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# **Annex I - Sustainable Development Indicators 2012**

**July 2012**

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## Table 1 - Headline Indicators

<b>Economy</b>	<b>Society</b>	<b>Environment</b>
<b>Economic prosperity</b>	<b>Healthy life expectancy</b>	<b>Greenhouse gas emissions</b>
<b>Long term unemployment</b>	<b>Social Capital</b>	<b>Natural resource use</b>
<b>Poverty</b>	<b>Social mobility in adulthood</b>	<b>Wildlife &amp; biodiversity</b>
<b>Knowledge &amp; skills</b>	<b>Housing provision</b>	<b>Water availability</b>

## Table 2 - Supplementary Indicators

Economy	Society	Environment
Population demographics – Total population	Avoidable mortality	UK CO <sub>2</sub> emissions by sector
Population Demographics - Households	Obesity	Energy consumed in the UK from renewable sources
Debt	Lifestyles	Housing energy efficiency
Pension provision	Infant health	Waste
Physical infrastructure	Air quality	Land use & development
Climate change adaptation	Noise	Origins of food consumed in the UK
Research & development	Fuel poverty	River water quality
Environmental goods & services sector		Fish stocks
		Status of species & habitats
		UK Biodiversity impacts overseas

## 3.0- HEADLINE INDICATORS - ECONOMY

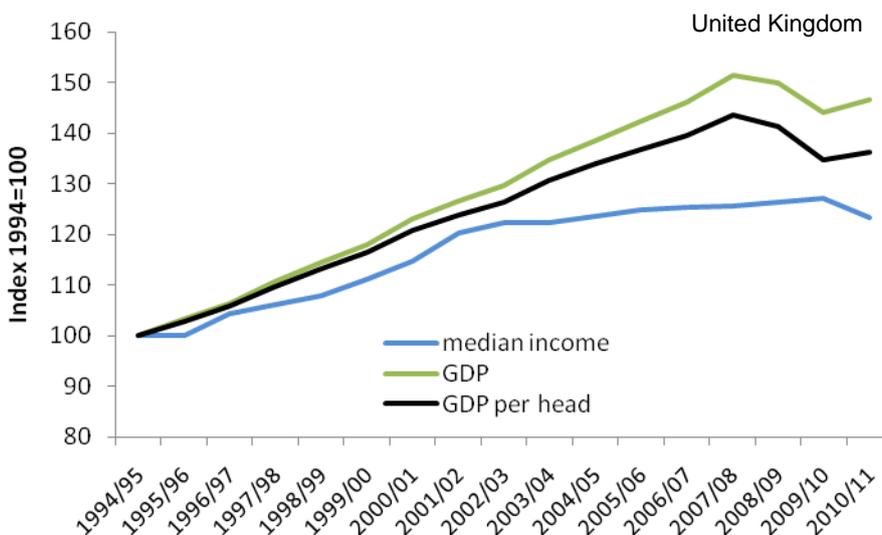
### 3.1 Economic prosperity

Measure:

GDP, GDP per head<sup>1</sup>, and equivalised median (middle) household income before housing costs<sup>2</sup>.

Rationale:

Gross Domestic Product (GDP) measures the scale of economic activity (goods and services produced) within a country. GDP does not reflect the level of economic prosperity experienced by people on a daily basis. GDP growth arising from the production and trade of goods and services does not automatically increase the purchasing power experienced by ordinary people at the same or similar rate.



Source: Department for Work and Pensions (Households Below Average Income) and Office for National Statistics

Other relevant information:

[http://www.hm-treasury.gov.uk/national\\_statistics.htm](http://www.hm-treasury.gov.uk/national_statistics.htm)

[http://www.hm-treasury.gov.uk/finexp\\_index.htm](http://www.hm-treasury.gov.uk/finexp_index.htm)

<http://statistics.dwp.gov.uk/asd/index.php?page=statistics>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Economy>

<sup>1</sup> chained volume measures, 2009 prices

<sup>2</sup> Adjusted for inflation

## 3.2 Long term unemployment

### Measure

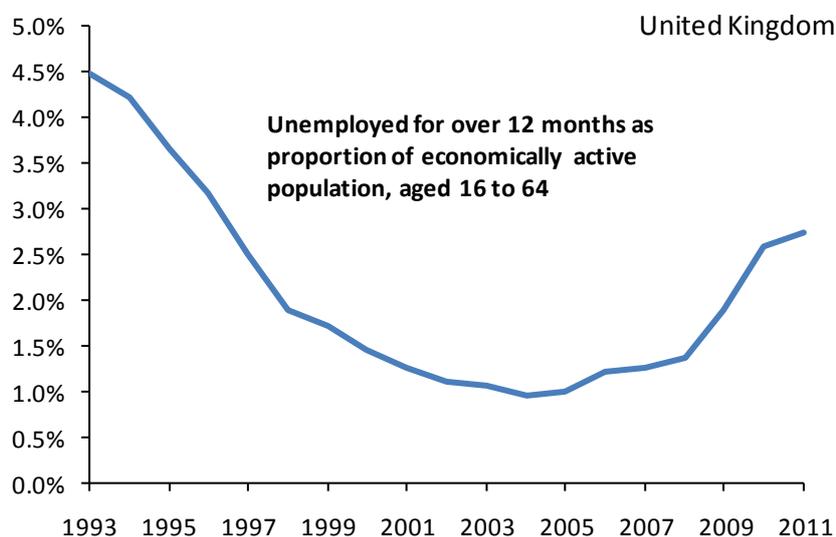
Percentage of people who have been out of work for more than 12 months.

### Rationale

An extended period of unemployment can impact on individuals and families, through loss of income, social isolation, sense of worth and other factors.

Employment enables people to meet their needs and improve their living standards and is the single most effective and sustainable way to tackle poverty and social exclusion for those who can work.

The denominator is the number of people who are economically active (i.e. are of working age and are either in work or are seeking work).



Source: Labour Force Survey, Office for National Statistics

Example of traffic light assessments:

Percentage of people who have been out of work for more than 12 months			
	Long term	Since 2000	Latest year
Long-term unemployment	 1993-2011		Increased (2011)

Other relevant information:

<http://www.dwp.gov.uk/policy/welfare-reform/>

<http://statistics.dwp.gov.uk/asd/index.php?page=statistics>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Labour+Market>

### 3.3 Poverty

Measure:

To be identified – taking into account the Social Mobility Strategy, the Child Poverty Strategy and the Office for National Statistics' measures of national wellbeing.

Rationale:

Poverty can perpetuate from one generation to the next and is therefore a key issue for inter-generational wellbeing.

The Child Poverty Strategy set out the approach to tackling poverty for this Parliament and up to 2020. At its heart are strengthening families, encouraging responsibility, promoting work, guaranteeing fairness and providing support to the most vulnerable. It is set against the backdrop of the Child Poverty Act 2010, which established income targets for 2020 and a duty to minimise socio-economic disadvantage.

The Social Mobility Strategy - Opening Doors, Breaking Barriers focuses on inter-generational social mobility ensuring that everyone has a fairer chance to get a better job than their parents. It aims to tackle unfairness at every stage of life with specific measures to improve social mobility from the Foundation Years to school and adulthood.

Source: to be confirmed

Other relevant information:

<http://www.education.gov.uk/childrenandyoungpeople/families/childpoverty/a0076385/child-poverty-strategy>

<http://www.dpm.cabinetoffice.gov.uk/news/social-mobility-strategy-launched>

<http://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/index.html>

<http://statistics.dwp.gov.uk/asd/index.php?page=statistics>

## 3.4 Knowledge and Skills

### Measure:

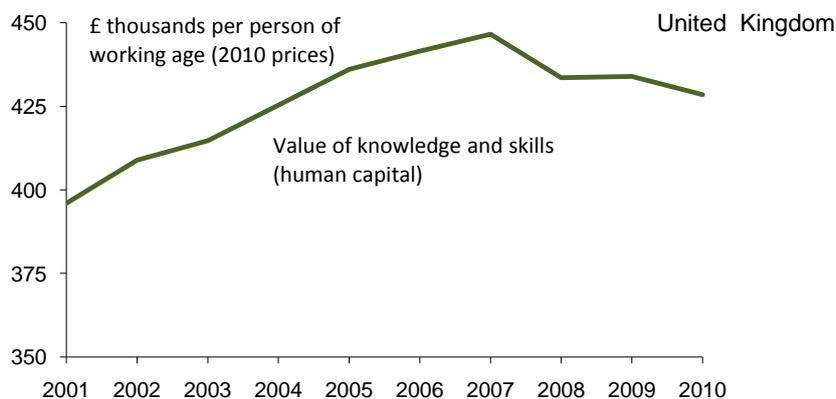
The value of knowledge and skills (as a proxy for human capital) per person of working age).

### Rationale:

Human capital is defined as “the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being” (OECD, 2001).

In practice, most approaches to human capital are restricted to people’s knowledge, skills and competences. This measure uses a discounted lifetime labour income approach which is based on gender, age and the level of qualification acquired during participation in formal education; ranging from school-based compulsory education, post-compulsory vocational or general education, tertiary education, etc.

Empirical work on economic growth suggests that countries with higher levels of human capital, other things being equal, have potential for greater output and income in the future. The measures can also be used in the assessment of an aging population, changes in retirement ages, and the evaluation of the economic benefits of different levels of education.



Source: Labour Force Survey, Office for National Statistics

### Other relevant information:

<http://www.bis.gov.uk/policies/higher-education>

<http://www.bis.gov.uk/policies/higher-education/research-analysis>

<http://www.education.gov.uk/researchandstatistics>

<http://www.education.gov.uk/childrenandyoungpeople>

<http://www.ons.gov.uk/ons/rel/wellbeing/human-capital-estimates/2010/index.html>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Children%2C+Education+and+Skills>

## 4.0- HEADLINE INDICATORS – SOCIETY

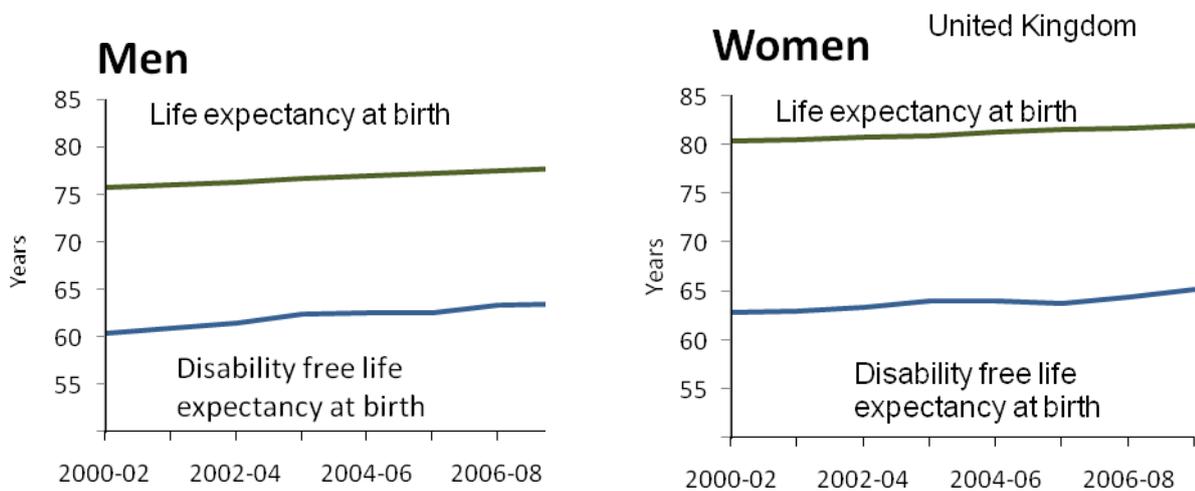
### 4.1 Healthy Life Expectancy

#### Measure

Healthy Life expectancy.

#### Rationale:

Life expectancy and disability-free life expectancy at birth are increasing for both males and females. Nationally, the gap between life expectancy and healthy life expectancy has narrowed slightly between 2000-02 and 2007-09. However, there is considerable variation across the UK and by measures of deprivation. Variations in the proportion of life spent in very good or good health have potentially significant impacts on health and wellbeing, families, health and social care.



