

SDR 136/2014

21 August 2014

Sustainable Development Indicators, 2014

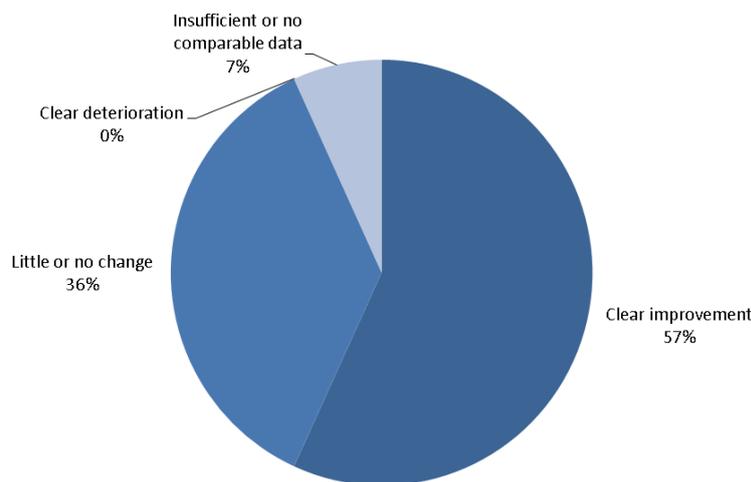
This statistical release presents an annual summary on a range of indicators looking at sustainable development in Wales and providing measures of everyday concerns including health, housing, jobs, crime, education and our environment. To accompany this release, the data for each indicator are available through our Statswales website.

The five headline indicators cover economic progress, social progress, environmental progress, progress in reducing our use of resources, and the wellbeing of Wales.

Key results

- In 2014, for the 44 sustainable development indicators, covering 29 key issues, compared with the base year of 2003:
 - 25 show clear improvement;
 - 16 show little or no change;
 - None show clear deterioration;
 - 3 have insufficient or no comparable data.
- All indicators which showed a clear improvement in 2013 have continued to show a clear improvement in 2014. In addition, 3 indicators which showed 'little or no change' in 2013 have showed a 'clear improvement' in 2014; these were Ecological impacts of air pollution (acidity), Health inequality (infant mortality) and Benefit dependency.
- There were no indicators in 2014 with the status of 'clear deterioration'.
- The short term changes in bird populations indicator changed from a 'clear deterioration' to 'little or no change' following an update of data to 2011.

Chart 1: Summary of progress across the Sustainable Development Indicators



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Llywodraeth Cymru
Welsh Government

Background

Welsh Ministers have a duty under section 79 of the Government of Wales Act 2006 to make a scheme setting out how they propose to promote sustainable development in the exercise of their functions (i.e. in everything that they do).

The Welsh Government's Sustainable Development Scheme 'One Wales: One Planet', defines sustainable development as enhancing the economic, social and environmental wellbeing of people and communities, achieving a better quality of life for our own and future generations. Sustainable development is the process by which the Welsh Government intends to reach the goal of sustainability. Currently, the Sustainable Development Indicators for Wales are used to support of the delivery of the Welsh Government's statutory Sustainable Development Scheme '[One Wales: One Planet](#)' (2009).

The Scheme reiterates that sustainable development is the central organising principle of the Welsh Government. Policies and activities to promote sustainable development are set out under five headings that mirror the headline indicators of sustainable development:

- sustainable resource use;
- sustaining the environment;
- a sustainable economy;
- a sustainable society;
- the wellbeing of Wales.

This publication therefore reports on these indicators using the headings set out in the Welsh Government's Sustainable Development Scheme.

This publication

From the 4th April 2014 the Welsh Government conducted a 12 week consultation on proposed changes to the statistical output method for Sustainable Development Indicators for Wales. The [Consultation - Summary of Responses](#) was published on 8th August 2014 with the majority of responses received, agreeing with our proposals. We therefore have actioned the two proposals in this Statistical Release.

We have included analysis of the five headline indicators and links to the corresponding Statswales tables for each of the Sustainable Development Indicators. Within the presentation of the data on Statswales, users will be able to access the range of sustainable development indicators that are relevant to consider together. We have ceased the publication of the 'In Your Pocket' booklet.

In this Statistical release we have added additional columns in the Table of Indicators including links to Statswales tables for each indicator and informing the users of the National Statistics status and source of the data.

Headline indicators

The indicators consist of a small number of headline indicators of sustainable development, and the full suite of indicators that measure more specific issues related to sustainable development. The headline indicators, when considered collectively, are intended to give a high level view of progress towards sustainable development. A short statistical commentary highlighting and explaining the trends and assessment for the headline indicators have been presented in this release.

Related Indicators publications

The Office for National Statistics published the latest [Sustainable Development Indicators](#) in July 2014. The responsibility for updating, maintaining and developing the SDIs has transferred from Department for Environment, Food and Rural Affairs (DEFRA) to the Office for National Statistics in 2014.

Traffic lights

Not everyone is able to look at a chart and immediately understand the message, so it is useful to be able to summarise what the indicator measures tell us. In order to be able to summarise what the indicators tell us, a set of 'traffic lights' is used:

Clear improvement



Little or no change



Clear deterioration



Insufficient or no comparable data



The traffic light for Wales for each measure is determined by comparing the measure in the latest year with its position in an earlier base year. Between these two years the measure may have deteriorated and then improved or vice versa. However, the traffic light only reflects the overall change in the measure from the base year to its latest position and does not reflect fluctuations during the intervening years.

For most indicator measures it will be very clear whether there has been an improvement or deterioration, and hence whether a green or red traffic light is warranted. However, where the amounts of change are small it can be difficult to judge whether they are sufficient to indicate that there has been a clear improvement or deterioration.

As a basic rule of thumb where an indicator measure has changed by less than 3 per cent, the traffic light has been set at amber, indicating little or no change. The choice of 3 per cent as the threshold is arbitrary but has proven to be helpful in deciding on the most appropriate traffic light. There are a few exceptions to this rule, where for example the indicator measure has been historically stable and/or almost at the level it can be expected to achieve. In such cases a smaller amount of change may be regarded as indicating an improvement or deterioration. In one or two cases the level of change may be greater than 3 per cent but the traffic light is nevertheless amber. This will apply where the limits of data collection imply that a larger percentage change is necessary for it to be regarded as showing a clear change.

The status "insufficient or no comparable data" is awarded when:

- There is no data available for an indicator, or the indicator is under development;
- There is only one year of data available for an indicator;
- There is data for more than one year, but the data is not comparable for each year.

Base year

The base year for Wales used since 2010 and in this publication is 2003 or the nearest year for which data is available. Prior to 2010 a base year of 2000 was used for the traffic lights calculation, therefore the traffic lights assessments for Wales are not comparable to versions before 2009.

A National Statistics publication

National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference. Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

The Table of Indicators in the next section as well as Statswales specifies whether the data for each of the indicators are National Statistics or outside the scope of National Statistics where data is available.

Table of indicators

The summary table of indicators shown on the following three pages indicates progress since a reference year for Wales. Notes and explanations for the table are provided in the 'Notes' and 'Key Quality Information' section towards the back of this release. The text in the 'Progress since reference year' column indicates the reference year. N/A indicates that there is no comparison available.

The column 'Last Update' refers to the reference date for the latest data. The indicators use the latest data that was available at the time of compiling this publication. New data for some indicators may have been published since the indicators were compiled. Where this is the case, the new data which has not been included in this update will be included in future updates.

