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A Review of Published Sustainability Indicator Sets:

How applicable are they to contaminated land remediation indicator-set development?

CL:AIRE

CONTAMINATED LAND: APPLICATIONS IN REAL ENVIRONMENTS

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How applicable are they to contaminated land remediation indicator-set development?

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- Brian Bone, Environment Agency
- Richard Boyle, Homes and Communities Agency
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Executive summary

SuRF-UK (www.claire.co.uk/surfuk) is the United Kingdom's Sustainable Remediation Forum – an initiative set up to progress the UK understanding of sustainable remediation. Part of the work of developing a SuRF-UK framework has been the consideration of how sustainability can be assessed for soil and groundwater remediation projects. Over six weeks in February and March 2009 over 100 documents describing sustainability indicators (for a wide variety of purposes) were identified and reviewed, in part based on an existing database held by r^3. The aim was to determine the range of factors considered by different sets of sustainability indicators, and identify if any existing data sets could be used for sustainability appraisal of remediation work, or if not how a UK sustainable remediation indicator set could be developed. Also included in this work was the assessment of a number of possible indicators made by delegates at a SuRF-UK Open Forum meeting in London, which took place on 18 November 2008. These were mapped against 18 different overarching (or "headline") categories, six for each element of sustainability: environmental, economic and social.

A total of 2,421 individual indicators were identified. These constitute a large sample of different interests in sustainability appraisal. Overall indicators found in the literature review and the suggestions made at the 18 November 2008 Open Forum fitted well with the headline indicators suggested (82% and 97% had a good unique fit to a category, respectively). Indicators were found that fitted into all of the 18 headline categories, but the distribution of indicators across the headlines was not uniform. A large number of environmental indicators are related to resource use and waste management. There are few indicators linked to impacts on soil, and also few linked to consideration of the quality of the evidence base and its uncertainty.

Twelve indicator sets (with 265 indicators in total) relating to contaminated land management were found by this review. The coverage of these indicator sets on an individual basis is incomplete. For 8 sets there is no inclusion of impacts on soil, which is not consistent with current UK and EU soil policy.

The indicator suggestions from the 18 November 2008 Open Forum were fairly evenly distributed across the three elements of sustainable development (environmental, economic and social). However, within each element most indicator choices were clumped around particular choices which are strongly related to historic client and regulator interests (impacts on air, resource utilisation and waste management, indirect and direct costs, community involvement and satisfaction, human health, and impacts on neighbourhoods or regions). The indicators identified by the literature review were wider ranging in the aspects they covered.

It is proposed that a second phase of this work is needed. More detailed analysis of data collected by this work within a second phase of work should update the listing from the additional references found, and carry out a duplication of the mapping selections as a final check. After this, work should consider the individual indicator items within each category. It should focus on developing an initial integrated set of indicators for sustainable remediation, based on the existing indicators already developed for this sector, supplemented by the most common individual indicators of sustainability that are used. This initial indicator set could be a basis for consultation within the sector to develop a consensus for the key factors to be considered in sustainability appraisal. This should also show linkages to indicator sets used by related sectors (e.g., construction and waste management), both in terms of common interests, but also in suggesting where soil or remediation based work in a project should extend the range of sustainability indicators considered at other decision making levels (such as project design).

A possible route to simplified sustainability appraisal is to take a tiered approach using an assessment of general headline indicators. This approach merits further investigation and consultation.

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1 Introduction

SuRF-UK (www.claire.co.uk/surfuk) is the United Kingdom's Sustainable Remediation Forum – an initiative set up to progress the UK understanding of sustainable remediation. Sustainable remediation has been provisionally defined as the practice of demonstrating, in terms of environmental, economic and social indicators, that an acceptable balance exists between the effects of undertaking the remediation activities and the benefits the same activities will deliver. "Phase 1" of the SuRF-UK work has been funded by the Homes and Communities Agency (HCA) and managed by Contaminated Land Applications in Real Environments (CL:AIRE). The goal of this work has been to develop a framework in order to embed balanced decision making in the selection of the remediation strategy to address land contamination as an integral part of sustainable development

Part of the work of developing this framework has been the consideration of how sustainability can be assessed. This consideration falls into two parts: the methods and techniques used for sustainability assessment (the how?); and the factors that need to be considered (the what?). This preliminary literature review, carried out by r^3 environmental technology ltd (r^3), with assistance from CL:AIRE and funded by the HCA focuses on what factors, or indicators, are used in contemporary sustainability guidance and reports. Over six weeks in February and March 2009 over 100 documents were identified and reviewed, in part based on an existing database held by r^3. The aim of this review work was to determine the range of factors considered by different sets of sustainability indicators, and identify if any existing data sets could be used for sustainability appraisal of remediation work, or if not how a UK sustainable remediation indicator set could be developed. Also included in this work was the assessment of a number of possible indicators made by delegates at a SuRF-UK Open Forum meeting in London which took place on 18 November 2008.

This report summarises the review findings, and is divided into the following sections: an overview of sustainability appraisal and the role of indicators[1]; the literature review approach; an assessment of indicator suggestions made at the November 2008 SuRF-UK workshop, the results of the literature review of indicator sets, and a conclusions and recommendations section.

[1] Taken from Bardos, Bakker, Nathanail and Slenders Remediation and Sustainability. Chapter 20 in F.A. Swartjes (Ed.), Dealing with contaminated sites. From theory towards practical application. Springer publishers, Dordrecht. Expected end of 2009

2 Sustainability Appraisal in Overview

Sustainable development as a concept was defined in the 1987 "Brundtland Report" by the World Commission on Environment and Development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland 1987). Sustainability is perhaps best described as a measure of how well a particular endeavour is able to meet these goals of sustainable development, There are three elements to sustainable development, and hence sustainability as shown in Figure 1: environment, economy and society.

There is no "standard" technique for sustainability appraisal (for example like ISO 14040 for life cycle assessment). Generally, sustainability appraisal tends to be based on assessments of indicators. Indicators are metrics or assessments of individual factors that contribute to an overall understanding of sustainability, for example: direct costs, greenhouse gas emissions etc[1]. Sustainability appraisal techniques employ some means of aggregating individual assessments of indicators to provide an overall understanding of "sustainability". Qualitative and quantitative approaches may be used in sustainability appraisal. In general quantitative approaches are limited to particular aspects of sustainability, but may be useful for evidence gathering as part of an overall appraisal.

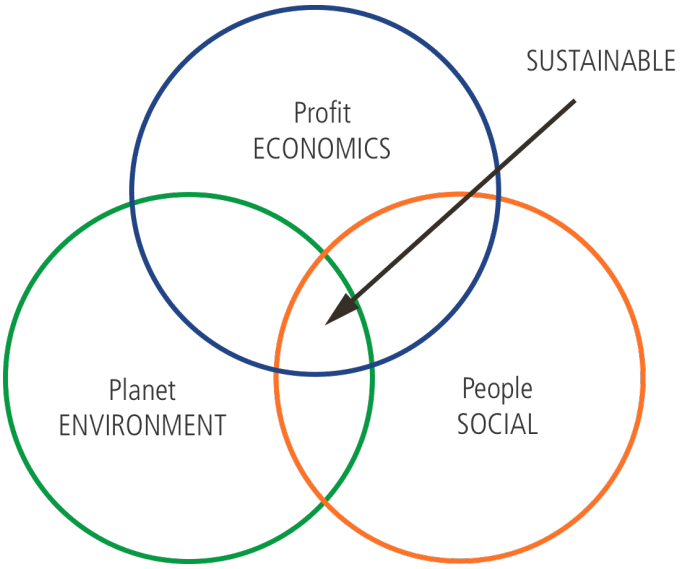

Figure 1

The elements of sustainable development

Indicators are integral to the communication of sustainable development[2]. They help review progress, they highlight where the challenges are, and they help people to understand what sustainable development means globally, nationally, locally and for them as individuals. Indicators appear to serve two broad functions. Policy orientated indicators that are linked to specific policy goals, often with some threshold or target for "acceptability" included, for example the England Sustainable Development Policy: Framework Indicators (Defra 2005 a and b), or guidance on determining Regional Spatial Strategies and Local Development Frameworks (ODPM 2005). Alternatively indicators may be orientated towards consistent reporting of sustainability effects, independent of particular regional, national or international policy goals, such as the Global Reporting Initiative (www.globalreporting.org). Obviously factors being considered will overlap, for example perhaps carbon or energy intensity, or impacts on water quality may be common to a number of different indicator sets for either function. However, on the whole indicator sets developed for specific policy goals tend to be more directed in their coverage. Therivel (2004) provides a more detailed review of the qualities of and use of sustainability appraisal indicators, but does not catalogue them.

[2] http://www.defra.gov.uk/sustainable/government/progress/index.htm

3 Approach

Each element of sustainability (economic, environmental and social) is assessed on the basis of indicators, with sustainability being a function of all three elements. Indicator sets can be quite long. For example the UK Government Sustainable Development Strategy reporting covers 28 indicators, each of which is in fact an aggregation of a number of individual measures (ONS and Defra 2008). Dealing with such a large set of factors is difficult for decision makers, particularly when different organisations and parties (across the public, private, third and sectors, local community groups and individuals) are seeking to find a consensus. One way forward is to organise indicators in some kind of a hierarchy where "headline" indicators are used to summarise a number of individual assessments. Table 1 sets out a series of headline indicators, proposed by the SuRF-UK Steering Group as a preliminary means of categorising individual factors to see how they relate to sustainability appraisal. These headline categories can then be used as "lenses" to see how widely different indicator sets cover sustainable development in a holistic sense, and to group individual indicators from different sources to look for similarities and differences in approach. The headline categories themselves are described in more detail in Annex 1.

The review work undertaken included four broad activities:

1. Development of a content management system for storing information about indicator sets, mapping them to the headline categories listed in Table 1, categorising them also according to their nature and origin, as set out in Table 2, and for carrying out analyses.
2. Identification of indicator sets from sustainability appraisal references taken from the existing r[3] archive and subsequent Internet searches.
3. Categorising and mapping the indicator sets found 79 of the 113 sources reviewed included suggested indicators for sustainability appraisal. Mapping and categorisation was carried out by three people. An initial test mapping was carried out on a subset of 370 indicators by all three people to ensure that interpretations of headlines and categories were similar and to refine the descriptions for each headline category (listed in Annex 1). Subsequently each indicator set was mapped by only one person for reasons of time and cost. However, the initial test set work gives some confidence that mapping has generally been carried out in a similar way by each of the report authors.
4. Reporting.

Table 2 summarises the characteristics of the indicator sources found. Annex 2 provides a listing of all of the sources reviewed. Annex 3 lists just over 20 sources identified after 16 March 2009 which could not be fully analysed owing to a lack of time and resources. These could be taken forward into a second phase study.

Selections for the main indicator lists were made by one person alone following the initial mapping trial. It would also be appropriate to review all of the mapping selections, so that selections have been agreed by at least two individuals. While we are confident that the general trends shown in this report are accurate, we think that this kind of checking would be useful to pick up any possible errors for individual indicators.

Table 1: Headline Indicator Categories

Environmental	Economic	Social
1. Impacts on air 2. Impacts on water 3. Impacts on soil 4. Impacts on ecology 5. Intrusiveness 6. Resource use and waste	1. Direct costs and direct economic benefits 2. Indirect costs and indirect economic benefits 3. Gearing 4. Employment / human capital 5. Life-span and "project risks" 6. Flexibility	1. Community involvement and community satisfaction 2. Human Health 3. Ethical and equity considerations 4. Impacts on neighbourhoods or regions 5. Fit with planning and policy strategies and initiatives 6. Uncertainty and evidence

Table 2: Indicator Sources

Sector	Number of Sources		Number of sources with indicator sets		Indicator set origin		
	Policy	Reporting	Policy	Reporting	UK	Wider Europe	Rest of world
Business / corporate	14	2	9	2	7	8	1
Environment - protection	12	1	8	1	8	2	3
Environment - waste management / resource management (resources include energy, water etc)	19	3	16	3	12	9	1
Spatial / land-use planning	8		4		7	1	
Government performance bench marking (e.g. framework indicators, local authority performance)	23	2	13	2	21	4	
Construction / building (including homes)	3		1		3		
Transport	4		3		2	2	
**Contaminated land - dedicated indicator sets	13	1	11	1	10	2	2
Other	8		5		7		1
Total	104	9	70	9	77	28	8

Note: indicators sets were also classified by date, and by whether they were using explicit or implicit indicators.

All indicator sets dated from 2000 to 2009, none predated 2000.

4 Assessment of indicators suggested on 18 November 2008

Using a workshop to assist in selecting criteria for consideration in environmental decision-making is established practice (e.g. for Strategic Environmental Assessment - Donnelly et al 2006 and 2007), and a structured approach can be used to consider and assess candidate criteria. A simplified exercise was carried at a SuRF-UK Open Forum held in London on 18 November 2008. This sought to identify suggestions for possible indicators for the sustainability assessment of contaminated land remediation projects. Suggestions were collated across five syndicate groups drawn from the 52 workshop delegates. The delegates were all contaminated land management or planning practioners with an interest in sustainable remediation.

105 individual indicator suggestions were provided. These have been grouped by headline category in Annex 4. 31 (30%) were associated with environmental headlines, 38 (36%) with economic headlines and 36 (34%) with social headlines, representing a fairly even spread across the three elements of sustainability. Few environmental indicators were suggested concerned with impacts on soil, water or ecology. Many environmental indicators suggested were categorised as concerned with resource use and waste management. Most economic indicator suggestions were concerned with the assessment of direct costs or indirect economic costs and benefits. Most social indicator suggestions were concerned with the assessment of human health or community involvement and community satisfaction and impacts on neighbourhoods or regions.

Overall the indicators, 97 % were classified as having a good fit with the headline indicators, i.e. were adequately described by the headline and could be uniquely mapped to it. 0% was classified as having a poor fit with the headline indicators; and 3% could have been mapped to more than one headline. These data indicate that in general the headline categories chosen worked effectively for the 18 November exercise.

Figure 1 shows how these indicators were distributed across the 18 headline categories. It is noteworthy that only one indicator was classified as relevant to impacts on soil.

5 Assessment of Indicator Sets

2,421 individual indicators were described in 79 sources, as summarised in Table 2. Of the 113 sources reviewed in detail, 77 originated from the UK, 28 from elsewhere in Europe and 8 from elsewhere in the world or from international organisations.

These were mapped against the headline categories listed in Table 1. 1,103 (46%) were associated with environmental headlines, 508 (21%) with economic headlines and 810 (33%) with social headlines. The dominant interest therefore appears to be in environmental indicators across the various indicator sets.

Figure 2 shows how these indicators were distributed across the 18 headline categories. All of the indicators identified were mapped successfully. 82 % were classified as having a good fit with the headline indicators; 5% were classified as having a poor fit with the headline indicators; and 13% could have been mapped to more than one headline. The headline category environment → resource use and waste had by far the greatest number of poor and multiple fit listings, however this may simply be because this category had a greater listing of any other category. These data indicate that in general the headline categories chosen worked effectively for the literature review as well, although they could be slightly refined in future studies.

The greatest environmental category by size, and by a long way, was environment → resource use and waste with 546 entries. Economic indicators are dominated by those relating to indirect economic costs and benefits, and those relating to employment and human capital. There were few indicators of the performance of the sustainability appraisal itself (uncertainty and evidence) and the other indicators mapped as in the social element were fairly evenly divided across the other five social headline categories.

Twelve indicator sets were from sources directly linked to contaminated site management (see Annex 8). Figure 3 shows how these indicators were distributed across the 18 headline categories. For the contaminated site management indicator sets, 111 (42%) indicators were associated with environmental headlines, 61 (23%) with economic headlines and 93 (35%) with social headlines. The indicator fits overall were 84% good, 8% poor and 8% multiple. The environmental indicators were dominated by those relating to resource use and waste management. Eight out of the twelve indicator sets had no coverage for impacts on soil, whereas one indicator set had substantive coverage (individually mapped in Annex 8). The dominant issue for economic indicators was with project risks and lifespan. The remainder of the economic indicators were fairly evenly distributed across the other five headline categories. Social indicators tended not to include ethical and equity issues and focused on Impacts on neighbourhoods or regions and community involvement and community satisfaction.

Annex 5 provides similar charts for all of the other Sectors listed in Table 2. Annex 6 lists the individual indicators found grouped by headline category and alphabetically for sources related to contaminated land management. Annex 7 provides a similar listing aggregated across the other (non-contaminated land sectors).

There are relatively few indicators directly concerned with impacts on soil. Perhaps historically this reflects a lower level of interest in the soil compartment of the environment. However, it is not consistent with the soil protection interests in the EU Soil Thematic Strategy (EC 2006), the draft Soil Framework Directive and the draft Soil Strategy for England (Defra 2008).

As seen above, the lack of soil related indicators extends even to indicators sets directly related to the contaminated land sector, and for the identification of possible indicators by delegates during the 18 November 2008 Open Forum. There is perhaps a message in these data, which is that soil considerations need to be promoted in general for sustainability appraisal, even within the contaminated land management sector.

A concern that has emerged at the SuRF-UK meetings, and also at meetings organised by NICOLE[3] is that the complexity and range of sustainability considerations would make sustainability appraisal unattractive as a routine decision support tool. One possible route to a simplification is to take a tiered approach using an assessment of general headline indicators (e.g. the 18 suggestions in Table 1) to provide a first approximation. The analysis of how well the indicators identified fit with the Table 1 "headline categories" implies that this is a feasible simplification. However, it would need to be validated by consultation and perhaps some refinements to improve the "good" fits found from 82%.

[3] NICOLE – Network for Industrially Contaminated Land in Europe – www.nicole.org

Figure 1: Distribution of November 18 indicators suggestions by headline category

Environmental		
Impacts on air	5	P: 0 M: 0 G: 5
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	2	P: 0 M: 0 G: 2
Impacts on soil	1	P: 0 M: 0 G: 1
Intrusiveness	6	P: 0 M: 0 G: 6
Resource use and waste	17	P: 0 M: 0 G: 17
Subtotal	31	(for Environmental)
Economic		
Direct costs and direct economic benefits	20	P: 0 M: 1 G: 19
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	10	P: 0 M: 0 G: 10
Employment / human capital	3	P: 0 M: 0 G: 3
Gearing	3	P: 0 M: 0 G: 3
Life-span and 'project risks'	2	P: 0 M: 0 G: 2
Subtotal	38	(for Economic)
Social		
Community involvement and Community satisfaction	10	P: 0 M: 0 G: 10
Ethical and equity considerations	1	P: 0 M: 0 G: 1
Human Health	9	P: 0 M: 1 G: 8
Impacts on neighbourhoods or regions	14	P: 0 M: 1 G: 13
Fit with planning and policy strategies and initiatives	1	P: 0 M: 0 G: 1
Uncertainty and evidence	1	P: 0 M: 0 G: 1
Subtotal	36	(for Social)
Total (from 1 sources)	105	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Figure 2: Distribution of <u>All</u> Indicators by Headline Category (excludes November 18 suggestions)

Environmental		
Impacts on air	203	P: 1 M: 20 G: 182
Impacts on water	84	P: 1 M: 13 G: 70
Impacts on ecology	141	P: 1 M: 16 G: 124
Impacts on soil	42	P: 2 M: 6 G: 34
Intrusiveness	87	P: 10 M: 9 G: 68
Resource use and waste*	546	P: 31 M: 88 G: 427
Subtotal	1103	(for Environmental)
Economic		
Direct costs and direct economic benefits	78	P: 3 M: 9 G: 66
Flexibility	16	P: 5 M: 0 G: 11
Indirect costs and indirect economic benefits	183	P: 10 M: 12 G: 161
Employment / human capital	168	P: 10 M: 10 G: 148
Gearing	19	P: 4 M: 1 G: 14
Life-span and 'project risks'	44	P: 4 M: 6 G: 34
Subtotal	508	(for Economic)
Social		
Community involvement and Community satisfaction	172	P: 14 M: 19 G: 139
Ethical and equity considerations	155	P: 9 M: 12 G: 134
Human Health	192	P: 4 M: 20 G: 168
Impacts on neighbourhoods or regions	130	P: 6 M: 19 G: 105
Fit with planning and policy strategies and initiatives	139	P: 15 M: 24 G: 100
Uncertainty and evidence	22	P: 0 M: 1 G: 21
Subtotal	810	(for Social)
Total (from 79 sources)	2421	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

*The visual representation of the value G: 427 continues past the boundaries of the table.