Source: Office for National Statistics

#### Other relevant information:

<http://www.dh.gov.uk/health/2012/01/public-health-outcomes/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Health+Expectancy>

## 4.2 Social Capital

Measure:

To be developed.

Rationale:

Although social capital has been considered as a concept for a number of years, its definition and measurement are still in their infancy. Social capital includes our social networks, communities, cultural activities and participation, as well as the trust and the shared norms and values they provide both for individuals and through institutions.

Owing to the definitional and measurement challenges, social capital is often represented by proxy measures or a combination of several measures. Measures will be selected from the forthcoming Community Life survey to be run by the Cabinet Office, with possibilities including sense of belonging, trusting neighbours, neighbourliness, volunteering and other community participation, influencing local decisions, feeling safe, mixing socially etc.

In terms of its importance for sustainable development, social capital is essential for sustainable communities and a strong and cohesive society underpins our economic development and our current and long term wellbeing. Society is also held together by its institutions be they provided by the public sector (including by local authorities) or by the third sector (voluntary organisations, charities etc.)

Source: to be confirmed

Other relevant information:

<http://www.cabinetoffice.gov.uk/news/community-life-survey-commissioned>

<http://www.thirdsector.co.uk/news/1136632/Cabinet-Office-launch-new-survey-volunteering-giving-community-action/?DCMP=ILC-SEARCH>

<http://www.cabinetoffice.gov.uk/resource-library/cabinet-office-autumn-2011-people-survey-report>

<http://www.cabinetoffice.gov.uk/big-society>

<http://www.ons.gov.uk/ons/guide-method/user-guidance/social-capital-guide/index.html>

<http://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/index.html>

[http://www.culture.gov.uk/what we do/research and statistics/4828.aspx](http://www.culture.gov.uk/what_we_do/research_and_statistics/4828.aspx) (Taking Part Survey)

## 4.3 Social Mobility in Adulthood

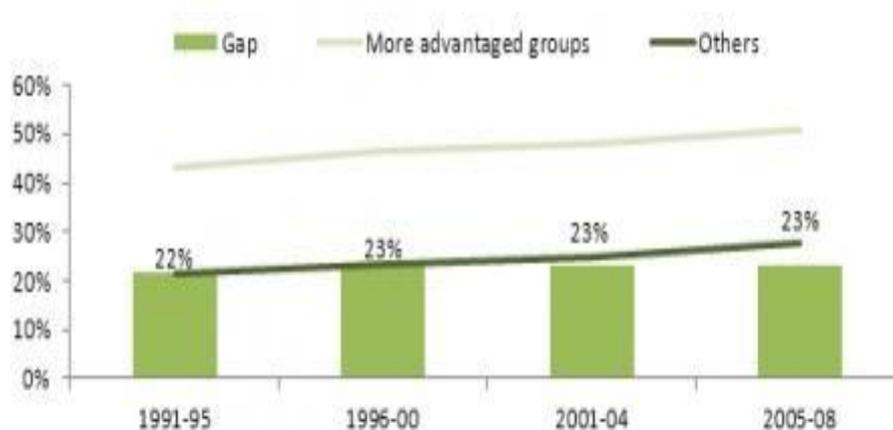
### Measure:

Proportion of working-age population employed in higher-level occupations by social background (defined using father's occupational group)<sup>3</sup>.

### Rationale:

Patterns of inequality and a lack of social mobility can be imprinted from one generation to the next and this is therefore a key issue for intergenerational wellbeing. There is evidence that a large number of the professions remain dominated by a small section of society and that in recent decades many professions have become less socially representative.

### **Proportion of working-age population employed in higher-level occupations by social background (defined using father's occupational group)**



Note: Higher level occupations are Employers in large organisations or Higher Managerial Occupations as defined by the National Statistics Socio-Economic Classification; “more advantaged groups” are those whose fathers were also in Higher level occupations.

Source: Department for Business Innovation & Skills, British Household Panel Survey and the Understanding Society Survey,

### Other relevant information:

<http://www.dpm.cabinetoffice.gov.uk/resource-library/opening-doors-breaking-barriers-strategy-social-mobility-update-progress-april-2011>

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<sup>3</sup> Further information will be made available by Department for Business Innovation & Skills later this year

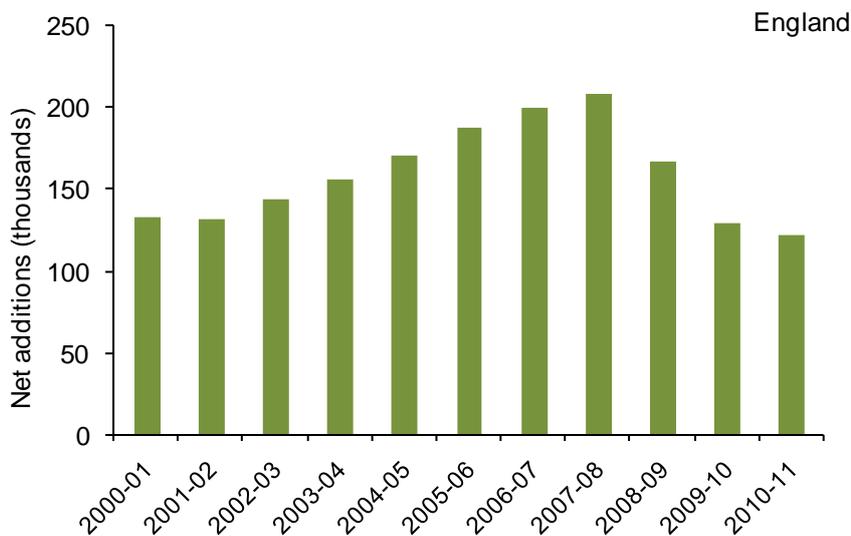
## 4.4 Housing provision

### Measure:

Net additions to the housing stock (new dwellings).

### Rationale:

Housing is a basic need and the number of households forming will continue to rise in the years to come, so the housing supply needs to be looked at alongside other aspects of sustainable development. This indicator could be expanded to highlight housing affordability.



Source: Department for Communities and Local Government

### Other relevant information:

<http://www.communities.gov.uk/housing/about/>

<http://www.communities.gov.uk/housing/housingresearch/>

<http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/>

<http://www.defra.gov.uk/environment/natural/green-infrastructure/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Building+and+Construction>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Housing+Stock>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Housing+Market>

# 5.0 HEADLINE INDICATORS - ENVIRONMENT

## 5.1a Greenhouse gases generated within the UK

**Green Economy Indicator**

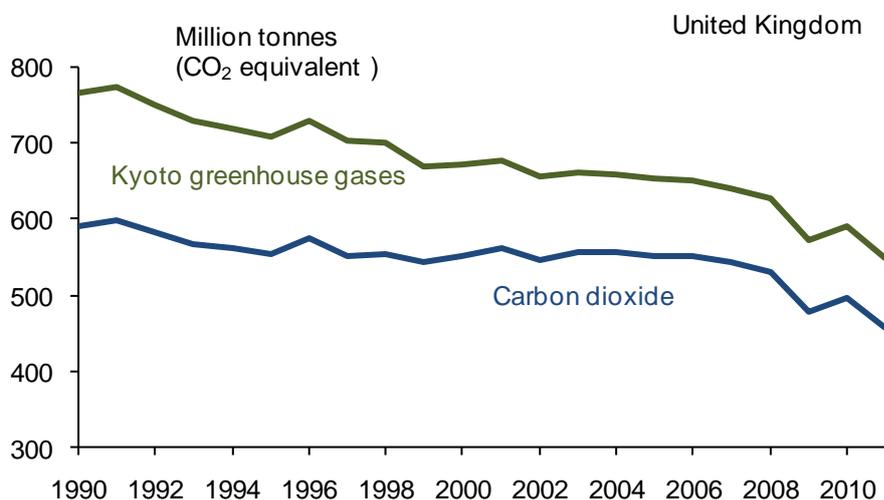
Measure:

Greenhouse gas and carbon dioxide emissions generated within the UK.

Rationale:

Emissions of greenhouse gases may have potentially dramatic economic, social and environmental consequences at global level through climate change.

This measure reflects emissions arising from activities within the UK, and is the basis for international targets. Emissions associated with UK consumption are reported on in indicator 5.1b.



Figures for 2011 are provisional

Source: Department for Energy and Climate Change

Example of traffic light assessments:

Greenhouse gas emissions from UK production			
	Long term	Since 2000	Latest year
Greenhouse gas emissions	 1990-2011		Decreased (2011)

Other relevant information:

<http://www.decc.gov.uk/en/content/cms/legislation/legislation.aspx>

<http://sd.defra.gov.uk/gov/green-government/commitments/>

[http://www.decc.gov.uk/en/content/cms/statistics/climate\\_stats/climate\\_stats.aspx](http://www.decc.gov.uk/en/content/cms/statistics/climate_stats/climate_stats.aspx)

[http://www.decc.gov.uk/en/content/cms/statistics/energy\\_stats/energy\\_stats.aspx](http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/energy_stats.aspx)

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Business+and+Energy>

## 5.1b Greenhouse gases from UK consumption

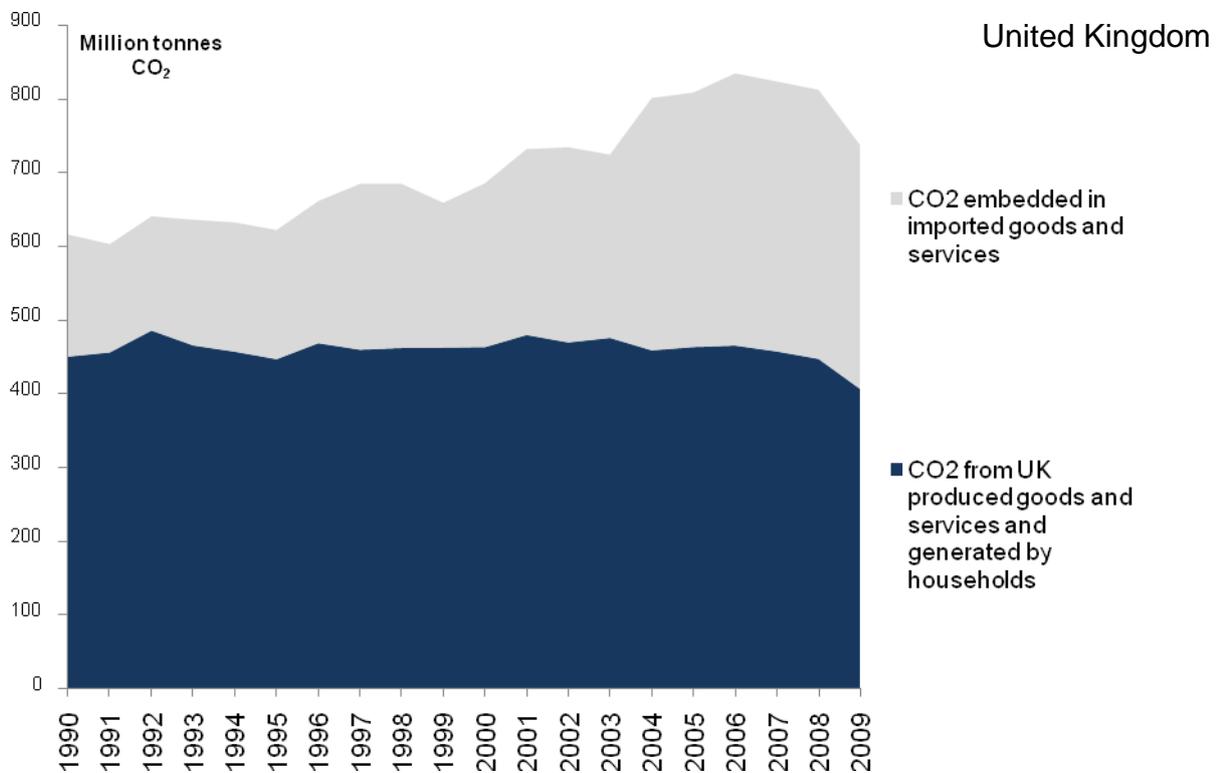
### Green Economy Indicator

#### Measure:

Carbon dioxide emissions associated with imported and UK produced goods and services consumed in the UK, and those generated directly by households.