		Progress since reference year	Last Update	StatsWales link	National Statistics Status and Data Source
Headline Indicators					
1. Economic output	GVA	 2003	2012	Gross Value Added (GVA) and GVA per head	These data are National Statistics. Source: Regional Accounts, Office for National Statistics
	GVA per head	 2003			
2. Social justice		 2002/05	2010/13	Percentage of the population in low-income households	These data are National Statistics. Source: Department for Work and Pensions
3. Biodiversity conservation	3a. Priority species status	 2002	2008	Status of priority habitats and species	These data are National Statistics. Source: UK Biodiversity Partnership
	3b. Priority habitat status	 2002			
4. Ecological footprint		 2003	2006	Wales' global ecological footprint	These data are outside the scope of National Statistics. Source: Stockholm Environment Institute, University of York
5. Wellbeing		 2003/04	2013	Health status, physical and mental component	The SF-36 data are National Statistics. Life satisfaction data are outside the scope of National Statistics. Source: SF-36 - Welsh Health Survey, National Survey for Wales
Sustainable Resource Use (RES)					
6. Greenhouse gas emissions		 2003	2012	Emissions of greenhouse gases	These data are outside the scope of National Statistics. Source: National Atmospheric Emissions Inventory
7. Waste	7a. Waste arisings by sector	 2002/03	2012-13	Waste arisings by sector	Local authority municipal waste data and municipal waste data are National Statistics. Source: WasteDataFlow
	7b. Waste arisings by management methods	 n/a	2007-08	Waste arisings by management methods	

		Progress since reference year	Last Update	StatsWales link	National Statistics Status and Data Source
8. Household waste	Waste arisings	 2003/04	2012-13	Household waste and amount recycled or composted	These data are National Statistics. Source: WasteDataFlow
	Recycled or composted	 2003/04			
9. Mobility	9a. Walking and Cycling	 2002/03	2009/10	Number of trips per person per year by main mode	These data are National Statistics. Source: National Travel Survey, Department for Transport
	9a. Public transport use	 2002/03	2009/10		
	9b. Travel to work	 2003	2011	Main mode of travel to work	These data are National Statistics. Source: Labour Force Survey, Office for National Statistics
Sustaining the Environment (ENV)					
10. Bird populations	10a. Short term changes	 2003	2012	Short-term abundance of widespread breeding birds	These data are outside the scope of National Statistics. Source: BTO/JNCC/RSPB Breeding Bird Survey (BBS)
	10b. Long term changes	 n/a	1988-1991	Long-term abundance of widespread breeding birds	
11. Ecological impacts of air pollution	Acidity	 2002/04	2010-12	Area of sensitive habitats exceeding critical loads for acidification and eutrophication	These data are outside the scope of National Statistics. Source: Centre for Ecology and Hydrology
	Nutrient nitrogen	 2002/04			
12. Air quality	12a. Urban	 2007	2013	Number of days with moderate or higher pollution levels	These data are National Statistics. Source: DEFRA, RICARDO-AEA Energy and Environment
	12b. Rural	 2003			
13. River quality	Biological	 2003	2010	Chemical and biological river water quality by year	These data are National Statistics. Source: Environment Agency
	Chemical	 2003			
14. Soil quality		 n/a	2007	Carbon stock in the top 0-15cm of soil in Welsh broad habitats	These data are outside the scope of National Statistics. Source: Countryside Survey, Centre for Ecology and Hydrology
15. Sustainable water resources management		 2003/04	2012-13	Resource zones reporting target headroom deficits	These data are outside the scope of National Statistics. Source: Natural Resources Wales

		Progress since reference year	Last Update	StatsWales link	National Statistics Status and Data Source
A Sustainable Economy (ECON)					
16. Employment		 2003	2014	Percentage of people aged 16-64 in work	These data are National Statistics. Source: Labour Force Survey, Office for National Statistics
17. Resource efficiency		 2005	2007	Ratio of carbon dioxide emissions to GVA at current prices (External link)	These data are outside the scope of National Statistics. Source: High Level Indicators, Department of Energy and Climate Change
18. Electricity from renewable sources		 2003	2012	Percentage of electricity generated in Wales from renewable sources	These data are National Statistics. Source: Department of Energy and Climate Change, Energy Trends
A Sustainable Society (SOC)					
19. Health inequality	19a. Infant mortality	 2003	2013	Infant, neonatal, perinatal deaths (External link)	These data are National Statistics. Source: Office for National Statistics
	19b. Life expectancy	 2002/04	2010-12	Life expectancy	
20. Benefit dependency		 2003	2013	Out-of-work benefit claimants	These data are National Statistics. Source: Department for Work and Pensions
21. Housing		 2004	2008	Average Standard Assessment Procedure (SAP) ratings for dwellings	Data for 2004 and 2008 are classified as National Statistics. Source: Welsh House Condition Surveys and Living in Wales Survey 2004 and 2008
22. Accessibility	GP surgery, shopping centre & grocer	 2005/06	2008/10	Percentage of households where time taken to reach local facilities on foot or by public transport is 15 minutes or less	These data are National Statistics. Source: National Travel Survey, Department for Transport
	Hospital	 2005/06			
23. Crime	23a. Police recorded crime	 2003/04	2012-13	Police Recorded Crime (PRC)	The PRC data are outside the scope of National Statistics. The BCS data are National Statistics. Source: Office for National Statistics
	23b. British Crime Survey	 2004/05	2012-13	British Crime Survey (BCS) – household crimes in Wales	

