DEPARTMENT OF ENERGY & CLIMATE CHANGE

Appraisals of Sustainability for the energy National Policy Statements: Monitoring Strategy

Planning For New Energy Infrastructure **June 2011**

This document is a Monitoring Strategy for the energy National Policy Statements (NPS).

The six energy NPSs are:

1. Overarching Energy NPS (EN-1);
2. Fossil Fuel Electricity Generating Infrastructure (EN-2);
3. Renewable Energy Infrastructure (EN-3);
4. Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4);
5. Electricity Networks Infrastructure (EN-5); and
6. Nuclear Power Generation (EN-6).

All documents are available on the consultation website of the Department of Energy and Climate Change at www.energynpsconsultation.decc.gov.uk

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Contents

1 Introduction

1.1 The Government has undertaken Appraisal of Sustainability (AoS) of the six energy National Policy Statements (NPS) as required by the Planning Act 2008. The AoSs incorporate the requirements of the Strategic Environmental Assessment (SEA) Directive[1]. This Monitoring Strategy sets out the approach, roles and responsibilities for monitoring the significant strategic effects of the energy NPSs which have been identified by the AoSs[2]. This includes consideration of significant positive and negative effects predicted by the AoSs and the consideration of unforeseen adverse effects that might arise from the implementation of the energy NPSs so as to be able to take appropriate remedial action.

1.2 The Monitoring Strategy sets out the Government's intentions at a strategic level for monitoring the effects of the NPSs identified in the AoSs. Its detailed contents are provisional and will be developed in consultation with Government departments, devolved administrations, regulators and industry in order to ensure that the monitoring system is robust and able to respond flexibly to new information and changing conditions as it is used.

1.3 For that reason, the material set out in this strategy is not exhaustive.

1.4 The six energy NPSs are:

- Overarching National Policy Statement for Energy (EN-1);
- National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2);
- National Policy Statement for Renewable Energy Infrastructure (EN-3);
- National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4);
- National Policy Statement for Electricity Networks Infrastructure (EN-5); and
- National Policy Statement for Nuclear Power Generation (EN-6).

1.5 Section 2 of this document outlines the guiding principles and key issues underpinning the approach to the Monitoring Strategy. The subsequent sections outline the approach to monitoring in accordance with the requirements of the SEA Directive 2001/42/EC and good practice guidance[3].

[1] Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

[2] The AoSs also incorporate the key findings of the Habitats Regulations Assessments for each of the revised draft energy NPSs

[3] ODPM et al (2005) *A Practical Guide to the Strategic Environmental Assessment Directive* and ODPM (2005) *Sustainability Appraisal of Regional Spatial Strategies* and Planning Advisory Service (2009) *CLG Plan Making Manual: Sustainability Appraisal.*

Table 1 How key steps in the Government's Practical Guide to SEA are addressed in this draft Monitoring Strategy

Steps from SEA Guidance		Addressed in section
intro	Why monitor?	3.0
1	What needs to be monitored?	4.0
2	What sort of information is required?	4.0, 5.0
3	What are the existing sources of monitoring information?	5.0, 7.0
4	Are there any gaps in the existing information and how can they be filled?	5.0
5	What should be done if adverse effects are found?	2.0
6	Who is responsible for the various monitoring activities, when should these be carried out, and what is the appropriate format for presenting monitoring results?	5.0, 6.0

1.6 The AoSs of the technology specific NPSs (EN-2, EN-3, EN-4, EN-5 and EN- 6) considered the potential for significant effects arising from the technology types being addressed by the individual plans. The AoS of EN-1considered the overall, cumulative effects of the five technology specific AoSs.

1.7 EN-1, EN-2, EN-3, EN-4 and EN-5 are not spatially specific and therefore the precise location, type and quantity of proposed energy infrastructure developments that will be granted development consents or licences to operate, is not known. Accordingly there are a wide range of potential effects that may occur and that will depend on a number of factors, including the speed and proportion of infrastructure development that is successfully developed across the range of energy sectors and the application of mitigation measures as set out in the NPSs. Monitoring is, therefore, most effectively focused on environmental and socio-economic trends. At a strategic level the lack of spatial definition means that it may not be possible to attribute changes (improvements or deterioration) in trends directly to any one individual NPS.