Figure 3: Distribution of Contaminated Land Sector Indicators by Headline Category

Environmental		
Impacts on air	7	P: 0 M: 0 G: 7
Impacts on water	15	P: 0 M: 3 G: 12
Impacts on ecology	8	P: 0 M: 0 G: 8
Impacts on soil	11	P: 0 M: 1 G: 10
Intrusiveness	11	P: 0 M: 0 G: 11
Resource use and waste	59	P: 8 M: 6 G: 45
Subtotal	111	(for Environmental)
Economic		
Direct costs and direct economic benefits	5	P: 0 M: 0 G: 5
Flexibility	11	P: 5 M: 0 G: 6
Indirect costs and indirect economic benefits	6	P: 1 M: 2 G: 3
Employment / human capital	7	P: 0 M: 1 G: 6
Gearing	5	P: 1 M: 0 G: 4
Life-span and project risks	27	P: 2 M: 2 G: 23
Subtotal	61	(for Economic)
Social		
Community involvement and Community satisfaction	19	P: 0 M: 3 G: 16
Ethical and equity considerations	7	P: 0 M: 0 G: 7
Human Health	16	P: 1 M: 0 G: 15
Impacts on neighbourhoods or regions	22	P: 0 M: 1 G: 21
Fit with planning and policy strategies and initiatives	16	P: 2 M: 2 G: 12
Uncertainty and evidence	13	P: 0 M: 0 G: 13
Subtotal	93	(for Social)
Total (from 12 sources)	265	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

6 Conclusions and Recommendations

A total of 2,421 individual indicators were identified. These constitute a large sample of different interests in sustainability appraisal. Overall indicators found in the literature review and the suggestions made at the 18 November 2008 Open Forum fitted well with the headline indicators suggested (82% and 97% had a good unique fit to a category, respectively). Indicators were found that fitted into all of the 18 headline categories, but the distribution of indicators across the headlines was not uniform. A large number of environmental indicators are related to resource use and waste management. There are few indicators linked to impacts on soil, and also few linked to consideration of the quality of the evidence base and its uncertainty.

It is noteworthy that twelve indicator sets relating to contaminated land management were found by this survey, which indicates a wider interest in "sustainable remediation". However, the coverage of these indicator sets on an individual basis is incomplete. For 8 sets there is no inclusion of impacts on soil, which is not consistent with current UK and EU soil policy.

The indicator suggestions from the 18 November 2008 Open Forum were fairly evenly distributed across the three elements of sustainable development (environmental. Economic and social), which implies that the contaminated land professionals represented at that meeting had a wide ranging view of sustainable development in general. However, within each element most indicator choices were clumped around particular choices, which are strongly related to historic client and regulator interests (impacts on air, resource utilisation and waste management, indirect and direct costs, community involvement and satisfaction, human health, and impacts on neighbourhoods or regions). The indicators identified by the literature review were wider ranging in the aspects they covered.

It is proposed that a second phase of this work is needed. More detailed analysis of data collected by this work within a second phase of work should update the listing from the additional references found, and carry out a duplication of the mapping selections as a final check. After this, work should consider the individual indicator items within each category. It should focus on developing an initial integrated set of indicators for sustainable remediation, based on the existing indicators already developed for this sector, supplemented by the most common individual indicators of sustainability that are used. This initial indicator set could be a basis for consultation within the sector to develop a consensus for the key factors to be considered in sustainability appraisal. This should also show linkages to indicator sets used by related sectors (e.g., construction and waste management), both in terms of common interests, but also in suggesting where soil or remediation based work in a project should extend the range of sustainability indicators considered at other decision making levels (such as project design).

A possible route to simplified sustainability appraisal is to take a tiered approach using an assessment of general headline indicators. This approach merits further investigation and consultation.

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8 Annex 1: Description of Headline Categories

Environmental Element of Sustainability	
Headline Indicator	Description
Air water and soil represent the three environmental compartments that might be affected by an environmental consequence (note land is comprised of soil and water).	
Impacts on air	Includes: Air quality (pollution) – e.g. NOx, SOx, acid, particulates, VOC; climate change, e.g. CO_2, N_2O; and ozone depleting substances (see also social – human health)
Impacts on water	Includes: emissions of nutrients (especially N and P), particulates (sediment inputs), impacts on pH and redox, emissions of other dissolved contaminants, transfer of pathogens, impacts if flow rates are low
Impacts on soil	Changes in biological functions, chemical functions and physical functions, accumulation of contamination, biological "contamination", physical contamination. Includes geotechnical performance (e.g. subsidence risks)
Impacts on ecology	An over-riding concern for environmental impacts is their consequences for ecology, both in terms of biodiversity (from a conservation perspective) and from the perspective of providing services necessary for the sustenance of life. Includes risks / impacts on ecological functioning and biodiversity, including imported species such as weeds
Intrusiveness	Environmental impacts may not be readily tangible, in many cases impacts may arise from noise, light or simply a visual impact. Includes impacts on the built environment, conservation issues (e.g. preservation of archeologically important strata), impacts on landscape. Includes also impacts from flooding, risks from flooding and avoidance of flooding risks.
Resource use and waste	Resource utilisation is an important consideration in sustainability appraisal. Environmental resources considered typically include materials and energy, and are important both in terms of their depletion, and also the environmental impacts of their production. Other resources are also important, for example water use, land use, use of landfill capacity and other downstream waste management capacity, and also the built environment and archaeological remains which may be altered or destroyed. Waste is part of the resource cycle. Utilisation of non-renewable resources tends of course to be more significant than the use of renewable resources – depending on the environmental costs of the resource production. Includes waste minimisation This category is independent of the climate change consequences of fossil fuel use which is considered elsewhere This category also includes emissions / discharges of pollutants and other uncontrolled materials where air, water or soil impacts are not specified.

Economic Element of Sustainability	
Headline Indicator	Description
Direct costs and direct economic benefits	Costs represent the use of economic resources. Direct costs are those that effectively affect the "bottom line" of the organisation or organisations that would undertake the project being considered. As for environmental resource utilisation, the usual desire is to minimise economic resource utilisation (so that economic resources can generally be applied most effectively – particularly important for a public administration). Costs, however, may also be indirect, and these indirect costs may not accrue to the project or organisations undertaking it, for example the long term impact of reducing investment to deal with an overly expensive project, or costs needed for supporting infrastructure measures. Direct and indirect (or consequential) costs have been considered separately to take into account that they may affect different groups, and that they are estimated differently. The indirect categories includes indicators of general economic performance for an area
Indirect costs and indirect economic benefits	
Gearing	In some cases a project may bring additional economic resources to a region or project which may increase its attractiveness. From a local authority point of view "planning gain" might be a consideration in considering gearing, but others might be increasing the local tax base
Employment / human capital	Projects may affect both the level of employment and also skills base. The development of projects that enhance skills may be significant at local, regional or national levels. This category also includes indicators related to education.
Life-span and "project risks"	Initiatives and projects with a short life span represent a poorer investment as the duration of the services they provide is limited. Flexibility is a related consideration. Projects and initiatives that are likely to be unable to adapt to changing future circumstances will also be limited in time. Change is inevitable: some change may be foreseeable at the time of planning, and at the very least this foreseeable change should be considered. Ideally, a project or initiative should also be intrinsically flexible so that it can adapt relatively easily to changes that might not be immediately obvious, for example by having in a recycling project multiple opportunities for re-use as opposed to just one. Project risks include issues such as the reliability of projects / technologies; technology status and maturity, issues of due diligence and taking decisions that affect the susceptibility of an activity to environmental hazards (such as flooding). However, this category does not include indicators that directly relate to environmental categories.
Flexibility	

Social Element of Sustainability	
Headline Indicator	Description
Community involvement and satisfaction	Community and stakeholder involvement underpin sustainable decision making; both in terms of the philosophy 0f sustainable development, but also as a platform for stable and robust decision making. Community satisfaction is intended to describe the consequences for the community after the project has been implemented (rather than the extent to which the community is involved in decision making). This category includes general access to services, including commercial and business services, but also services such as health care, leisure, and education. Issues of specific or equitable access are considered in another category (below)
Human health	Achieving satisfactory risk management, dealing with issues of risk perception, effects of noise, odour, dust and bioaerosols; needs to consider acute versus chronic risks, and occupational exposure, health and safety issues
Ethical and equity considerations	Ethical issues can impinge on waste management and recycling operations in unexpected ways, for example there is currently a debate about the sustainability about biofuel production which has a strong ethical content related to possible impacts on poorer countries. Another possible ethical consideration might relate to job creation: positively for example creating sheltered employment opportunities. Equity issues consider issues of access related to affordability, disability, gender, ethnic or cultural background etc.
Impacts on neighbourhoods or regions	Projects can cause aggravation for example by removing or reducing public access to land, by increasing traffic and congestion, by closing access routes; or more generally by being insensitive to site neighbours[4]. Other sources of aggravation may be nuisance issues such as noise, light pollution, smells, litter and debris off site. This category also includes traffic issues at all scales, and issues related to crime, disorder and public safety
Fit with planning and policy strategies and initiatives	Planners, regulators and local authorities are set guiding policies, and they are responsible for ensuring that initiatives support these policies, or at least do not run counter to them.
Uncertainty, evidence and verification	Sustainable development policy in the UK is explicitly described as evidence based. Consequently it is important to consider in the sustainability appraisal the quality of the evidence presented in support of claims for the proposed options being considered. A related issue is uncertainty. The lower the level of uncertainty over possible outcomes for an option being considered, the more likely that option would be successful if implemented in practice. Another important consideration is how assertions of sustainability can be verified once a project development is underway or has been implemented, and operations have begun. In broad terms this category considers the quality of information going into the sustainability appraisal.

[4] To some extent this consideration could overlap with "Environment – intrusiveness" as the sources of aggravation may be considered in this headline.

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http://new.wales.gov.uk/docrepos/40371/4038231/784611/IWG_report_June_06.doc?lang=en

10 Annex 3: Additional documents identified after March 16th 2009 and not reviewed

Resource Name	Description	Link
Strategy for sustainable construction	Constructing Excellence's Key Performance Indicator (KPI) data	www.tinyurl.com/5yyw63
Strategy for sustainable construction	Design Quality Indicator (DQI)	www.dqi.org.uk
Strategy for sustainable construction	Key Performance Indicators	www.kpizone.com
	Ministry of Defence: Stress Indicator Tool in 2007	
	DEFRA: Soil strategy for England (draft in 2004)	
	Bringezu, S., Schütz, H. and Moll, S., (2003). Rationale for and Interpretation of Economy-Wide Material Flow Analysis and Derived Indicators. Journal of Industrial Ecology 7 (2): 43 - 67.	
	EEA CSI-16 EEA, Core set of indicators – municipal waste (CSI-16);	http://themes.eea.europa.eu/IMS/ISpecs/ISpecification20041007131809/IAssessment1183020255530/view_content
	EUROSTAT, 2008 Data downloaded from Environmental Data Centre on Waste (especially: Structural Indicators on municipal waste and Waste Statistics Regulation):	http://epp.eurostat.ec.europa.eu/portal/page?_pageid=3155,70491033,3155_70531796&_dad=portal&_schema=PORTAL
	category indicators	AS/NZS ISO 14042:2001
State of the Environment Reporting	indicators of environmental health	Environment Australia, 2001
		Hamblin A., 1998. Environmental indicators for national state of the environment reporting - The Land, Australia: State of the Environment (Environmental Indicator Reports), Department of the Environment, Canberra, Australia.

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		Van Bruggen, A.H.C and Semenov, A.M. 2000. In search of biological indicators for soil health and disease suppression. Applied Soil Ecology 15:13-24.
IDEM (Integration and Development of Environmental Management System) LIFE05 ENV/IT/000808	GUIDELINES FOR THE INTEGRATION OF ENVIRONMENTAL BALANCE WITH ENVIRONMENTAL MANAGEMENT SYSTEM	http://www.idems.it/en/?Consultation_material:Output_of_the_project:Results_of_the_project
InfoCoSM: Information and communication technologies to strengthen sustainable city management LIFE04 TCY/ROS/000051	Currently only in Russian	http://www.infoeco.ru/
EMAS4NewStates: Innovative approach in EMAS II implementation in the local authorities of new member states LIFE04 ENV/LV/000631	English pages are under development	http://www.bkgriga.lv/?object_id=658
Dogme 2000: A model for Environ. management on the municipal level LIFE04 ENV/DK/000071	Different indicators under "Green accounts" subpages	http://www.dogme2000.org/t2w_381.asp
URBANGUARD: Enabling the incorporation of urban sustainability parameters in spatial urban development LIFE03 TCY/CY/000019	Final indicators	http://www.moi.gov.cy/moi/urbanguard/urbanguard.nsf/All/E8853ADEA576DBAFC2257356005F37DC?OpenDocument
DIVERS: Information, competitiveness and sustainability in urban system LIFE02 ENV/E/000176	Only in Spanish	http://www.ecourbano.es/
ecoBUDGET: A political management system for local Environ. Budgeting LIFE00 ENV/S/000852		http://www.iclei-europe.org/index.php?id=1333

Resource Name	Description	Link
CLEAR methods for cities' Environ. accounting and reporting LIFE00 ENV/IT/000144	Only in Italian	http://www.clear-life.it/
ECO-LUP: Applying EMAS to local authorities' land-use planning LIFE00 ENV/D/000326	Brochure	http://www.ecolup.info/docs/indexeco_navi.asp?id=7236&domid=629&sp=E&addlastid=&m1=7205&m2=7236
URBAN-NET	The URBAN-NET project addresses issues of urban sustainability in Europe. Its overall aim is to increase the cooperation and coordination between European Member and Associated States through networking and the collaboration on joint research activities. URBAN-NET is funded by the European Commission's Framework 6 Programme under the European Research Area Network (ERA-NET) initiative.	http://www.urban-net.org/
Environment Agency (2005) Developing social appraisal criteria for the Environment Agency. Science Report SC010044/SR3	This report describes the research and development of a set of criteria for social appraisal for the Environment Agency. It also describes the use of an early version of the social criteria during 2003 to identify the social issues of most importance across the Agency's functions, and the priorities for future work on social issues.	http://publications.environment-agency.gov.uk/pdf/SCHO0805BJMH-e-e.pdf
Department of Communities and Local Government (2006) Strategic Planning for Sustainable Waste Management: Companion guide to Planning Policy Statement 10. DCLG, London UK. Reference No: 06 PD 03957. ISBN 13 978 185 112 8587	Refers to indicators used in Regional Spatial Strategy and Local Authority Core Sets mapped elsewhere. Appendix A offers a selection of topics that fit in with these schemes	http://www.communities.gov.uk/documents/planningandbuilding/pdf/150805.pdf

11 Annex 4: Listing of 18 November 2008 Indicator Suggestions

Environmental: ---> Impacts on air

Acid rain generation

Air Quality

Climate Change - Green House Emissions (carbon)

Emissions to air – by process & by production of materials

Ozone depletion

Environmental: ---> Impacts on water

Environmental: ---> Impacts on ecology

Biosphere – protection; improvement; diversity; flora/fauna

Ecology – habitat creation; habitat destruction

Environmental: ---> Impacts on soil

Soil – function; land pollution

Environmental: ---> Intrusiveness

flood risk

Green Infrastructure

Heritage

Intrusiveness

Local Aesthetics

Visual Landscape – Eye-sore; fit into natural landscape

Environmental: ---> Resource use and waste

Carbon Footprint

Energy Consumption/Demand

Future Resource

Materials – consumption; production; recovery

Maximise soil reuse

Minimise soil waste

Natural Resources – efficient reuse

Recovery of Product

Recovery of Product

Reduction of landfill

Renewables Generation

Transportation (tonnes per mile)

Use of Natural Resources – fuel; aggregates; water

Waste Generation

Waste Minimisation – Produce material; impact

Water – lakes; ponds; water consumption; tidal effects

Water – resource use; quality; clean-up

Economic: ---> Direct costs and direct economic benefits

Avoidance of liability
Capital
Carbon trading
Compensation/Damages paid out
Corporate Image/reputation
Corporate Reputation/Share Price
Cost of Process
Costs – immediate; lifetime
Direct costs
Environmental Liability
Equipment Used
Good PR
Grants/Fiscal incentives
Internal Rates of Return
Investment
Liability – long term; short term
Maintenance Cost
Operating Costs / Operational Costs
Profit
Tax exemptions & relief

Economic: ---> Indirect costs and indirect economic benefits

Emissions Trading
Indirect costs
Land Value– neighbours & development
Local Authority reputation
Local Wages/Economy
Property Blight/Uplift
Raising taxes by redeveloping land to productive sites
Regeneration
Technology Development
Tourism

Economic: ---> Employment / human capital

Employment

Employment - creation or destroy

Training

Economic: ---> Gearing

Inward Investment

Planning Gain

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Economic: ---> Life-span and 'project risks'

Finality (financial certainty/closure confidence)

Longevity

Economic: ---> Flexibility

Social: ---> Community involvement and Community satisfaction

Acceptability
Community Acceptance
Community Confidence
Community Social Responsibility
Consultation
Land Options Enhancements
Local amenity/services
Protection of green spaces
Public perception
Social Perception

Social: ---> Ethical and equity considerations

Ethical

Social: ---> Fit with planning and policy strategies and initiatives

Politics

Social: ---> Human Health

Health and Safety
Health and Safety – community & well being
Human Health Risk Assessment
Human Health standards increase or decrease
Physical Hazard
Population Impacted
Protection of Human Health
Reduction of Health Risk
Traffic

Social: ---> Impacts on neighbourhoods or regions

Community Cohesion

Crime

Disturbance e.g. traffic

Disturbance/Nuisance

Highway safety

Minimise dust generation

Minimise noise generation

Minimise odour generation

Noise

Road miles created

Social Disruption (relocation/rehousing)

Stakeholder Stress

Transportation

Urbanisation – crime reduction; space reduction

Social: ---> Uncertainty and evidence

Uncertainty

12 Annex 5: Distribution of Indicators across headlines for each sector

Distribution of all Indicators by Headline AND Sector (business / corporate)

Environmental		
Impacts on air	17	P: 0 M: 1 G: 16
Impacts on water	5	P: 0 M: 1 G: 4
Impacts on ecology	12	P: 0 M: 2 G: 10
Impacts on soil	3	P: 0 M: 0 G: 3
Intrusiveness	3	P: 0 M: 1 G: 2
Resource use and waste	42	P: 0 M: 7 G: 35
Subtotal	82	(for Environmental)
Economic		
Direct costs and direct economic benefits	13	P: 0 M: 3 G: 10
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	16	P: 1 M: 3 G: 12
Employment / human capital	23	P: 0 M: 4 G: 19
Gearing	0	P: 0 M: 0 G: 0
Life-span and project risks	1	P: 0 M: 1 G: 0
Subtotal	53	(for Economic)
Social		
Community involvement and Community satisfaction	6	P: 0 M: 1 G: 5
Ethical and equity considerations	17	P: 2 M: 3 G: 12
Human Health	9	P: 0 M: 5 G: 4
Impacts on neighbourhoods or regions	2	P: 0 M: 0 G: 2
Fit with planning and policy strategies and initiatives	13	P: 1 M: 5 G: 7
Uncertainty and evidence	4	P: 0 M: 0 G: 4
Subtotal	51	(for Social)
Total (from 11 sources)	186	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of all Indicators by Headline AND Sector (construction / building - including homes)

Environmental		
Impacts on air	1	P: 0 M: 0 G: 1
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	1	P: 0 M: 0 G: 1
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	4	P: 0 M: 2 G: 2
Subtotal	6	(for Environmental)
Economic		
Direct costs and direct economic benefits	1	P: 0 M: 0 G: 1
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	1	P: 0 M: 0 G: 1
Employment / human capital	1	P: 0 M: 1 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	3	(for Economic)
Social		
Community involvement and Community satisfaction	2	P: 1 M: 1 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	0	P: 0 M: 0 G: 0
Impacts on neighbourhoods or regions	0	P: 0 M: 0 G: 0
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 sources)	11	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of all Indicators by Headline AND Sector (environment - protection)

Environmental		
Impacts on air	30	P: 1 M: 2 G: 27
Impacts on water	19	P: 0 M: 3 G: 16
Impacts on ecology	40	P: 0 M: 11 G: 29
Impacts on soil	4	P: 0 M: 1 G: 3
Intrusiveness	4	P: 0 M: 0 G: 4
Resource use and waste	57	P: 1 M: 12 G: 44
Subtotal	154	(for Environmental)
Economic		
Direct costs and direct economic benefits	3	P: 0 M: 0 G: 3
Flexibility	1	P: 0 M: 0 G: 1
Indirect costs and indirect economic benefits	13	P: 0 M: 0 G: 13
Employment / human capital	14	P: 1 M: 0 G: 13
Gearing	1	P: 1 M: 0 G: 0
Life-span and project risks	1	P: 0 M: 0 G: 1
Subtotal	33	(for Economic)
Social		
Community involvement and Community satisfaction	14	P: 1 M: 2 G: 11
Ethical and equity considerations	16	P: 0 M: 1 G: 15
Human Health	40	P: 0 M: 3 G: 37
Impacts on neighbourhoods or regions	10	P: 0 M: 0 G: 10
Fit with planning and policy strategies and initiatives	11	P: 2 M: 0 G: 9
Uncertainty and evidence	1	P: 0 M: 0 G: 1
Subtotal	92	(for Social)
Total (from 9 sources)	279	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of all Indicators by Headline AND Sector (environment - waste management / resource management - resources include energy, water etc)

Environmental		
Impacts on air	45	P: 0 M: 3 G: 42
Impacts on water	15	P: 0 M: 1 G: 14
Impacts on ecology	19	P: 0 M: 0 G: 19
Impacts on soil	12	P: 0 M: 2 G: 10
Intrusiveness	6	P: 0 M: 0 G: 6
Resource use and waste	138	P: 3 M: 24 G: 111
Subtotal	235	(for Environmental)
Economic		
Direct costs and direct economic benefits	13	P: 1 M: 1 G: 11
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	45	P: 2 M: 3 G: 40
Employment / human capital	30	P: 4 M: 3 G: 23
Gearing	2	P: 0 M: 0 G: 2
Life-span and project risks	4	P: 1 M: 0 G: 3
Subtotal	94	(for Economic)
Social		
Community involvement and Community satisfaction	19	P: 2 M: 1 G: 16
Ethical and equity considerations	23	P: 2 M: 2 G: 19
Human Health	40	P: 1 M: 3 G: 36
Impacts on neighbourhoods or regions	19	P: 1 M: 2 G: 16
Fit with planning and policy strategies and initiatives	29	P: 4 M: 8 G: 17
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 19 sources)	459	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of all Indicators by Headline AND Sector (government performance bench marking - e.g. framework indicators, local authority performance)