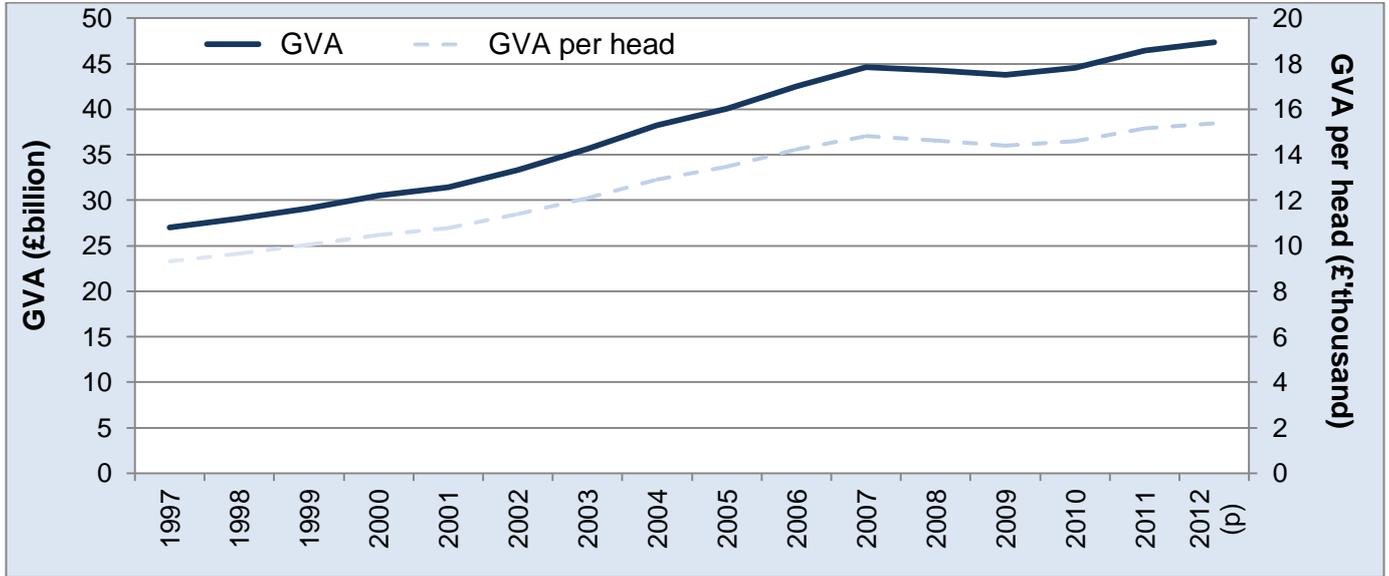
		Progress since reference year	Last Update	StatsWales link	National Statistics Status and Data Source
The Wellbeing of Wales (WEL)					
24. Education	24a. Core subject indicator	 2003	2013	Percentage of pupils at Key Stage 2 achieving the core subject indicator	These data are National Statistics. Source: National Curriculum Assessments
	24b. Level 2	 2003	2013	Percentage of adults aged 19-21 qualified to National Qualification Framework level 2	These data are National Statistics. Source: Annual Population Survey/Annual Labour Force Survey, Office for National Statistics
	24c. Level 4	 2003	2013	Highest qualification levels of working age adults	
25. Child poverty	 2002/05	2010/13	Households below average income	These data are National Statistics. Source: Department for Work and Pensions	
26. Pensioner poverty	 2002/05	2010/13	Households below average income		
27. Workless households	 2003	2013	Workless households (External link)	These data are National Statistics. Source: Labour Force Survey, Office for National Statistics	
28. Active community participation	 2003	2010-11	People volunteering on a formal or informal basis at least once a month in the last 12 months	These data are National Statistics. Source: Citizenship Survey, Communities and Local Government	
29. Welsh language	 2003	2013	Percentage of Key Stages 1, 2 and 3 assessments in Welsh first language	These data are National Statistics. Source: National Curriculum Assessments	

Detailed note of each indicator can be found in [Annex A](#).

1. Economic Output

Both GVA and GVA per head in Wales have increased continually between 1997 and 2012 (with the exception of a brief fall in 2008 and 2009) to reach their highest level in the presented time series.

Chart 1: Gross Value Added (GVA) and GVA per head, Wales 1997 to 2012 (p)



Source: Regional Accounts, Office for National Statistics

GVA  compared to reference year, 2003

GVA per head  compared to reference year, 2003

- With the exception of 2008 and 2009, both GVA and GVA per head have increased continually between 1997 and 2012.
- Wales' GVA per head as a proportion of the UK's GVA per head has fallen from 74 per cent in 1997 to 72 per cent in 2012.

Note: GVA measures the contribution to the economy of each individual producer, industry or sector in the UK. GVA is used in the estimation of Gross Domestic Product (GDP). The link between GVA and GDP can be defined as GVA (at current basic prices; available by industry only) plus taxes on products (available at whole economy level only) less subsidies on products (available at whole economy level only) equals GDP (at current market prices; available at whole economy level only). All the items in the regional accounts are measured in current prices, which mean that increases over time reflect inflation as well as real growth.

(r) The data prior to 2012 have been revised since the previous publication.

(p) Figures for 2012 are provisional.

These data are National Statistics.

2. Social Justice

There has been little change in the percentage of the population in relative low-income households both before and after housing costs since the reference year (2002/05).

Chart 2: Percentage of the population in relative low-income households, Wales, 1994/97 to 2010/13



Source: Department for Work and Pensions

Wales  compared to reference year, 2002/05

- Following a previous downward trend the percentage of the population in relative low-income households before housing costs has remained unchanged at 19 per cent in recent years.
- Following a previous downward trend, the percentage of the population in relative low-income households after housing costs has remained unchanged at 23 per cent in recent years.

Note: The data for this indicator are taken from the 'Households Below Average Income' (HBAI) statistical reports which use estimates from the Family Resources Survey. For this indicator relative low-income households are defined as households having an income below 60 per cent of median household income. The incomes used are adjusted for household size and composition. The figures are three-year moving averages so, for example, 2010/13 relates to the period 2010-11 to 2012-13.

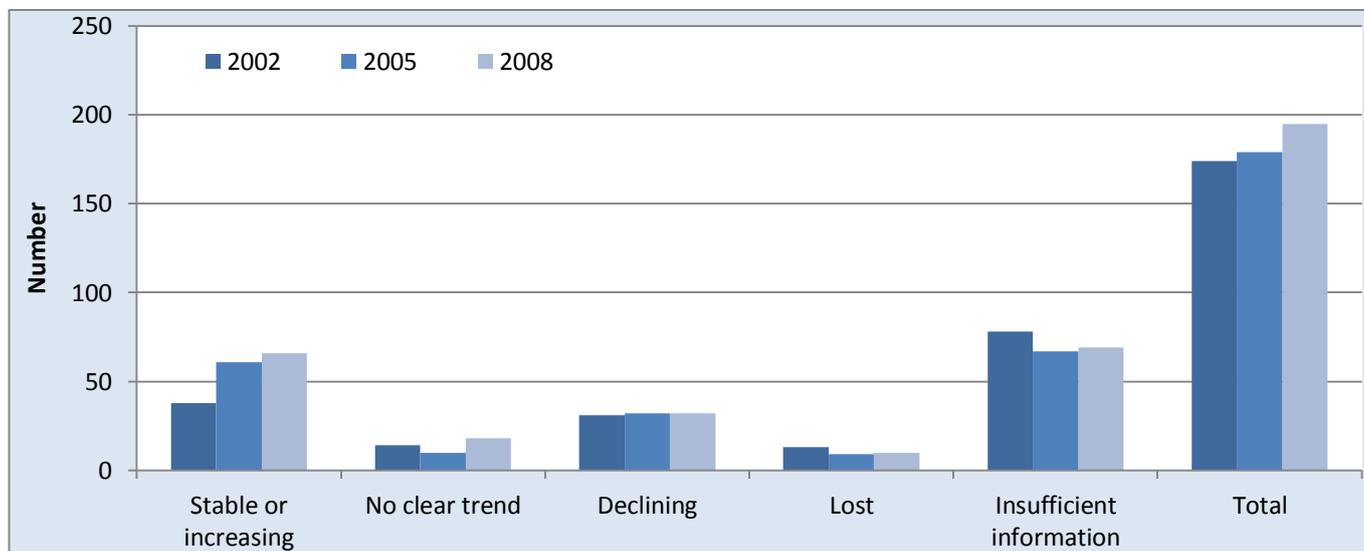
These data are National Statistics.

3a. Biodiversity Conservation

There has been no new data available for this indicator since 2008.

Of the priority species for which sufficient information was available, the number classed as 'stable or increasing' increased between 2002 and 2008.

Chart 3a: Priority species status, Wales, 2002, 2005 and 2008



Source: UK Biodiversity Partnership

Wales  compared to reference year, 2002

- The total number of priority species in Wales has increased by 21 since 2002, to 195 in 2008.
- Of the priority species for which sufficient information was available, 52 per cent were classed as stable or increasing in 2008, compared with 40 per cent in 2002.
- Of the priority species with sufficient information available, the percentage of species classed as lost or declining has decreased since 2002.

