

Assessment of Sustainable Development Indicators Priority area summaries

To support the establishment of the UK Government sustainable development strategy, *Securing the Future*, in 2005 a revised set of indicators of sustainable development was established. There is no longer a set of indicators with a specific 'headline' role. There are instead 68 indicators supporting four priority areas of sustainable consumption and production, climate change and energy, protection of our natural sources and enhancing the environment, and creating sustainable communities for a fairer world.

Many of the indicators consist of more than one component measure, and in total the 68 indicators consist of 126 separate measures. A baseline assessment of these measures was first published in *'Sustainable development indicators in your pocket 2005'* (June 2005) and updates have been released every year, with the latest being *Sustainable development indicators in your pocket 2009* (July 2009). These publications are available in printed form and on the sustainable development website¹.

Each measure is relevant to sustainable development overall and to one or more of the priority areas. However, for formal reporting for the 4 priority areas, summaries of the measures are used. These employ the results of a traffic light system² used throughout the publication where green signifies improvement; amber little or no change; and red deterioration, compared with baselines of 1990 and 2003. An assessment is always made where data allow but the assessment may not contribute to the formal summaries to avoid double counting of similar concepts and to exclude indicators that are only intended to provide context to other indicators.

Assessing progress in Sustainable Development priority areas

The formal priority area summaries are based on the number of component measures showing green, amber or red traffic lights for the indicators supporting each of the four areas. Not all indicators and not all component measures contribute to the each summary, and some indicators or components support more than one priority area. In addition some indicators are included in the Strategy for contextual purposes only – to provide context for interpreting other indicators. The traffic lights for these contextual indicators do not contribute to the formal summaries. The number of indicators and measures associated with each priority area are summarised in Table 1.

¹ www.defra.gov.uk/sustainable/government/progress/




²  improvement;  little or no change;  deterioration; since baseline years

Table 1 Number of indicator measures contributing to priority area summaries

Priority area	Supporting indicators in Strategy ⁽¹⁾		Component measures ⁽²⁾		Measures used in priority area summary ⁽⁴⁾
	All indicators	excluding contextual indicators ⁽³⁾	All measures	excluding contextual measures ⁽³⁾	
<i>Sustainable consumption and production</i>	25	20	49	41	30
<i>Climate change and energy</i>	15	14	23	23	14
<i>Protecting our natural resources</i>	15	13	29	26	24
<i>Creating sustainable communities</i>	39	34	67	60	51
<i>All</i>	68	62	126	118	99

(1) The indicators supporting each priority area, as listed in the Strategy.
(2) The individual measures that make up the indicators - an indicator may consist of several separate components.
(3) Contextual indicators / measures are not intended to be used to formally review progress but are included in the Strategy to provide background information for each priority area. They are therefore excluded from the reporting for priority areas.
(4) The individual measures that are used in the reporting for priority areas. These exclude contextual measures and also exclude duplicate measures or those measures that would otherwise result in double counting.

A spreadsheet that accompanies this note sets out all 68 indicators and the 126 component measures. For each measure, this indicates which priority areas it supports within the strategy and whether it contributes toward the formal summary assessment of that area.

Basis of compiling priority area summaries

The indicators are intended to support, review and inform policy development towards the delivery of the commitments in the Strategy. They are also intended to be communication tools to raise awareness and understanding of sustainable development.

The indicators cover a very broad range of issues and many of them consist of more than one measure. There is intentional repetition of indicators across the priority areas, and repetition of measures across the indicators.

Some indicators are covering very much the same issues, but from different perspectives. Examples would include greenhouse gas emissions, total carbon dioxide emissions, and carbon dioxide emissions from individual sectors. For the priority area summaries it would be inappropriate to count these indicators as being distinct as the carbon dioxide emissions figures feed directly into the higher level indicator of 'Greenhouse gas emissions'. So changes in the same emissions would in effect be counted several times in the summaries. In such cases where the trend in the 'higher level' measure is very strongly influenced by the more disaggregated measure, then the higher level measure is not counted.

This approach also reflects the need to ensure that progress is dependent on making progress in specific delivery areas, rather than more generalised

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measures which are helpful for summarising but do not allow specific and appropriate policy responses to be identified in order to affect the trend.

In other cases, for the purposes of communication, some indicators may have separate measures, but because the trends in these measures are very closely allied it would not be appropriate to count the measures as being distinct for the purposes of the summaries, as there would be 'double-counting'.