1.8 EN-6 is locationally specific and it lists eight sites which have been assessed as potentially suitable for the deployment of new nuclear power stations by the end of 2025. The AoS of EN-6 considered the potential for significant effects to occur at these eight sites at a strategic level of regional, national and international importance. The potential effects of the sites were taken into account in considering the interactions between sustainability topics and the overall cumulative effects of EN-6 at the national level. The national and international significance of such effects will depend on the number of new nuclear power stations built. Proposals for monitoring take particular account

of the potential for significant effects arising from locational clusters of proposed new development.

1.9 As the plan maker, the Department of Energy and Climate Change is responsible for monitoring the energy NPSs. However, much of the information required may be obtained from other programmes of data collection that gather information on the environmental and socio-economic trends identified as significant for the NPSs overall. Hence the approach adopted for monitoring the energy NPSs is that, wherever possible, use will be made of existing monitoring and this information will be collected by others and collated and reported by the Department of Energy and Climate Change.

2 Guiding principles

2.1. The following principles guide the Monitoring Strategy.

Effects Identified in the Assessment

- Monitoring will be undertaken to address the **significant effects** of implementing the plan (i.e. the NPS) identified in the AoS. These effects will arise mainly from construction and operation of the infrastructure which is consented in line with the relevant NPS;

- With a view to avoiding duplication, monitoring will employ **existing measures** where appropriate[4]; and

- **Predicted significant positive and negative effects** will be monitored in accordance with this strategy and will take into account the monitoring of significant **cumulative effects** at the strategic level, including the effects of regional clusters of new energy infrastructure development.

Unforeseen Effects

- **Unforeseen adverse effects** will be monitored by considering any changes to baseline conditions captured through existing monitoring, including at a national level (for example using UK Sustainable Development Indicators) and sub/regional level (for example using data from Regional Observatories); and

- For EN-6, local effects that were not identified as significant in the AoS, will be addressed through the monitoring requirements developed as part of the individual site development consents.

Reporting / Outcome

- The Department of Energy and Climate Change will **collate and report** monitoring information;

- If significant **adverse effects** are identified, the Department of Energy and Climate Change will review this information in consultation with the appropriate regulators or authorities concerned to ensure that **appropriate remedial action** is taken.

- The monitoring strategy will be reviewed periodically, in consultation with the relevant regulators and statutory consultees, and will be revised if necessary,for example, to reduce monitoring of predicted

[4] The SEA Directive (Article 10) allows for existing monitoring arrangements to be used if appropriate, with a view to avoid duplication of monitoring.

significant effects that have not arisen in practice. The review of the monitoring strategy may be timed to coincide with reviews of the energy NPSs.

3 Why monitor?

3.1 The SEA Directive requires monitoring of the significant effects of implementing the plan, including unforeseen adverse effects. The Directive provides that:

"*Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action*."

"*In order to comply… existing monitoring arrangements may be used if appropriate, with a view to avoiding duplication* …"[5]

3.2 Monitoring is an established element of plan making and assessment / appraisal procedures. It serves to inform reviews and updates of the plan by providing the plan maker and wider decision makers with information as to how predicted effects are being realised and managed. The benefits of monitoring the significant environmental and other sustainability effects arising from the implementation of the energy NPSs include:

- Identifying and tracking unforeseen effects should they arise;
- Enhancing an understanding of how the natural, social and economic environment is changing as a result of the new energy infrastructure development; and
- Identifying whether strategic level actions are necessary to enhance or reduce identified effects.

3.3 Monitoring may also be used to assess the effectiveness of proposed mitigation measures. The emerging findings of the AoSs have informed the development of the energy NPSs and have included the incorporation of mitigation measures where appropriate. For example, for EN-6, the AoS recommendations have included site mitigation possibilities for the Infrastructure Planning Commission when considering individual applications for development consent. The significance of these local effects and the effectiveness of mitigation measures will be addressed through monitoring requirements determined at the next level of assessment and consent.

3.4 Monitoring of significant effects arising from the energy NPSs will provide information to the public and wider stakeholders on how the effects of plan implementation are being reviewed and managed.

[5] Article 10 of the SEA Directive.

4 What needs to be monitored?

4.1 Monitoring must cover all the significant effects identified, for example:

- those that may give rise to irreversible damage;
- where there is uncertainty over possible adverse effects and where monitoring would enable mitigation measures to be taken; and
- those that may indicate a breach of regulation or recognised standards.