Note: UK priority species and habitats are those that have been identified as being most threatened. Biodiversity Action Plans (BAPs) have been put in place to establish the factors for their decline and the work necessary for recovery. Lost includes those recorded before or since BAP publication. The number of priority species with sufficient information has increased from 96 in 2002 to 126 in 2008.

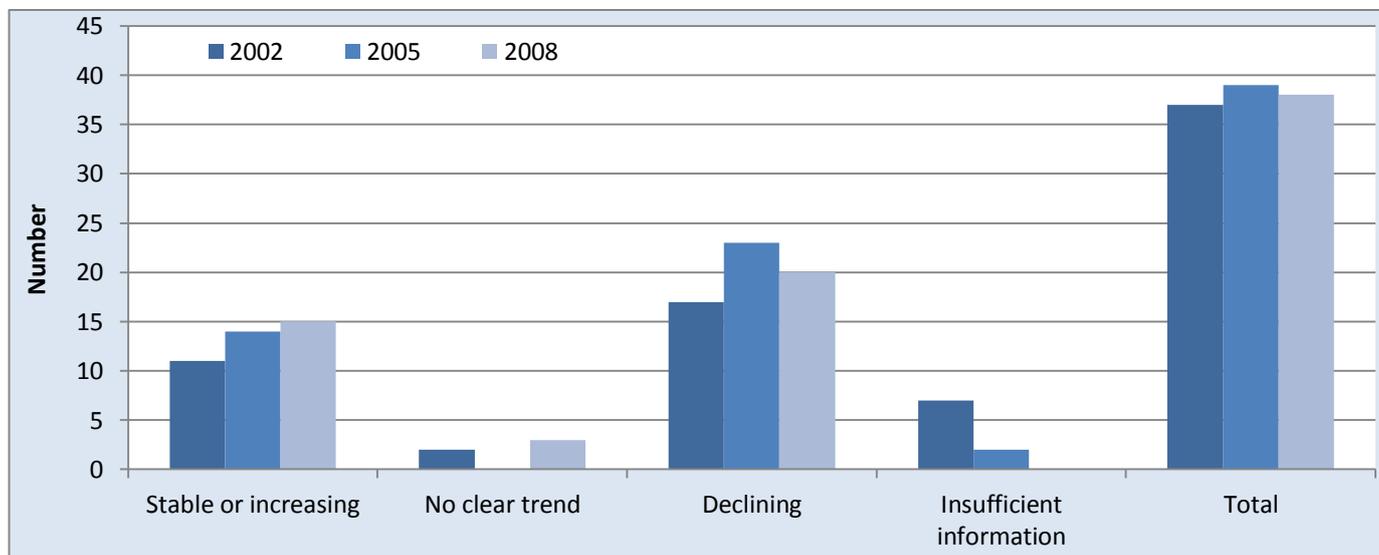
These data are National Statistics.

3b. Biodiversity Conservation

There has been no new data available for this indicator since 2008.

Of the priority habitats for which sufficient information was available, the number classed as 'stable or increasing' increased between 2002 and 2008.

Chart 3b: Priority habitat status, Wales, 2002, 2005 and 2008



Source: UK Biodiversity Partnership

Wales  compared to reference year, 2002

- The total number of priority habitats in Wales fell slightly to 38 in 2008.
- Of the priority habitats with sufficient information available, the percentage of habitats classed as stable or increasing has increased slightly to 39 per cent in 2008.
- Of the priority habitats with sufficient information available, the percentage of habitats classed as declining increased from 57 per cent in 2002 to 62 per cent in 2005. However, this has since fallen to 53 per cent in 2008.

Note: UK priority species and habitats are those that have been identified as being most threatened. Biodiversity Action Plans (BAPs) have been put in place to establish the factors for their decline and the work necessary for recovery.

The reason for the apparent increase in the number and proportion of declining habitats between 2002 and 2005 is due to more information becoming available. In 2002, there were 5 habitats that were not reported on due to insufficient information that were then reported as declining in 2005. In addition, the number of BAP habitats increased by 2 between 2002 and 2005, and both of these were recorded as declining.

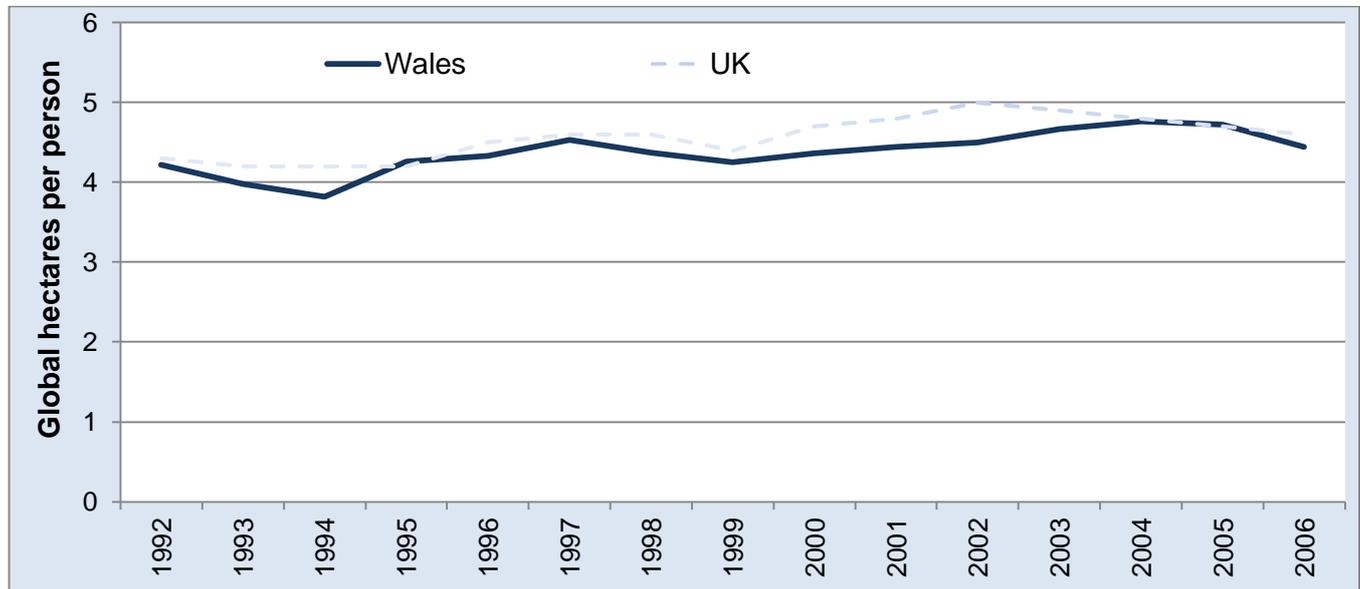
These data are National Statistics.

4. Ecological Footprint

There has been no new data available for this indicator since 2006.

The ecological footprint of Wales fell to 4.4% in 2006 compared to 4.7% in the reference year of 2003. While this was slightly lower than for the UK in 2006, it was still more than double the average earthshare, being the average amount of global resources available per person.

Chart 4: The ecological footprint of Wales, 1992 to 2006



Source: Stockholm Environment Institute, University of York

Wales  compared to reference year, 2003

- Following several years of variation, the ecological footprint of Wales increased from 4.2 global hectares per person in 1999 to 4.8 in 2004. However, it fell to 4.4 in 2006.
- The ecological footprint of Wales was slightly lower than for the UK in 2006, but was more than double the average earthshare¹.