Environmental		
Impacts on air	75	P: 0 M: 8 G: 67
Impacts on water	22	P: 1 M: 3 G: 18
Impacts on ecology	40	P: 1 M: 2 G: 37
Impacts on soil	8	P: 1 M: 1 G: 6
Intrusiveness	35	P: 2 M: 2 G: 31
Resource use and waste	156	P: 9 M: 23 G: 124
Subtotal	336	(for Environmental)
Economic		
Direct costs and direct economic benefits	9	P: 0 M: 0 G: 9
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	27	P: 0 M: 0 G: 27
Employment / human capital	52	P: 1 M: 1 G: 50
Gearing	2	P: 0 M: 0 G: 2
Life-span and project risks	7	P: 0 M: 1 G: 6
Subtotal	97	(for Economic)
Social		
Community involvement and Community satisfaction	49	P: 5 M: 8 G: 36
Ethical and equity considerations	49	P: 1 M: 2 G: 46
Human Health	65	P: 2 M: 8 G: 55
Impacts on neighbourhoods or regions	39	P: 3 M: 8 G: 28
Fit with planning and policy strategies and initiatives	30	P: 1 M: 5 G: 24
Uncertainty and evidence	2	P: 0 M: 1 G: 1
Subtotal	234	(for Social)
Total (from 15 sources)	667	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of all Indicators by Headline AND Sector (spatial / land-use planning)

Environmental		
Impacts on air	12	P: 0 M: 4 G: 8
Impacts on water	5	P: 0 M: 0 G: 5
Impacts on ecology	18	P: 0 M: 1 G: 17
Impacts on soil	4	P: 1 M: 1 G: 2
Intrusiveness	21	P: 8 M: 5 G: 8
Resource use and waste	54	P: 8 M: 9 G: 37
Subtotal	114	(for Environmental)
Economic		
Direct costs and direct economic benefits	2	P: 0 M: 0 G: 2
Flexibility	2	P: 0 M: 0 G: 2
Indirect costs and indirect economic benefits	26	P: 3 M: 2 G: 21
Employment / human capital	20	P: 4 M: 0 G: 16
Gearing	6	P: 2 M: 0 G: 4
Life-span and project risks	3	P: 0 M: 2 G: 1
Subtotal	59	(for Economic)
Social		
Community involvement and Community satisfaction	32	P: 3 M: 1 G: 28
Ethical and equity considerations	23	P: 4 M: 2 G: 17
Human Health	17	P: 0 M: 1 G: 16
Impacts on neighbourhoods or regions	18	P: 2 M: 1 G: 15
Fit with planning and policy strategies and initiatives	17	P: 3 M: 4 G: 10
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 4 sources)	280	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of all Indicators by Headline AND Sector (transport)

Environmental		
Impacts on air	9	P: 0 M: 1 G: 8
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	1	P: 0 M: 0 G: 1
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	15	P: 0 M: 3 G: 12
Subtotal	25	(for Environmental)
Economic		
Direct costs and direct economic benefits	6	P: 1 M: 0 G: 5
Flexibility	2	P: 0 M: 0 G: 2
Indirect costs and indirect economic benefits	5	P: 0 M: 0 G: 5
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	1	P: 0 M: 0 G: 1
Life-span and project risks	1	P: 1 M: 0 G: 0
Subtotal	15	(for Economic)
Social		
Community involvement and Community satisfaction	14	P: 2 M: 1 G: 11
Ethical and equity considerations	5	P: 0 M: 2 G: 3
Human Health	1	P: 0 M: 0 G: 1
Impacts on neighbourhoods or regions	11	P: 0 M: 4 G: 7
Fit with planning and policy strategies and initiatives	8	P: 0 M: 0 G: 8
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 3 sources)	79	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of all Indicators by Headline AND Sector (Other)

Environmental		
Impacts on air	7	P: 0 M: 1 G: 6
Impacts on water	3	P: 0 M: 2 G: 1
Impacts on ecology	2	P: 0 M: 0 G: 2
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	7	P: 0 M: 1 G: 6
Resource use and waste	21	P: 2 M: 2 G: 17
Subtotal	40	(for Environmental)
Economic		
Direct costs and direct economic benefits	26	P: 1 M: 5 G: 20
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	44	P: 3 M: 2 G: 39
Employment / human capital	21	P: 0 M: 0 G: 21
Gearing	2	P: 0 M: 1 G: 1
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	93	(for Economic)
Social		
Community involvement and Community satisfaction	17	P: 0 M: 1 G: 16
Ethical and equity considerations	15	P: 0 M: 0 G: 15
Human Health	4	P: 0 M: 0 G: 4
Impacts on neighbourhoods or regions	9	P: 0 M: 3 G: 6
Fit with planning and policy strategies and initiatives	15	P: 2 M: 0 G: 13
Uncertainty and evidence	2	P: 0 M: 0 G: 2
Subtotal	62	(for Social)
Total (from 5 sources)	195	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

13 Annex 6: Listing of literature review indicators by headline and similarity for contaminated land sector related sources

This annex is a listing of indicators used by the documents reviewed. Similarities are common, in some cases with the exact same wording. The annex includes the full listing including these similarities.

Contaminated land Sector

Environmental: ---> Impacts on air

Actual and combined emission of pollutants to air

Air and Atmosphere - Impacts of reagents added during remediation

Air and Atmosphere - Impacts of remediation by-products and emissions

Air emissions

Global environment > air quality (global warming)

Local environment > air quality (pollution)

Number of complaints during characterisation and remediation of the site

Environmental: ---> Impacts on ecology

Conservation - Impacts of organisms added during remediation

Conservation - Impacts on the "quality of nature"

Destroying / developing valuable biotopes

Exposure pathways (receptor: Ecosystems)

Impacts on land and ecosystems

Local environment > habitat/ecology

Restoration area/ecosystem/proximity (receptor: Ecosystems)

Transfer to higher trophic level/potential (receptor: Ecosystems)

Environmental: ---> Impacts on soil

Ground Function - Changes in soil function

Ground Function - Impact of added organisms

Ground Function - Impacts of process by-products and emissions on soil systems

Ground Function - Impacts of remediation work on subsurface structure

Ground Function - Impacts of substances added during remediation

Ground Function - Impacts of the intrusion or exclusion of water

Ground Function - Impacts on soil mineralogy during remediation

Ground Function - Soil resource depletion

Local environment > quality/structure of soil

Presence of intermediate dechlorination products (Contaminant Distribution and Peak Concentrations)

Soil organic matter

Environmental: ---> Impacts on water

ID of route entry/assess risk/resultant conc. levels (receptor: Ground water)

ID of route entry/assess risk/resultant conc. levels (receptor: Surface water)

Leachate generation potential (receptor: Ground water)

Leachate movement potential (receptor: Ground water)

limit the damage to water resources

Local environment > groundwater quality

Local environment > Surface water quality

Restoration area (receptor: Surface water)

Restoration area/ground water/ proximity (receptor: Ground water)

Surface and groundwater management plan

Surface area/ detailed assessment (receptor: Ground water)

Surface area/detailed assessment (receptor: Surface water)

Water Function - Impacts of reagents added during remediation

Water Function - Impacts of remediation by-products and emissions

Water requirements and associated impacts on water resources

Environmental: ---> Intrusiveness

Compatibility of the intended land use function with the natural and anthropogenic conditions of the site and its surroundings

Conservation - Conservation of the built environment and of landscape

Conservation of industrial monuments

Conservation of industrial monuments

Description of the development (site details, design, size, purposes and objectives), incl. map

Guideline use

Legacy - Impacts on landscape

Legacy - Impacts on the built environment

Ratio of surface sealing

Site use > Impact on landscape

Studies realised

Environmental: ---> Resource use and waste

Break in pollutant linkage

Building material recycling and reuse

Building material recycling and reuse on site

Distance from plant supply

Distance to material supply or disposal site

Duration of treatment

Energy Consumption Standard

Energy requirement (other than vehicle fuel)

Energy requirements

Energy use

Existence of a waste management plan, recycling and reuse of soils and debris

Fate of soil remediated

Global environment

Global environment > Use of natural resources

Global environment > Waste

HGV movements

Legacy - Fate of treated contaminants

Legacy - Waste generation

Local environment

Local environment > groundwater quantity

Local environment > surface water quantity

Major contamination

Management approach to handling treating of these materials and their disposal routes

Mass of soil remediated

Material consumption and waste generation

Materials used in remediation

Means and scope of transporting materials and products to and from the site

Nature and quantities of materials needed during construction and operation

Percentage of Renewable Energy produced at reused buildings and infrastructure

place less of a burden on the public purse and our resources than other regulatory mechanisms

Possibilities for energy efficiency optimisation

Potable water reduction facilities

Rainwater separation

Ratio of surface sealing

Reductions in concentrations of CAHs observed down gradient of the bioreactor monitoring network

removal or treatment of the contamination without spreading it into the wider environment

Resource and Energy Use - Availability of the treated land area for use

Resource and Energy Use - Recycling / recovery

Resource and Energy Use - Use of energy

Resource and Energy Use - Use of energy and materials resources for aftercare

Resource and Energy Use - Use of landfill resources

Resource and Energy Use - Use of material resources by the remediation work

Resource and Energy Use - Use of water, taking into account its scarcity

Resource and Energy Use - Waste minimisation

Saving water, energy, building material by urban

Saving water, energy, building material by urban design

Special / hazardous wastes, their disposal methods and main environmental impacts

Studies realised

The fact if the urban design concept allows secondary or even third uses of buildings and building plots

Total recycled and raw materials in the detailed impact analysis

Total recycled and raw materials used

Total road travel

Transportation requirements, broken down into road type, in the detailed impact analysis

Types and quantities of waste water, energy (noise, vibration, light, heat radiation etc) and residual materials generated during construction and operation

Unpurified waste water runoff

Using dig and dump

Valuable biotopes destroyed / developed

Water use

Which components of the affected environment are potentially affected by the project?

Economic: ---> Direct costs and direct economic benefits

Additional services (water, electricity, emergency services etc) and developments needed

Budget allocated for participation

Cost benefit tools

Existence of a marketing strategy and related documents.

Financing and taxation approaches

Economic: ---> Employment / human capital

Emergence of structures and institutional learning

Existence of a quality assurance and quality control system to ensure that standards and procedures in planning, assessment, reporting etc are effective and compliant.

Existence of appropriate skills in the Project Manager's profile.

Influence on decisions, procedures and process evolution

Job structure on the site

Number of created (long-term) jobs responsibility, job intensity on the site

Number of people affected (net influx of people, number of jobs, etc)

Economic: ---> Flexibility

Currently in use with allocation/permission in hectares

Derelict land and buildings in hectares

Future site usability scores

Legacy - Functionality of the site

Methods of construction; nature / methods of production or other activities during future use

Other with known potential in hectares

Reinstatement and after-use of land taken during construction

Vacant buildings in hectares

Vacant Land in hectares

Whether the urban design concept allows secondary or even third uses of buildings and building plots

Whether the urban design concept has been developed using different expert opinions

Economic: ---> Gearing

Developing on brownfield sites

Discouraged by EU Landfill Directive

Financing and taxation approaches

Generation of employment and development off the site

Holding contaminated sites in landbanks

Economic: ---> Indirect costs and indirect economic benefits

Cost

Legacy - Benefits following remediation

Legacy - Infrastructure changes

Legacy - Need for long term care

Practical methods in the process management

Whether an integrated traffic concept for the site development has been adopted

Economic: ---> Life-span and 'project risks'

Acceptance of the project: Initiatives for or against the project / Critical suggestions within the formal planning process

Compatibility of the intended land use function with the natural and anthropogenic site conditions

Describes the projects potential for accidents hazards and emergencies

Environmental impairment insurance ('sometimes')

Existence and scope of a risk management framework

Existence of a Community Information and Participation Plan

Existence of a costs benefits analysis

Existence of a marketing strategy and related documents

Existence of a Project Management Plan updated on a regular basis

Existence of a Project Management plan, updated on a regular basis

Existence of a Quality Assurance and Quality Control Procedures Plan

Existence of a Health and Safety Plan and records

Existence of cost calculation tools

Existence of documents on decision making process

Existence of documents recording the decision making process

Guideline use

Impacts on long-term stewardship of a site

Lowest level, where control over budgets and process (binding decisions) exists

Market price

Maximum risk ratio (after/before)

Proof of a sufficient demand

The fact if a step by step-realization of the project is possible

The fact if a sufficient demand has been proved by means of e.g. a market analysis or feasibility study

The fact if an integrated traffic concept for the site development has been adopted

The fact if the urban design concept has been developed by calling in different expert opinions

Time plan of the construction, operation and where appropriate, decommissioning of project

Which baseline data are available that lend themselves towards monitoring?

Social: ---> Community involvement and Community satisfaction

Alternative sources of information / contradictory expertises

Budget allocated by authorities for participation

Connections across the brownfield site, according to the demand

Connections across the brownfield site, according to the demand

Early Involvement of stakeholders and power of influence in the different steps of the process management

Equal access to information

Existence of a stakeholder Information and Participation Plan

Existence of an informative public approach strategy

How sufficient are existing services and facilities (schools, recreational, retail) for the future

Impact of the development on services, e.g. public transport, schools, health care

Integration of stakeholders into all steps of the process

Modal split for the site

Number of workers and visitors (construction and operation), their access & transport mode

Publicity and documentation of debates and (intermediate) results

Ratio of site users within the analysed region typically used catchment area of a public transport stop

Representativeness of the range of participants / citizens

Satisfaction / contestation of results

Satisfaction / contestation of results

Stakeholder concern > Acceptability

Social: ---> Ethical and equity considerations

Compatibility of the intended land use function with the natural and anthropogenic conditions of the site and its surroundings

Generation of employment and development off the site

Job structure on the site

Number of created (long-term) jobs resp. job intensity on the site

reduce the impact on the public purse, by getting the polluter to pay more

Symmetry of information flow

Transparency of the process management

Social: ---> Fit with planning and policy strategies and initiatives

Accelerate the clean up of seriously contaminated sites that are a risk

Accordance of the site development to the integrated urban development strategy

Accordance of the site development to the urban development strategy

Changes reflected in local, regional and national plans and policies and other data collected as necessary. Where does the proposal conform, where is departure form plans justified?

Creating mixed structures

Existence of a "Post-Remediation validation reporting"

Formal environmental policy

improve national consistency in dealing with the worst sites

Innovative Solutions to comply with health and safety regulations

Integration of the intended land use into the objectives of the regional development strategy

Integration of the intended land use into the objectives of the regional economic and / or spatial development strategy

Integration of the site development into a regional land management

Integration of the site development into a regional land management

Job structure on the site

New dwelling completions in England

Percentage of all regional development sites that have been taken from the regional land management pool

Social: ---> Human Health

Aggravation Factors - Impacts of materials and organisms added during remediation works

Aggravation Factors - Impacts of remediation by-products and emissions

Ambient noise level: Time percentage of excessive noise

Average daily exposure (oral or inhalation route)

Drinking water/consumption/quantification (receptor: humans)

Existence and use of a Health & Safety Plan

Food chain uptake/consumption/quantification (receptor: humans)

Human health and safety

Human health and safety > Risks to public

Human health and safety > Risks to site users

Index dose (oral or inhalation route)

Pressure on neighbourhood: Number of complaints and incidents per year

Restoration material/skin contact/ingestion/extent (receptor: humans)

Site proximity to settlements (receptor: humans)

Solutions to comply with health and safety regulations

Windblown materials/inhalation/quantification (receptor: humans)

Social: ---> Impacts on neighbourhoods or regions

Aggravation Factors - Impact of vehicular traffic

Aggravation Factors - Impacts of remedial operations on local amenity value

Aggravation Factors - Intrusiveness

Aggravation Factors - Noise and vibrations

Dust and air quality impact: Number of complaints during characterisation and remediation of the site

Impact on other sites

Impact upon the wider surroundings

Land uses on the site(s) and in surrounding areas

Length of site works

Noise

Number of complaints and incidents per year

Ratio of site users within the analysed region typically used catchment area of a public transport stop; modal split for the site

Remediation location

Site plant used

Site use

Site use > Duration of remediation

Site use > Site use

Site use > Surrounding land use

Social indicators for the area (age, class, unemployment, crime) and development impact

The land area taken, the future land uses and boundaries with adjacent land use areas

Time percentage of excessive noise

Where are areas expected to be significantly affected by the project and their timing

Social: ---> Uncertainty and evidence

A Documented strategy

Equal access to information

Information management

Nature and status of the decision(s) for which the information has been prepared

Publicity and documentation of process and (intermediate) results

Record of decisions: existence of documents on the decision-making process

Stakeholder concern

Stakeholder concern > confidence

Support for the project: Initiatives for or against the project / Critical suggestions within the formal planning process

Two-way information flow

Use of decision support tools

Whether a step by step-realization of the project is possible

Whether the urban design concept has been developed by calling in different expert opinions

14 Annex 7 Listing of literature review indicators by headline and similarity for contaminated land sector related sources

This annex is a listing of indicators used by the documents reviewed. Similarities are common, in some cases with the exact same wording. The annex includes the full listing including these similarities.

Environment

Environmental: ---> Impacts on air

(a) Number of days per year when air pollution is moderate or higher for PM10 (b) Annual average nitrogen dioxide concentration (c) for rural sites, number of days per year when air pollution is moderate or higher for ozone

Achievement of Emission Limit Values
Acid Rain, Eutrophication and Smog Precursors (Emissions to air)
Acidification in the UK
Agriculture sector
Air acidification (cars)
Air Emissions – ammonia (nH3)
Air Emissions – volatile organic compounds
Air emissions from transport
Air quality
Air quality
Air Quality
Air quality – % reduction in NOx and primary PM10 emissions through local authority's estate and operations
Air quality – days per year when air pollution is moderate of higher
Air Quality – nitrogen oxides (noX)
Air Quality - Promoting a Healthy Environment
Air Quality – Sulphur Dioxide (So2)
Air Quality > Change in amount of dust produced by e.g. firing, off-road driving or construction
Air Quality > Change in amount of waste incineration or other combustion activities e.g. boilers
A Air Quality > Change in indoor air quality due to different layout or use of materials
Air Quality > Change in level of CFC/HFC usage e.g. in Air Conditioning Units
Air Quality > Change in production of atmospheric pollutants from industrial processes
Air Quality > Change in type and firing intensity of weapons or explosives
Air Quality > Other air quality issues
Air quality and health: (a) annual levels of particles and ozone (b) days when air pollution is moderate or higher
Air quality and health
Air Toxics Emissions*

Air transport of food

Air-quality regulation (Regulating services)

Ambient Concentrations of Benzene*

Ambient Concentrations of Carbon Monoxide*

Ambient Concentrations of Lead*

Ambient Concentrations of Manganese Compounds in EPA Region 5

Ambient Concentrations of Nitrogen Dioxide*

Ambient Concentrations of Particulate Matter*

Atmospheric Concentrations of Greenhouse Gases*

Average annual concentrations of NO2 and PM10 in urban areas

Average surface temperature, 1772 to 2007

Aviation and shipping emissions

Aviation and shipping emissions

Aviation and shipping emissions: greenhouse gases from UK-based international aviation and shipping fuel bunkers

Benzene levels in urban air (microgram per cubic metre of air as a mean level for the colder half of the year)

Building Energy Use - Total carbon dioxide emissions from defence estate (building) energy use (tonnes/year) against base year

Carbon dioxide emissions associated with UK consumption, 1992 to 2004

Carbon dioxide emissions by end user

Carbon Dioxide emissions by end user

Carbon dioxide emissions by end user, 1990 to 2006

Carbon dioxide emissions for local authority areas, 2005 to 2006

Carbon emissions per £10,000 GVA

Carbon Monoxide Emissions*

Change in energy and non-energy related greenhouse gas emissions (by Member State)

Changes in EU-15 GHG emissions by sector and share of sectors

Climate change

Climate Change

Climate change (ClCh)

Climate change and energy > Climate change > Global surface average temperature

Climate change and energy > Climate change > Projections of greenhouse gas emissions

Climate Change Mitigation

Climate Protection - Reducing Greenhouse Gases

CO2 emissions

CO2 emissions by end user: industry, domestic, transport (excluding international aviation), other

CO2 emissions from traffic (as the most prominent green-house gas)

CO2 reduction from local authority operations

Collection > GHG emissions from fuel production and combustion

Column ozone levels at Lerwick and Camborne, 1979 to 2006

Concentrations of Ozone-Depleting Substances*

Concentrations of selected air pollutants

Days when air pollution is moderate or high

Depletion of fossil fuels

Dust and Particles (Emissions to air)

Ecological impacts of air pollution – area of sensitive habitats exceeding critical loads for acidification and Eutrophication

Electricity generation

Emissions of air pollutants

Emissions of air pollutants

Emissions of air pollutants: SO2, NOx, NH3 and PM10 emissions and GDP

Emissions of carbon dioxide (tonnes per year) into air

Emissions of greenhouse gases

Emissions of greenhouse gases by source

Emissions of greenhouse gases, 1990 to 2007

Emissions of nitrogen oxides into year (tonnes per year)