4.2 However, the guidance for monitoring (SA/SEA)[6] states that it is not necessary to monitor all the effects considered as part of the appraisal process. In accordance with guidance and in line with the principles set out in Section 2, the key significant effects (positive and negative) identified by the AoSs of the energy NPSs are addressed in this monitoring strategy, together with provision for identifying any unforeseen or uncertain adverse significant effects .

4.3 The significant effects identified by the AoSs are summarised according to each individual AoS in Table 2 below. These effects are then detailed in the Monitoring Framework (Table 3) which sets out:

- The AoS themes and objectives for AoSs1-5 and for AoS 6
- The potentially significant effects that requires monitoring
- Proposed monitoring measures
- Proposed data sources and monitoring frequencies

Table 2 Summary of significant effects identified by the AoSs of ENs1-6

Summary Significant Effects identified by AoSs of ENs1-6
AoS of EN-1 Overarching NPS for Energy
• **Positive**, cumulative effects for **climate change,** medium and long term • **Positive** effects for **economy and skills,** long term • **Positive** benefits (indirect) for **health and well being,** medium and long term • **Positive** effects for **equality,** medium and long term • **Negative** effects for **biodiversity, landscape / visual amenity and archaeology / cultural heritage,** short, medium and long term • **Negative / uncertain** effects, cumulative for **water quality and water resources, flood risk and coastal change** (regional and sub-regional significance dependant on clustering), short, medium and long term
AoS of EN-2 NPS for Fossil Fuel Electricity Generating Infrastructure
• **Positive** effects for **climate change,** medium to long term • **Positive** effects for **economy and skills,** short, medium and long term • **Positive** benefits (indirect) for **health and well being,** long term

[6] http://www.communities.gov.uk/publications/planningandbuilding/practicalguidesea

Summary Significant Effects identified by AoSs of ENs1-6
• **Negative** effects for **ecology, resources and raw materials, flood risk and coastal change, water quality and water resources, landscape, townscape and visual,** short, medium and long term • **Negative** effects for **air quality** and (indirectly) for **health and well** being, short term
AoS of EN-3 NPS for Renewable Energy Infrastructure
• **Positive** effects for **climate change,** short, medium and long term • **Positive** effects on **economy and skills** short, medium and long term • **Positive** effects for **equality,** short, medium and long term • **Negative** effects on **ecology,** short term and **uncertain** effects, medium and long term • **Negative** effects for **landscape, townscape and visual, flood risk and coastal change, water quality and water resources, noise, traffic and transport, soil and geology,**short, medium and long term
AoS of EN-4 NPS for Gas Supply Infrastructure and Gas and Oil Pipelines
• **Positive** effects for **economy and skills,** medium and long term • **Negative** effects for **landscape, townscape and visual,** short and medium term • **Negative / uncertain** effects on **climate change,** long term • **Negative** effects for **ecology, resources and raw materials and water quality and water resources,** short term
AoS of EN-5 NPS for Electricity Networks Infrastructure
• **Positive** effects for **climate change**, medium and long term • **Positive** effects for **economy and skills,** short term, (indirect) long term • **Negative** cumulative effects for **landscape, townscape and visual,** short, medium and long term
AoS of EN-6 NPS for Nuclear Power Generation
• **Positive** effects for **climate change,** medium and long term • **Positive** effects for **communities, population, employment and viability**, short, medium and long term • **Positive** effects (indirect) for **health and well being**, medium and long term • **Positive** effects for **air quality**, medium and long term • **Negative** effects for **biodiversity**, cumulative, short, medium and long term • **Negative** effects for **cultural heritage**, cumulative where infrastructure clustered, short, medium and long term • **Negative** effects for **landscape**, cumulative where infrastructure clustered, short, medium and long and term • **Negative** effects for **water quality and resources** cumulative where infrastructure clustered, short, medium and long and term • **Negative** effects for **flood risk and coastal change**, medium and long

Summary Significant Effects identified by AoSs of ENs1-6
term • **Negative** effects for **radioactive waste,** long term[7]

4.4 Effects may be significant at different stages of the energy infrastructure development process. The overall significant effects of the NPSs identified by the AoSs in the above table generally refer to the operational phase of the energy infrastructure. However, certain effects may be more significant at different parts of the infrastructure life cycle, for example transport disturbances that occur during construction phases, and these will be dealt with by the monitoring associated with the development consents for individual sites.[8]

4.5 The type and level of information required is detailed in the proposed Monitoring Framework (Table 3) which sets out the key significant effects identified by the AoSs and the proposed measures to monitor these effects. The potential for other unforeseen or uncertain adverse effects to be significant is addressed by also including consideration of air quality and soil and geology.