Note: The results for Wales are based mainly on specific data for Wales apart from resource productivity and energy efficiency of producing sectors which used the UK average and imports/exports of materials where UK ratios were assumed. One global hectare is equal to one hectare of biologically productive space with world average productivity.

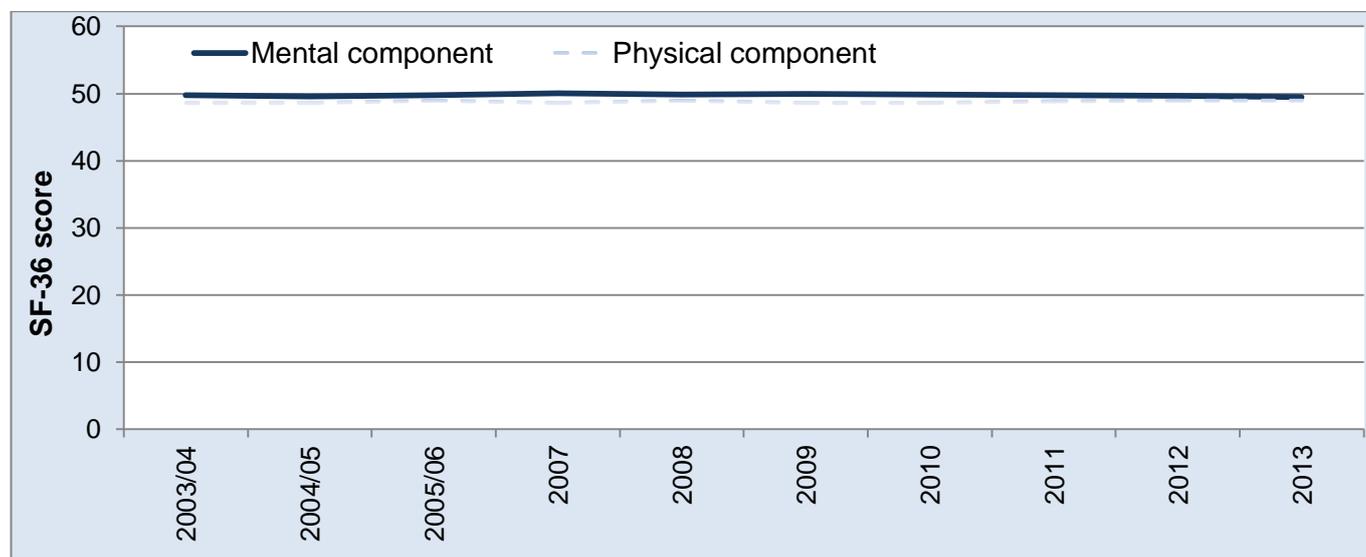
¹ Global Footprint Network estimates for 2006 show that the average 'earthshare' was 1.8 global hectares per person. The 'earthshare' is the average amount of global resources available per person.

These data are outside the scope of National Statistics.

5. Wellbeing

There has been little change in either the physical component or mental component scores of the SF-36 (a standard set of 36 health questions which ask respondents about their own perception of their physical and mental health) since the baseline year (2003/04).

Chart 5: Health status (SF-36), all persons aged 16 and over, Wales, 2003/04 to 2013



Source: SF-36 - Welsh Health Survey, National Survey for Wales

Wales  compared to reference year, 2003/04

Health Status

- There has been little change in the physical and mental component scores since 2003/04.

Note: SF-36 are a standard set of 36 health status questions. They ask respondents about their own perception of their physical and mental health and the impact it has on their daily lives. Responses can be combined to produce two summary measures of physical and mental health - the Physical Component Summary and Mental Component Summary. Higher scores indicate better health. All scores above or below 50 can be interpreted as above or below the general US population norm.

Overall Life Satisfaction

- In 2013-14, the National Survey for Wales found that 79 per cent of people aged 16 or over reported either medium or high satisfaction with their life nowadays, whilst 21 per cent reported low or very low satisfaction.

The life satisfaction results are based on one question included in a face-to-face interview; respondents were asked to give their satisfaction with their life nowadays on a 0-10 response scale. A response of 9 or 10 was categorised as 'high' satisfaction, 7 or 8 as 'medium' satisfaction, 5 or 6 as 'low' satisfaction and 4 or below as 'very low' satisfaction.

The SF-36 data are National Statistics.

Life satisfaction data are outside the scope of National Statistics.

Key Quality Information

1. Section 79(6) of the Government of Wales Act 2006 places a duty on Welsh Ministers to publish a report of how the proposals set out in their Sustainable Development Scheme have been implemented in the preceding financial year, and to lay a copy of the report before the Assembly. The [latest report](#), published on 23 June 2014, explains how the Welsh Ministers' [Sustainable Development Scheme](#) has been implemented between April 2013 and March 2014.
2. Sustainable development means enhancing the economic, social and environmental wellbeing of people and communities, achieving a better quality of life for our own and future generations. The Sustainable Development Indicators for Wales are used to measure progress made on key issues and priority areas outlined in the Welsh Government's statutory Sustainable Development Scheme '[One Wales: One Planet](#)' (2009).
3. From the 4th April 2014 the Welsh Government conducted a 12 week consultation on proposed changes to the statistical output method for Sustainable Development Indicators for Wales. The [Consultation - Summary of Responses](#) was published on 8th August 2014 with the majority of responses received, agreeing with our proposals. We therefore have actioned the two proposals in this Statistical Release.

We have included analysis of the five headline indicators and links to the corresponding Statswales tables for each of the Sustainable Development Indicators. Within the presentation of the data on Statswales, users will be able to access the range of sustainable development indicators that are relevant to consider together. We have ceased the publication of the 'In Your Pocket' booklet.

4. On 7th July 2014 the Welsh Government introduced the Well-being of Future Generations (Wales) Bill into the National Assembly for Wales. The Bill establishes a set of six statutory well-being goals which Welsh Ministers and specified public authorities in Wales will be expected to contribute to.

The Bill provides for a set of long-term well-being goals for Wales. These are for a prosperous; resilient; healthier; more equal Wales; with cohesive communities; and a vibrant culture and thriving Welsh language. Placing them in legislation will provide a clear definition of the Wales we want – a sustainable Wales, and help deliver the long term consistency and certainty that is needed to tackle the generational challenges we face, for example climate change, tackling poverty, and health inequalities.

The Bill will require Welsh Ministers to establish national indicators to measure progress towards the achievement of the well-being goals and report on them annually. These will build upon and replace the current set of Sustainable Development Indicators for Wales. The Bill confirms the aim of public bodies to improve the economic, social and environmental well-being of Wales in accordance with the sustainable development principle.

Further information on the Well-being of Future Generations (Wales) Bill can be found at: <http://wales.gov.uk/topics/sustainabledevelopment/future-generations-bill/?lang=en>

Data Sources and Quality

5. The statistics come from a range of sources in Wales and across the UK, which are updated at different times and intervals. The source of data for each indicator is stated in the Table of Indicators.

The quality and suitability of the data sources have been assessed by statisticians and scientists in the Welsh Government.