#### Rationale:

The consumption 'measure is based on emissions, associated with our consumption, whether or not they occur within the UK – i.e. including emissions associated with the production and importation of goods used in the UK but produced elsewhere, but excluding emissions associated with the production of exports from the UK. These emissions are often referred to as consumption emissions to distinguish them from estimates relating to emissions generated within the UK (see indicator 5.1a).



Source: Department for Environment, Food and Rural Affairs, University of Leeds and Centre for Sustainable Accounting

#### Other relevant information:

<http://www.defra.gov.uk/environment/climate/mitigating/>

<http://www.defra.gov.uk/environment/economy/>

## 5.2 Natural Resource Use

### Green Economy Indicator

#### Measure:

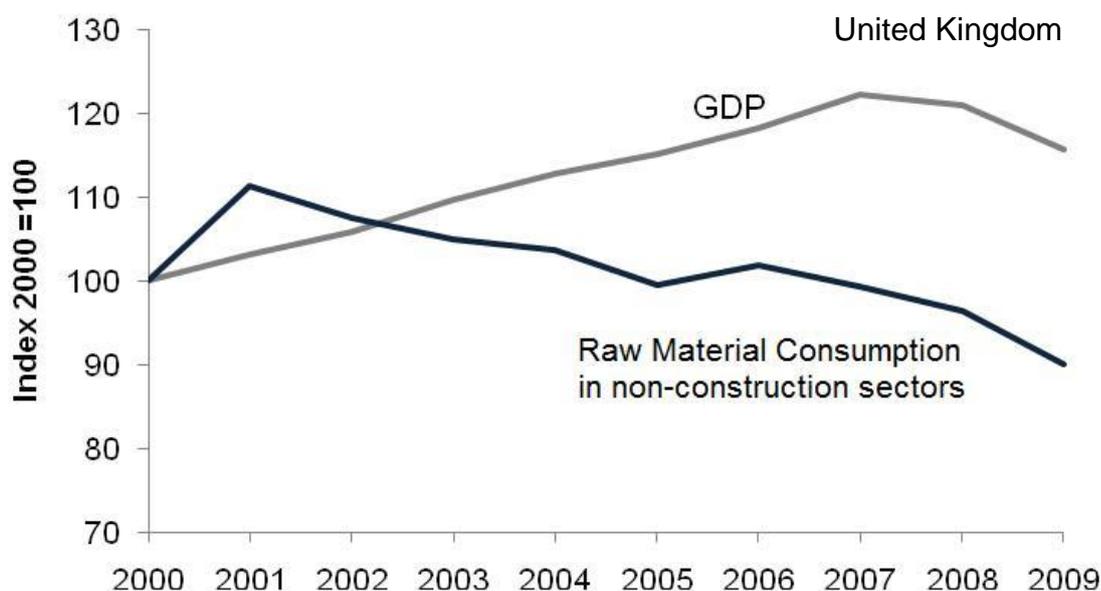
Raw material consumption in non-construction sectors and GDP – experimental data.

#### Rationale:

Natural capital includes naturally-produced assets that have a direct or indirect impact on the well-being of humanity. The rate of consumption of resources should not reduce the capacity for future generations to meet their needs, and it is important to improve the efficiency of resource use.

This indicator covers use of metal ores, minerals, biomass (e.g. agricultural harvest), timber etc and fossil fuels. It excludes aggregates used for construction.

All sectors of the economy will need to grow with less environmental impact and greater resilience to future environmental challenge including, material scarcity.



Source: Department for Environment, Food and Rural Affairs, Office for National Statistics

#### Other relevant information:

<http://www.defra.gov.uk/environment/economy/>

<http://www.defra.gov.uk/statistics/environment/green-economy/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Agriculture+and+Environment>

## 5.3 Wildlife and biodiversity

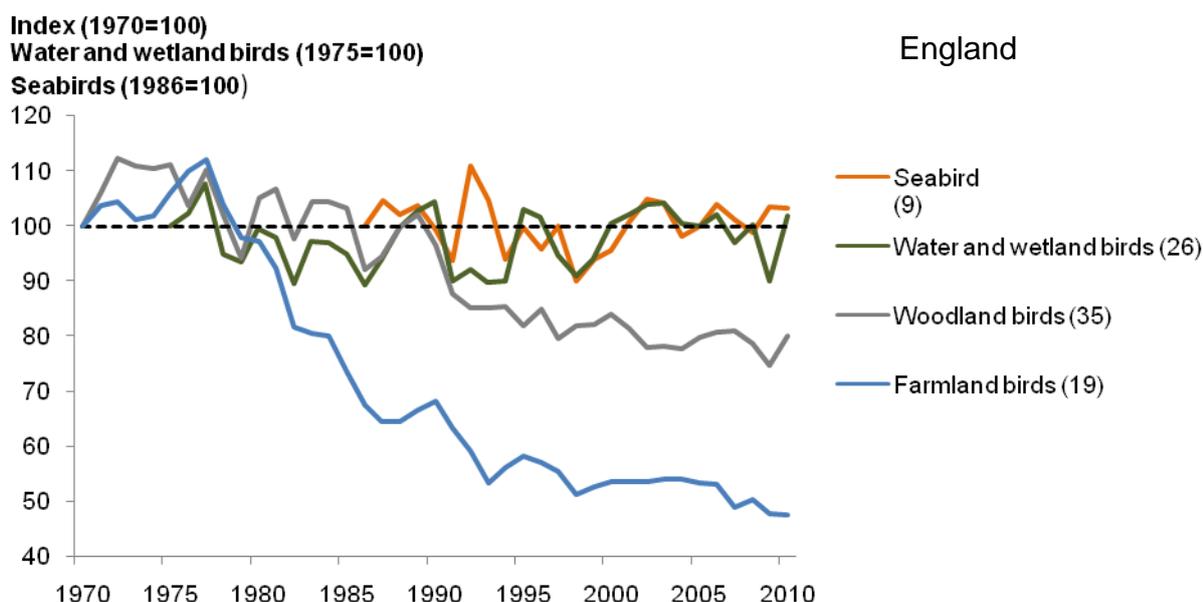
### Green Economy Indicator

#### Measure:

Wildlife: Bird population indices - farmland birds, (b) woodland birds, (c) seabirds and (d) water and wetland birds (this measure may be adjusted or clarified in light of indicators being developed to support the Natural Environment White Paper).

#### Rationale:

Natural capital includes those elements of the environment that yield resources and ecosystem services, but we cannot determine our entire capital of natural resources and instead have to focus on selected aspects of the natural environment and changes in its state. Populations of key species of birds are a good indicator of the broad state of wildlife and countryside because they occupy a wide range of habitats and key positions in the food chain. It may be possible to compile other indicators once the NEWP commitment to include natural capital within the UK Environmental Accounts has been implemented.



Source: Department for Environment Food and Rural Affairs, Royal Society for the Protection of Birds, British Trust for Ornithology and the Joint Nature Conservation Committee.

#### Other relevant information:

<http://www.defra.gov.uk/statistics/environment/>

<http://www.defra.gov.uk/statistics/environment/biodiversity/>

<http://www.defra.gov.uk/environment/natural/biodiversity/>

<http://www.defra.gov.uk/environment/natural/whitepaper/>

## 5.4 Water Availability

### Green Economy Indicator

#### Measure:

To be identified, but illustrated by water resource availability assessed in river catchment abstraction management.

#### Rationale:

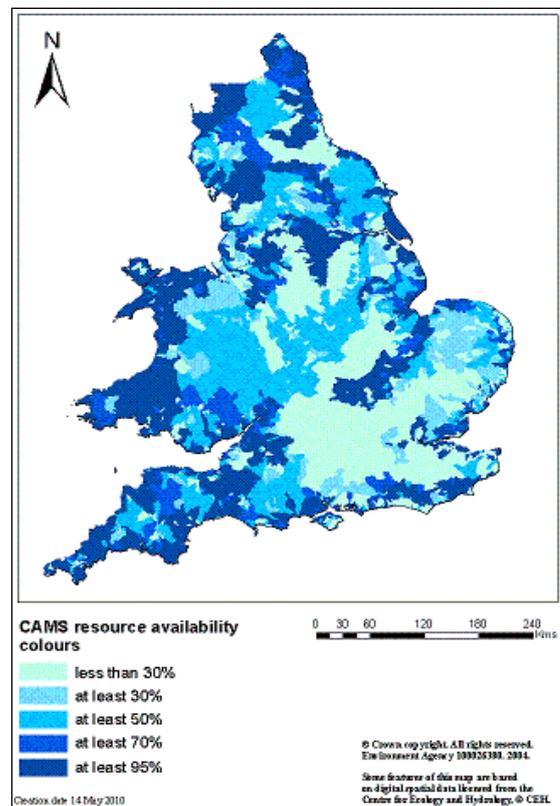
Water resources need to be managed effectively, given increasing pressure on water supply, e.g. for domestic, municipal or industrial water use, as a result of population increase, changing household water use patterns and by climate change.

The supply reliability map presented shows how reliable the supply will be for new abstraction licence holders, taking into account the supply allocated to existing licences and the risk of harm to the environment caused by additional demand. The map shows that whilst existing demand can be *normally*<sup>1</sup> met, for around a quarter of water bodies in England, a reliable source of water for new abstraction licences will be available for less than 30 per cent of the time. Therefore, new licences issued in these areas will have a less reliable supply of water than those issued elsewhere (or which have been issued previously).

Source: Environment Agency - Availability of water resources for new abstractions.

#### Other relevant information:

<http://www.defra.gov.uk/environment/quality/water/legislation/whitepaper/>  
<http://archive.defra.gov.uk/environment/quality/water/documents/www-factsheet-greeneconomy.pdf>  
<http://www.defra.gov.uk/statistics/environment/green-economy/>  
<http://sd.defra.gov.uk/gov/green-government/commitments/>  
<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Water+Resources>



#### **Availability of water resources for new abstractions licences.**

- For areas in the greater than 95 per cent band, water for new abstractions is available at all flows, except the very lowest.
- For areas in the less than 30 per cent band, water for new abstractions would only be available for limited periods, when flows are high; typically this may mean that abstraction is limited to the winter months.

<sup>1</sup> to note during drought existing licence allocations may not be met if rivers and groundwater are low.

## 6.0- Supplementary Indicators - ECONOMY

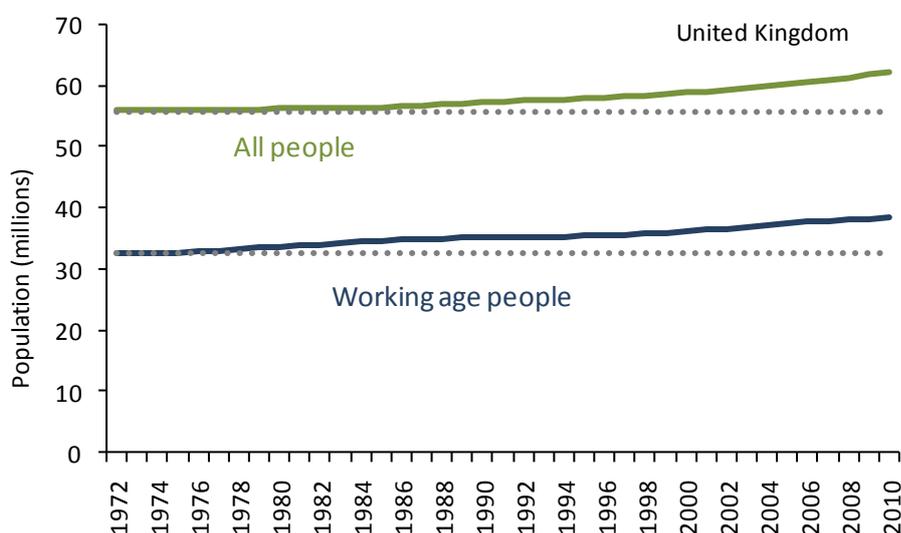
### 6.1a Population Demographics -Total population

#### Measures:

Total UK population and working age population.