Emissions of ozone depleting substances by weight

Emissions of pollutants (facilities and transport) - Air quality

Emissions of sulphur dioxide into air (tonnes per year)

Energy and non-energy related emissions of nitrogen oxides (by Member State)

Energy and non-energy related emissions of non-methane volatile organic compounds (by Member State)

Energy and non-energy related emissions of sulphur dioxide (by Member State)

Energy and non-energy related greenhouse gas emissions

Energy-related emissions of particulate matter

Energy-related greenhouse gas emissions by economic sector

Environment > Percentage reduction in greenhouse gas emissions baseline (percent)

Environmental impacts > Incineration

Environmental profile of the transport sector, as illustrated by energy consumption, emissions of NOX, CO2 and NMVOC in relation to freight and passenger transport performance

EU emissions of greenhouse gases compared with Kyoto Protocol target, 1990 to 2012

Food transportation

Fuel use and travel - Total carbon dioxide emissions from operational fuel use and business travel (tonnes/year)

gases, e.g. sulphur dioxide and carbon dioxide, emitted to air

GHG emissions from transport increase

GHG emissions of biofuels

Greenhouse gas emissions

Greenhouse gas saving trend

Greenhouse effect (100 yr) (cars)

Greenhouse gas emissions

Greenhouse gas emissions (CO2 and CH4) - Climate change

Greenhouse gas emissions and climate change

Greenhouse gas emissions from food chain, 2006

Greenhouse gas emissions*: Kyoto target and CO2 emissions

Greenhouse gas emissions: Kyoto target and carbon dioxide emissions

Greenhouse gas emitted in supplying water

Greenhouse gas emitted in wastewater treatment

Greenhouse gas savings of biofuel by feedstock and country of origin

Greenhouse Gases (Emissions to air)

Greenhouse gases from agriculture

Gross emissions in million tonnes CO2 equivalents analysed between industry, transport, households, agriculture and waste

Household energy use

Initiatives to reduce greenhouse gas emissions and reductions achieved

Land application > GHG emissions from fuel production and combustion

Lead Emissions*

Local contribution to global climatic change

Manufacturing sector

Manufacturing sector

Manufacturing sector: CO2, NOx, SO2, PM10 emissions and GVA

Mercury Emissions*

Metal emissions (Emissions to air)

Methane emissions by source, 1990 to 2006

Million tonnes of CO2 emissions emitted

Nitrogen oxides emissions by source, 1980 to 2006

Nitrogen Oxides Emissions*

Nitrous oxide emissions by source, 1990 to 2006

NO, SO, and other significant air emissions by type and weight

NOx, SOx and other significant air emissions by type and weight

Number of days of air pollution

Number of kilometres travelled by car (km per person per year)

Other relevant indirect greenhouse gas emissions by weight

Other relevant indirect greenhouse gas emissions by weight

Ozone and Particulate Matter Concentrations for U.S. Counties in the U.S./Mexico Border Region

Ozone Depleting Substances (Emissions to air)

Ozone depletion

Ozone layer depletion

Ozone Levels Over North America*

Particulate (PM10) emissions by source, 1980 to 2006

Particulate Matter Emissions

Per capita CO2 emissions

Percent of Days With Air Quality Index Values Greater Than 100

Photo-oxidant formation (POFo)

Population living in Air Quality Management Areas

Post application > Carbon sequestration

Post application > Herbicide production GHG emissions (per tonne of avoided product)

Post application > Pesticide production GHG emissions (per tonne of avoided product)

Private car CO2 emissions and car-kilometres and household spending, 1990 to 2006

Private cars

Processing > Emissions from electricity use

Public sector

Public sector

Public sector: CO2, NOx emissions and GVA

Quality of local ambient air

Rainfall and temperature in England and Wales, 1845 to 2007

GHG emissions from electricity use

GHG emissions from fuel production and combustion

Reduced greenhouse gas emissions from food and farming

Regional Haze*

Road freight

Road traffic by type of vehicle

Road transport

Road transport: CO2, NOx, PM10 emissions and GDP

Savings of CO2 per unit of output under food and drink manufacturing sector CCAs

Selected Emission Estimates for Freight Transport (kg/t-km)

Service sector

Service sector

Service sector: CO2, NOx emissions and GVA

Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.

Stratospheric ozone depletion

Sulphur Dioxide Emissions*

Sulphur dioxide and nitrogen dioxides emissions

Sulphur dioxide emissions, by source and targets, 1980 to 2006

Sustainable prosperity

Sustainable transport > Social and environmental impact of transport > Average CO2 emissions per km from new passenger cars

Sustainable transport > Social and environmental impact of transport > Emissions of ozone precursors from transport

Sustainable transport > Social and environmental impact of transport > > Emissions of particulate matter from transport

Temperature

Total direct and indirect greenhouse gas emissions by weight

Total direct and indirect greenhouse gas emissions by weight

Total emissions of SOX by different transport modes in EEA member countries plus Croatia

Total greenhouse gas emissions (from water supply, wastewater treatment, offices and transport)

Total savings of CO2 under food and drink manufacturing and retail sector CCAs

Transport emissions of air pollutants

Transport emissions of greenhouse gases
Transportation > GHG emissions from fuel production and combustion

Travel; distance

Trends in transport GHG emissions by country (1990–2004)

Tropospheric ozone creation (average) (% of BNES "fair share")

U.S. Greenhouse Gas Emissions*

UK methane emissions by source

UK nitrous oxide emissions by source

Vehicle Emissions

Volatile Organic Compounds (Emissions to air)

Volatile Organic Compounds Emissions*

Environmental: ---> Impacts on ecology

Achievement in meeting standards for the control system for animal health

Agricultural land use

Amounts of land in designated SSSIs assessed by English Nature to be in a (i) favourable and/or (ii) unfavourable condition, as defined by B

An index based on certain conditions prevailing in four important habitats (forests, lakes, farmland, seas)

Area of ancient semi-natural woodland in GB

Area of natural habitats (deciduous forest, original forest, meadow, dry grassland, moor, and marshland)

Area of woodland in the UK

Area of Woodland, 1924 to 2008

Benthic Macroinvertebrates in wadeable streams

Biodiversity

Biodiversity

Biodiversity

Biodiversity

Biodiversity - Protecting Species and Ecosystems

Biodiversity > % SSSIs in favourable condition

Biodiversity And Nature Conservation > Change in construction or engineering activity that may affect biodiversity and nature conservation

Biodiversity And Nature Conservation > Change in effect (indirect or direct) on a designated site (particularly SSSI, SPA, SAC or Ramsar site)

Biodiversity And Nature Conservation > Change in effect on designated species of conservation concern (including European protected species or local biodiversity action plan species)

Biodiversity And Nature Conservation > Change in public access or recreation that may affect biodiversity and nature conservation

Biodiversity And Nature Conservation > Change in site activities or operation that may affect biodiversity and nature conservation

Biodiversity And Nature Conservation > Change in site use (i.e. acquisition or disposal) that may affect biodiversity and nature conservation

Biodiversity And Nature Conservation > Other biodiversity and nature conservation issues

Biodiversity Condition - Percentage (%) SSSIs in favourable (or unfavourable recovering) condition

Biodiversity conservation

Biodiversity conservation

Biodiversity conservation: (a) priority species status (b) priority habitat status

Biodiversity in coastal/marine areas

Bird populations

Bird populations

Bird Populations*

Bird populations: bird population indices

Bird species

Birds of conservation concern

Change in areas of biodiversity importance

Changes in populations of selected characteristic species

Coastal Benthic Communities

Coastal Fish Tissue Contaminants

Condition of habitats on agriculturally managed SSSIs (England)

Condition of Sites of Special Scientific Interest (SSSIs)

Conservation of biodiversity - Biodiversity

Contaminants in Lake Fish Tissue*

Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas

Description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas

Deterioration of identified 'at risk' environmental areas

Ecological Connectivity in EPA Region 4*

Ecological impacts of air pollution

Ecological impacts of air pollution

Ecological impacts of air pollution: area of UK habitat sensitive to acidification and Eutrophication with critical load exceedences

Ecotoxicity - freshwater aquatic ecotoxicity

Ecotoxicity - marine aquatic ecotoxicity

Ecotoxicity - terrestrial aquatic ecotoxicity

Endemic species (number or percentage) Developed Reid et al., 1993

Endemic species in protected areas (number or percentage) Implemented Reid et al., 1993; UNEP, 2001

Endemic species threatened with extinction (number or percentage) Implemented Reid et al., 1993; UNEP, 2001

Extent and management of SSSIs

Favourable condition of designated wildlife sites

Fish Faunal Intactness*

Fish stocks

Fish stocks: fish stocks around the UK within sustainable limits

Forest Extent and Type*

Forest Fragmentation*

Fragmentation of ecosystems and habitats by transport infrastructure

Genetic diversity in livestock and crops

Habitats

Habitats protected or restored

Habitats protected or restored

Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff

Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff

Impacts on drought on livestock numbers in selected African countries

Improved Local Biodiversity – proportion of Local Sites where positive conservation management has been or is being implemented

Invasive species

Land Cover

Land Use

Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

Loss of biodiversity with continued agricultural expansion, pollution, climate change and infrastructure development

Major agricultural reasons for unfavourable conditions on SSSIs (England)

Mean depth of fish catches (m)

Native species at risk especially protected species

Natural Resource Protection and Environmental Enhancement > Biodiversity

Natural resources > biodiversity > Red List Index for European species

Natural resources > land use > Forest trees damaged by defoliation

Natural resources > marine ecosystems > Size of fishing fleet

Net change in natural/semi-natural habitats

Non-Indigenous Species in the Estuaries of the Pacific Northwest

Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

Ozone Injury to Forest Plants

Photochemical ozone – Vegetation

Photosynthesis (Supporting Services)

Population index of common birds (1980=100)

Population of wild birds

Populations of butterflies, 1976 to 2006

Populations of wild birds

Populations of wild birds, 1970 to 2007

Populations of wild birds, by region, 1994 to 2006

Populations of wild birds: 1970 to 2002

Protected areas

Protected forests as an annual percentage of productive forest land

Protected Species

Relative Ecological Condition of Undeveloped Land in EPA Region 5

Reverse decline in farmland birds

Sea fisheries

Sites affected by abstraction

Spawning stock biomass and fishing pressure for North Sea cod 1963–2002

Species (populations) threatened with extinction (number or percentage) Developed Reid et al., 1993

Species (populations) threatened with extirpation (number or percentage) Developed Reid et al., 1993

Species (populations) with stable or decreasing populations Implemented Reid et al., 1993

Species and Biodiversity

Species planted in Irish Forests

Species richness (number of species, number of species per unit area, and Implemented Reid et al., 1993; UNEP, 2001

Species risk index (number of endemic species per unit area in a community Implemented Reid et al., 1993; UNEP, 2001 multiplied by the percentage of the natural community that has been lost)

Spending on global biodiversity, 2000-1 to 2006-7

Spending on UK biodiversity, 2000-1 to 2006-7

SSSI habitats in favourable or recovering condition by sector, 2003 to 2008

Status of priority habitats in the UK, 2002 to 2005

Status of priority species in the UK, 2002 to 2005

Strategies, current actions, and future plans for managing impacts on biodiversity

Submerged Aquatic Vegetation in the Chesapeake Bay

Sustainable management of woodland

The area of land designated as an SSSI which is in 'unfavourable condition'

Threatened species in protected areas (number or percentage) Implemented Reid et al., 1993; UNEP, 2001

Threatened species maintained in ex situ collections (number or percentage) Developed Reid et al., 1993

Total European capture production (landings), 1990–2000

Trends in plant biodiversity

U.S. and Global Mean Temperature and Precipitation*

UK Index of populations of farmland birds

Urbanization and Population Change

USES 2.0 Aquatic Ecotoxicity (% of BNES "fair share")

USES 2.0 Terrestrial Ecotoxicity (% of BNES "fair share")

Wetland Extent, Change, and Sources of Change

Wild bird populations, including: Birds of farmed habitats; Woodland birds; Urban and other birds

Environmental: ---> Impacts on soil

Acid Deposition*

Acids and Organic Pollutants (Emissions to land)

Area affected by erosion

Concentrations of organic matter in agricultural topsoils

Contributing to soil improvement

Ecotoxicity, terrestrial

Environmental indicators

Erosion regulation (Regulating services)

Forest cover

Geology and soils > Change in amount of soil e.g. erosion

Geology and soils > Change in ground stability

Geology and soils > Change in soil quality e.g. potentially contaminating activities or compaction

Geology and soils > Change in status of or effects on features of geological importance e.g. Geological SSSIs.

Geology and soils > Other geology and soil issues

Improved soil nutrient status

Land contamination - Land and soil

Metal emissions to land (Emissions to land)

NATURAL RESOURCES > LAND USE > Critical load exceedance for nitrogen

Nitrogen (N2) & Phosphate (P2O5) fertiliser use in the GB

Number of properties affected by subsidence

Pesticide use

Pesticides and Fertilisers (Emissions to land)

Post application > Erosion (tonnes/ha)

Processing > Decomposition of feedstock

Soil bulk density

Soil contamination by heavy metals

Soil formation (supporting services)

Soil organic matter

Soil quality

Soil quality - soil organic carbon

Use of soils, impact on soil quality (including positive) - Land and soil

Environmental: ---> Impacts on water

Acidification
Aquaculture production
Biological river water quality, 1990 to 2007
Chemical river water quality, 1990 to 2007
Coastal Sediment Quality
Concentrations of total ammonium, BOD, nitrate, and orthophosphates in European rivers between 1992 and 2001
Dangerous substances in water
Discharge of pollutants - Water resources
Emissions to sewer
Estuarine and costal water quality
Estuarine water quality, marine inputs
Eutrophication, aquatic, groundwater
Eutrophication, aquatic
Fish Kills
Fresh water (Provisioning services)
GQA nutrient status of freshwaters for Phosphate and Nitrate
Groundwater Quality
High and Low Stream Flows
Historic and projected changes in water consumption for food production, 1960-2050
Hypoxia in the Gulf of Mexico and Long Island Sound*
Improved river water quality
Lake and Stream Acidity
Lake Water Quality
Land application > Leachate from stockpiling of end product
Metal emissions to water (Emissions to water)
Migration of Contaminated Ground Water Under Control at High-Priority Cleanup Sites*
Natural Resource Protection and Environmental Enhancement > Water
NATURAL RESOURCES > FRESH Water RESOURCES > Biochemical oxygen demand in rivers
Nitrate and Pesticides in Shallow Ground Water in Agricultural Watersheds*
Nitrate status of groundwater / % of sites not meeting standard
Nitrogen and Phosphorus in Streams in Agricultural Watersheds
Nitrogen and Phosphorus in Wadeable Streams
Nitrogen and Phosphorus Loads in Large Rivers*
Nutrients and Organic Pollutants (Emissions to water)
Nutrients in water
Oil discharged to the marine environment from coastal refineries, offshore installations and oil tankers
Organic and inorganic nitrogen fertiliser application
Organic and inorganic phosphate fertiliser application
Per cent of river length with nitrate levels greater than 30mgNO3 per litre

Per cent of river length with phosphate levels greater than 0.1mg per litre
Percentage of main rivers and canals as good or fair quality
Pesticides in Streams in Agricultural Watersheds
Post application > Leachate from application of end product
Processing > Leachate (litres/tonne of feedstock)
Quality of shellfish waters
Leachate from stock piling of material (litres/tonne feedstock)
River quality
River quality
River quality: rivers of good (a) biological (b) chemical quality
River quality: rivers of good biological and chemical quality
River water quality
River Water Quality
River water quality
Rivers of Good or Fair chemical and biological water quality
Rivers of good or fair quality
Sea Level*
Sea Surface Temperature
Streambed Stability in Wadeable Streams
The nitrogen load entering the surrounding seas (tonnes per year)
The phosphorus load entering the surrounding seas (tonnes per year)
Total water discharge by quality and destination
Total water discharge by quality and destination
Trophic State of Coastal Waters*
Water > Change in sedimentation of watercourses e.g. from driving, dredging, soil erosion or construction run-off
Water > Other water and drainage issues
Water Quality
Water regulation (Regulating services)
Water sources significantly affected by withdrawal of water
Water stress

Environmental: ---> Intrusiveness

Amount of development within identified floodplain

Annual average flow per 1,000km of principal roads

Built-up land in relation to population

Change in the character of the landscape

Changes in characteristic countryside features

Changes to the landscape between 1990 and 1998 (map)

Chemical releases to the environment

Concentrations of persistent organic pollutants

Cultural heritage (Cultural services)

Density of development

Designated Heritage Assets

Discharges from the nuclear industry, 1983 to 2005

Flood risk (including increased risk due to climate change) - Water resources

Flooding

Flooding

Flooding

Frequency of coastal flood events

Frequency of flood events

Historic environment > Acquisition or disposal of sites that may have historic environment features or may be of heritage or historical significance

Historic environment > Chance of activity affecting known historic environment feature (including archaeology, historic buildings or MOD heritage)

Historic environment > Change in intensity of construction or engineering works

Historic environment > Change in intensity of training near historic environment feature (e.g. driving, firing, digging, noise, vibration)

Historic environment > Change in land management regime, e.g. forestry, ploughing, recreation or other third party activity

Historic environment > Change in maintenance regime affecting condition of historic buildings

Historic environment > Design and use of materials of project impacting on landscape or heritage/historic significance

Historic environment > Location of project impacting on landscape or heritage/historic significance of site

Historic environment > Other archaeological and historic environment issues

Historic environment > Potential for archaeological remains, not previously recorded, affecting the planning for the proposed activity

Historic environment > Refurbishment or change of use of historic buildings or those with a heritage significance

Impact on Green Belt (e.g. maintaining extent, openness) - Landscape

Impact on landscapes (urban, rural, urban fringe) - Landscape

Ionizing radiation

Land covered by restoration and aftercare conditions

Land use

Land use in the EU-15

Landscape

Landscape and townscape > Alterations to the shape of the land through the creation of mounds or depressions

Landscape and townscape > Development or change that affects vernacular features or distinctive landscape and/or townscape elements

Landscape and townscape > Effects of construction or development in (or immediately adjacent to) National Parks, Areas of Outstanding Natural Beauty or other areas subject to landscape designations

Landscape and townscape > Other landscape and townscape issues

Landscape and townscape > Removal or replacement of natural landscape features such as trees, woodlands, hedgerows

Landscape and townscape > The potential to create a visual intrusion into the nightscape e.g. installation of lighting or floodlighting

Landscape and townscape > The potential to generate significant change within the landscape/townscape by the introduction of new buildings or infrastructure, or changes to existing buildings or infrastructure

Landscape features - hedges, stonewalls and ponds

Landscape value

Leisure trips by mode of transport

Loss of amenity

Loss or damage to historic landscapes and their settings

Loss or damage to historic parks and gardens and their settings

Loss or damage to historic view lines and vistas

Loss or damage to listed building and their settings

Loss or damage to scheduled ancient monuments and their settings

Natural hazard regulation (Regulating services)

Natural Resource Protection and Environmental Enhancement > Heritage

Natural Resource Protection and Environmental Enhancement > Land Quality

New development with sustainable drainage installed

Noise

Number and area of sites damaged/destroyed by development

Number of additional houses where flood risk has been reduced

Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds

Numbers of people and properties affected by coastal flood events

Numbers of people and properties affected by flood events

Overseas travel

Percentage of highways that are either of a high or acceptable level of cleanliness

Projected land use changes, 1700–2050

Properties at risk from flooding

Properties at risk of flooding, 2006

Proportion of coastline subject to managed realignment where required

Protection of archaeological heritage - Historic environment

Protection of built heritage - Historic environment

Sea level rise at selected sites, 1850 to 2006

Serious pollution incident sources, 2000 to 2007

Serious pollution incidents affecting water, air or land, 1993 to 2007
The rural environment protection scheme
Total number and volume of significant spills
Water > Change in area under hard surfaces, especially near floodplains

Environmental: ---> Resource use and waste

Proportion of land stock that is derelict / percentage of new housing development on previously developed land
Abiotic Depletion (AbDe)
Abstractions by purpose
Abstractions for the public water supply from surface water and groundwater, by region, 2006
Accidental and illegal discharges of oil at sea
Acidification (Acid)
Aggregates (Resource use)
Aggregates procured from a recycled source
Agricultural and forestry land use, 1996 to 2007
Agricultural land uses
Agriculture (Resource use)
Agriculture sector
Agriculture sector: fertiliser input, farmland bird population, and ammonia and methane emissions and output
AIR QUALITY > Change in reliance on fossil fuels for energy generation or vehicle use e.g. increase car usage
Amount of electricity used to heat homes and other premises (TWh/year)
Amount of land loss to greenfield development
Amount of land lost to greenfield development for employment purposes
Amount of land lost to greenfield development for housing
Amount of secondary/recycled aggregates used compared with virgin aggregates
Amount of water used, per 1000 full time employees on water company sites
Annual domestic consumption of construction minerals, EU-15 1970–2001
Apparent steel consumption, imports of iron and steel, and CO2 emissions from metal production, EU-15, 1995–2001
Area of contaminated land
Average age of the vehicle fleet
Biochemicals, natural medicines, pharmaceuticals (Provisioning services)
Biodegradability of the output
Biofuels production
Bring banks and civic amenity sites
Capacity of operating MBT plants by primary output
Carbon Storage in Forests*
Change in potential cereal output, 2080 (Africa)
Chemicals used per Ml of wastewater treated
Chemicals used per Ml of water supplied

