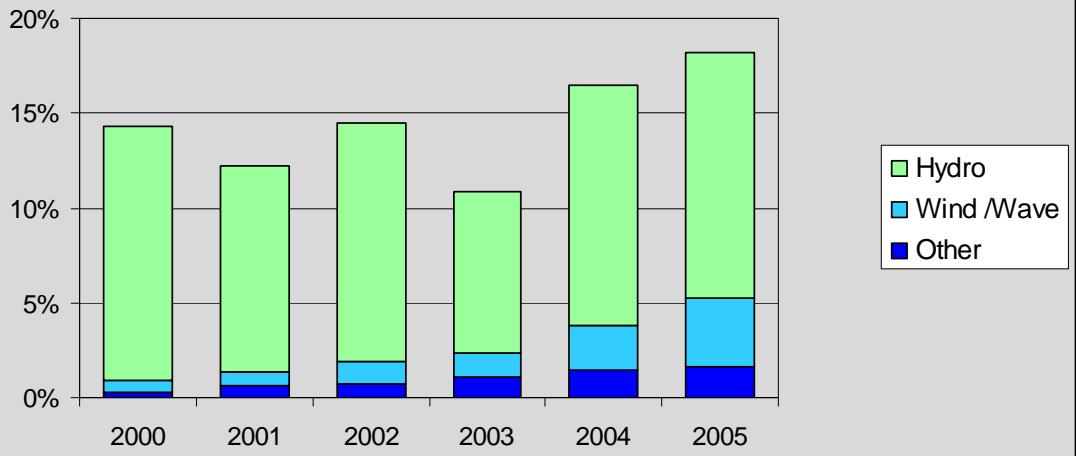
## Scotland's Global Contribution: Sustainable Energy

<b>13. Percentage of Scottish electricity consumption generated from renewable sources in Scotland.</b>	
Definitions:	<p>This indicator helps monitor the extent to which Scottish gross electricity consumption can be met sustainably using renewable energy sources located both within Scotland and its coastal waters. The indicator equates to the amount of renewables generated in Scotland as a percentage of Scottish gross electricity consumption, where consumption is the amount of electricity generated minus net exports (but including losses).</p> <p><b>Electricity generated in Scotland</b> is electricity generated in Scotland by both those producing electricity to sell to others and autogenerators, companies producing electricity mainly for their own use.</p> <p><b>Renewable sources</b> of energy include on and offshore wind, wave and tidal, hydroelectricity and solar energy. Solid renewable energy sources include wood, straw, short rotation coppice, other biomass and the biodegradable fraction of wastes. Gaseous renewables consist of landfill gas and sewage gas, as well as synthetic gas produced using the biodegradable portion of mixed wastes. Non-biodegradable wastes are not counted as a renewable source.</p> <p>Scottish <b>gross electricity consumption</b> is the amount of electricity consumed which is computed as total electricity generated less exports plus imports.</p>
Data:	Annual figures are used to assess progress. The percentage is calculated as: electricity generated from renewable sources in Scotland divided by gross electricity consumption in Scotland.
Who produces the data:	Data is collected and published by DECC. The unit of measurement is electricity generated as a percentage of the gross electricity consumption. It is a direct measure.
Timeliness of the data:	Data is published annually in the December issue of Energy Trends, it is approximately one year in arrears. Eg. 2007 data was published in December 2008.
Quality control:	The evidence source is National Statistics.
Other Information:	This is a National Indicator, set by the Scottish Government in the 2007 Spending Review. The target associated with this indicator is for the amount of electricity generated through renewable sources as a percentage of gross consumption to increase to 50% by 2020, with an interim target of 31% by 2011.

**ORIGINAL INDICATOR****13. Percentage of Scottish electricity consumption generated from renewable sources in Scotland.**