#### Rationale:

This is included as a contextual indicator. Population and population growth are key drivers behind many challenges for sustainable development as population growth and household formation increase the pressure on resources and services. *(This indicator may be adapted to highlight the aging population)*



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency

#### Other relevant information:

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population>

<http://www.communities.gov.uk/corporate/researchandstatistics/statistics/subject/>

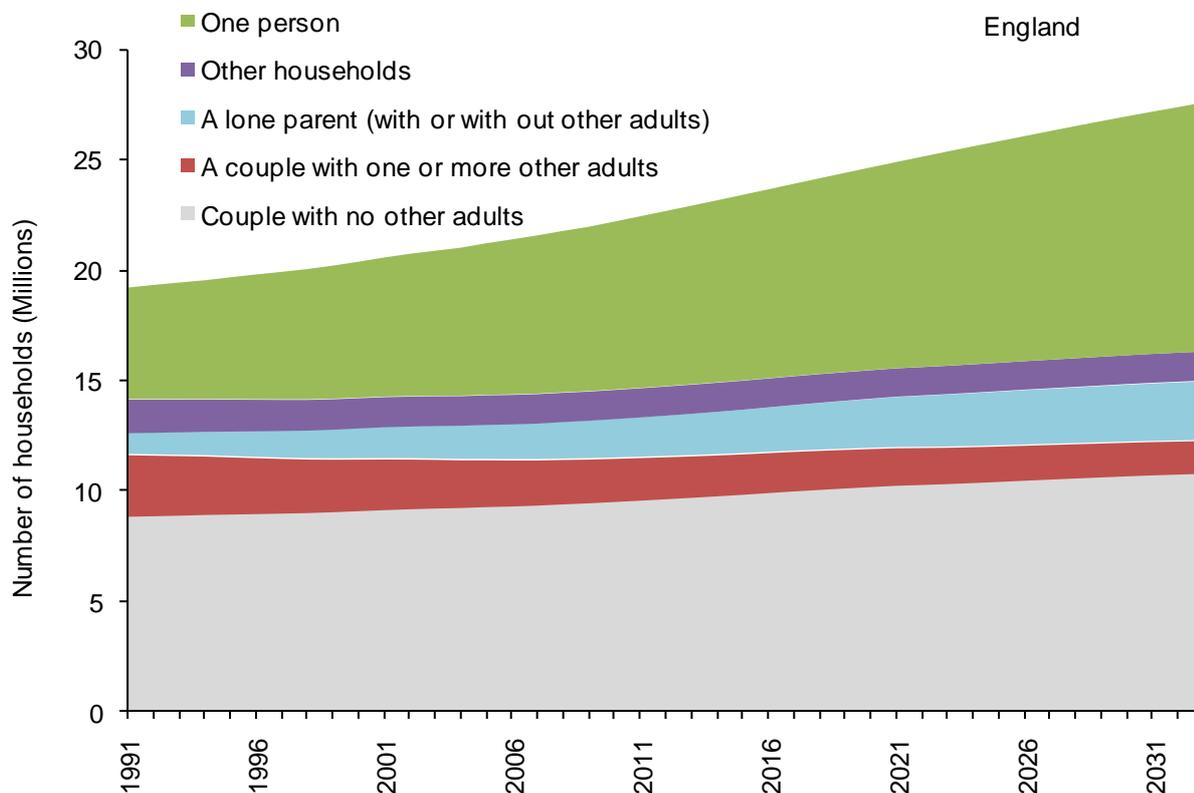
## 6.1b Population Demographics-Households

### Measure:

Household projections.

### Rationale:

This is included as a contextual indicator. Household formation increases the pressure for housing and on resources and services.



Source: Department for Communities and Local Government, Welsh Assembly Government, Scottish Executive, Northern Ireland Statistics and Research Agency.

### Other relevant information:

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population>

<http://www.communities.gov.uk/corporate/researchandstatistics/statistics/subject/>

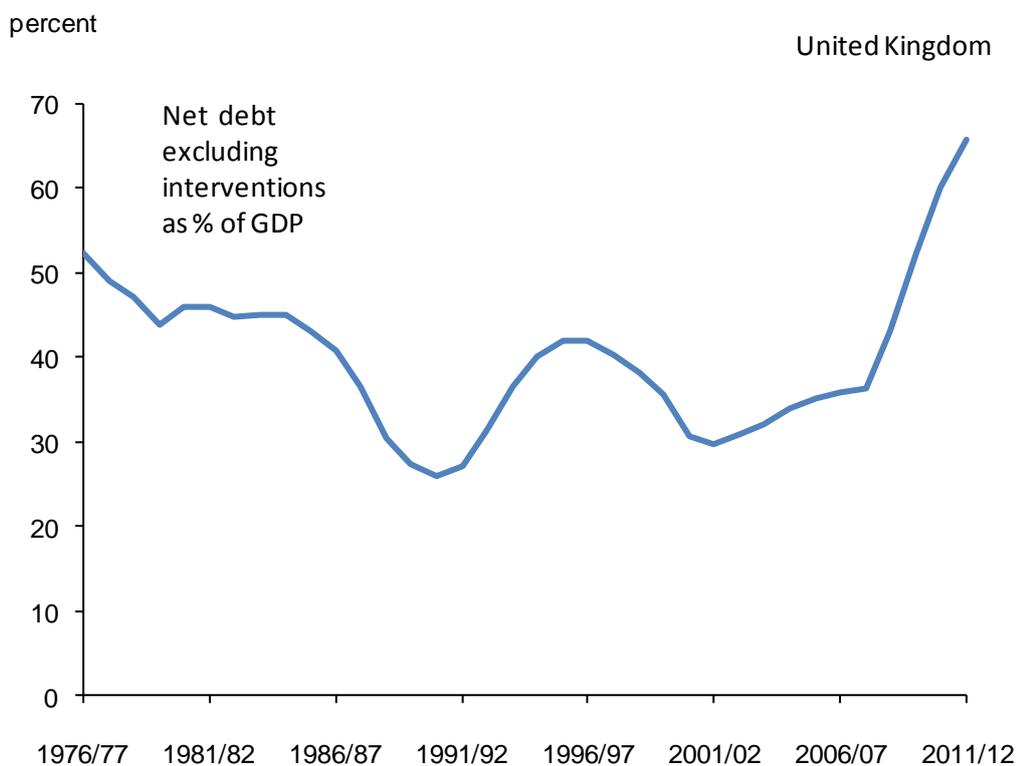
## 6.2 Debt

### Measure:

Public sector net debt as a percentage of GDP.

### Rationale:

Public sector net debt is a stock measure of the total indebtedness of a country and shows the sustainability of public finances. (This indicator may be extended to cover other forms of debt, e.g. personal debt).



Source: Office for National Statistics

### Other relevant information:

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Economy>

[http://www.ons.gov.uk/ons/dcp171778\\_272879.pdf](http://www.ons.gov.uk/ons/dcp171778_272879.pdf)

[http://www.hm-treasury.gov.uk/national\\_statistics.htm](http://www.hm-treasury.gov.uk/national_statistics.htm)

## 6.3 Pension provision

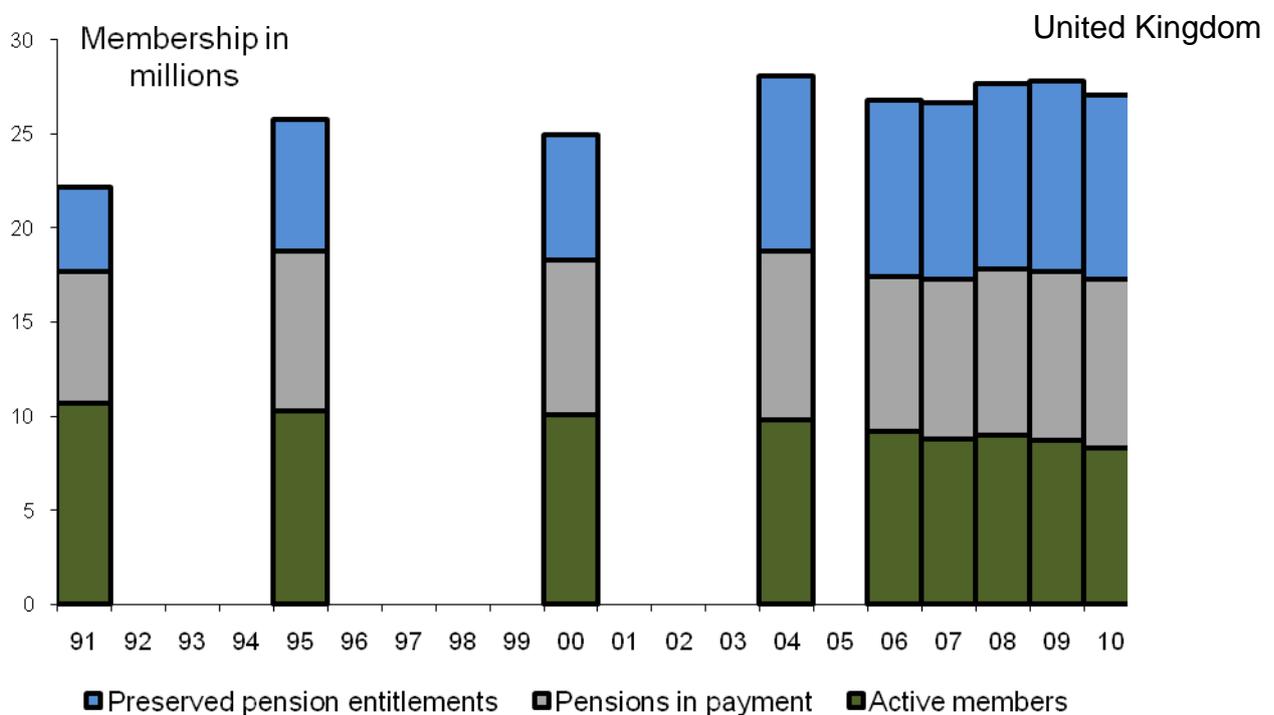
### Measure:

Total membership of occupational pension schemes.

### Rationale:

As illustrated, financial security is an important contribution to personal wellbeing, and pension provision is an important aspect of a sustainable economy.

A lack of adequate pension provision (particularly for an ageing population) would have long term consequences for the sustainability of public finances, the economy and society.



Source: Occupational Pension Schemes Survey, Office for National Statistics

### Other relevant information:

<http://www.dwp.gov.uk/policy/pensions-reform/>

<http://statistics.dwp.gov.uk/asd/index.php?page=statistics>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Economy>

## 6.4 Physical Infrastructure

### Measure:

Physical capital stock as measured by total tangible assets.

### Rationale:

A sustainable economy has to maintain the physical capital needed to support production. This measure looks at the extent to which the UK is improving its stock of fixed capital, as measured by the value of its tangible asset base. Tangible fixed assets comprise buildings and other structures (including historic monuments), vehicles, other machinery and equipment and cultivated assets in the form of livestock and orchards. Tangible non-produced assets are assets such as land and sub-soil resources that occur in nature over which ownership rights have been established.



Source: National Balance Sheet, Office for National Statistics and 2010 GDP deflator, HM Treasury

### Other relevant information:

[http://www.hm-treasury.gov.uk/infrastructure\\_index.htm](http://www.hm-treasury.gov.uk/infrastructure_index.htm)

[http://www.hm-treasury.gov.uk/national\\_infrastructure\\_plan2011.htm](http://www.hm-treasury.gov.uk/national_infrastructure_plan2011.htm)

<http://www.defra.gov.uk/environment/natural/green-infrastructure/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Economy>

## 6.5 Climate Change Adaptation

### Green Economy Indicator

Measure:

To be confirmed

Rationale:

The latest UK Climate Change Risk Assessment demonstrated that, without adaptation, climate change poses risks to all parts of the UK's economy, through direct economic impacts, impacts on society and the environment. One of Defra's priorities is to "Support a strong and sustainable green economy, resilient to climate change". The transition to a Green Economy, resilient to climate change, is essential for delivering sustainable development and long term growth.

Indicator to be confirmed, based on the National Adaptation Programme to be laid before Parliament in 2013. Government is being advised on measuring progress by the Adaptation Subcommittee of the Committee on Climate Change, as part of its statutory functions under the Climate Change Act. This is likely to include economic, as well as social and environmental indicators.