A National Statistics publication

6. The United Kingdom Statistics Authority has designated this output as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. This National Statistics Release presents and assesses the indicators – measures of everyday concerns including health, housing, jobs, crime, education and our environment. The majority of the statistics are produced by government and many are National Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference. Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

In this Statistical release we have added additional columns in the Table of Indicators including links to Statswales tables for each indicator and informing the users of the National Statistics status and source of the data.

7. These statistics adhere to the Welsh Government's [Statistical Quality Management Strategy](#).

Users and Uses

8. The sustainable development indicators are used to monitor progress in delivering the Welsh Government's sustainable development scheme. The Welsh Government produces an annual report on progress towards sustainable development, which includes analysis from the sustainable development indicators. The latest report, '[One Wales: One Planet, the Sustainable Development Annual Report 2013-2014](#)' was published July 2014.

The indicators are also used by Assembly Members, local authorities and other bodies from the economic, environment and social sectors, and the Wales's Commissioner for Sustainable Futures to monitor progress and hold the government to account.

9. The [Programme for Government 2011 -2016](#), which is the current Welsh government programme, outlines the Welsh Government's aim to become a "one planet nation", putting sustainable development at the heart of government. In order to help assess what progress the Welsh Government is making there are a number of Programme for Government indicators, which are based on the data and the indicators in this release, including a tracking indicator looking at 'Data from the annual progress report on the Sustainable Development Scheme, including progress against the set of sustainable development indicators'.

10. There are a variety of users of the data available in this release, including national and local government, voluntary organisations, researchers, students and individual citizens.
11. More generally the information is used for:
 - Monitoring trends;
 - Policy development;
 - Advice to Ministers; and
 - Informing debate in the National Assembly for Wales and beyond.

Methods

12. The traffic lights for Wales for each indicator is determined by comparing the measure in the latest year available with its position in an earlier base year of 2003, or the nearest year for which data is available. Between these two years the measure may have deteriorated and then improved or vice versa. However, the traffic light only reflects the overall change in the measure from the base year to its latest position and does not reflect fluctuations during the intervening years.
13. As a basic rule of thumb where an indicator measure has changed by less than three per cent, the traffic light has been set at amber, indicating little or no change. The choice of three per cent as the threshold is arbitrary but has proven to be helpful in deciding on the most appropriate traffic light. There are a few exceptions to this rule where, for example, the indicator measure has been historically stable and/or almost at the level it can be expected to achieve. In such cases a smaller amount of change may be regarded as indicating an improvement or deterioration. In one or two cases the level of change may be greater than three per cent but the traffic light is nevertheless amber. This will apply where the limits of data collection imply that a larger percentage change is necessary for it to be regarded as showing a clear change.
14. The base year for Wales used since 2010 and in this publication is 2003 or the nearest year for which data is available. Prior to 2010 a base year of 2000 was used for the traffic lights calculation, therefore the traffic lights assessments for Wales are not comparable to versions before 2009.

Symbols

15. The following symbols may have been used in this release:
 - negligible (less than half the final digit shown)
 - . not applicable
 - .. not available
 - ~ not yet available
 - * disclosive or not sufficiently robust for publication
 - p provisional
 - r revised

Comparability and Coherence

16. Some of the statistics in the Sustainable Development Indicators correspond to or are similar to some of the indicators in the Welsh Government's [State of the Environment Report](#) which was last published in 2012. For those environmental indicators that have not been updated for a couple of years both statistical outputs may show the same latest data. The status of some indicators may however differ between the two publications (for example, the ecological footprint). This is because the Sustainable Development Indicators look at more recent trends and presents progress against an agreed baseline year of 2003 (or the nearest year for which data is available). However, the State of the Environment Report looks at long term trends, in some cases, where data permits, from the 1990's.

Related Statistics for Other UK Countries

17. The Office for National Statistics published the latest Sustainable Development Indicators in July 2014:
<http://www.ons.gov.uk/ons/rel/wellbeing/sustainable-development-indicators/july-2014/sustainable-development-indicators.html>

Scottish Sustainable Development information:
www.scotland.gov.uk/Topics/SustainableDevelopment

Northern Ireland Sustainable Development information:
<http://www.ofmdfmni.gov.uk/index/equality-and-strategy/pfg-economics-statistics/sustainable-development.htm>

International Indicators

18. At an international level, the approach to the use of sustainable development indicators advocated by the United Nations is available at:
<http://sustainabledevelopment.un.org/>

Indicators for measuring the progress towards sustainable development within the European Union as a whole are available at:
<http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators>

Revisions

19. Data that is used in the Sustainable Development Indicators may be revised between publications by the producers of the statistics. Where this happens, the revised data will be updated in the following year's publication and highlighted accordingly.

We adhere to the Welsh Government's statistical revisions policy details of which are available at:
<http://wales.gov.uk/statistics-and-research/about/statement-of-compliance/revisions-errors-postponements/?lang=en>

Statswales

20. All the indicators can be found on [Statswales](#).

Further Information

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Annex A

	Indicator	Note
1	Gross Value Added (GVA) and GVA per head, Wales	<p>GVA measures the contribution to the economy of each individual producer, industry or sector in the UK. GVA is used in the estimation of Gross Domestic Product (GDP). The link between GVA and GDP can be defined as GVA (at current basic prices; available by industry only) plus taxes on products (available at whole economy level only) less subsidies on products (available at whole economy level only) equals GDP (at current market prices; available at whole economy level only). All the items in the regional accounts are measured in current prices, which mean that increases over time reflect inflation as well as real growth.</p>
2	Percentage of the population in relative low-income households, Wales	<p>The traffic light for Wales has been calculated using 'after housing costs'.</p> <p>The data for this indicator are taken from the 'Households Below Average Income' (HBAI) statistical reports which use estimates from the Family Resources Survey. For this indicator relative low-income households are defined as households having an income below 60 per cent of median household income. The incomes used are adjusted for household size and composition. The figures are three-year moving averages so, for example, 2009/12 relates to the period 2009-10 to 2011-12.</p>
3a	Priority species status	<p>UK priority species and habitats are those that have been identified as being most threatened. Biodiversity Action Plans (BAPs) have been put in place to establish the factors for their decline and the work necessary for recovery. Lost includes those recorded before or since BAP publication.</p>
3b	Priority habitat status	<p>The number of priority species with sufficient information has increased from 96 in 2002 to 126 in 2008.</p> <p>The reason for the apparent increase in the number and proportion of declining habitats between 2002 and 2005 is due to more information becoming available. In 2002, there were 5 habitats that were not reported on due to insufficient information that were then reported as declining in 2005. In addition, the number of BAP habitats increased by 2 between 2002 and 2005, and both of these were recorded as declining.</p>
4	The ecological footprint of Wales	<p>The results for Wales are based mainly on specific data for Wales apart from resource productivity and energy efficiency of producing sectors which used the UK average and imports/exports of materials where UK ratios were assumed. One global hectare is equal to one hectare of biologically productive space with world average productivity.</p>
6	Emissions of greenhouse gases, Wales	<p>The basket of greenhouse gases includes, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.</p> <p>The base year, 2003, has been calculated on emissions from 1990 for carbon, methane and nitrous oxide, and from 1995 for hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. This is not, however, comparable with the base year defined by the Kyoto Protocol.</p> <p>Emissions for all years are recalculated each year using the most recent methodology.</p>