Climate Change > Total carbon emissions from energy use (tonnes / year)

Climate Change Adaptation

Climate change and energy > climate change > Greenhouse gas intensity of energy consumption

Climate Change and Energy > Climate Change Adaptation

Climate Change and Energy > Climate Change Mitigation

Climate change and energy > energy > Combined heat and power generation

Climate change and energy > energy > Consumption of biofuels by transport

Climate change and energy > energy > Electricity generation from renewables

Climate change and energy > energy > Gross inland energy consumption, by fuel

Climate change and energy > energy > Implicit tax rate on energy

Climate change as measured by E

Climate regulation (Regulating services)

Coal (Resource use)

Composition of aggregated resource use (DMC), 2001

Construction and built environment > Change in amount of construction activity e.g. long term major construction project

Construction and built environment > Change in use of materials for construction and refurbishment

Construction and built environment > Changes in how land or buildings are used

Construction and built environment > Disposal or procurement of land or buildings

Construction and built environment > Opportunity to affect the design and layout of new buildings and facilities

Construction and built environment > Opportunity to refurbish old brownfield facilities rather than build afresh

Construction and built environment > Other land, building and construction issues

Construction and demolition waste going to landfill

Consumption of electricity from renewable sources

Costs of preventing and mitigating damage

Creating Sustainable Communities and a Fairer World > Sustainable Development and Global Stability

Decoupling illustrated by environmental impacts for 4 factors (greenhouse gases, runoffs of nutrients into the sea, emission of acidifying compounds and emissions to air) in relation to GDP

Delivery > Embedding Sustainable Development

Demonstrated landfill diversion at existing MBT facilities

Demonstrated recycling performance of MBT

Development on previously developed land

Direct energy consumption by primary energy source

Direct energy consumption by primary energy source

Direct energy use

Discharges from the nuclear industry

Domestic consumption of fossil fuels, EU-15, 1970–2001

Domestic extraction (used) versus imports of materials, EU-15 1970–2001

Domestic extraction and imports of fossil fuels, and CO2 emissions, EU-25

Domestic Material Consumption (DMC) and ratio of DMC to GVA (in constant prices)

Domestic water consumption

Domestic water consumption
Domestic water consumption: domestic water consumption per head
Domestic water demand
Dwelling density
Ecological footprint
Ecosystem goods (Provisioning services)
Efficiency of electricity supplied by fossil fuels
Electricity efficiency
Electricity from combined heat and power
Electricity generated by renewable sources, 1996 to 2007
Electricity generation
Electricity generation: electricity generated, CO2, NOx and SO2 emissions by electricity generators and GDP
Electricity production by source
Employment land availability
Energy and climate change > Change in amount of energy saving technology installed in facilities
Energy and climate change > Change in balance of renewable/non-renewable energy used
Energy and climate change > Change in number of energy consuming buildings or processes on site
Energy and climate change > Change in number of energy consuming personnel on site
Energy and climate change > Change in opportunity to explore generation of renewable energy or CHP
Energy and climate change > Change in through-life energy use of equipment
Energy and climate change > Other energy issues
Energy consumption and production
Energy consumption in food, drink and tobacco manufacturing by type
Energy consumption per household, by end user, 1990 to 2006
Energy efficiency (consumption and generation) - Climate change
Energy efficiency and specific CO2 emissions
Energy efficiency of road passenger travel/average fuel consumption of new cars
Energy efficiency of the economy
Energy Efficiency, by relating energy use to GDP
Energy generated from biomass & farm waste
Energy intensity (by Member State)
Energy per household
Energy saved due to conservation and efficiency improvements
Energy saved due to conservation and efficiency improvements
Energy savings per unit output
Energy supply
Energy supply
Energy supply: UK primary energy supply and gross inland energy consumption
Energy Use
Energy use
Energy use

Energy use and main socio-economic drivers in OECD and non-OECD countries, 1971 and 2000

Energy use for freight transport by Mode

Energy Use Index Comparison of Waterways with Rail and Road measured in Kj/tonne-km

Energy use per capita

Energy use per unit of output in the food and drink manufacturing industry

Energy used by the process

Energy used for operational purposes (water and wastewater treatment) and administrative functions (annual)

Energy: consumed

Energy: renewable

Environment > Significant own fault (and contractor)environmental incident (number)

Environment and climate change

Environment and society > Environmental justice

Environment and society > Regeneration and development

Environmental damages

Environmental equality

Environmental impacts

Environmental impacts > Biological treatment

Environmental impacts > Land filling

Environmental profile of the agricultural sector

Environmental profile of the energy sector, illustrated by energy consumption and emissions of NOX, CO2 and SO2 in relation to GDP

Eutrophication (Eutr)

Eutrophication (inhabitant equivalent)

Farm waste sent to landfill

Fertiliser use

Fibre and Fuel (Provisioning services)

Final Destination (Waste treatment)

Final energy consumption by economic sector

Fish stocks

Fish stocks around the UK at full reproductive capacity and harvested sustainably, 1990 to 2006

Food (Provisioning services)

Food industry progress against recycling targets

Food losses for different commodities

Forestry (Resource use)

Freight Transport Demand

Fuel used for electricity generation, 1990 to 2007

Fuels and ores (based on primary energy) (houses - heating and electricity)

Generation and management of municipal waste

Genetic resources (Provisioning services)

Getting to school

Global impact of consumption

Global partnership > global resource management > Bilateral ODA dedicated to water supply and sanitation
Global trends (1960–2005) in use of fertilizer
Global trends (1960–2005) in use of pesticides
Global trends (1960–2005) in use of irrigation
Good agricultural and environmental condition
Green and dry recycling rates for household waste, 1997-8 to 2007-8
Green business per capita
Gross estimate of the global picture of losses, conversion and wastage at different stages of the food supply chain
Gross potential contingent valuation of improving the quality of rivers
Groundwater exploitation and saltwater intrusion in Europe
Growth in final energy consumption and electricity consumption
Hazardous waste
Hazardous waste production
Heritage > Number of quadrennial inspections report for historic buildings undertaken on the estate
Higher productivity of Food and drink processing
Homes improved for energy efficiency and affordable warmth
Homes judged unfit to live in
Household energy use
Household energy use: domestic CO2 emissions and household final consumption expenditure
Household waste arisings
Household waste per person
Household waste per person
Household waste per person after recycling and composting, 1997-8 to 2007-8
Household waste recycled and composted
Household waste: (a) arisings (b) recycled or composted
Households and dwellings
Households and dwellings
Housing conditions
Impacts of climate change
Implementation of SEA
Import from water-scarce regions of the world
Importation of drinking water
Improving energy recovery
Increase in water consumption
Increasing recycling
Indicative residence times of various processes
Indirect energy consumption by primary source
Indirect energy use
Industrial energy use
Industrial waste generation and management

Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives

Initiatives to reduce indirect energy consumption and reductions achieved

Installed capacity for energy production from renewable sources

Installed capacity of operational facilities by location

Inter-regional movement of waste

Intractable waste

Irish Sea Fish Landings

Kilometres travelled by waste - Transport

Labour productivity, material productivity, and energy productivity, EU-15, 1960–2002

Land Cover

Land Cover in the Puget Sound/Georgia Basin

Land covered to organic production

Land recycling

Land recycling

Land recycling

Land Remediation > % of estate inspected for contaminated land

Land take - Land and soil

Land use: (contextual)

Land use: area used for agriculture, woodland, water or river, urban

Land-take

Land-Use - Protecting Recreation Areas

Level of materials recycling - Sustainable resource use

Levels of "food waste" across all sectors of the food industry

Levels of waste arising in the food and drink (& tobacco) manufacturing industry

Livestock numbers

Local Authority housing as a percentage of total stock 2006

Loss of best and most versatile agricultural land to development

Losses in land productivity due to land degradation

Managing housing supply and demand

Marine Fish Stocks

Material intensity of European economies

Materials

Materials recycling

Materials used by weight or volume

Materials used by weight or volume

Maximum, minimum and mean limit values of potential contaminants for compost in Europe

Metal ores: domestic extraction, imports, exports, and domestic consumption, EU-15, 1970–2001

Metals (Resource use)

Mineral extraction

Minerals (Resource use)

Minimising disposal - Sustainable waste management

Mobility

Mobility - Making Mobility Environmentally Sound Transport Intensity

Municipal Waste Infrastructure

Natural Gas (Resource use)

Natural resources > fresh water resources > population connected to wastewater secondary treatment systems

Nature occupation

Net loss of soils to development

New and converted dwellings – on previously developed land

New homes built on previously developed land

New homes built on previously developed land

New homes built on previously developed land, 1989 to 2007

NOISE AND VIBRATION > Changes in recreational use of the estate, e.g. Activities such as driving or shooting

Non-food crops

Non-renewable energy

North Sea fish stocks and stocks of North East Atlantic mackerel, 1964 to 2007

Nuclear > No indicator in place

Number of 'zero carbon' homes

Number of chemicals which have been classified

Number of unfit homes per 1,000 dwellings

Nutrient cycling (supporting services)

Oil (Resource use)

Organic farming

Ornamental resources (Provisioning services)

Other uses of bio-waste

Other waste recycled

Passenger travel by modes, cycling and walking

Per capita consumption PCC) of water

Percent mean abundance of the original species

Percent of energy supply 'off grid' and on to local, decentralised energy systems by 2025 and by 2050

Percent of household waste was recycled/composted

Percentage and total volume of water recycled and reused

Percentage and total volume of water recycled and reused

Percentage and total volume of water recycled and reused

Percentage of commercial buildings meeting BREEAM Very Good Standard or above or equivalent

Percentage of electricity generated from renewable and non-carbon sources

Percentage of journeys to and from work and school made on foot, by bicycle or by public transport (percent per year)

Percentage of materials used that are recycled input materials

Percentage of materials used that are recycled input materials

Percentage of municipal waste landfilled

Percentage of products sold and their packaging materials that are reclaimed by category

Percentage of products sold and their packaging materials that are reclaimed by category

Percentage of residents surveyed using different modes of transport, their reason for, and distance of, travel

Percentage of the region's homes are powered by renewable energy

Percentage of the tonnage of household waste arisings which have been (a) recycled (b) composted (c) used to recover heat, power and other energy sources (d) landfilled

Pollution incidents from agriculture

Pollution to land, air and water (including greenhouse gases, particulate matter and other contaminants)

Population that are within water resource zones that are in deficit

Possible individual ranges of yield and cropland area losses by 2050

Post application > Dryland salinity (area affected)

Post application > Fertiliser production (per tonne of avoided product)

Post application > Gypsum production

Post application > Sodicity (area affected)

Post application > Water conservation

Previously developed land that has been vacant or derelict for more than 5 years

Previously developed land that has been vacant or derelict for more than five years

Primary aggregates per unit of construction value

Primary production (supporting services)

Private cars

Private vehicles: CO2 emissions and car-km and household final consumption expenditure

Probable problem areas of local contamination in Europe

Processing > Fuel production and combustion

Processing > Water use

Producing a fuel

Production and consumption of selected metal resources, 2001

Production of primary land won aggregates by mineral planning authority

Production of secondary and recycled aggregates by mineral planning authority

Projected changes in agricultural productivity to 2080 due to climate change, incorporating the effects of carbon fertilization

Proportion of biofuel meeting sustainability standards

Proportion of energy supplied from renewable sources

Proportion or journeys on foot or by cycle

Proportions by country

Proportions by feedstock

Proportions by previous land-use

Protection of Resources - Using Precious Resources Efficiently

Quantity of materials that come into circulation (tonnes per person per year)

Quantity of Municipal Solid Waste Generated and Managed*

Quantity of RCRA Hazardous Waste Generated and Managed*

Quantity of waste to landfill sites (tonnes per year)

Radioactive Waste (Emissions to land)

Radioactive waste disposal, 1997 to 2006

Radioactive waste stock, 1986 to 2007

Radioactive waste stocks

Ratio of final energy consumption to total energy consumption

Water use

Recovery rates of packaging wastes

Recycling

Recycling and Recovery rates of packaging materials (RRPM)

Recycling of household waste

Reduction of biodegradable waste landfilling (RBWL)

Regional Ecological Footprint

Relative decoupling of resource use and economic growth in the EU-15

Renewable electricity

Renewable electricity: renewable electricity generated as a percentage of total electricity

Renewable Energies – Expanding Sustainable Energy Supply

Renewable energy

Renewable energy contribution to gross electricity consumption

Renewable energy generated by water and wastewater companies

Renewable energy generation

Renewable energy generation - Climate change

Renewable energy purchased by water and wastewater companies

Residual household waste per household

Resource efficiency – the ratio of carbon dioxide emissions (expressed in tonnes of carbon) to GVA (expressed in constant prices)

Resource flows for 3 factors (energy consumption, drinking water consumption, and total waste volume in relation to GDP)

Resource use

Resource use

Resource use: Domestic Material Consumption and GDP

Road freight

Road freight: CO2 emissions and tonne-km, tonnes and GDP

Road transport

Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations and transportation of the organisation's workforce

Site restoration (prevention of emissions to land)

Size of the vehicle fleet

Socio-economic development > innovation, competitiveness and eco-efficiency > effects of innovation on material and energy efficiency

Socio-economic development > innovation, competitiveness and eco-efficiency > energy intensity

Solid waste (hazardous) (tonnes)

Solid wastes to be sent to landfill (or treated via other routes)

Specific emissions

Spent nuclear fuel (by Member State)

Structural indicator, energy intensity of the economy

Sustainable consumption and production > consumption patterns > Final energy consumption, by sector

Sustainable consumption and production > consumption patterns > Motorisation rate

Sustainable consumption and production > production patterns > Area under organic f

Sustainable consumption and production > production patterns > Livestock density index

Sustainable consumption and production > resource use and waste > Components of Domestic Material Consumption

Sustainable consumption and production > resource use and waste > Emissions of acidifying substances, ozone precursors, and particulate matter by source sector, and GDP

Sustainable consumption and production > resource use and waste > Environmental impact of material consumption

Sustainable consumption and production > resource use and waste > Generation of hazardous waste, by economic activity

Sustainable consumption and production > resource use and waste > Municipal waste treatment, by type of treatment method

Sustainable Consumption and Production > Waste

Sustainable Land Use

Sustainable transport > transport growth > Energy consumption, by transport mode

Sustainable transport > transport growth > Volume of freight transport and GDP

Sustainable transport > transport growth > Volume of passenger transport and GDP

Tackling fuel poverty – % of people receiving income based benefits living in homes with a low and high energy efficiency rating

The environmental impact of waste treatment

The establishment of a baseline of water use for each food industry sub-sector

The quantity of materials recovered for recycling

The quantity of phosphorus from sludge annually recycled to cultivated land as fertilizer (tonnes per year)

The value of green public procurement (SEK per year)

The value of purchases of eco-labelled products and services (SEK per person per year)

Thermal efficiency of housing stock

Tonnages of Waste to be Handled by Waste Management Facilities in 2020 by Region in milions of tonnes

Total Amount of employment floor-space on previously developed land – by type

Total annual volume of water in excess (or within, if shown in brackets) abstraction licences

Total annual volume of water in excess (or within, if shown in brackets) abstraction licenses

Total energy consumption (TWh/year)

Total energy consumption by source

Total energy consumption from renewable sources

Total energy use by the food, drink (and tobacco) manufacturing industry

Total energy use per unit output

Total final energy consumption by sector

Total leakage

Total leakage per 100 km of supply main (average)

Total number and volume of significant spills

Total primary energy requirement by fuel type

Total types of all waste arisings and method used for its management

Total unfit dwellings as a percentage of total housing stock 2006

Total volume of water put into supply

Total waste landfilled and non-municipal/non-inert waste to landfill, 2000-1 to 2006

Total waste water sludge

Total water withdrawal by source

Total water withdrawal by source

Total weight of waste by type and disposal method

Total weight of waste by type and disposal method

Toxic Chemicals in Production-Related Wastes Combusted for Energy Recovery, Released, Treated, or Recycled*

Transport final energy consumption by mode

Travel & transport > change in amount of vehicle use in training exercises

Travel & transport > change in freight distance covered if engaging with different suppliers or procuring/disposing of different quantities.

Travel & transport > change in fuel efficiency and emission levels from vehicles

Travel & transport > change in levels of congestion on local roads or at access points

Travel & transport > change in transport mode for commuting or travelling to clients or facilities

Travel & transport > other travel and transport issues

Travel to work

Travel to work by alternative modes (cycling, walking, work transports schemes, car share)

Travel: industry

Trends in European water use

UK ammonia emissions by source

UK consumption of biofuels

UK materials consumption per head

UK organically managed land

Uptake of cleaner and alternative fuels

Uptake of environmental management systems by transport companies

Urban Waste Water Treatment

Use of construction minerals in Germany, 2001

Use of previously developed land - Land and soil

Use of Resources

Vacant land and properties and derelict land

Vehicle fill

Volume of biofuel by feedstock and country of origin

Volumes and proportions by fuel type

Waste

Waste
Waste
Waste
Waste (Landfill, Incinerated and Recycled)
Waste > change in amount of special, controlled, hazardous or radioactive waste produced
Waste > change in amount of waste produced (by e.g. More people, different materials)
Waste > change in opportunity to procure recycled or re-used items
Waste > change in opportunity to send more waste for re-use or recycling
Waste > change in waste quantities from demolition or construction activities
Waste > changes in waste produced through disposal of redundant equipment and materials
Waste > other waste issues
Waste > Total waste and total waste recovered
Waste arising and management
Waste arisings and management
Waste arisings by sector and method of disposal
Waste collected per head
Waste from road vehicles (ELV)
Waste hierarchy
Waste Management - Total waste versus total waste recovered and recycled
Waste minimisation - Sustainable waste management
Waste oil and tires from vehicles
Waste water sludge sent for recycling (agriculture, land reclamation, other)
Waste: arisings by (a) sector (b) method of disposal
Waste: landfilled
Waste: production
Waste: recycling
Wastewater for disposal
Water
Water (inhabitant equivalent)
Water > Change in number of people and processes consuming/abstracting water
Water > Change in number of people and processes that discharge waste water
Water > Change in number or type of potentially polluting activities or processes on site
Water > Change in the use and installation of water-saving measures
Water > Usage m3 / year
Water availability and exploitation in Europe
Water consumption
Water consumption - Total consumption in cubic metres
Water consumption - Water resources
Water cycling (Supporting Services)
Water footprint
Water leakage

Water leakage rate from mains and customer pipes

Water purification and waste treatment (Regulating services)

Water requirement equivalent of main food products

Water resource use

Water resource use

Water resource use: total abstractions from non-tidal surface and ground water sources and GDP

Water saved through demand management measures (households and nonhouseholds)

Water sources significantly affected by withdrawal of water

Water stress

Water stress

Water supply and leakage, 1994-5 to 2006-7

Water Use and Abstraction (Resource use)

Water use for irrigation

Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally

Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally

Whole Farm Approach

Wood (forest surface sq km)

World biofuels annual production (biodiesel and ethanol)

World biofuels production, 2005 (million litres of fuel)

World population and energy use 1971–2000

Young Offenders' access to suitable accommodation

Economic

Economic: ---> Direct costs and direct economic benefits

Amount of the present actual environmental restoration expense

Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations

Better Regulation

Cost

Cost and benefits resulting from each of the different water uses

Cost per ton or per household or per person

Costs for going beyond 140 g/km CO2 emission

Costs of impact mitigation: cost of bypasses for fish migration, river bed restoration costs, etc

Costs of pressure mitigation in order to reduce water withdrawals

Costs of treatment of the residual pollution

Costs of waste management - Sustainable economic growth

Coverage of the organization's defined benefit plan obligations

Deviations from schedule

Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments

Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments

Diversion between revenue and expenditures for MSWMS

Economic output

Economy and employment > short term adjustment costs / benefits resulting from decision (e.g. temporary increase in unemployment or need to retrain workforce)

Empty running

Energy taxes

Farm Incomes

Financial implications and other risks and opportunities for the organization's activities due to climate change

fuel consumption

Gap between least well performing quartile and median

GDP per capita

Genuine savings

Government Debt - Reducing Debt - Creating New Opportunities

Health and Safety > UK gas mains decommissioned through mains replacement programme (kilometres)

Industrial production

Infrastructure investments

Labour compensation

Link revenue and funding

MSW - MS cost as % of Gross National Product (GNP) of the city

Net farm Income by farm type

OECD System of Unit Labour Cost Indicators > Annual Total Labour Costs

OECD System of Unit Labour Cost Indicators > Annual Exchange Rate Adjusted ULC

OECD System of Unit Labour Cost Indicators > Annual Labour Compensation

OECD System of Unit Labour Cost Indicators > Annual Labour Compensation

OECD System of Unit Labour Cost Indicators > Annual Labour Income Share (Real ULC)

OECD System of Unit Labour Cost Indicators > Annual Labour Productivity

OECD System of Unit Labour Cost Indicators > Annual Real Output

OECD System of Unit Labour Cost Indicators > Annual Unit Labour Costs

OECD System of Unit Labour Cost Indicators > Quarterly Real Output - Benchmarked

OECD System of Unit Labour Cost Indicators > Quarterly Total Labour Costs - Benchmarked