Source: to be confirmed

Other relevant information:

<http://engage.defra.gov.uk/nap/>

## 6.6 Research and Development

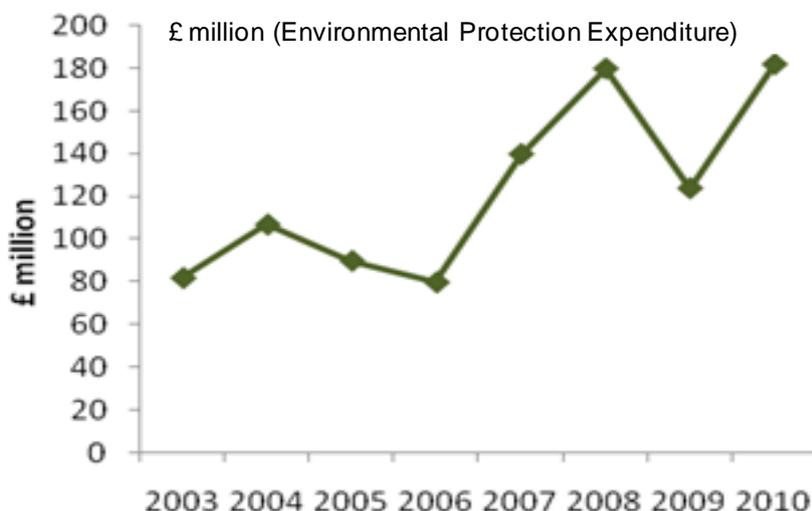
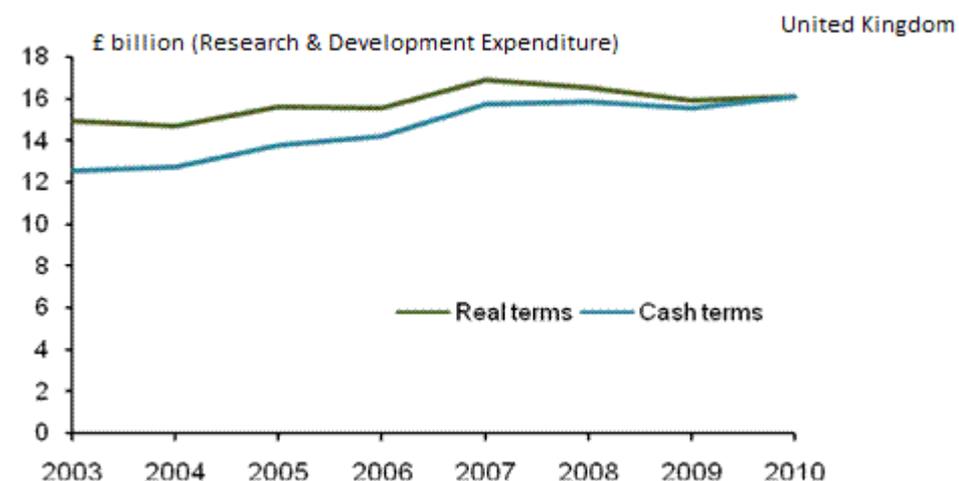
### Green Economy Indicator

#### Measure:

- Expenditure on Research & Development by UK businesses in cash and real terms
- Environmental protection expenditure research and development spending

#### Rationale:

Business innovation and research & development are vital ingredients in raising the productivity, competitiveness and growth potential of modern economies.



Source: Department for Environment Food and Rural Affairs and Office for National Statistics

#### Other relevant information:

<http://www.bis.gov.uk/policies>

<http://www.bis.gov.uk/analysis/statistics>

<http://www.defra.gov.uk/statistics/environment/green-economy/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Business+and+Energy>

## 6.7 Environmental Goods and Services sector

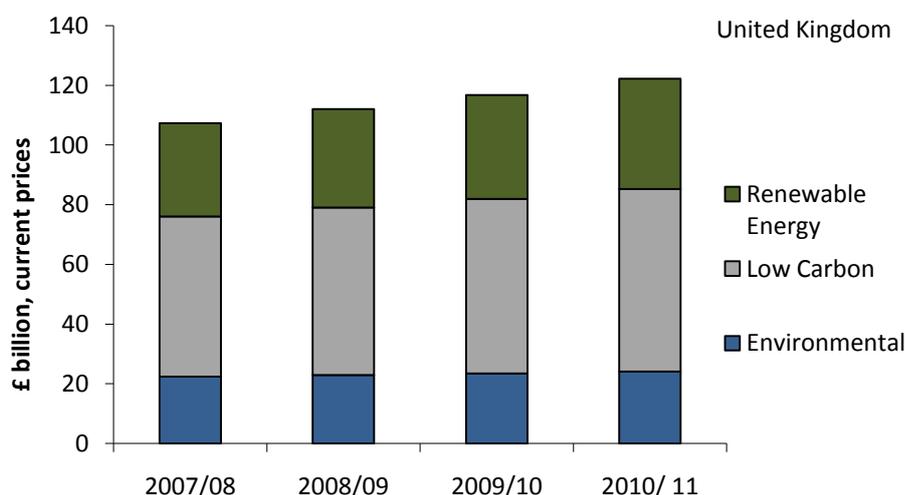
### Green Economy Indicator

#### Measure:

Sales of Low Carbon and Environmental Goods and Services.

#### Rationale:

Moving towards a green economy includes developing opportunities and markets for environmentally oriented goods and services and jobs. The low carbon and environmental goods and services sector could be a key component of future social and economic prosperity. The measure includes economic activity in the wider supply chain.



#### Source: K-Matrix

(The source data for this measure is commissioned from an external consultant, and is therefore subject to contract)

For further information on methodology and more detailed data refer to:  
<http://www.bis.gov.uk/policies/business-sectors/green-economy/market-intelligence/market-data>

#### Other relevant information:

<http://www.bis.gov.uk/policies>

<http://www.bis.gov.uk/analysis/statistics>

<http://www.defra.gov.uk/environment/economy/>

<http://www.defra.gov.uk/statistics/environment/green-economy/>

## 7.0- Supplementary Indicators - Society

### 7.1 Avoidable mortality

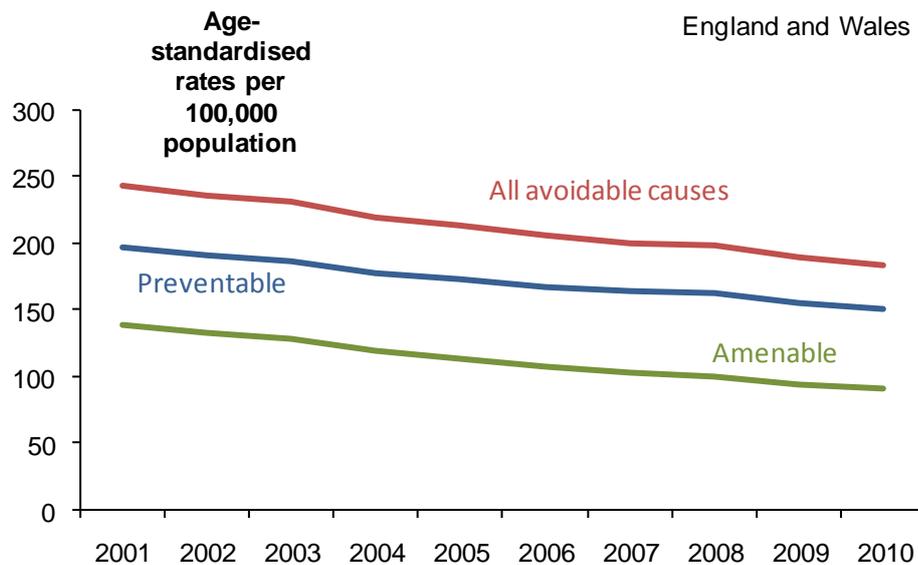
#### Measure:

Mortality from causes that are considered avoidable

#### Rationale:

A number of causes of death, for which public health and medical interventions are available, should be rare and ideally should not occur.

These potentially avoidable causes of death include conditions primarily linked to lifestyle and related factors such as smoking, drinking, diet and lack of exercise. While a particular condition can be considered to be avoidable, this does not mean that every death caused by this condition could be prevented. Amenable mortality, means deaths from conditions considered amenable to good quality healthcare. A death is preventable if could be avoided by public health interventions in the broadest sense.



Notes: some causes are both amenable to healthcare and preventable.

Source: Office for National Statistics

Other relevant information:

<http://www.ons.gov.uk/ons/rel/subnational-health4/avoidable-mortality-in-england-and-wales/index.html>

<http://www.ons.gov.uk/ons/about-ons/consultations/closed-consultations/2011/definitions-of-avoidable-mortality/definition-of-avoidable-mortality.pdf>

<http://www.dh.gov.uk/health/2012/01/public-health-outcomes/>

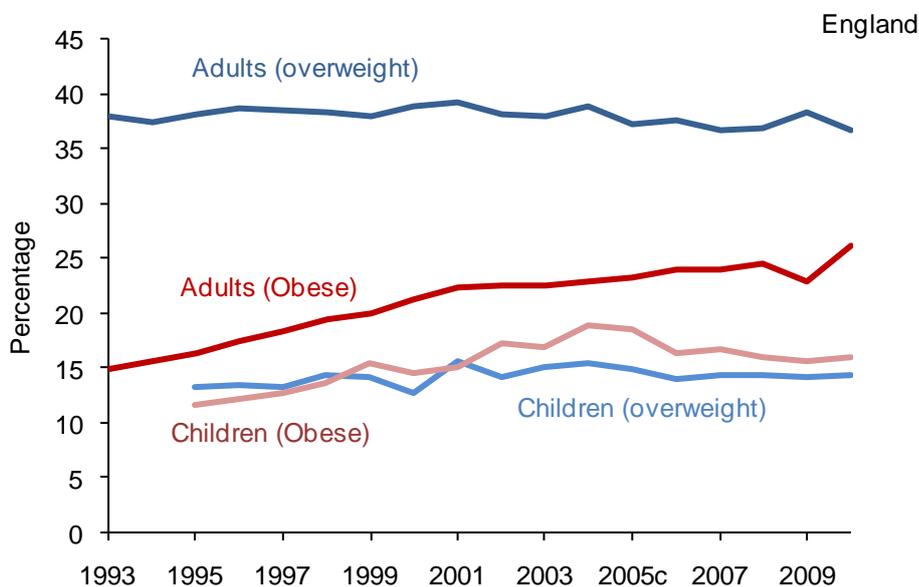
## 7.2 Obesity

### Measure:

Incidence of being overweight or obese in both children and adults

### Rationale:

Obesity is one of the most serious risks to health in Europe, being linked to diabetes, hypertension, heart disease and cancer. Overweight children are of particular concern, because when unhealthy nutritional habits and a sedentary lifestyle are maintained over years the result is obesity.



Notes: Adults aged 16 years and over. All Children aged 2 to 15.

In 2008 the definitions for children who were overweight or obese were revised from those used in previous years to correct an error which meant that small numbers of children that should have been classified as either 'overweight' or 'obese' were omitted from these categories because of rounding of age and BMI thresholds. In no cases were results significantly different from those presented previously.

All years were weighted to adjust for the probability of selection, and from 2003 non-response weighting was also applied.