		<p>The traffic light for Wales has been assessed using local authority municipal waste only. Data on industrial & commercial waste, and construction & demolition waste are not comparable due to changes in the survey methodology for each year.</p> <p>Local authority municipal waste data may include some commercial waste so any totals derived from these figures may include an element of double counting. Local authority municipal waste data includes household waste, but excludes abandoned vehicles.</p> <p>A change in definition of the municipal waste was introduced from April 2012. Further information can be found in the latest annual statistical bulletin. A statistical article on the change in definitions of Local Authority Municipal Waste was also published.</p> <p>Construction and demolition (C&D) waste data for 1998-99, 2002-03 and 2004-05 relates to 1999, 2003 and 2005. 2005 is not comparable to previous years due to differing survey methodology.</p> <p>The figures for industrial and commercial (I&C) waste in 1998-99 and 2002-03 are not comparable due to differing survey methodologies. 2006-07 data relates to the 2007 calendar year.</p>
7a	Waste arisings by sector, Wales	<p>Municipal waste data may include some commercial waste so any totals derived from these figures may include an element of double counting. 'Recycled' includes composting and re-use.</p> <p>A change in definition of the municipal waste was introduced from April 2012. Further information can be found in the latest annual statistical bulletin. A statistical article on the change in definitions of Local Authority Municipal Waste was also published.</p> <p>Construction and Demolition (C&D) Waste Surveys were carried out in 1999, 2003 and 2005-06. Figures from the 2005-06 survey have been grossed up to estimate arisings in 2008. Industrial and Commercial (I&C) Waste Surveys were carried out in 1998-99, 2002-03 and 2007. Between 2002-03 and 2007, 1.8 million tonnes of waste were reclassified as 'non-wastes'.</p> <p>Data for 2007-08 is not comparable to earlier years due to the use of different survey methodologies. There was greater coverage in the 2005-06 C&D Survey, resulting in a large increase in recycling and arisings. Transfer Station estimates for 2007-08 are included and are based on outputs from EA permitted transfer stations in 2008.</p>
8	Kilograms of household waste produced and amount recycled or composted per person per year, Wales	<p>From 1996-97 to 2003-04, data on municipal waste was collected through Municipal Waste Management Surveys. These surveys were sent to all local authorities in England and Wales. Between 2001-02 and 2003-04 separate surveys were carried out for England and Wales. From 2004-05 the surveys have been replaced by data compiled using WasteDataFlow. WasteDataFlow is the web based system managed by the Environment Agency which provides reporting on municipal waste data by UK local authorities to government.</p>

9a	Number of trips per person per year by main mode, Wales	Changes in sample size and methodology were made in 2002. Short walks are believed to have been under-recorded in 2002 and 2003 compared with earlier years. Data for calendar years has been grouped together to provide a robust sample, for example 2009/10 includes data for the calendar years 2009 and 2010.
9b	Percentage of people travelling to work by main modes, Wales	The 'other' category includes motorcycles, bus, coach, private bus or taxi, railway train, underground train or light railway. This indicator uses data from the Labour Force Survey for the autumn quarter of each year (October-December).
10a	Short-term changes in abundance of widespread breeding birds between 1994 and 2011, by major habitat group in Wales	The less abundant species (including some key birds of farmed habitats) could not be included because of statistical considerations. Therefore these data are not representative of all birds in Wales. Also, at the start of the BBS in 1994, populations of many farmland and some woodland bird species had already shown steep declines in abundance at the UK-level and Wales-level over the previous 25 years. Hence, short-term trends should always be interpreted with reference to this historic context. Values less than 100 indicate a decline in abundance since 1994. No data are available for 2001 due to foot and mouth disease. As a result Index values for 2001 were interpolated from data for 2000 and 2002. Data for all years have been revised since the previous publication as statistical models are used to re-fit all the data each year. In addition, one new species met criteria for inclusion in 2011 (the woodland living redpoll) and is included retrospectively from 1994. This increases sample size by one, and has a small effect on both the woodland and all species index values.
10b	Long-term changes in the ranges of widespread breeding birds between 1968-1972 and 1988-1991, by major habitat group, Wales	All groups in Wales are assessed as having little or no change. The results relate to 124 different species, grouped into farmed habitats, woodland and urban following the 1988-1991 Breeding Bird Atlas. Other habitats (coastal, wetland and not classified) are also shown but as a single group. Range is stable if less than or equal to 5 per cent change in the number of 10km squares occupied.
11	Percentage of sensitive habitat area exceeding critical loads for acidification and eutrophication, Wales,	Critical loads are thresholds above which the deposition of pollutants causing acidification and eutrophication (e.g. excessive freshwater algae growth due to nitrogen) causes significant harm to the environment.
12a	Days when air pollution was moderate or higher, urban sites, Wales	The number of days where air pollution was moderate or higher at urban sites in Wales has shown a clear improvement at three sites and there are 2 sites where it has deteriorated. Though the indicator has been given an overall status of a clear improvement the indicator has shown a large amount of fluctuation and thus the assessment should be interpreted with caution. In 2012, the criteria for what pollution levels were considered 'moderate or higher' was revised and backdated to 2010. This change in criteria results in more days where pollution is 'moderate or higher' in urban areas when compared to the previous definition and are not directly comparable. The urban sites included in this indicator meet the requirement to monitor particles

		<p>(PM₁₀), ozone and sulphur dioxide. Concentrations were analysed to determine the number of days at each site on which the pollution was moderate or higher, i.e. when concentrations for at least one pollutant exceeded the National Air Quality Standards. Swansea Roadside and Wrexham opened in 2007. Chepstow and Port Talbot Margam opened in 2008. Sites at Swansea and Cwmbran closed in 2007 and Port Talbot closed in 2008. There is no data for Wrexham in 2010 due to unmet data capture criteria.</p>
12b	Days when air pollution was moderate or higher, rural sites, Wales	<p>The number of days when air pollution was moderate or higher at rural ozone sites in Wales has been assessed as clearly improving. However, as the indicator has shown a large amount of fluctuation, the assessment should be interpreted with caution.</p> <p>In 2012, the criteria for what pollution levels were considered 'moderate or higher' was revised and backdated to 2010. This change in criteria results in less days where pollution is 'moderate or higher' in rural areas when compared to the previous definition and is not directly comparable. The rural sites included in this indicator meet the requirement to monitor particles ozone. Concentrations were analysed to determine the number of days at each site on which the pollution was moderate or higher, i.e. when concentrations for at least one pollutant exceeded the National Air Quality Standards. Some data are missing due to data capture criteria not being met.</p>
13	Percentage of total length of rivers of good chemical or biological quality, Wales	<p>For this indicator, 'good' = classes A and B of the Environment Agency's general quality assessment (GQA) scheme for assessing the quality of rivers. Chemical quality is based on three indicators of pollution: biochemical oxygen demand, dissolved oxygen and ammonia. Chemical data is presented for three-year periods, e.g. results for 2009 include results of samples in 2007, 2008 and 2009. Biological quality testing was carried out every 5 years but since 2002 one third of sites have been tested, e.g. results for 2009 include results of samples in 2007, 2008 and 2009.</p> <p>Excluding 1991, 1992 and 1993 for chemical quality; Including 1990, 1995, 2000 and 2002-2009 for biological quality.</p>
14	Carbon stock (tonnes per hectare) in the top 0-15cm of soil in Welsh broad habitats	<p>Too few samples were available for analysis of the other peat-dominated broad habitats, bog and fen, marsh and swamp.</p>
15	Percentage of resource zones reporting target headroom deficits, Wales	<p>Water companies use water resource zones to forecast and plan the supply and demand for water. To account for future uncertainties, an additional amount of water is added to forecast water demand. This "additional" amount of water is called "Target Headroom". A target headroom deficit occurs when the actual amount of available water supply is less than the sum of the forecast demand and target headroom.</p> <p>Data for Wales include water resource zones not wholly within Wales but which extend beyond the border to England. Data includes resource zones for the following water companies: Dee Valley, Severn Trent and Dwr Cymru.</p>