So for each measure and for each priority area consideration has been given as to whether the trend in the measure should be regarded as separate from others and thus reasonably included in the compilation of priority area summaries.

No distinction has been made about the importance of individual measures compared with other measures. So within the summaries each measure has been given equal weighting.





Any indicators or measures that are not included in the summaries are not being disregarded in overall monitoring of progress. All of them contribute to the review of progress in the UK Government Strategy, and many of them are related to formal policy targets and are hence reported on separately elsewhere. Their exclusion from the counting of traffic lights is just to try to avoid duplication and give an unbiased summary.

Assessments of change for individual indicators

Within 'Sustainable development indicators in your pocket 2009', and on the sustainable development website, each indicator is presented in chart form, with statistical commentary and the 'traffic light' assessments. The website also provides access to the data used and provides justifications for the indicator assessments.

Not everyone is able to look at a graph and immediately understand the messages, and it is useful to be able to summarise what the indicators tell us. So to highlight whether or not things are moving in the right or wrong direction, a set of traffic lights are used.

The 'traffic lights' are:

-  = clear improvement
-  = little or no change
-  = clear deterioration
-  = insufficient or no comparable data

based on an assessment of the latest data compared with the position for earlier years.

It is these 'traffic lights' that the priority area summaries are based.

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The data used for the indicators are mainly from published National Statistics sources from across Government. The reported figures are therefore as accurate as the original sources allow. For most indicators it will be very clear whether there has been an improvement or a 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. So as a basic rule of thumb where an indicator value 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 been helpful in deciding on the most appropriate traffic light. The Government departments or other organisations who are responsible for the data are consulted as to the appropriateness of the traffic light assessments.

There are a few exceptions to the uniform rule, where for example the indicator 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. This approach meets a National Audit Office recommendation to devise a documented and consistent way of assessing change and is regarded as a good way of adding clarity to the decision process regarding significance of changes in indicator values

For each indicator, where possible, two traffic light assessments of progress have been made by comparing the latest data with the position at two baselines:

- Since 1990 (medium-term change)
- Since 2003 (short-term change) (previously 1999)

The choice of baselines is of course also to some extent arbitrary. We could just as reasonably use 1991 and 2000 as baselines, but the assessments are after all only intended to help communicate the more detailed information shown by the indicators themselves.

However, owing to year on year variation the position in 1990 or 2003 may be unrepresentative of the trend and could unduly influence our assumptions about the degree of progress made. To reduce the impact of the precise baseline year, where possible a three-year average around the baseline year has been used. So the assessment of change since 1990 will be based on a comparison of the latest year's data with the average of data for 1989-1991, and similarly change since 2003 based on a comparison with an average of 2002-2004, if data are available.

Geographic coverage

Within the indicator set there is some variation in the geographic coverage of the indicators, from UK down to England only – this is predominantly driven by data availability. In the presentation of individual indicators the coverage is made clear.

Indicator presentation

Within the sustainable development website and ‘Sustainable development indicators in your pocket’ for each indicator for which we currently have data, one or more charts are provided that show the change in the indicator since 1990. In many cases a small chart additionally will be shown within the main chart to illustrate the longer-term change – going back as far as 1970 if data are available. The presentation of the charts has been simplified as far possible. For example on the x-axis not all years for which data are presented have been indicated.

Many indicators have several components and these may be shown as an index, which means that the value of the component for a base year, mainly 1990, is treated as representing 100 (per cent). Subsequent or preceding values of the indicator are then shown in relation to that base value - in effect as a percentage of it. This allows trends in components with different units to be more easily compared from the base year.

The traffic lights, summarising the medium and short-term change are shown beneath the charts. If trends in individual components of an indicator are moving in the same direction then a single pair of assessments may be presented, rather than presenting multiple traffic lights. This is for convenience only, and the components are being assessed separately. Should the directions diverge then separate traffic lights will be reported.

A short statistical commentary on the indicator is then provided to highlight and explain the trends.

Most of the data used to compile the indicators come from Government sources and are National Statistics. The assessments of progress have been undertaken by statisticians within the Department for Environment, Food and Rural Affairs (Defra), in collaboration with statisticians and other colleagues within other Government departments and within the Devolved Administrations.

Further information may be obtained by contacting the Environment Statistics Service in Defra (email: sdindicators@defra.gsi.gov.uk).