OECD System of Unit Labour Cost Indicators > Quarterly Unit Labour Costs

Producer Prices

Production > Manufacturing > Crude steel

Productivity

Productivity measures by sector

Revenue from recovered material and energy

Road transport fuel price (including taxes) in EU Member States

Sales > Manufacturing

Sales > Retail trade > Total retail trade

Shareholder value > Capital Expenditure (£million)

Shareholder value > Cash flows generated by continuing operations (£million)

Shareholder value > Earnings per share from continuing operations before exceptional items re-measurement and stranded cost recoveries (pence)

Shareholder value > Total shareholder return (percent -three year cumulative)

Significant financial assistance received from government

Socio-economic development > innovation, competitiveness and eco-efficiency > Turnover from innovation, by economic sector

Stocks > Manufacturing

Structural indicator, gross domestic expenditure on R&D

Subsidies

Time utilisation

Total agricultural exports (billion USD)

Total environmental protection expenditures and investments by type

Total environmental protection expenditures and investments by type

Total Factor Productivity

Total Income From Farming per full time person equivalent

Total net average local costs of different waste management activities

Total output of the economy (GDP and GDP per head)

Transport subsidies by mode

Value of direct farm CAP payments

World fisheries and aquaculture production (million tonnes)

Economic: ---> Employment / human capital

16 to 18 year olds who are not in education, employment or training (NEET)

16 to 18 year olds who are not in education, training or employment

16 year olds with no qualifications

Achievement at level 4 or above in both English and Maths at Key Stage 2

Achievement of 2 or more A*- C grades in Science GCSEs or equivalent

Achievement of 5 or more A*- C grades at GCSE or equivalent including English and Maths

Achievement of a Level 2 qualification by the age of 19

Achievement of a Level 2 qualification by the age of 19

Achievement of a Level 3 qualification by the age of 19

Achievement of at least 78 points across the Early Years Foundation Stage with at least 6 in each of the scales in Personal Social and Emotional Development and Communication, Language and Literacy

Agricultural workforce as a percentage of the UK total workforce

Animal health and welfare: skills and training

Average hours of training per year per employee by employee category

Average hours of training per year per employee by employee category

Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations

Business recognised as Investors in People

Change in the economic activity rate

Change in the number of businesses run by women

Civilian Employment (household survey based)

Coverage of the organization's defined benefit plan obligations

Creating Sustainable Communities and a Fairer World > Young people

DEMOGRAPHIC CHANGES > PUBLIC FINANCE SUSTAINABILITY > Average exit age from the labour market

Demography

Demography: population and population of working age

Economically inactive

Economically inactive

Economically inactive: people of working age who are economically inactive

ECONOMY AND EMPLOYMENT > Change in number of jobs and related high value added economic activity

ECONOMY AND EMPLOYMENT > Change in opportunity for training and skills provision

ECONOMY AND EMPLOYMENT > Change in opportunity to raise employee awareness and understanding of sustainable development

ECONOMY AND EMPLOYMENT > Other economy and employment issues

Education

Education

Education

Education - Continuously Increasing Education and Training Level of Qualifications of 25 Year-Olds

Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases

Education: 19 year-olds with level 2 qualifications and above

Educational (Cultural services)

Employee Turnover (sector average)

Employees (household survey based)

Employees > Ethnic minority employees (percentage)

Employees > Female employees (percentage)

Employment

Employment

Employment – proportion of working age people who are in work

Employment - Raising Employment Levels

Employment / training issues

Employment and skills

Employment by sector for rural areas in England

Employment land available – by type

Employment quantity (Waste treatment)

Employment: people of working age in employment

Employment quality (Waste treatment)

Estimated and projected population of the world by major development groups, 1950, 2000 and 2050 according to different fertility variants

Farmers who are benchmarking their business

gross weekly pay 2007

Growth in number employed in local businesses

Health and Safety > Proportion of available work days which are lost due to sickness (percent)

Human population growth in developed and developing

Inequality gap in the achievement of a Level 2 qualification by the age of 19

Inequality gap in the achievement of a Level 3 qualification by the age of 19

INFRASTRUCTURE AND AMENITIES > Change in numbers of personnel and families requiring access to welfare, social or recreational facilities

Labour productivity in manufacturing and other services

Labour productivity

Labour productivity by sector

Land (i) allocated in DPDs by date A, and (ii) developed by date B for employment purposes (being UCO B1a,b,c, B2 & B8) in strategic employment areas in accordance with the RSS

Level of unemployment

Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements

Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements

Movements of working age population

Narrowing the gap between the lowest achieving 20% in the Early Years Foundation Stage Profile and the rest

No of jobs created - Employment

Number of days lost through absence during the reporting year (per employee) (sector average)

Number of income support claimants in the 20% most deprived areas

Number of new business start-ups

OECD System of Unit Labour Cost Indicators > Annual self employment ratio

Opportunities for education and awareness raising - Public involvement

Overall employment rate

Participation of 17 year-olds in education or training

Pension provision

People

Percent of working population in employment

Percentage of adults teleworking

Percentage of employees covered by collective bargaining agreements

Percentage of employees receiving regular performance and career development reviews

Percentage of employees receiving regular performance and career development reviews

Percentage of employees trained in organization's anti-corruption policies and procedures

Percentage of population of working age who are claiming key benefits

Percentage of population of working age who are claiming key benefits

Percentage of workforce living in rural areas in England who are employed in agriculture

Population (million)

Population age structure (0 to 14 years / 15 to 59 years / 60 and more years)

Population density

Population structure

Preparing for Life

Productivity: UK output per worker

Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings

Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings

Progression by 2 levels in English between Key Stage 1 and Key Stage 2

Progression by 2 levels in Maths between Key Stage 1 and Key Stage 2

Proportion of adults with poor literacy and numeracy skills

Proportion of farmers who are members of FCBs

Proportion of people of working age out of work for more than two year

Proportion of people of working age who are in work

Proportion of people of working age who are in work

Proportion of the labour force receiving training

Proportion of young people (18-24 year olds) in full time education or employment

PUA income – the average income in a city 2007

Qualifications – percentage of adults of working age with at least an NVQ level 4 qualification or equivalent

Qualifications – the percentage of people aged 19-21 with at least an NVQ level 2 qualification or equivalent

Qualifications at age 19

Qualifications at age 19

Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation

Reduction in number of schools where fewer than 55% of pupils achieve level 4 or above in both English and Maths at KS2

Sectoral employment (agriculture / industry / services)

Skills and training

Skills and training

Social inclusion > access to labour market > total long-term unemployment rate

Social inclusion > education > ict skills

Social inclusion > education > life-long learning

Social inclusion > education > low reading literacy performance of pupils

Social inclusion > education > persons with low educational attainment, by age group

Socio-economic development > employment > dispersion of regional employment rates

Socio-economic development > employment > employment rate, by gender and by highest level of

Socio-economic development > employment > unemployment rate, by gender and age group

Subsidies or grants per person

Sustainable development education

Sustainable development education

Take up of 14-19 Learning Diplomas

The business stock per 1,000 inhabitants businesses in the area

The proportion of employers reporting skills gaps and shortages

The Special Educational Needs (SEN)/non-SEN gap – achieving 5 A*- C GCSE inc. English and Maths

The Special Educational Needs (SEN)/non-SEN gap – achieving Key Stage 2 English and Maths threshold

Total amount of additional employment floorspace – by type

Total area on agricultural holdings in the UK

Total Employment (household survey based)

Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained

Total number and rate of employee turnover by age group, gender, and region

Total number and rate of employee turnover by age group, gender, and region

Total population

Total workforce by employment type, employment contract, and region

Total workforce by employment type, employment contract, and region

Trends in employment in the food sector, GB basis

Unemployment

Unemployment

Unemployment (household survey based)

Unemployment > Rate > Harmonised (HUR)

Unemployment > Rate > Survey Based

Unemployment rate

Unemployment rate

Unemployment: proportion of children and working age people living in workless households

Urban and rural population in less developed regions (billions)

Work: people as a resource

Working age population qualified to at least Level 3 or higher

Working age population qualified to at least Level 4 or higher

Workless households

Workless households

World population

Young adults

Young adults

Young Offenders' engagement in suitable education, training and employment

Economic: ---> Flexibility

Benchmarking

Diversification

Economy growth vs. growth of passenger transport volumes

Potential Intermodal Coastal Ports in England and Wales

Theoretical potential for cropland expansion, irrespective of conservation, water and other environmental issues

Economic: ---> Gearing

Assistance funds as a percentage of GNI, in total and analysed between development and environmental assistance, and assistance to neighbouring countries

Business and sectoral strategies > Cross–sectoral issues

Collaboration

Growth of world trade

Institutional cooperation

Investment: (a) total investment (b) social investment relative to GDP

Inward investment - Sustainable economic growth

Manufacturing investment and output by foreign-owned companies

Number of planning consents for business premises in rural areas

Proposed development of key economic sites

Proposed development/improvements of key infrastructure/services

SOCIO-ECONOMIC DEVELOPMENT > INNOVATION, COMPETITIVENESS AND ECO-EFFICIENCY > Total R&D expenditure

Take-up of free consultancy visits available from Envirowise to the food industry in each of the next three years

Value added activities

Economic: ---> Indirect costs and indirect economic benefits

% of farms involved in value added activities

Actions taken in response to incidents of corruption

Agricultural international land leases

Agriculture's contribution to total UK gross value added (percent)

Average yields (milk, cereals etc.), Feed conversion ratios

Balance of Payments

Benefit dependency

Business and sectoral strategies > Corporate sustainability

Business and sectoral strategies > Sectoral sustainability

Business start ups and closures

Business tendency surveys (construction)

Business tendency surveys (manufacturing)

Business tendency surveys (manufacturing) > Confidence indicators > Composite indicators > OECD Indicator

Business tendency surveys (non-manufacturing)

Business tendency surveys (retail trade)

Business tendency surveys (services)

Capital investment in agriculture

Commodity Yields

Comparative industrial and office rental costs

Consumer Price Index

Consumer Price Index

Consumer Price Index > OECD Groups

Contribution to UK imports, exports, trade balance

Cost structure in selected economic sectors, Germany

Cost-effectiveness

Costs of compensation for injured parties

Costs of damage to the environment as a result of human activities

Countryside visit expenditure

Currency Conversions > Real effective exchange rates

Damage to property from storm events

Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or pro bono engagement

Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement

Diversity of economic sectors represented in the area

Economic benefits of waste minimisation - Sustainable economic growth

Economic development

Economic Future- Creating a Positive Investment Climate – Securing Sustainable Welfare

Economic growth

Economic growth

Economic impacts

Economic losses (opportunity costs) due to inefficient measures

Economic output: Gross Domestic Product

Economic Welfare - Increasing Env. /Socially Benign Growth

Economic yield per recruit (1-year olds) for North Sea cod

ECONOMY AND EMPLOYMENT > Change in opportunity for business creation and growth

Empty running by transport

Energy subsidies

Energy-related research and development expenditure

Environment > Total value of fines from environmental citations and prosecutions (£/$)

Environmental protection expenditure in food, drink and tobacco manufacturing

External costs of electricity production

External costs of transport

External Finance > Reserve assets

Farm assurance schemes

Final energy prices

Financial implications and other risks and opportunities for the organization's activities due to climate change

Food chain contribution relative to other sectors of the national economy

Foreign Trade

General agro-economic indicators

Genuine Economic Progress

Genuine economic progress taking account of environmental factors, resources and well-being

Global partnership > financing for sustainable development > bilateral oda dedicated to debt

Global partnership > financing for sustainable development > bilateral oda dedicated to social infrastructure and services

Global partnership > financing for sustainable development > foreign direct investment in developing countries by income group

Global partnership > financing for sustainable development > oda, by income group

Global partnership > financing for sustainable development > untied oda

Global partnership > globalisation of trade > eu imports from developing countries, by group of products

Global partnership > globalisation of trade > eu imports from least developed countries, by group of products

Global trends (1960–2005) in cereal and meat production

Greater value added per head

Gross domestic product

Gross value added by the UK agri-food sector

Growth of GDP in developed and developing countries

Growth of local businesses by turnover and employee numbers

Growth rates and linkages in cluster sectors

GVA per capita 2005 (a calculation of the average Gross Value Added per head of population)

GVA per head of population

Household car availability, 1989-91 to 2007

Housing completion figures

Housing market data, sales, price, type

'Image' indices derived from consultations with business and local property specialists as part of the planning process. Attract people from deprived areas

Impact on local infrastructure - Transport

Imports of food, feed and drink by degree of processing

Indicators of competitiveness

Innovation

Innovation - Creating the Future with New Solutions

Interest Rates

Internalisation of external costs

Investment

Investment

Journey times between key employment areas and key transport interchanges

Leading Indicators OECD > Component series

Leading Indicators OECD > Composite indicators > Total leading indicator > Amplitude adjusted

Leading Indicators OECD > Composite indicators > Total leading indicator > Trend restored

Leading Indicators OECD > Reference series

Level of Economic Activity

Level of Economic Activity - Gross Value Added (GVA) and GVA per head, in current and in constant prices

Licensing of large industries

Manufacturing investment and output by UK companies

Markets for RDF Fuel

Mean house prices 2007

Monetary aggregates and their components

Monetary aggregates and their components > Narrow money and components

Monetary value of significant fines and total number of non monetary sanctions for non-compliance with environmental laws and regulations

Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations

Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations

Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

National Accounts (for non-member countries) > GDP by expenditure at constant prices

National Accounts (for non-member countries) > GDP by expenditure at current prices

National Accounts (for non-member countries) > GDP by output at constant prices

National Accounts (for non-member countries) > GDP by output at current prices

Net capital expenditure in the food sector

New business registration rate

New retail floor space in town centres and out of town

Number (and value) of diversified activities on farm

Number of business applications granted planning consent

Number of EMAS and ISO registered enterprises

Opening Markets - Increasing Trade Opportunities of Developing Countries

Orders > Construction

Orders > Manufacturing

Organic farming

Origin of UK imports and destination of UK exports of food, feed and drink 2004

Overnight stays

Percentage change in the total number of VAT registered business in the area

Percentage of dwellings in council tax bands A & B 2006 (houses in the two lowest valuation categories for council tax purposes)

Percentage of dwellings in council tax bands G & H 2006 (houses in the two highest valuation categories for council tax purposes)

Percentage of small businesses in an area showing employment growth

Percentage of total South East business turnover attributable to new (new to market) and significantly improved products

Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation

Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation

Potential restoration costs of the environment

Production > Industry (C, D and E) > Rate of capacity utilisation

Production increase in yield and area (1965–2008) of several key crops

Productivity

Quality of marketed produce (e.g. carcase classification)

Rail freight and short sea shipping capacity growth

Rateable value per square metre of all bulk classes (non-residential) property 2007

Real changes in the cost of transport

Real GVA per capita growth

Real productivity per employee (total) growth rate

Regional/local variations in GDP/GVA per head

Relative employment/output growth in different economic sectors in the area

Reliability > MWh lost on our US electricity transmission system (MWh)

Research and development and employment in high and medium-high technology industries

Retail establishments per 10,000 inhabitants 2006 (a basket composed of retail; hotels; restaurants and bars; recreational; beauty and well-bring establishments)

Sales > Retail trade > Car registration

Sector cash interest cover ratio

Share of forest-related manufacturing activities in total gross value added, selected European countries 2000

Share prices

Significant financial assistance received from government

Socio-economic development > economic development > dispersion of regional gdp per inhabitant
Socio-economic development > economic development > net national income

Spending on research and development in food and drink manufacturing as a proportion of GVA

Survival rates for VAT-registered businesses

The expenditure on R&D as the proportion of GVA

Total and social investment as a percentage of GDP

Total external costs and transport subsidies found for EU-15

Total factor productivity of the food sector

Total Income from Farming

Total Income from Farming per full-time person equivalent

Total value of financial contributions to community during reporting year

Trends in gross value added in the agri-food sector

Trends in total factor productivity in agriculture

UK distribution of performance across farms > 0.5 SLR

UK farm gate share (%) of total household food sales

UK International assistance: Net Official Development Assistance (a) per cent of Gross National Income (comparison with selected countries) (b) per capita (comparison with selected countries)

UK self-sufficiency in food as a percentage of all food and indigenous type food

UK trade in food, feed and drink in real terms at 2004 prices

Understanding and describing significant indirect economic impacts, including the extent of impacts

Understanding and describing significant indirect economic impacts, including the extent of impacts

Urbanisation

Value added activities

Value of manufacturing exports per head

VAT registrations in rural areas

VAT stock per 10,000 adult population 2006 (an indicator for enterprise and innovation activity)

Work in progress > Construction

Work in progress > Manufacturing

Work started > Construction

Economic: ---> Life-span and 'project risks'

A 30-year national transport strategy

Accumulations of waste

Deliverability (e.g. maturity of technology, market risks, costs) - Sustainable waste management

Delivery of genuinely sustainable outcomes

Development in areas at risk of flooding

Development in the floodplain

Energy and climate change > Extent of in-built resilience to climate change into new developments and major refurbishment projects

Energy and climate change > Management of the vulnerability of the location of new developments to climate change impacts

Energy and climate change > Response to risks and potential opportunities posed by climate change as a result of this activity

Financial risks

Immobilisation process

Risk assessment

Selection of appropriate treatment techniques

Socio-economic development > innovation, competitiveness and eco-efficiency > real effective exchange rate

Sustainable procurement > extent to which innovation opportunities exist to further sd (e.g. Reduce energy and water consumption, reduce pollution/waste, benefit the local community)

Sustainable procurement > extent to which overall sustainability of the project is likely to be compromised by cost considerations

Waste characterisation sampling and checking

Social

Social: ---> Community involvement and Community satisfaction

Access to a GP or primary care professional and other primary care facilities

Access to a post office

Access to a primary school

Access to basic services

Access to food shops

Access to key services and facilities by public transport, walking and cycling

Access to natural green-space

Access to services in rural areas

Access to services: - the percentage of households where the time taken to walk to local facilities (doctor, post office, shopping centre, chemist and food store) is less than 14 minutes

Access to the countryside

Access to transport services

Accessibility

Accessibility

Accessibility: access to key services

Active community participation

Active community participation

Active community participation: informal and formal volunteering at least once a month

Aesthetic value (Cultural services)

Availability of good quality housing for all social groups including low income households, lone parent households, ethnic minorities, disabled and young people

Capacity of infrastructure networks

Carers receiving needs assessment or review and a specific carer's service, or advice and information

Changing public behaviour

Children and young people's satisfaction with parks and play areas

Children Missing from Home or Care

Citizens' satisfaction with the local community

Claimant count

Communities and social values > change in opportunity for community involvement (e.g. Volunteering, community-support roles)

Communities and social values > change in opportunity for consultation, partnership working and information on the estate and its activities

Community Involvement > MOD standing in public opinion survey

Community participation and volunteering - the percentage of people volunteering formally or informally at least once a month

Community well being

Complexity

Construction and built environment > Change in amount of green space developed e.g. playing fields, 'greenfield' areas

Consumer opinion surveys

Consumer opinion surveys > Confidence indicators > Composite indicators > OECD Indicator

Creating Sustainable Communities and a Fairer World > Community Engagement

Culture

Delivery of Sure Start Children Centres

Design

Direction of Travel

Distance travelled relative to income

Early Access for Women to Maternity Services

Economy and employment > change in activity or land use that may affect livelihood of estate tenants and commercial users

Economy and employment > improvement in quality / availability of local amenities and infrastructure, or vice versa

Effective collaboration through Multi Area Agreements

Enhanced public transport capacity and reputation

Environment and society > Communication

Environment and society > Community processes

Environment and society > Consumption, behaviour and lifestyle

Environment and society > Quality of life

Environment and society > Social inclusion

Environment and society > Social perceptions of risk

Equipment Procurement and Construction Procurement > Number of projects applying MOD sustainable construction methodology

Equipment Procurement and Construction Procurement > Number of projects engaged in AESMS

Extent of informal volunteering

Extent to which people in the community know and relate supportively with their neighbours

Facilities for young people

Faster infrastructure delivery

Fear of crime

Food Chain Centre website

Frequency of social gatherings for the whole community

Getting to school

Getting to school: how children get to school

Good and equitable access to services - Access to services

Good governance > openness and participation > e-government on-line availability

Good governance > openness and participation > e-government usage by individuals

Governance and regulation > Participatory decision-making

Housing Quality – Building for Life Assessments

Human well-being

Improving the quality of where people live - Quality of surroundings

Index of Sustainable Economic Welfare

Index of Sustainable Economic Well-being' (ISEW)

Indicator of cultural vitality

Indoor spaces available for communal gatherings and activities

Infrastructure and amenities > change in impact on local utilities and infrastructure

Infrastructure and amenities > change in public access to estate land and social or recreational facilities

Infrastructure and amenities > other infrastructure or amenity issues

Integrated information on journey times, cost and CO2 emissions

Integrated transport authorities for urban areas

Integrated travel services and ticketing

Local environment quality

Local environment quality

Location of jobs in proximity to residents

Low pay

Make infrastructure and its associated systems more resilient to environmental change, less carbon intensive and more socially acceptable

Matching output to market requirements

Mobility

NHS Hospital waiting lists

Number of childcare places available per 1,000 population of children under 5 not in early education

Number of properties actually affected by sewer flooding

Number of properties in the UK with a low pressure supply

Number of properties with a greater than 1 in 10 year risk from sewer flooding per 100,000 properties connected

Number of properties with interruptions to supply (in excess of 6 hours in duration)

Offsets and balances or provision of community infrastructure

Opportunities for participation - Public involvement

Outdoor spaces available for communal gatherings and activities

Overall well-being

Participation in Cultural Activity

Participation in regular volunteering

Participation in sport and cultural activities

Passenger transport

Percentage of adults surveyed who feel they can influence decisions affecting their own local area.