Source: Department of Health, Child Measurement Programme and Health Survey for England, NHS Information Centre

Other relevant information:

<http://www.dh.gov.uk/health/2012/01/public-health-outcomes/>

<http://www.ic.nhs.uk/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Health+and+Social+Care>

## 7.3 Lifestyles

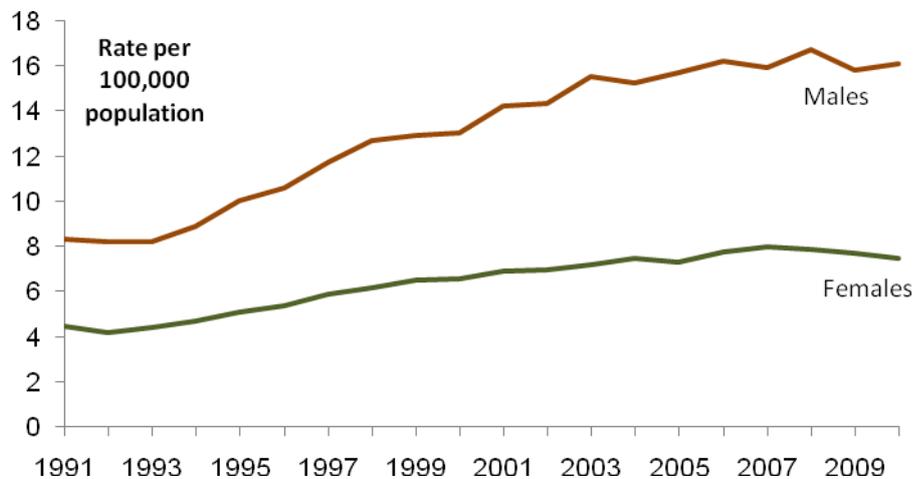
Measure:

To be identified

Rationale:

A healthy and active population is vital to making the UK a more sustainable society. Good diet, exercise and a healthy lifestyle can lead to long-term benefits for both health and general wellbeing. There are a number of possibilities for indicators, and it may not be possible to identify or develop a single combined measure. Issues to be considered include walking, cycling, exercise, diet, smoking, and drinking. Some examples are below:

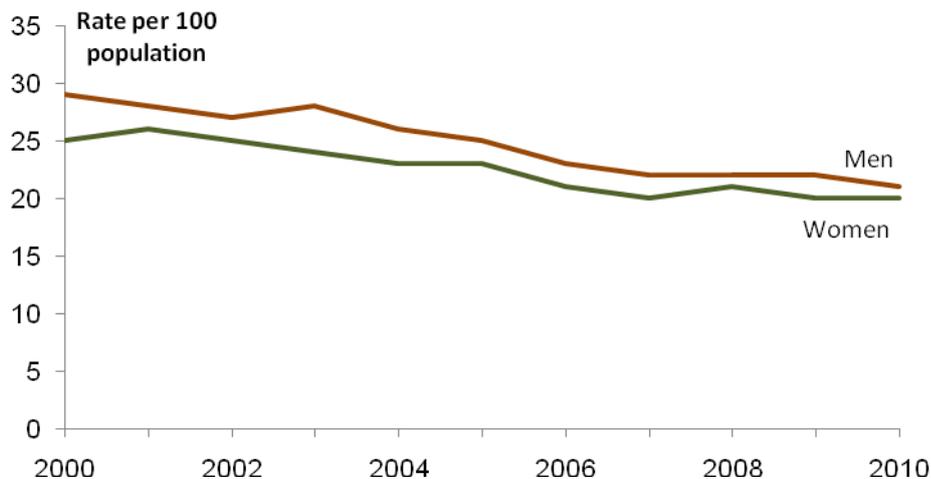
### Age-standardised alcohol-related death rates, England



Source: Office for National Statistics

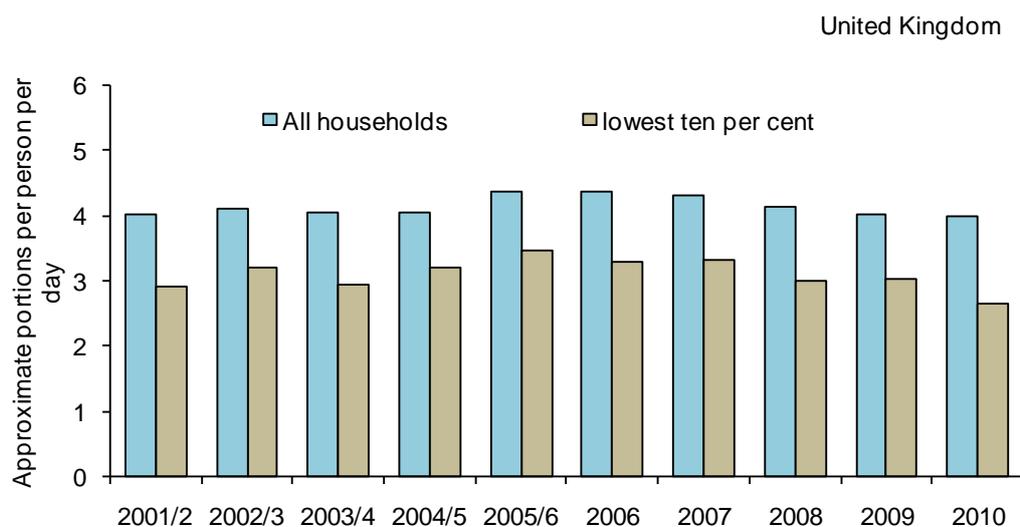
### Prevalence of cigarette smoking by sex, aged over 16

Great Britain



Source: General Lifestyle Survey, Office for National Statistics

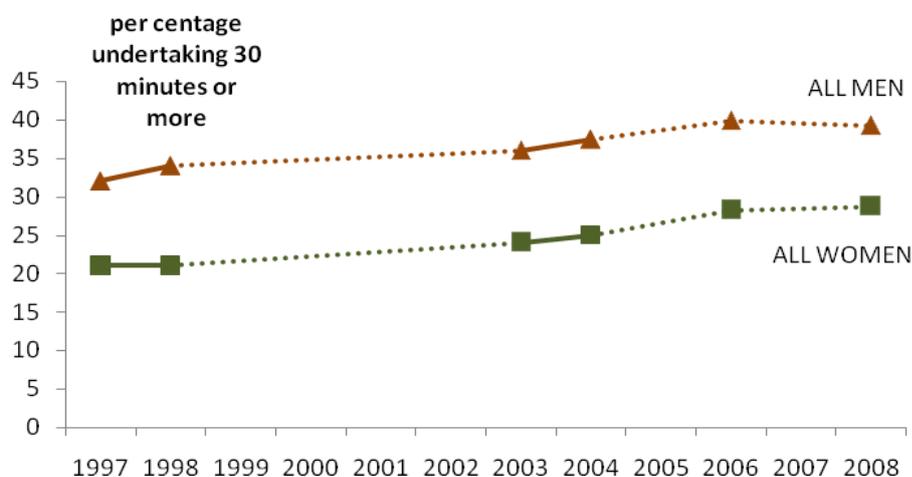
## Purchases of fruit and vegetables



Notes: Excluding potatoes. Lowest income households are those with incomes in the lowest ten per cent of all households.

Source: Family Food in 2010, Defra

**Levels of physical activity:** undertaking 30 minutes or more of moderate or vigorous activity on at least 5 days a week.



Source: Health Survey for England, Department for Health

Other relevant information:

<http://www.dh.gov.uk/health/2012/01/public-health-outcomes/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Health+and+Social+Care>

[http://www.culture.gov.uk/what we do/research and statistics/4828.aspx](http://www.culture.gov.uk/what_we_do/research_and_statistics/4828.aspx) (Taking Part Survey)

<http://www.defra.gov.uk/statistics/foodfarm/food/pocketstats/>

## 7.4 Infant health

### Measure:

Incidence of low birth weights.

### Rationale:

Birth weight can be an important indicator of community health and health inequalities – which are key issues for the long term health of our society.

The indicator shows low birth weight of all live births where father's occupation is classified as managerial, professional or intermediate and routine and manual occupations, never worked and long-term unemployed



Source: Office for National Statistics, Department of Health

Other relevant information:

<http://www.dh.gov.uk/health/2012/01/public-health-outcomes/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Health+and+Social+Care>

## 7.5 Air Quality

### Green Economy Indicator

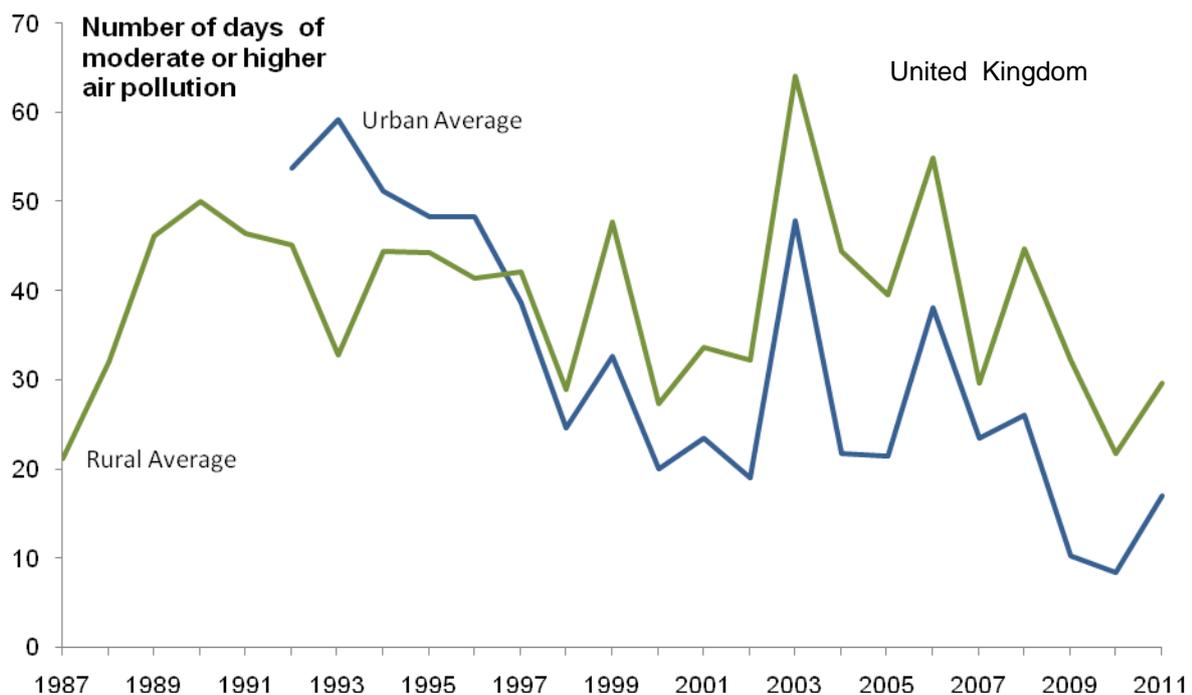
#### Measure:

Days when air pollution is moderate or higher in the UK (this measure may be adjusted or clarified in light of indicators being developed to support the Natural Environment White Paper )

#### Rationale:

Long-term health and wellbeing can be adversely affected by poor air quality, particularly for those with respiratory conditions, and particularly for children.

Another measure to be considered is mortality caused by anthropogenic air pollution, as proposed in the Public Health Outcomes Framework.



Source: AEA Energy & Environment, Department for Environment, Food and Rural Affairs

Other relevant information:

<http://www.defra.gov.uk/environment/quality/air/air-quality/>

<http://uk-air.defra.gov.uk/>

<http://www.dh.gov.uk/health/2012/01/public-health-outcomes/>

## 7.6 Noise

Measure:

Percentage of population affected by noise (to be developed)

Rationale:

There are a number of direct and indirect links between exposure to noise and health outcomes such as stress, heart attacks, and other health issues. Complaints about noise are the largest single cause of complaint to most local authorities and there is evidence that exposure to noise is a key determinant of health and wellbeing.

Source:

Other relevant information:

<http://www.defra.gov.uk/environment/quality/noise/>

<http://www.defra.gov.uk/environment/quality/noise/research/>

## 7.7 Fuel Poverty

### Green Economy Indicator

#### Measure:

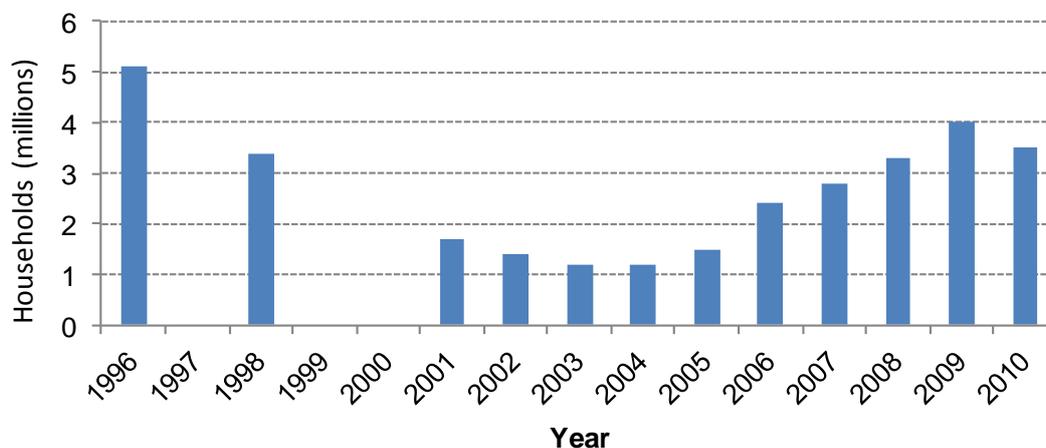
Number of households in fuel poverty in England. A household is considered to be in fuel poverty if it would need to spend more than 10 percent of its income on energy to maintain a satisfactory heating regime.