16	Percentage of people aged 16-64 in work, Wales	<p>This indicator uses data from the Labour Force Survey for the spring quarter of each year (March-May) and are seasonally adjusted. This differs from the Framework Indicator for the UK which uses data for the May-July quarter.</p> <p>Due to the change in the female state pension age headline labour market statistics are now based on 16-64 rather than working age (16-59/64).</p>
17	The ratio of carbon dioxide emissions to GVA at current prices, Wales	<p>The ratio of carbon dioxide to GVA uses GVA at current prices and has not been adjusted for inflation. The Nomenclature of Units for Territorial Statistics (NUTS) is a hierarchical classification of administrative areas and there are 12 NUTS3 areas in Wales.</p>
18	Percentage of electricity generated from renewable sources, Wales	<p>Renewable sources include wind, hydro, solar, landfill gas and other biofuels and wastes.</p>
19a	Infant mortality rate per 1,000 live births, Wales	<p>Figures for Wales are based on the number of deaths registered each year. Infant mortality rates can fluctuate from year to year as they are based on statistically small numbers.</p>
19b	Life expectancy at birth, Wales	<p>Life expectancy at birth for an area in a given time period is an estimate of the average number of years a new-born baby would survive if he or she experienced the particular area's age-specific mortality rates for that time period throughout his or her life. It is not therefore the number of years a baby born in the area in that time period could actually expect to live, both because the death rates of the area are likely to change in the future and because many of those born in the area will live elsewhere for at least some part of their lives.</p>
20	Percentage of people aged 16-64 claiming out of work key benefits, Wales	<p>The figures relate to people claiming at least one key benefit including Jobseeker's Allowance, Employment Support Allowance, Incapacity Benefit, Severe Disablement Allowance, Income Support and Pension credits. Due to the change in the female state pension age, headline labour market statistics are now based on 16-64 rather than working age (16-59/64).</p>
21	Average SAP ratings for dwellings in Wales,	<p>This indicator uses the 2005 SAP rating definition and is based on a scale from 1 to 100.</p>
22	Percentage of households where the time taken to reach local facilities on foot or by public transport is 15 minutes or less, Wales,	<p>The time taken to reach local facilities is based on travelling on foot or by public transport, depending on which is quickest. Data for calendar years has been grouped together to provide a robust sample, for example 2005/07 includes data for the calendar years 2005, 2006 and 2007.</p> <p>From 2009 a smaller random sample of households were asked questions on time taken to reach local facilities. Any perceived improvement in these categories could be as a result of the smaller sample size</p> <p>In 2008 households were not asked about the time taken to reach shopping centres and hospitals.</p>

23a	Police recorded serious acquisitive crime, Wales,	The National Crime Recording Standard (NCRS) was implemented from April 2002. As a result figures recorded before and after that date are not directly comparable. This is indicated by the vertical line on the chart. The NCRS aims to promote greater consistency between police forces in the recording of crime and to take a more victim-orientated approach to crime recording.
23b	British Crime Survey - household crime in Wales. This is now known as Crime Survey for England and Wales (CSEW)	The British Crime Survey (BCS) provides information about levels of crime and public attitudes to crime as well as other criminal justice issues. The BCS measures the amount of crime in England and Wales by asking people about crimes they have experienced in the last year. The BCS includes crimes which are not reported to the police, so it is an important alternative to police records. Offence categories of household crime include: bicycle theft; burglary; theft in a dwelling; other household theft; thefts of and from vehicles; and vandalism to household property and vehicles. Since 1 April 2012, Crime Survey for England and Wales (CSEW) is the new name for the British Crime Survey to better reflect its geographical coverage. While the survey did previously cover the whole of Great Britain, it ceased to include Scotland in its sample in the late 1980s.
24a	Percentage of pupils at Key Stage 2 achieving the core subject indicator, Wales	The core subject indicator represents the percentage of pupils achieving level 4 or above in English or Welsh (first language), Mathematics and Science in combination.
24b	Percentage of adults aged 19-21 qualified to National Qualification Framework level 2 threshold or above, Wales	Data for 1997 to 2000 are based on a four-quarter average of quarterly LFS data. Data for 2001 to 2003 are based on the 'boosted' annual LFS for Wales and represent the period from March each year to February the following year. As a result estimates for 2001 onwards are more reliable than for previous years and comparisons over time should be treated with caution. Figures for 2004 represent the calendar year ending in December 2004 and are from the Annual Population Survey. Qualification rates for this age group can fluctuate from year to year as they are based on statistically small numbers.
24c	Percentage of working age adults qualified to National Qualification Framework level 4 or above, Wales	Data for 1997-2000 are based on a four-quarter average of quarterly LFS data. Data for 2001 to 2003 are based on the 'boosted' annual LFS for Wales and represent the period from March each year to February the following year. As a result estimates for 2001 onwards are more reliable than for previous years and comparisons over time should be treated with caution. This is indicated by the vertical line on the chart. Figures for 2004 represent the calendar year ending in December 2004 and are from the Annual Population Survey. Working age adults for this purpose refers to males aged 18-64 and females aged 18-59.

25	Percentage of children in relative low-income households, Wales	<p>The traffic light for Wales has been assessed using 'after housing costs'</p> <p>The data for this indicator are taken from the 'Households Below Average Income' (HBAI) statistical reports which use estimates from the Family Resources Survey. For this indicator relative low-income households are defined as households having an income below 60 per cent of median household income. The incomes used are adjusted for household size and composition. The figures are three-year moving averages so, for example, 2009/12 relates to the period 2009-10 to 2011-12.</p>
26	Percentage of pensioners in relative low-income households, Wales,	<p>This indicator uses data from the Labour Force Survey household data sets for the April-June quarter for 1997 onwards. Children are defined as persons aged under 16. A workless household is defined as a household with at least one person aged 16-64 where no one aged 16 or over is in employment. These data have been revised since the previous publication.</p>
28	Percentage of people surveyed as having volunteered on a formal or informal basis at least once a month in the previous 12 months, Wales	<p>The traffic light for Wales has been assessed as amber because the changes in the percentage of people volunteering on a formal or informal basis at least once a month in the last 12 months between the latest year and the base year are not statistically significant.</p> <p>Formal volunteering consists of giving unpaid help through groups, clubs or organisations to benefit other people or the environment. Informal volunteering consists of giving unpaid help as an individual to people who are not relatives.</p>
29	Percentage of Key Stages 1, 2 and 3 assessments and Foundation Phase outcomes, Wales	<p>In 2012, Key Stage 1 was replaced with the Foundation Phase. At Key Stage 1 the statutory requirement was that pupils were assessed in Welsh as a first language and at the Foundation Phase the statutory requirement is that pupils are assessed in language, literacy and communications skills through medium of Welsh. The sustainability of Welsh depends to a substantial degree on children being able to speak it.</p>