[7] Monitoring should address the effects of interim storage at power station sites. Monitoring at the geological disposal facility (GDF) or at other sites for the ultimate disposal of waste is expected to be undertaken separately.

[8] For the Nuclear NPS, the effects of spent fuel and intermediate level waste are associated with the longer term and the plans for a national Geological Disposal Facility.

5 Who is responsible for monitoring the energy National Policy Statements?

5.1 The Department of Energy and Climate Change is the plan maker, responsible for delivering and reviewing the energy NPSs and will undertake monitoring of the overall progress of the energy NPSs, including the effects covered by this draft monitoring strategy.

5.2 The Department of Energy and Climate Change will collate, organise and report the monitoring data from the key identified information sources, in line with the effects identified in the Monitoring Framework (Table 3).

5.3 The energy NPSs will be monitored through the use of existing established indicators and data sources / providers, covering the significant effects identified. Where gaps in data and information requirements are identified they will be addressed through the review process. Relevant information and data is gathered and reported (including in line with statutory duties) by various agencies and organisations, as illustrated below.

- **Natural England and Countryside Council for Wales** – condition status of designated European sites and Sites of Special Scientific Interest (SSSIs)
- **Environment Agency / Environment Agency Wales** – water quality (chemical, biological and ecological); liquid and gaseous radioactive discharges;
- **Department of Energy and Climate Change** – Digest of UK Energy Statistics (DUKES), sector specific information
- **Department for Environment, Food and Rural Affairs** – UK Sustainable Development Indicators
- **Nuclear Installations Inspectorate** (worker/public exposure to radioactivity);
- **Health Protection Agency** (radiation exposure of UK population)
- **EIA/Sustainability Assessment/consent monitoring** for individual energy infrastructure projects to ensure mitigation commitments, satisfy planning, environmental and health regulatory conditions and permits. This data will inform the monitoring of cumulative effects where energy infrastructure is clustered, regionally and nationally.

5.4 The key information sources for the indicators and measures applied to monitoring the strategic significant effects identified by the AoSs of the energy NPSs are detailed in the Monitoring Framework (Table 3).

6 What is the frequency of monitoring?

6.1 Monitoring should be undertaken once the plan has been designated and begins to produce effects. The energy NPSs will facilitate new energy infrastructure across a range of sectors and it is expected that the timetable for the implementation of individual infrastructure projects will vary, with development taking place over a number of years and at different scales, once individual energy NPSs are designated. The effects of the NPSs in implementation will therefore not be immediate, and monitoring should take account of development timetables accordingly.

6.2 Data sources for the monitoring measures identified in Table 2 draw on established systems of data gathering and reporting that are typically collated on an annual basis. The frequency of data collation and the reporting of monitoring data for the NPSs should, however, take account of the progress of NPS implementation and be undertaken at intervals that are commensurate with the strategic nature of the development effects being monitored. The requirements for monitoring, including the frequency of data reporting should be reviewed in line with any updates or changes to the plan.