The Hills Review, an independent review of the definition of fuel poverty, recently concluded. It recommended that the existing definition of fuel poverty is unfit for purpose and that Government should adopt a new measure. Government has committed to adopting a new approach to measurement of fuel poverty, following a separate consultation to be undertaken by the Department of Energy and Climate Change. We will revisit this indicator in light of the outcome of that consultation.

#### Rationale:

Fuel poverty is a social problem which, according to the Warm Homes and Energy Conservation Act (2000), affects low income households that cannot keep warm at reasonable cost. Fuel poverty is responsible for a range of health and well being issues, from social exclusion to cardiovascular, and other, health problems that, according to Professor Hills' report, contribute to a high number of excess winter deaths.

### Fuel poverty England



Source: Department of Energy and Climate Change

#### Other relevant information:

[http://www.decc.gov.uk/en/content/cms/funding/Fuel\\_poverty/Hills\\_Review/Hills\\_Review.a\\_spx](http://www.decc.gov.uk/en/content/cms/funding/Fuel_poverty/Hills_Review/Hills_Review.a_spx)

[http://www.decc.gov.uk/en/content/cms/statistics/fuelpov\\_stats/fuelpov\\_stats.aspx](http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx)

# 8.0 Supplementary indicators- Environment

## 8.1 UK CO<sub>2</sub> emissions by sector

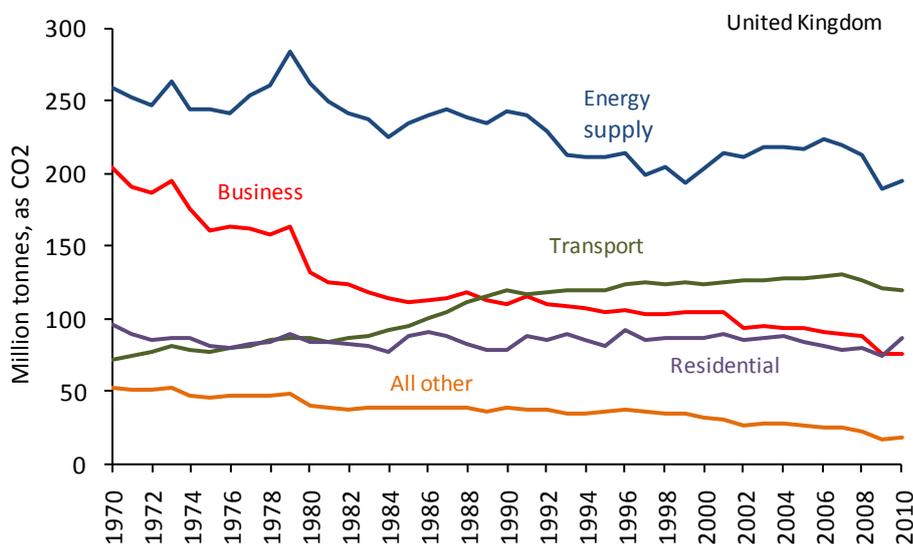
Green Economy Indicator

### Measure:

Carbon dioxide emissions by sector.

### Rationale:

All sectors of the economy must play their part in reducing the impact of their activities on the world's climate.



Source: Department for Energy and Climate Change

### Other relevant information:

<http://www.decc.gov.uk/en/content/cms/legislation/legislation.aspx>

<http://sd.defra.gov.uk/gov/green-government/commitments/>

[http://www.decc.gov.uk/en/content/cms/statistics/climate\\_stats/climate\\_stats.aspx](http://www.decc.gov.uk/en/content/cms/statistics/climate_stats/climate_stats.aspx)

[http://www.decc.gov.uk/en/content/cms/statistics/energy\\_stats/energy\\_stats.aspx](http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/energy_stats.aspx)

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Business+and+Energy>

## 8.2 Energy consumed in the UK from renewable sources

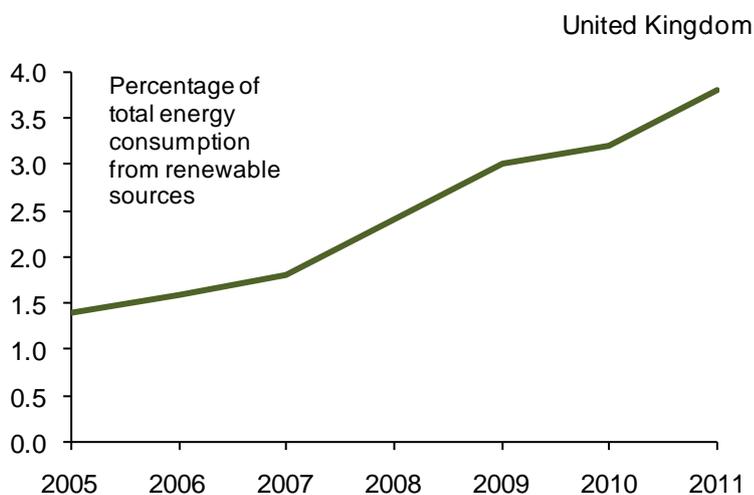
### Green Economy Indicator

#### Measure:

Renewable energy consumption as a percentage of capped gross final energy consumption.

#### Rationale:

Exploiting our renewable resources will make a strong contribution to our energy needs and allow us to be less reliant on others.



Source: Department for Energy and Climate Change

#### Other relevant information:

[http://www.decc.gov.uk/en/content/cms/statistics/energy\\_stats/source/renewables/renewables.aspx#](http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/renewables/renewables.aspx#)

[http://www.decc.gov.uk/en/content/cms/meeting\\_energy/renewable\\_ener/renewable\\_ener.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/renewable_ener/renewable_ener.aspx)

## 8.3 Housing Energy Efficiency

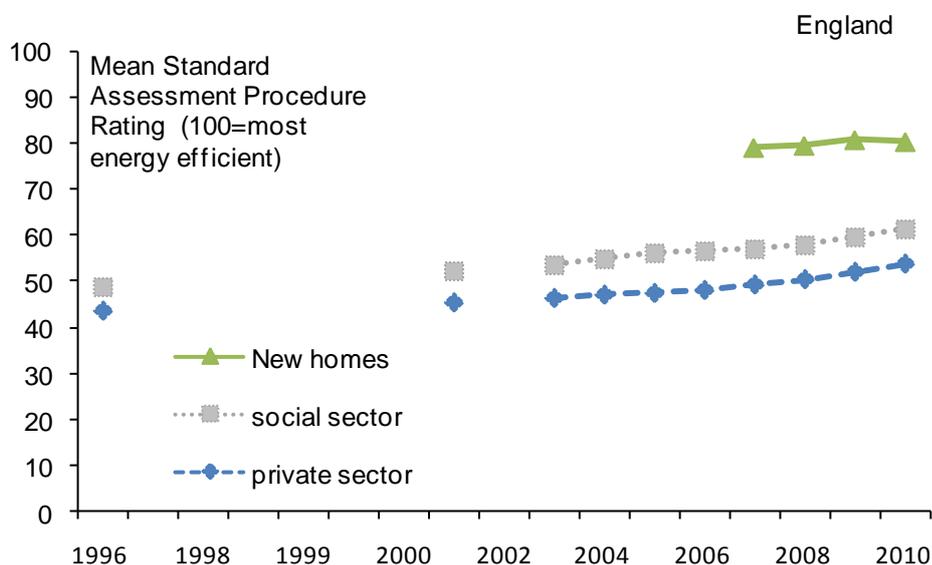
### Green Economy Indicator

#### Measure:

Energy efficiency ratings of existing and new housing.

#### Rationale:

More energy efficient dwellings are essential if the UK is to meet its challenging greenhouse gas reduction targets.



Source: Department for Communities and Local Government, English Housing survey

#### Other relevant information:

[http://www.decc.gov.uk/en/content/cms/meeting\\_energy/meeting\\_energy.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/meeting_energy.aspx)

[http://www.decc.gov.uk/en/content/cms/statistics/energy\\_stats/energy\\_stats.aspx](http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/energy_stats.aspx)

<http://www.communities.gov.uk/publications/corporate/statistics/codesustainablesapq42011>

<http://www.communities.gov.uk/housing/housingresearch/housingsurveys/englishhousingurvey/>

## 8.4 Waste

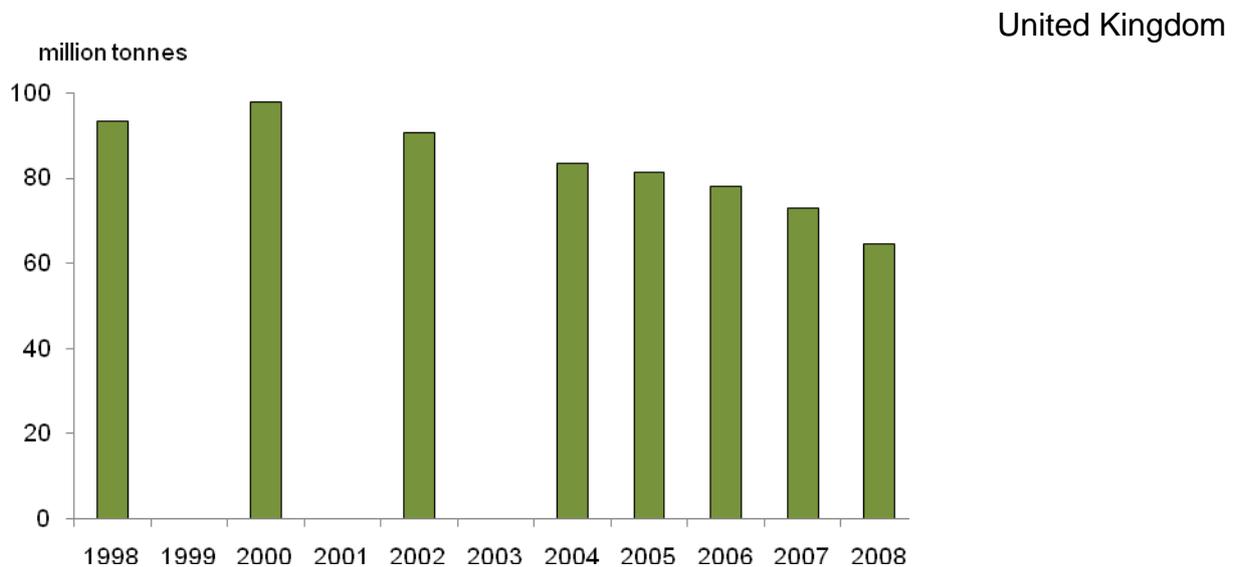
### Green Economy Indicator

#### Measure:

Total UK waste from all sectors (including households) disposed of in landfill sites..

#### Rationale:

The types of waste we produce, all forms of waste management, and the transport of waste, have impacts on the environment. Waste is a potential resource and increased level of reuse, recycling and energy recovery will contribute to sustainable development.