Definitions:	<p>The indicator is defined as the share of total electricity consumed in Scotland produced from renewable sources. The indicator was originally taken to be a percentage of total electricity generation, but the Forum for Renewable Energy Development in Scotland (FREDS) concluded in their Future Generation Report (published in 2005) that consumption enabled more robust forecasts of how much additional capacity would be likely to be required over time to meet the target. Renewable energy sources include hydro (natural flow), wind, wave and biofuels. It excludes pumped-hydro as it is assumed that the energy used to pump water is generated from non-renewable sources.</p> <p>All generators are included, including those that use the electricity that they generate for their own use. Scottish electricity generation is electricity generated in Scotland. The amount of electricity consumed is the total amount generated net of any transfers, transmissions losses or own use of electricity by the electricity generators.</p>
Data:	<p>Annual figures are used to assess progress. The percentage is calculated as: electricity generated from renewable sources in Scotland divided by total electricity consumed in Scotland.</p>
Who produces the data:	<p>The Department of Trade and Industry (DTI) produce the data on electricity generation and consumption from their annual inquiry which covers all firms involved in energy production.</p>
Timeliness of the data:	<p>DTI publish their 2005 electricity statistics for Scotland in January 2007. Figures for 2006 are expected to be released in January 2008.</p>
Quality control:	<p>Official statistics produced by DTI undergo regular quality assurance reviews and are produced free from any political interference.</p>
Other Information:	<p>The Scottish Executive had a target that 18% of Scottish electricity consumption to be generated from renewable sources in Scotland by 2010, rising to 40% by 2020.</p>
Original Webpage	<p>Renewable sources of energy can provide a sustainable means of generating the energy we need. Scotland has huge potential for renewable energy. The amount of electricity generated from renewable sources as a percentage of the Scottish consumption increased from 14.3% in 2000 to 18.2% in 2005. The renewables share tends to fluctuate as hydro (natural flow) is highly dependent on the level of precipitation in the catchment areas. The amount of energy generated by wind or wave power increased by 60% between 2004 and 2005.</p>

**Percentage of Scottish electricity consumption generated from renewable sources in Scotland: 2000-2005**



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## Scotland's Global Contribution: Sustainable Energy

### 14. Carbon emission indicator

The indicator will define the carbon savings achieved as a result of the measures included within the Energy Efficiency and Microgeneration Strategy. As the Strategy is currently in the development stages, the data will become available after the Strategy has been published.

## Scotland's Global Contribution: Transport

### 15. Total volume of road traffic in Scotland (vehicle-kilometres)

Definitions:	The total distance which was travelled by all types of vehicles (including pedal cycles) on public roads in Scotland in a calendar year.
Data:	<p>The distance is expressed in vehicle-kilometres (e.g. if one vehicle travelled 1,000 kilometres and another vehicle travelled 2,000 kilometres, the total for the two vehicles is 3,000 vehicle-kilometres).</p> <p>The distance is estimated using a complex methodology, of which this paragraph provides an over-simplified description. The starting-point is counts of traffic (the numbers of vehicles of various types) taken at a sample of points on the public road network in Scotland. These are used to estimate the traffic flows (numbers of vehicles per day) on individual stretches of major roads (motorways and A roads) and, on average, on minor roads of various types in various parts of the country. The numbers of vehicle-kilometres are then estimated by multiplying these traffic flows by the lengths of the relevant stretches or types of public road (e.g. a flow of 1,000 vehicles per day along a 5 kilometre stretch of road gives a total of 5,000 vehicle-kilometres per day). The results are scaled up to give the estimates for the year as a whole for the country as a whole.</p>
Who produces the data:	The Department for Transport, which produces the official traffic estimates for Great Britain as a whole, and for parts thereof.
Timeliness of the data:	The estimates are produced annually, in respect of calendar years. DfT usually publishes a few figures for Scotland in its " <i>Road Traffic Statistics</i> " bulletin in July. SE usually publishes the figures for Scotland in " <i>Main Transport Trends</i> " and, in more detail, in updated versions of " <i>Scottish Transport Statistics</i> " tables (on its web site) in August.
Quality control:	The DfT figures for Scotland (and for other parts of GB) are National Statistics. DfT carries out various checks on the "raw" data (traffic counts, etc) and on the results of the estimation process.
Other information :	1993 is the first year for which there are estimates of the total volume of traffic for Scotland as a whole (estimates for M and A roads are available for some earlier years). The total has tended to grow by 1-2% per year, the main exceptions being 2000 (the year of the fuel price protests) and 2005.