Percentage of children travelling to (a) primary school and (b) secondary school by different modes of transport

Percentage of people who feel that their local area is a place where people from different backgrounds and communities can live together harmoniously

Percentage of people who say they are satisfied with their local area as a place to live

Percentage of residents surveyed finding it easy to access key local services / Percentage of residents defined as within a distance of 500m of key local services

Percentage of residents who are satisfied with their neighbourhood as a place to live

Percentage of rural households at set distances from key services

Percentage of schools providing access to extended services

Percentage of voluntary/community organisations in a specified locality per 1,000 that performed well or very well in the past year

Perspectives of Families - Compatibility of Family and Work

Places available for youth gatherings and wholesome activities

Ports, Port Groups and Freight Waterways in the UK

Procurement

Proportion and amount of leisure floor-space completed in developments in sub regional centres A, B and C

Proximity of transport infrastructure to designated areas

Public awareness

Public awareness of the importance of protecting and enhancing identified environmental areas of value in the region as measured by D

Public policy positions and participation in public policy development and lobbying

Recreation and tourism (Cultural services)

Reduction in available open space

Regional accessibility of markets and cohesion

Reliability > Average time the average customer is without power over the year from our US electricity distribution network (minutes)

Reliability > Electricity delivered by the UK electricity transmission system as a proportion of electricity demanded (percent)

Reliability > Gas delivered by the UK gas transmission system as a proportion of gas demanded (percent)

Reliability > Gas distribution UK network reliability (percent)

Resident satisfaction with green space

Resident satisfaction with local bus service

Risk perception (Social Acceptability)

Satisfaction in local area

Satisfaction in local area: households satisfied with the quality of the places in which they live (a) overall (b) in deprived areas (c) non-decent homes

Satisfaction in local areas

Secondary schools judged as having good or outstanding standards of behaviour

Self reported experience of social care users

Social care clients receiving Self Directed Support

Social investment as per cent of GDP

Social participation, patient and public involvement

Strong leadership and accountability

Tenant/satisfaction/participation

Time taken to travel to work (average time taken per journey)

Timeliness of social care assessment (all adults)

Timeliness of social care packages following assessment

Transport

Travel: accessibility

User reported measure of respect and dignity in their treatment

Visual profile of the facility

Voluntary action

Volunteering

Volunteering > No indicator in place

Wellbeing

Wellbeing

Wellbeing

Willingness (WTP) of individuals or of the society to pay for mitigation and preventative measures

Social: ---> Ethical and equity considerations

Access for disabled people

Achievement gap between pupils eligible for free school meals and their peers achieving the expected level at Key Stages 2 and 4

Achieving independence for older people through rehabilitation/intermediate care

Adults with learning disabilities in settled accommodation

Affordable housing (house price/earnings affordability ratio)

Affordable housing completion figures

Affordable housing completions

Alleviate poverty and minimise waste by ensuring a sustainable supply of food and water

Attitudes to the environment and climate change, 2007

Average earning - average hourly earning for full time employees only

Average household size

Benefit recipients

Changes in commodity prices in relation to oil prices

Changes in the prices of major commodities from 1900 to 2008

Childhood obesity

Childhood obesity: prevalence of obesity in 2-10 year-olds

Childhood poverty

Childhood poverty: children in relative low-income households a) before housing costs b) after housing costs

Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity

Cost per person / income per person

Cost per person as % of minimum wage per person

Creating Sustainable Communities and a Fairer World > Equality and Diversity

Creating Sustainable Communities and a Fairer World > Veterans

Delivery > Accountability and Responsibility

Demographic changes > old-age income adequacy > at-risk-of-poverty rate for persons aged 65 years and over

Deprivation and poverty

Development Co-operation - Supporting Global Sustainable Development

Diet: people consuming five or more portions of fruit and vegetables per day and in low income households

Distribution / Location

Diversity > % representation of race, religion, gender and disability in the workplace

Employment rate 2007

Environmental equality

Environmental equality

Environmental equality

Equality - Promoting Equality in Society

Ethnic minority employment and unemployment

Expenditure on personal mobility by income group

FAO food commodity price indices 2000-2008

Farmer suicide rates

Fuel poverty

Fuel Poverty

Fuel prices and taxes

Global partnership > globalisation of trade > aggregated measurement of support

Gross affordable housing completions

Health inequality

Help people from different cultural and social backgrounds respond to a changing environment

Home Life

Homelessness

Homelessness

Homelessness

Homelessness: (a) rough sleepers (b) households in temporary accommodation (i) total (ii) households with children

Household estimates and projections, by household type, 2004 to 2029

Household expenditure on household food and non-alcoholic beverages as a percentage of total household expenditure

Households living in fuel poverty

Households living in fuel poverty

Households living in fuel poverty: (a) pensioners (b) households with children (c) disabled/long-term sick

Households on the Housing Register

Housing conditions

Housing conditions: (a) social sector homes below the decent homes standard (b) vulnerable households in the private sector in homes below the decent homes standard

Improved access for those most in need - Access to services

Income deprivation - number of people within families that are dependent on means-tested Income Support benefits

Index of Multiple Deprivation (IMD) range 2007 (the range between maximum and minimum IMD scores)

Index of Multiple Deprivation IMD median score 2007

Indicators of success in tackling poverty and social exclusion

Infrastructure and amenities > change in provision of facilities for welfare, social or recreation on site

Integration of Citizens from Abroad - Integration Instead of Exclusion

Key Stage 2 attainment for Black and minority ethnic groups

Key Stage 4 attainment for Black and minority ethnic groups

Lower production-related CAP subsidies from consumers and taxpayers

Market access in agricultural areas of Africa, Asia and Latin America

Mobility patterns in EU-10 and EU-15

Net additional dwellings for the current year

Net additional pitches (Gypsy and Traveller)

Notifiable injuries per 100,00 employees per year

Number of households experiencing financial exclusion: • Number of households not able to access affordable personal credit

Number of households experiencing financial exclusion: • Number of households without a current account

Number of non-decent homes per 1,000 dwellings

Obesity among primary school age children in Yr 6

Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour

Operations identified as having significant risk for incidents of forced or compulsory labour, and measures taken to contribute to the elimination of forced or compulsory labour

Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights

Pension provision

Pensioner poverty

Pensioner poverty: pensioners in relative low-income households a) before housing costs b) after housing costs

People supported to live independently through social services (all adults)

People with a long-term condition supported to be independent and in control of their condition

Percent of employees in private services 2006 (the aggregate of those employed in distribution; hotels and restaurants; transport and communication; banking, finance and insurance; and other services)

Percent of high skilled workers 2007 (those employed as managers and senior administrators, in professional occupations, and in associated professional and technical occupations)

Percent of adults with broadband

Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening

Percentage of employees covered by collective bargaining agreements

Percentage of households in fuel poverty

Percentage of new build and retrofit homes meeting Eco-Homes Very Good standard or above or equivalent Code for Sustainable Homes

Percentage of people who feel that their local area is a place where people from different backgrounds and communities can live together harmoniously

Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations

Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken

Percentage of the population in households receiving less than 60% of median household income

Percentage of the working age population on three types of benefits 2007 (incapacity benefit, income support and JSA)

Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.

Population and GDP per capita in OECD and developing countries, 2002

Population estimates and projection by age group, 1991 to 2036

Poverty: proportion of children living in low-income households, before and after housing costs

Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation

Progress in reducing health inequalities

Proportion of children in poverty

Proportion of children in poverty

Proportion of children under 16 living in low income households

Proportion of households where water and sewerage bills are greater than 3% of disposable income

Proportion of lone parents, long-term ill and disabled people who are economically active

Proportion of pensioners living in low-income households, before and after housing costs

Proportion of people of claiming benefits who have been out of work for more than a year

Proportion of people of working age in workless households

Proportion of population who live in areas that rank within the most deprived 20% of areas in the country (Indices of multiple deprivation)

Proportion of the population who live in wards that rank within the most deprived 10% and 25% of wards in the country

Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.

Ratio of basic salary of men to women by employee category

Ratio of basic salary of men to women by employee category

Ratio of lower quartile house price to lower quartile income by district

Real change in transport prices by mode

Reduced gap in productivity between the less well performing quartile of rural areas and the English median by 2006, and improved accessibility of services for rural people

Reduction in health inequalities

Results of SVS assessments of the welfare of animals on farm in Great Britain

Services for disabled children

Social and community enterprises

Social Concern

Social inclusion > access to labour market > gender pay gap in unadjusted form

Social inclusion > access to labour market > in-work poverty

Social inclusion > education > at-risk-of-poverty rate, by highest level of education attained

Social inclusion > monetary poverty and living conditions > at-risk-of-poverty rate, by gender, by age group, and by household type

Social inclusion > monetary poverty and living conditions > inequality of income distribution

Social inclusion > monetary poverty and living conditions > relative at risk of poverty gap

Social justice

Socio-economic development > economic development > gross household saving

Special educational needs – statements issued within 26 weeks

Supermarket share of retail food sales

Temporary accommodation/rough sleepers

The extent to which older people receive the support they need to live independently at home

Total number of incidents of discrimination and actions taken

Total number of incidents of violations involving rights of indigenous people and actions taken

Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes

Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data

Transport taxes and charges

UK companies implementing ethical trading codes of conduct

UK international assistance

Water affordability

Weekly wage threshold below which 10% of the working population fall 2006

Workless households: population living in workless households (a) children (b) working age

Young adults: 16-19 year-olds not in employment, education or training

Social: ---> Fit with planning and policy strategies and initiatives

Achievement of Biodiversity Action Plan targets

Agri-environment schemes, 1992 to 2007

Amount of municipal waste arising, and managed by management type by waste planning authority

Appraisal and Assessment > Number of appraisals and assessments under taken

Area of land covered by HLS and ELS environmental stewardship schemes

Biodegradable municipal waste landfilled and targets, 2001-2 to 2007-8

Capacity of new waste management facilities by waste planning authority

Changes in retail price indices

Compliance with Bathing Water Directive

Compliance with drinking water standards, England and Wales

Compliance with drinking water standards, Northern Ireland

Compliance with drinking water standards, Scotland

Compliance with EC Bathing Waters Directive

Compliance with Evaluation Criteria – Coal-Fired Power Stations

Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity

Compost classification types and number of classes adopted in national compost standards and legislation

Costs and cost sharing of animal disease

Data capture - volumes of biofuel with known/unknown feedstock, country of origin, previous land-use, sustainability standards, and overall

Data capture trend (proportion of known data)

Delivery > Planning for Delivery and Measuring Success

Dwelling density: average density of new housing

Energy and climate change > Extent of application of Common Minimum Standards, OGC Guide 11 and grading of energy performance

Enquiries to business advice services

Enterprises with environmental management systems (number of enterprises per year)

Entry Level Stewardship

Environmental Management Systems > Percentage coverage on estate

Environmental Management Systems Implementation - Percentage of estate covered.

Environmental standard trend

Estimated monetary adjustments to agricultural accounts

Evaluation of progress made by the associations (2004 data) to meet their own commitment of an average CO2 emission of 140 g/km for the passenger car vehicle fleet

Exceedences of air quality objectives due to traffic

Extent and condition of key habitats for which Biodiversity Action Plans (BAPs) have been established

Extent to which area manages its own waste arisings - Sustainable waste management

Farm health plans

Farming and environmental stewardship

Farming and environmental stewardship

Farming and environmental stewardship

Generic issues > Appraisal and evaluation

Generic issues > Data and indicators

Good governance > policy coherence and effectiveness > transposition of community law, by policy area

Governance and regulation > Legal frameworks

Governance and regulation > Policy integration

Governance and regulation > Regulation, economic instruments and voluntary action

Governance and regulation > The use of science in policy-making

Greenhouse gas reduction targets of 80% by 2050

Heritage Condition - Removal of our buildings at risk against the baseline published in the Department for Culture Media and Sport's Biennial Conservation Report.

Higher Level Stewardship

Households and dwellings: households, single person households and dwelling stock

Implementation of integrated strategies

Improved time taken to clear up cases of farmland and transportation animal welfare cases

Indicative biofuel targets in the member states

Indicator still under development

Inefficient allocation of water use permits (abstraction and discharge) at a given set of environmental standards

Inefficient distribution of water resources among different water uses at a given set of environmental standards

Initiatives to mitigate environmental impacts of products and services and extent of mitigation

Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation

Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives

Initiatives to reduce greenhouse gas emissions and reductions achieved

Initiatives to reduce indirect energy consumption and reductions achieved

Inspection activity by relevant inspectorates targeted

Land Condition - Percentage of estate inspected for contaminated land.

Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures

Local authority commitments on climate change

Managed delivery target

Moving up the waste hierarchy - Sustainable waste management

National monitoring systems

Net additional dwellings – for the reporting year

Net additional dwellings – in future years

Net additional dwellings – in previous years

Number of companies with certified or non-certified Environmental Management System (EMS) in place across all or part of their operations

Number of eco-labelled products, analysed as the number of trade names

Number of planning permissions granted contrary to Environment Agency advice on flooding and water quality grounds

Number of, and amount of investment from, development programmes for these protected sites

Pension provision: working age people contributing to a non-state pension in at least three years out of the last four

Percentage of all new contracts for construction projects with agreed environmental performance targets e.g. an "Excellent" rating or "Very Good" rating where Defence Related Environmental Assessment Methodology or other standards are used

Percentage of construction projects achieving their target environmental assessment rating at design and as built stages. (Long-term)

Percentage of tests on unrestricted herds resulting in a confirmed new incident

Plan period and housing targets

Planning for Climate Change - Percentage of processes and guidance reviewed

Planning for Climate Change - Percentage of programmes, plans, projects and contracts that have incorporated appropriate climate change adaptation factors in their assessments and specifications (against a programmed baseline)

Political consensus on transport strategy

Procurement: Equipment, Timber and Paper - Number of equipment projects engaged in Acquisition Safety Environmental Management Systems and Project Oriented Environmental Management Systems (POEMS)

Products Promoting Sustainability

Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship

Projections of total income from farming up to 2010

Proportion of data at each Accuracy level (0-5)

Proportion of fuel meeting a qualifying environmental standard

Proportion of vehicle fleet meeting certain emission standards

Public transport

R&D issues

Reduce carbon emissions by 60% by 2025

Reducing reliance on the car - Transport

Results of SVS assessments of the welfare of animals on farm in Great Britain

Schools that have received the Green School Award (number of schools per year)

Social and technological innovation > Innovation and productivity

Social and technological innovation > Innovation processes

Social and technological innovation > Managing macro socio-technological systems

Social and technological innovation > Socio-technological systems

SSSI features in target condition (Scotland only)

SSSIs in target condition (England only)

Strategies, current actions, and future plans for managing impacts on biodiversity

Sustainable Consumption and Production > Design and Construction

Sustainable Consumption and Production > Procurement

Sustainable consumption and production > production patterns > Area under agri-environmental commitment

Sustainable Management of the Local Authority and Local Businesses

Sustainable procurement > environmental, economic and social issues exposed in urd/srd/sor/assessment brief/business case

Sustainable procurement > evaluation of sustainable development tender question suite responses

Sustainable procurement > extent of application of common minimum standards, ogc guide on achieving excellence in construction

Sustainable procurement > extent of application of minimum environmental standards "quick wins" in the procurement of products

Sustainable procurement > extent to which project can demonstrate a whole life, value for money approach (where sd is appropriately weighted as part of vfm considerations)

Sustainable procurement > level of sustainable development awareness/training of project team

The actual and planned expenditures for achieving existing environmental standards

The early establishment of the FIBR Food Industry Better Regulation Group

The percentage of accredited partnerships which have enjoyed full co-operation from the food industry

The percentages of children assessed through the medium of Welsh at the end of Key Stages 1, 2 or 3

Total amount of floor-space for 'town centre uses'

Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes

Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes

Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes

Treatment of wastes prior to landfilling

Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements

UK International assistance

Upper tier authorities – average actual performance by 2005 CPA category, indexed on 2000-01 results

Social: ---> Human Health

Access to a GP or primary care professional
Access to local green space
Accident risk
Achievement of 'Accessible Natural Green Space Standards'
Air quality – black smoke
Air quality – ground level ozone (o3)
Air quality – particulate matter (pm10)
Air quality and health
Alcohol related hospital stays
All-age all cause mortality rate
Annual levels of particles and ozone in the air, 1987 to 2007
Asthma Prevalence*
Average life expectancy (men and women compared)
Bathing Water Quality
Birth Defects Prevalence and Mortality
Blood Cadmium Level
Blood Cotinine Level*
Blood Lead Level*
Blood Mercury Level*
Blood Persistent Organic Pollutants Level*
Cancer Incidence*
Cardiovascular Disease Prevalence and Mortality*
Changes in historic and projected composition of human diet and the nutritional value
Childhood Cancer Incidence*
Childhood obesity
Children and young people's participation in sporting opportunities
Children killed or seriously injured in road traffic accidents
Chronic Obstructive Pulmonary Disease Prevalence and Mortality*
Collection > Motor vehicle exhaust emissions
Compliance with EC Bathing Water Directive mandatory and guideline standards, 1988 to 2008
Compliance with EU Bathing Water Directive guideline standards, 1995 and 2008
Consumption of fresh fruit and vegetables
Creating Sustainable Communities and a Fairer World > Health and Safety
Current Human Exposures Under Control at High-Priority Cleanup Sites*
Days lost due to occupational ill health (per employee) (sector average)
Days when air pollution is moderate or higher
Days when air pollution is moderate or higher, 1987 to 2007
Death rate by case (direct standardised mortality rate per 100,000 population)
Death rates from cancer, circulatory disease, respiratory illness, accidents and suicides

Deaths per year from water related illnesses

Demographic changes > demography > total fertility rate

Diet

Diet

Dietary health

Disease regulation (Regulating services)

Drinking Water Quality

Drinking water quality, 1995 to 2006

Early death rates for circulatory disease, cancer, accidents and suicide

Early years - infant mortality (which should be reported by socio-economic group as and when data become available)

Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases

Emotional health of children

Employment analysed by age groups

Environmental and health impacts

Expected years of healthy life

Fertilizer Applied for Agricultural Purposes*

Food - Producing Healthy Food in an Environmentally Sound Way Area of Organic Farming

Food-borne illness

General Mortality*

Geology and soils > change in risk to human health and the environment from contaminated land

Health

Health - Living Healthily

Health and Safety > Employee lost time injury frequency rate (injuries per 100,000 hours)

Health and Safety > Members of the public injured as a direct result of our operations (number of fatalities)

Health and safety topics covered in formal agreements with trade unions.