Source: Department for Environment Food and Rural Affairs

#### Other relevant information:

<http://www.defra.gov.uk/environment/waste/>

<http://www.defra.gov.uk/statistics/environment/waste/>

<http://sd.defra.gov.uk/gov/green-government/commitments/>

## 8.5 Land Use and Development

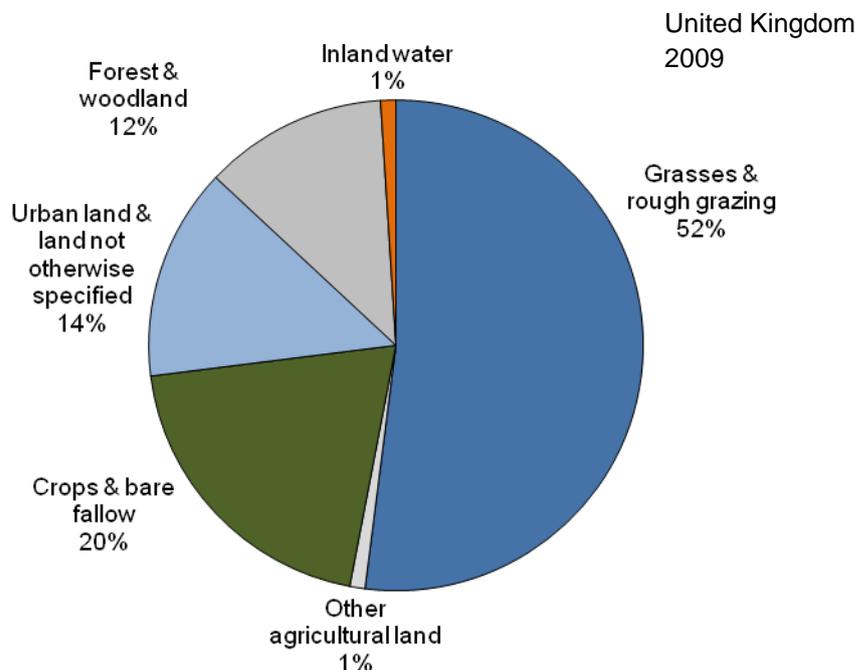
### Green Economy Indicator

#### Measure:

(To be developed using land use change and stock).

#### Rationale:

Sustainable use of land is important to deliver development as well as protecting the natural and historic environment. Development of this indicator needs to take account of the National Planning Policy Framework.



Source: Department for Environment, Food and Rural Affairs; Ordnance Survey; Forestry Commission, Forest Service (Northern Ireland)

#### Other relevant information:

<http://www.defra.gov.uk/environment/natural/>

<http://www.defra.gov.uk/statistics/national-statistics/>

<http://www.defra.gov.uk/statistics/>

<http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/>

<http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Land+and+Inland+Waters>

## 8.6 Origins of Food Consumed in the UK

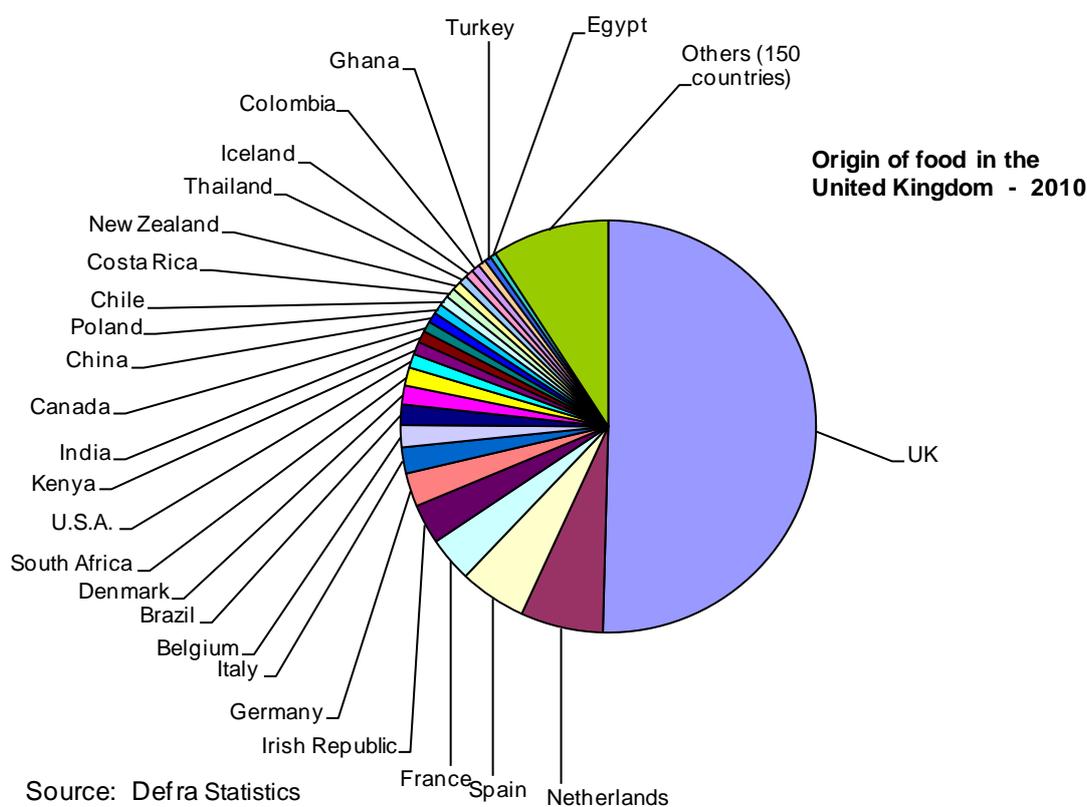
### Measure:

A contextual indicator - The origins of food consumed in the UK based on farm gate value of unprocessed food, 2010.

### Rationale:

Maintaining a range of supply sources means that any risk to our total food supply is spread, lowering the impacts of any unforeseen disruptions involving any particular trading partner or from within our domestic agriculture sector.

Excessive dependence upon individual country suppliers can expose the food chain to sudden shortages in the event of natural, technical or political shocks. Trade is dependent upon good international relations and institutional and regulatory frameworks.



Source: Defra Statistics

Based on the farm-gate value of unprocessed food

### Other relevant information:

<http://www.defra.gov.uk/statistics/foodfarm/>

<http://www.defra.gov.uk/statistics/foodfarm/food/pocketstats/>

## 8.7 River Water Quality

Green Economy  
Indicator

### Measure:

To be identified, but likely to cover rivers of good quality (to be based on data from the Water Framework Directive Monitoring – the definition of the indicator is subject to on-going discussions).

### Rationale:

River quality is important because rivers are a major source of water used for drinking and by industry; they are also used extensively for recreation. Moreover, rivers of good quality support a diverse array of aquatic invertebrates and plants on which a wide range of other species depend.

Source: Environment Agency

### Other relevant information:

<http://www.defra.gov.uk/environment/quality/water/>

<http://www.defra.gov.uk/statistics/environment/inland-water/>

## 8.8 Fish Stocks

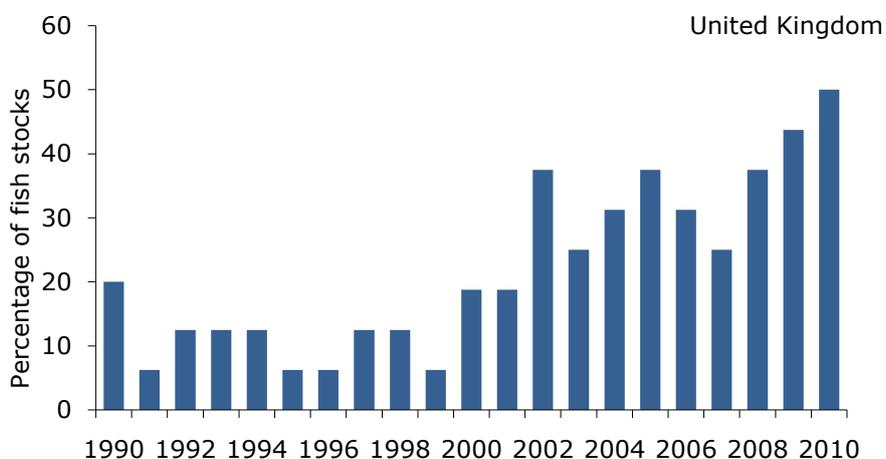
### Green Economy Indicator

#### Measure:

Fish stocks harvested sustainably and at full reproductive capacity.

#### Rationale:

Fish are an integral component of marine biodiversity. They are an important element of the food chain for seabirds, seals and cetaceans and are a very important source of food for people. Sustainable fisheries will help to ensure our marine ecosystems remain diverse and resilient and provide a long-term and viable fishing industry.



Source: Centre for Environment, Fisheries & Aquaculture Science

#### Other relevant information:

<http://www.marinemanagement.org.uk/fisheries/statistics/annual.htm>

<http://www.defra.gov.uk/environment/marine/>

## 8.9 Status of Species and Habitats

### Green Economy Indicator

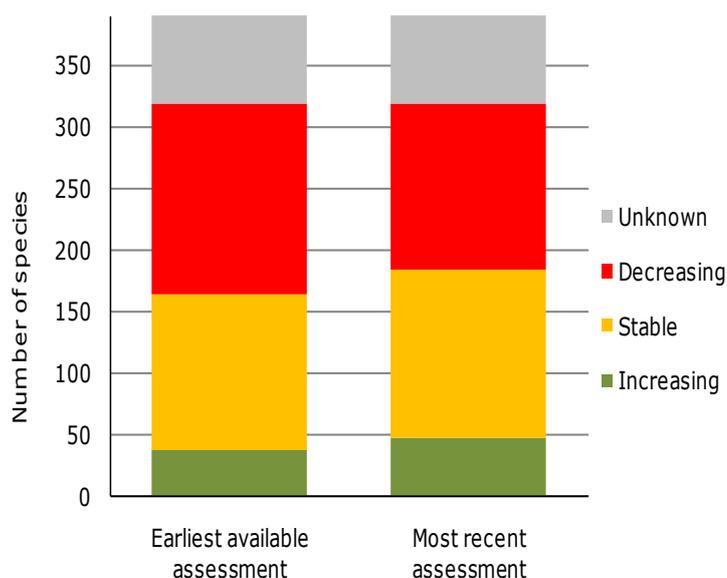
#### Measure:

Indicator to be developed on status of priority species and habitats.

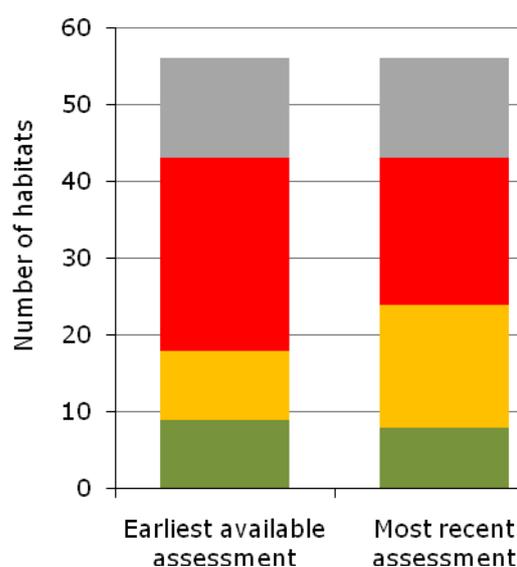
#### Rationale:

Priority species are species of high nature conservation value that are restricted in range or have suffered significant population declines in the past. Priority habitats are natural and semi-natural habitats of high nature conservation value. Habitats provide crucial ecosystem services. The longer-term intention is to focus on species and habitats that are important for ecosystem services.

**Change in the status of priority species 2002 to 2008, England**



**Change in the status of priority habitats 2002 to 2010, England**



Source: UK Biodiversity Partnership, Natural England, Joint Nature Conservation Committee

#### Other relevant information:

<http://www.defra.gov.uk/statistics/environment/>  
<http://www.defra.gov.uk/statistics/environment/biodiversity/>  
<http://www.defra.gov.uk/environment/natural/biodiversity/>  
<http://www.defra.gov.uk/environment/natural/whitepaper/>

## 8.10 UK Biodiversity Impacts Overseas

Green Economy  
Indicator

Measure:

To be confirmed - based on a current research project on the global biodiversity impacts of UK consumption of imported goods.

Rationale:

Biodiversity underpins the delivery of many benefits from terrestrial, marine and freshwater ecosystems. However, UK imported goods and services from a wide range of rapidly changing international sources have the potential to bring about large-scale impacts in global biodiversity through mechanisms such as overexploitation, land-use and habitat change, and pollution.

Source: to be confirmed

Other relevant information:

<http://www.defra.gov.uk/environment/natural/>