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## Learning: Learning

<b>16. Learning: Percentage of schools registering for the Eco Schools Programme and percentage of schools by sector (primary, secondary and special) achieving 1<sup>st</sup> Green Flag status</b>	
Definitions	<p>The Eco Schools programme is a well established international programme for promoting positive action and attitudes towards the environment through an accredited award scheme. It gives young people in Scotland the opportunity to learn about sustainable development, to put it into practice in their local environment and to share their ideas and experiences with their community and other young people around the world. The Eco Schools programme is managed by Keep Scotland Beautiful. The Eco Schools team provide support and advice to schools and local authority education officers.</p> <p>The number/percentage of Primary and Secondary schools within a Local Authority participating in the Eco School's award or similar accredited environmental award has been included as a performance measure under the National Priorities in Education- Priority 4 Values and Citizenship. The programme has an important contribution to make to citizenship because involvement in the programme empowers pupils to make decisions and to take action. It also promotes active citizenship through a pupil centred approach.</p>
Data:	Data on registrations and Green Flag status is collected on an ongoing basis by the Information Officer Eco Schools Scotland at Keep Scotland Beautiful (KSB)
Who produces the data:	This data is collected by the Eco Schools Information Officer and is available from Eco Schools Scotland
Timeliness of the data:	Data updated regularly as information on registrations and awards comes into Eco Schools Scotland
Quality Control:	Data is updated as new schools register for the programme and when a new Green Flag is awarded. This is managed by the Eco Schools Scotland Team
Other Information:	Target to reach 80% of schools in Scotland registered on the programme by 2008.

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## Context: Economy

<b>17. Economy: Economic activity: GDP / GDP per head</b>	
Definitions:	<p>Gross Domestic Product (GDP) is a measure of economic activity within an economy: the total value of goods and services produced in an economy over a period of time.</p> <p>The GDP data used in the derivation of the indicator is a constant price (inflation adjusted) measure of GDP at basic prices, also known as Gross Value Added. In accordance with the recommendations of the 1993 System of National Accounts (OECD), these data are annually chain-linked to reflect the changing contribution of industries to the Scottish economy and their influence upon the overall measure of GDP.</p> <p>The population statistics used are mid-year estimates of the total resident population of Scotland.</p>
Data:	<p>The GDP data are compiled and published in Index form; the population estimates are presented as the number of persons resident in Scotland.</p>
Who produces the data:	<p>The Scottish Government publish a quarterly index of GDP for Scotland (<a href="http://www.scotland.gov.uk/gdp">http://www.scotland.gov.uk/gdp</a>)</p> <p>Mid-year population estimates are produced by the General Register Office for Scotland (<a href="http://www.gro-scotland.gov.uk">http://www.gro-scotland.gov.uk</a>)</p>
Timeliness of the data:	<p>The GDP data are released around 17 weeks after the quarter to which the data relate.</p> <p>The population estimates are available with a lag of around one year although population projections are published for the current year.</p>
Quality control:	<p>Both the Quarterly GDP data and the mid-year population estimates are National Statistics publications.</p>
Other information :	<p>The Quarterly GDP data are available at the Scotland level only.</p> <p>Growing the economy is the Scottish Government's top priority although no specific targets have been set for GDP growth.</p>

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## Context: Demography

<b>18. Age Profile of the Population</b>	
Definitions:	The estimated population of an area includes all those usually resident there whatever their nationality. Students are treated as being resident at their term time address. Members of the UK and non-UK armed forces stationed in Scotland are included; UK forces stationed outside Scotland are excluded. Short-term international migrants are excluded. An international migrant is defined as someone who intends to change their country of residence for 12 months or more. Population figures relate to 30 June of the year shown and ages relate to age last birthday.
Data:	The size and structure of Scotland's population is measured using the base of the latest Census (2001) and information on births and deaths collected by GROS and estimates of migration based on the best proxy information available from health service sources and survey data to produce annual intercensal population estimates.
Who produces the data:	Published annually by GROS on their website ( <a href="http://www.gro-scotland.gov.uk/statistics/library/index.html">http://www.gro-scotland.gov.uk/statistics/library/index.html</a> )
Timeliness of the data:	GROS publishes the mid-year population estimates 9 months after the reference date e.g. the latest population estimate for 30 June 2005 was published on 27 April 2006. The 30 June 2006 estimate will be published in April 2007. Population projections are usually published every two years, the latest are the 2004-based set. Scotland level projections were published in October 2005 by The Government Actuary's Department and Council and NHS Board level projections were published in December 2005 by GROS.
Quality control:	Both the estimates and the projections are National Statistics.
Other information:	Data are available at local authority level and NHS Board level. Small area population estimates are available for datazones and also for settlements and localities, however, these small area statistics are not classed as National Statistics. GROS are currently reviewing the method and requirements for population projections through the Population Projections Working Group (PPWG) papers and minutes of which can be found on the GROS website. ( <a href="http://www.gro-scotland.gov.uk/statistics/user-consultation-groups-seminars/population-projections-working-group-ppwg-/index.html">http://www.gro-scotland.gov.uk/statistics/user-consultation-groups-seminars/population-projections-working-group-ppwg-/index.html</a> )

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