7. Monitoring Framework

Table 3 Monitoring Framework

AoS Themes and Objectives AoSs of EN1, EN-2, EN-3, EN-4 and EN-5	AoS Themes and Objectives AoS of EN-6*	Effect to be monitored	Possible Monitoring Measure/ Indicator	Potential Data Source/ Frequency of Data Collation
1. Climate Change: To minimise detrimental effects on the climate from greenhouse gases and ozone depleting substances and maximise resilience to climate change	**1. Climate Change** (13) To minimise greenhouse gases emissions	Positive effects are identified for the medium and long term, through the development and operation of low carbon energy sources.	• % output from low carbon sources • total installed capacity of energy generation by sector • emissions of greenhouse gases by source • carbon budget assessments	Energy Statistic (DUKES) DECC/OND Defra Devolved Administrations and Agencies Annual
2. Ecology (Flora and Fauna): To protect and enhance protected habitats, species, valuable ecological networks and ecosystem functionality	**2. Biodiversity and Ecosystems** (1) (2) (3) To avoid adverse impacts on the integrity of wildlife sites of international and national importance, to avoid adverse impacts on valuable ecological networks and ecosystem functionality	The development of new energy sources is likely to result in significant adverse effects on national and European sites of biodiversity value. Impacts may be cumulative where new developments are geographically clustered. There is uncertainty about the scale and location and new energy developments and therefore the medium and long term effects for this objective are also uncertain.	• condition of European Sites (Natura 2000, Ramsar, Marine Protected Ares (MPAs)) and Sites of Special Scientific Interest (SSSIs) identified as potentially affected by NPS development • changes in areas of biodiversity importance (priority habitats and species by type) and areas designated for their intrinsic environmental value including sites of international, national, regional or sub regional significance	Natural England (NE) Countryside Council for Wales (CCW) Defra Devolved Administrations and Agencies Annual
3. Resources and Raw Materials: To promote the		Potential for cumulative negative impacts in the short term	• Water abstractions (see also Water	Environment Agency Devolved

AoS Themes and Objectives AoSs of EN1, EN-2, EN-3, EN-4 and EN-5	AoS Themes and Objectives AoS of EN-6*	Effect to be monitored	Possible Monitoring Measure/ Indicator	Potential Data Source/ Frequency of Data Collation
sustainable use of resources and natural assets and to deliver secure, clean, affordable energy		through the use of resources and raw materials (construction/ development) and generation of waste products. Longer term benefits potentially positive (not spatially dependant) through securing clean, affordable energy.	Quality and Resources AoS objective) • Waste to landfill • Energy output by sector	Administrations and Agencies OFWAT ONS Defra DUKES, DECC, ONS Annual
4. Economy and Skills: To promote a strong and stable economy with opportunities for all	**3. Communities, population, employment and viability** (4) (5) (10) To create employment opportunities, to encourage the development of sustainable communities	Significant positive effects are identified for employment and the economy. The effects will significant at different levels depending on the location of development. For example, positive effects from regional clusters (E.g. EN-6 Nuclear NPS).	• gross value added (GVA) per capita • percentage change in employment by sector	NOMIS/ Office for National Statistics (OND) Annual
5. Flood Risk and Coastal Change: To avoid, reduce and manage flood risk (including coastal flood risk) from all sources and coastal erosion risks by locating infrastructure in lower risk areas and ensuring it is resilient over its lifetime without increasing the risks elsewhere.	**11. Flood Risk and Coastal Change** (14) To avoid increased flood risk (including coastal flood risk) and seek to reduce risk where possible.	Potential negative effects may occur where developments arising from the plans increase impermeable surfaces (e.g. built structures, hard standing) and effects are more likely in riverine and coastal locations. These effects are not appraised as strategically significant beyond the short term. However, the long term effects on the plan may be significant, e.g. for	• Areas at risk of flooding (fluvial, groundwater, sea level rise)	Environment Agency, including flood maps, Shoreline Management Plans and National Coastal Erosion Risk Mapping Devolved Administrations and Agencies Defra UK Climate Impacts Program (UKCIP)

AoS Themes and Objectives AoSs of EN1, EN-2, EN-3, EN-4 and EN-5	AoS Themes and Objectives AoS of EN-6*	Effect to be monitored	Possible Monitoring Measure/ Indicator	Potential Data Source/ Frequency of Data Collation
		coastal energy installations when sea level rise due to climate change becomes a factor. Effects will be dependant on the scale and location of energy development which is uncertain.		Annual
6. Water Quality and Water Resources: To protect and enhance surface (including coastal) and groundwater quality (including distribution and flow).	**10. Water Quality and Resources** (15) (16) (17) (18) To avoid adverse impacts on: surface water hydrology and channel geomorphology, surface water quality, supply of water resources, groundwater quality, distribution and flow and assist achievement of Water Framework Directive objectives.	There is potential for significant negative effects on water quality and resources. In particular this may occur where new energy developments and associated infrastructure is clustered.	• Water Framework Directive (WFD) status of water bodies • Compliance with discharge consents and abstraction licences • Condition of freshwater fish directive sites and shellfish waters in the vicinity of new power stations • Qualitative and quantitative status of groundwater bodies • Water supply zones: supply/demand balance	Environment Agency Devolved Administrations and Agencies Water Companies Annual
7. Traffic and Transport: To minimise the detrimental impacts of travel and transport on communities and the environment, whilst maximising positive effects.	**4. Communities – supporting infrastructure** (8) (9) To avoid adverse impacts on the function and efficiency of the strategic transport infrastructure and avoid disruption to services.	*No strategically significant effects identified.*		
8. Noise: To protect both		*No strategically significant effects*		