Health and safety topics covered in formal agreements with trade unions. Health and safety topics covered in formal agreements with trade unions

Health inequality

Health inequality: (a) infant mortality (by socio-economic group) (b) life expectancy (by area) for men and women

Health life expectancy

Health Safety and Well being > Incidence of reportable injuries per 100,000 staff

Health, safety and well-being > change in equipment used that could significantly affect health, safety or well-being

Health, safety and well-being > change in organisation roles and responsibilities that may significantly affect procedures for health, safety or well-being

Health, safety and well-being > change in processes, activities, or external climate that could significantly affect health, safety or well-being

Health, safety and well-being > change in staff numbers or workload that may affect health or stress levels

Health, safety and well-being > change in use or storage of substances that could significantly affect health, safety or well-being

Health, safety and well-being > change to building or interior layout that could significantly affect health, safety or

Health, safety and well-being > change to building or interior layout that could significantly affect health, safety or well-being

Health, safety and well-being > influx of new staff that may be unsure of health, safety or security procedures

Health, safety and well-being > other health, safety or well-being issues

Healthy life expectancy (HLE) at age 65

Healthy life expectancy / Self-reported general health / Self-reported long-standing illness

Healthy life expectancy at 65

Healthy life expectancy: healthy life expectancy (a) men (b) women

Household consumption of fruit and vegetables

Housing (proportion of households living in non-decent housing)

Human toxicity

Human toxicity (HuTo)

Human toxicity, groundwater

Human toxicity, long-term gr

Human, plant and animal health

Impact on human health - Health

Index of multiple deprivation 2004 male and female life expectancy

Infant mortality

Infant mortality rate

Infant mortality rates

Infant Mortality*

Infectious Diseases Associated With Environmental Exposures or Conditions*

Injuries, road or work

Intakes of fat and saturated fatty acids as a percentage of food energy intake from household supplies

Investors In People > % of staff working in organisations that have IiP recognition

Land application > Motor vehicle exhaust emissions

Life expectancy

Life expectancy at birth

Life Expectancy at Birth*

Looked after children cases which were reviewed within required timescales

Low Birth-weight*

Major/fatal accidents to employees arising whilst undertaking water company related activities

Male life expectancy 2003-05 (rolling average)

Mortality by cause

Mortality rates

Mortality rates

Mortality rates: death rates from (a) circulatory disease and (b) cancer, below 75 years and for areas with the worst health and deprivation indicators, and (c) suicides

Motor vehicle exhaust emissions

Noise and vibration > change in intensity, duration or timing of training activities - effects on people and wildlife

Noise Pollution

Number of convictions (sector total)

Number of primary fires and related fatalities and non-fatal casualties

Obesity

Obesity in primary school age children in Reception

OH&S issues

People in employment working long hours

People killed or seriously injured in road traffic accidents

Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs

Pest regulation (Regulating services)

Pesticide residues in food

Pesticide Residues in Food*

Pollination (Regulating services)

Population Served by Community Water Systems With No Reported Violations of Health-Based Standards*

Post application > Fertiliser production (per tonne of avoided product)

Post application > Gypsum production

Post application > Herbicide production (tonnes/ha of avoided product)

Post application > Pesticide production (tonnes/ha of avoided product)

Preterm Delivery*

Prevalence of breast-feeding at 6-8 wks from birth

Processing > Motor vehicle exhaust emissions

Processing > SO2 emissions (electricity production)

Public health > determinants of health > overweight people, by age group

Public health > determinants of health > population exposure to air pollution by ozone

Public health > determinants of health > population exposure to air pollution by particulate matter

Public health > determinants of health > population living in households considering that they suffer from noise

Public health > determinants of health > present smokers, by gender and by age group

Public health > determinants of health > serious accidents at work

Public health > health and health inequalities > healthy life-years and life expectancy at age 65, by gender

Public health > health and health inequalities > suicide death rate, by gender and by age group

Rate of Hospital Admissions per 100,000 for Alcohol Related Harm

Rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities by region

Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region

Reduction in number of schools where fewer than 30% of pupils achieve 5 or more A*- C grades at GCSE and equivalent including GCSEs in English and Maths

Relevant health statistics

Reported Pesticide Incidents

Respiratory illness

Respiratory inorganics

Respiratory organics

Road accidents

Road accidents

Road accidents: number of people and children killed or seriously injured

Smoking

Smoking

Smoking: prevalence of smoking (a) all adults (b) 'routine and manual' socioeconomic groups

SO2 emissions (electricity production)

Social and health impacts

Specialist support to victims of a serious sexual offence

Stopping smoking

Sustainable consumption and production > consumption patterns > Consumption of certain foodstuffs per inhabitant

Take up of school lunches

The number of emergency bed days per head of weighted population

The volume of chemical products classified as harmful to health or the environment that are manufactured in or imported into Sweden (tonnes per person per year), excluding petroleum-based fuels

Transport accident fatalities

Transportation > Motor vehicle exhaust emissions

Trends in intake of sodium and non-milk extrinsic sugars from household supplies

U.S. Homes above EPA's Radon Action Level*

UK egg packing station throughput by system

Under 18 conception rate

Urinary Pesticide Level*

USES 2.0 Human Toxicity (% of BNES "fair share")

Work fatalities, injury and sickness rates, working days lost through illness

Work-life Balance > % staff reporting satisfactory work life balance

Workplace safety

Social: ---> Impacts on neighbourhoods or regions

Adult crimes in the community are best described as (rare, occasional, frequent, constant)

Amount of increased private car travel for journey-to work purposes

Amount of increased private car travel for leisure purposes

Change in freight transport intensity in EU

Change in road transport's share in EU-10

Children who have experienced bullying

Children's Journeys to and from School

Commercial effects, locally, regionally, globally

Communities and social values > change in land use that will affect estate tenants, other landowners or casual users

Communities and social values > change in local environmental quality experienced by communities (e.g. Noise, litter, traffic)

Communities and social values > other community or social issues

Congestion – average journey time per mile during the morning peak

Congestion - Transport

Convenience (Social Acceptability)

Crime

Crime

Crime

Crime - Increasing Personal Security

Crime: burglary (British Crime Survey burglary and recorded burglary in dwellings), vehicle theft (BCS vehicle-related thefts and recorded theft of or from vehicles) and recorded robbery

Crime: crime survey and recorded crime for (a) vehicles (b) domestic burglary (c) violence

Demographic changes > demography > net migration, by age group

Demographic profiles

Domestic burglaries per 1,000 households

Drug-related (Class A) offending

Dwelling density

Ethnic composition of offenders on Youth Justice System disposals

Exposure to and annoyance by traffic noise

Extent to which the community is a safe environment for children

Extent to which the community is a safe environment for women

Extent to which there is a basic sense of safety and trust within the community

Fear of crime

Fear of crime

Fear of crime / Anti-social behaviour

Fear of crime: (a) car theft (b) burglary (c) physical attack

First time entrants to the criminal justice system aged 10-17

Food transport by air

Food transport on urban roads

Freight transport

Freight transport modal split by group of goods

Freight transport volumes grow along with GDP

Freight Transported by mode (tonnes lifted)

Governance and regulation > Spatial planning

Growth in road traffic volume

Heavy goods vehicle mileage intensity

HGV vehicle and tonne kilometres for congestion and transport efficiency

Household composition

Housing: percentage of dwellings that are unfit

Impact of land use - land competition

Impact on recreational and open spaces - Amenity

Impacts on local amenity (noise, dust, light, vermin, odour) - Amenity

Juvenile crimes in the community are best described as (rare, occasional, frequent, constant)

Land-take by transport infrastructure

Level of crime

Level of crime

Level of serious violence and serious acquisitive crime

Load factors for freight transport

Local amenity and aesthetics

Local environmental quality

Local mobility and passenger transportation

Major conflicts since 1990

Military expenditure 2002

Mobility: (a) number of trips per person by mode (b) distance travelled per person per year by broad trip purpose

Noise

Noise (Social Acceptability)

Noise and vibration > change in noise and vibration from demolition and construction activities

Noise and vibration > change in type of vehicle or weapons used

Noise and vibration > change in volume and timing of heavy vehicles on roads, particularly though communities or near historic buildings

Noise and vibration > other noise and vibration issues

Noise levels

Number of net additional dwellings provided in sub-region Y

Number of net additional dwellings provided

Occupancy rates of passenger vehicles

Odour (Social Acceptability)

Odour associated with fugitive emissions

Overall level of deprivation

Passenger transport modal split by purpose

Percentage of conservation area demolished or otherwise lost

Percentage of residents surveyed who are concerned with different types of noise in their area

Perceptions of anti-social behaviour

Population movement

Population movements

Private space consumption (Social Acceptability)

Public concern over noise - Anti-Social Behaviour Orders

Rate of proven re-offending by young offenders

Reduction of number of schools judged as requiring special measures and improvement in time taken to come out of the category

Repeat incidents of domestic violence

Road traffic

Robberies per 10,000 adult population 2006-07

Secondary school persistent absence rate

Social justice

Social justice

Spatial planning

Substance misuse by young people

Total Number of Facilities in England and Wales by Region and Waste Flow Scenario

Traffic (Social Acceptability)

Traffic congestion

Tranquillity maps

Transport - number of trips per person per year, disaggregated by mode, + distance travelled per person per year by broad trip purpose

Travel & transport > change in volume of commuting or travelling to clients and facilities

Travel: mode

Trips per person by mode

Urban space consumption (Social Acceptability)

Urban vehicle kilometres (as the main driver of congestion and accidents)

Vehicle crimes per 1,000 population

Vehicle Numbers

Visual impact (Social Acceptability)

Young People within the Youth Justice System receiving a conviction in court who are sentenced to custody

Young people's participation in positive activities

Social: ---> Uncertainty and evidence

Demography

Governance and regulation > Scaling issues

Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting

Percentage and total number of business units analyzed for risks related to corruption

Practices related to customer satisfaction, including results of surveys measuring customer satisfaction

Social and technological innovation > Technological risk

Sustainable consumption and production > production patterns > Eco-label awards

Sustainable development

Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country

15 Annex 8: Distribution of indicators for each individual set related to contaminated land management

Distribution of Indicators by Headline for Best Practice Guidance for Sustainable Brownfield Regeneration

Environmental		
Impacts on air	0	P: 0 M: 0 G: 0
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	0	P: 0 M: 0 G: 0
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	4	P: 0 M: 0 G: 4
Resource use and waste	3	P: 0 M: 0 G: 3
Subtotal	7	(for Environmental)
Economic		
Direct costs and direct economic benefits	3	P: 0 M: 0 G: 3
Flexibility	2	P: 0 M: 0 G: 2
Indirect costs and indirect economic benefits	1	P: 0 M: 0 G: 1
Employment / human capital	4	P: 0 M: 0 G: 4
Gearing	1	P: 0 M: 0 G: 1
Life-span and project risks	3	P: 0 M: 0 G: 3
Subtotal	14	(for Economic)
Social		
Community involvement and Community satisfaction	6	P: 0 M: 0 G: 6
Ethical and equity considerations	4	P: 0 M: 0 G: 4
Human Health	4	P: 0 M: 0 G: 4
Impacts on neighbourhoods or regions	1	P: 0 M: 0 G: 1
Fit with planning and policy strategies and initiatives	6	P: 0 M: 0 G: 6
Uncertainty and evidence	9	P: 0 M: 0 G: 9
Subtotal	30	(for Social)
Total (from 1 source)	51	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for Open Board Paper

Environmental		
Impacts on air	0	P: 0 M: 0 G: 0
Impacts on water	1	P: 0 M: 0 G: 1
Impacts on ecology	0	P: 0 M: 0 G: 0
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	2	P: 1 M: 0 G: 1
Subtotal	3	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	0	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	1	P: 0 M: 0 G: 1
Human Health	0	P: 0 M: 0 G: 0
Impacts on neighbourhoods or regions	0	P: 0 M: 0 G: 0
Fit with planning and policy strategies and initiatives	2	P: 0 M: 0 G: 2
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 source)	6	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for RESCUE WP 1 Report

Environmental		
Impacts on air	1	P: 0 M: 0 G: 1
Impacts on water	1	P: 0 M: 1 G: 0
Impacts on ecology	1	P: 0 M: 0 G: 1
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	2	P: 0 M: 0 G: 2
Resource use and waste	12	P: 1 M: 0 G: 11
Subtotal	17	(for Environmental)
Economic		
Direct costs and direct economic benefits	1	P: 0 M: 0 G: 1
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	1	P: 1 M: 0 G: 0
Employment / human capital	2	P: 0 M: 0 G: 2
Gearing	1	P: 0 M: 0 G: 1
Life-span and project risks	18	P: 2 M: 1 G: 15
Subtotal	23	(for Economic)
Social		
Community involvement and Community satisfaction	9	P: 0 M: 2 G: 7
Ethical and equity considerations	2	P: 0 M: 0 G: 2
Human Health	0	P: 0 M: 0 G: 0
Impacts on neighbourhoods or regions	3	P: 0 M: 0 G: 3
Fit with planning and policy strategies and initiatives	5	P: 1 M: 1 G: 3
Uncertainty and evidence	1	P: 0 M: 0 G: 1
Subtotal	20	(for Social)
Total (from 1 source)	60	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for subr:im - Measuring Sustainability: What's in a number?

Environmental		
Impacts on air	0	P: 0 M: 0 G: 0
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	0	P: 0 M: 0 G: 0
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	1	P: 0 M: 0 G: 1
Resource use and waste	6	P: 0 M: 1 G: 5
Subtotal	7	(for Environmental)
Economic		
Direct costs and direct economic benefits	1	P: 0 M: 0 G: 1
Flexibility	2	P: 0 M: 0 G: 2
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	1	P: 0 M: 1 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and project risks	3	P: 0 M: 1 G: 2
Subtotal	7	(for Economic)
Social		
Community involvement and Community satisfaction	3	P: 0 M: 1 G: 2
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	0	P: 0 M: 0 G: 0
Impacts on neighbourhoods or regions	5	P: 0 M: 0 G: 5
Fit with planning and policy strategies and initiatives	1	P: 0 M: 0 G: 1
Uncertainty and evidence	1	P: 0 M: 0 G: 1
Subtotal	10	(for Social)
Total (from 1 source)	24	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for subr:im - The Role of the UK Development Industry in Brownfield Regeneration

Environmental		
Impacts on air	0	P: 0 M: 0 G: 0
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	0	P: 0 M: 0 G: 0
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	1	P: 1 M: 0 G: 0
Subtotal	1	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	5	P: 5 M: 0 G: 0
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	3	P: 1 M: 0 G: 2
Life-span and project risks	1	P: 0 M: 0 G: 1
Subtotal	9	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	0	P: 0 M: 0 G: 0
Impacts on neighbourhoods or regions	0	P: 0 M: 0 G: 0
Fit with planning and policy strategies and initiatives	2	P: 1 M: 1 G: 0
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 source)	12	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for subr:im - Uncovering the True Impacts of Remediation

Environmental		
Impacts on air	0	P: 0 M: 0 G: 0
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	0	P: 0 M: 0 G: 0
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	4	P: 0 M: 2 G: 2
Subtotal	4	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	1	P: 0 M: 0 G: 1
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	1	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	1	P: 0 M: 0 G: 1
Impacts on neighbourhoods or regions	1	P: 0 M: 0 G: 1
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	1	P: 0 M: 0 G: 1
Subtotal	3	(for Social)
Total (from 1 source)	8	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for Sustainability of land remediation. Part 1: overall analysis

Environmental		
Impacts on air	2	P: 0 M: 0 G: 2
Impacts on water	2	P: 0 M: 0 G: 2
Impacts on ecology	1	P: 0 M: 0 G: 1
Impacts on soil	1	P: 0 M: 0 G: 1
Intrusiveness	1	P: 0 M: 0 G: 1
Resource use and waste	4	P: 0 M: 0 G: 4
Subtotal	11	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	0	(for Economic)
Social		
Community involvement and Community satisfaction	1	P: 0 M: 0 G: 1
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	2	P: 0 M: 0 G: 2
Impacts on neighbourhoods or regions	3	P: 0 M: 1 G: 2
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	1	P: 0 M: 0 G: 1
Subtotal	7	(for Social)
Total (from 1 source)	18	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for Sustainability of land remediation. Part 2: impact assessment

Environmental		
Impacts on air	1	P: 0 M: 0 G: 1
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	0	P: 0 M: 0 G: 0
Impacts on soil	1	P: 0 M: 0 G: 1
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	14	P: 4 M: 3 G: 7
Subtotal	16	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	1	P: 0 M: 0 G: 1
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and project risks	1	P: 0 M: 0 G: 1
Subtotal	2	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	2	P: 0 M: 0 G: 2
Impacts on neighbourhoods or regions	5	P: 0 M: 0 G: 5
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 source)	25	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for US Air Force Final Biowall Protocol

Environmental		
Impacts on air	0	P: 0 M: 0 G: 0
Impacts on water	0	P: 0 M: 0 G: 0
Impacts on ecology	0	P: 0 M: 0 G: 0
Impacts on soil	1	P: 0 M: 0 G: 1
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	1	P: 0 M: 0 G: 1
Subtotal	2	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	0	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	0	P: 0 M: 0 G: 0
Impacts on neighbourhoods or regions	0	P: 0 M: 0 G: 0
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 source)	2	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for US EPA: Incorporating Sustainable Practices into Site Remediation

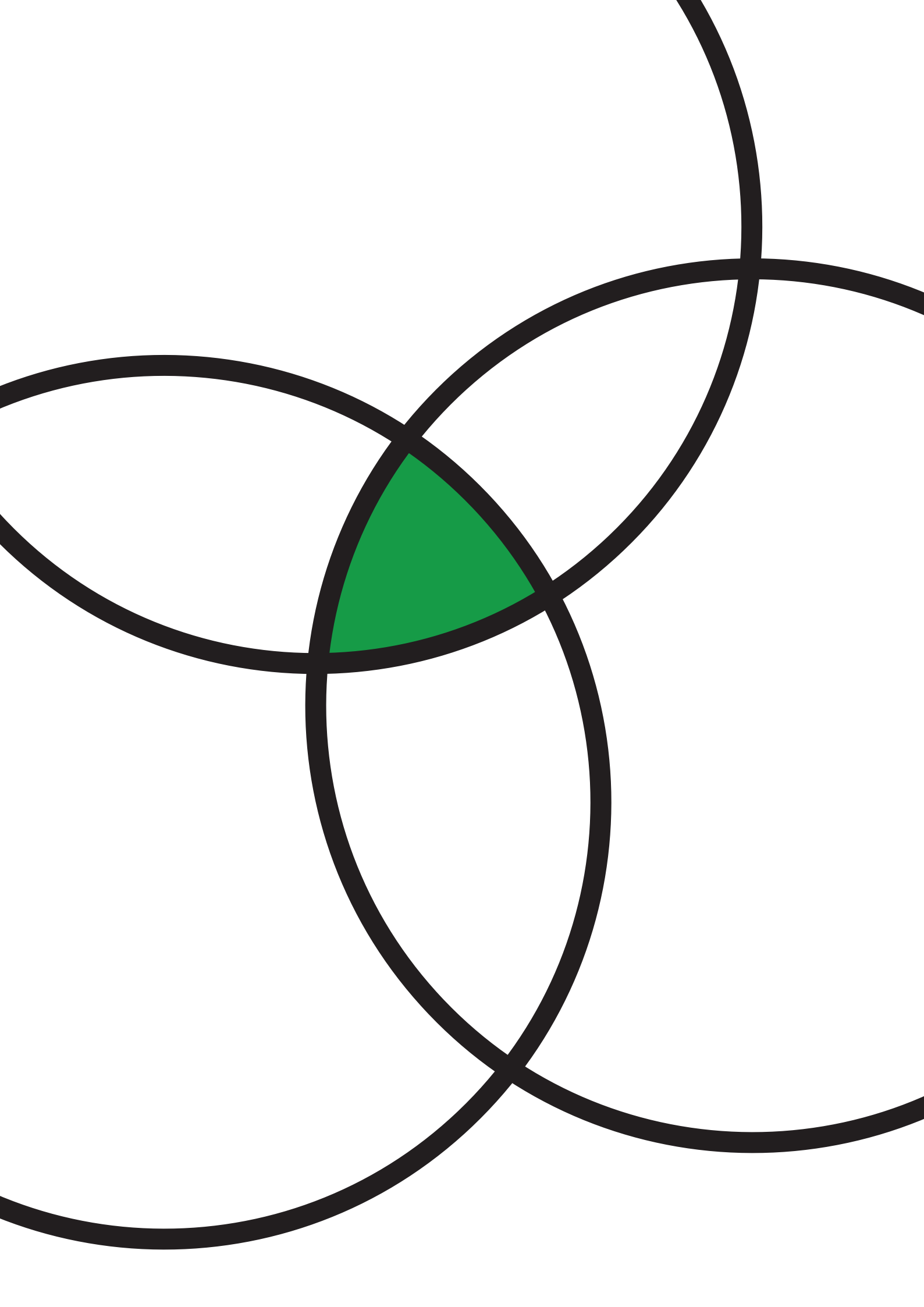
Environmental		
Impacts on air	1	P: 0 M: 0 G: 1
Impacts on water	1	P: 0 M: 0 G: 1
Impacts on ecology	1	P: 0 M: 0 G: 1
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	2	P: 0 M: 0 G: 2
Subtotal	5	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and project risks	1	P: 0 M: 0 G: 1
Subtotal	1	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	0	P: 0 M: 0 G: 0
Impacts on neighbourhoods or regions	0	P: 0 M: 0 G: 0
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 source)	6	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for Use of Stabilised Biowaste in the Restoration of Former Landfill Sites

Environmental		
Impacts on air	0	P: 0 M: 0 G: 0
Impacts on water	8	P: 0 M: 0 G: 8
Impacts on ecology	3	P: 0 M: 0 G: 3
Impacts on soil	0	P: 0 M: 0 G: 0
Intrusiveness	0	P: 0 M: 0 G: 0
Resource use and waste	0	P: 0 M: 0 G: 0
Subtotal	11	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	0	P: 0 M: 0 G: 0
Indirect costs and indirect economic benefits	0	P: 0 M: 0 G: 0
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	0	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	5	P: 0 M: 0 G: 5
Impacts on neighbourhoods or regions	0	P: 0 M: 0 G: 0
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 source)	16	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit

Distribution of Indicators by Headline for Wider environmental value

Environmental		
Impacts on air	2	P: 0 M: 0 G: 2
Impacts on water	2	P: 0 M: 2 G: 0
Impacts on ecology	2	P: 0 M: 0 G: 2
Impacts on soil	8	P: 0 M: 1 G: 7
Intrusiveness	3	P: 0 M: 0 G: 3
Resource use and waste	10	P: 1 M: 0 G: 9
Subtotal	27	(for Environmental)
Economic		
Direct costs and direct economic benefits	0	P: 0 M: 0 G: 0
Flexibility	1	P: 0 M: 0 G: 1
Indirect costs and indirect economic benefits	3	P: 0 M: 2 G: 1
Employment / human capital	0	P: 0 M: 0 G: 0
Gearing	0	P: 0 M: 0 G: 0
Life-span and 'project risks'	0	P: 0 M: 0 G: 0
Subtotal	4	(for Economic)
Social		
Community involvement and Community satisfaction	0	P: 0 M: 0 G: 0
Ethical and equity considerations	0	P: 0 M: 0 G: 0
Human Health	2	P: 1 M: 0 G: 1
Impacts on neighbourhoods or regions	4	P: 0 M: 0 G: 4
Fit with planning and policy strategies and initiatives	0	P: 0 M: 0 G: 0
Uncertainty and evidence	0	P: 0 M: 0 G: 0
Subtotal	0	(for Social)
Total (from 1 source)	37	P = Poor fit indicators, M = Indicators that could have fitted to More than one category, G = Good fit



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