AoS Themes and Objectives AoSs of EN1, EN-2, EN-3, EN-4 and EN-5	AoS Themes and Objectives AoS of EN-6*	Effect to be monitored	Possible Monitoring Measure/ Indicator	Potential Data Source/ Frequency of Data Collation
human and ecological receptors from disturbing levels of noise.		*identified.*		
9. Landscape, Townscape and Visual: To protect and enhance landscape quality and townscape quality and to enhance visual amenity.	**7. Landscape** (24) (25) To avoid adverse impacts on nationally important landscapes, on landscape character, quality and tranquility, diversity and distinctiveness.	New energy sector developments are identified as having landscape and visual effects, particularly where they are geographically related to designated landscapes and/or where developments occur in clusters with the potential for cumulative effects. Although there is uncertainty as to the scale and location of some energy sector development; adverse impacts are considered likely.	• Change in the quality of character or status of a designated area • Changes in settings and views	Natural England Countryside Council for Wales Periodically
10. Archaeology and Cultural Heritage: Protect and where appropriate enhance the historic environment including heritage resources, historic buildings and archaeological features.	**6. Cultural Heritage** (22), (23) To avoid adverse impacts on the internationally and nationally important features of the historic landscape, and on the setting and quality of built heritage, archaeology and historic landscapes	The development of new energy infrastructure is likely to have negative effects on cultural and heritage assets. Effects are uncertain as the scale and location of new developments is not determined.	• Status of heritage at risk, including listed and non-listed historic and archaeological features	English Heritage Local Authorities Annual
11. Air Quality: To protect and enhance air	**8. Air Quality** (12) To avoid adverse impacts on air	Potential negative impacts on air quality arising from accelerated	• Emissions of air pollutants (nitrogen oxides (NOx), sulphur	Defra Environment Agency

AoS Themes and Objectives AoSs of EN1, EN-2, EN-3, EN-4 and EN-5	AoS Themes and Objectives AoS of EN-6*	Effect to be monitored	Possible Monitoring Measure/ Indicator	Potential Data Source/ Frequency of Data Collation
quality on local, regional, national and international scale.	quality	development of some sectors (fossil fuel, biomass) energy infrastructure and networks, effects may be cumulative where developments are clustered. Effects are uncertain in the medium to long term as the scale and location of new developments is not determined. Some positive effects likely through an increase in the proportion of low carbon technologies.	dioxide (SOx), particulates (PM_{10}). • Compliance with permits for emissions to air and with conditions of air quality monitoring zones	Devolved Administrations and Agencies Annual
12. Soil and Geology: To promote the use of brownfield land and where this is not possible to prioritise the protection of geologically important sites and agriculturally important land.	**9. Soils, Geology, Land Use** **(19) (20) (21) (24)** To avoid: damage to geological resources; the use of Greenfield land; the contamination of soils; adverse impacts on soil functions.	Effects are uncertain in the short, medium and long term as the scale and location of new developments is not determined. Potential for cumulative effects where new developments and infrastructure are clustered. .	• Land use and land recycling (by region)	Defra Devolved Administrations and Agencies Annual
13. Health and Well Being: To protect and enhance the physical and mental health of the population.	**5. Human Health and Well Being** (6), (7), (11) To avoid adverse impact on physical and mental health	There are identified health benefits from having a reliable and secure supply of energy as well as indirect positive health effects associated with enhanced prosperity and long term employment	• Satisfaction with area as a place to live • Deprivation levels	MORI/ ONS Index of Multiple Deprivation/DCLG/ONS Annual

AoS Themes and Objectives AoSs of EN1, EN-2, EN-3, EN-4 and EN-5	AoS Themes and Objectives AoS of EN-6*	Effect to be monitored	Possible Monitoring Measure/ Indicator	Potential Data Source/ Frequency of Data Collation
		opportunities.		
14. Equality: To encourage equality and sustainable communities		Medium to long term positive effects through improved access to and the provision of affordable energy.	• Households living in fuel poverty • Environmental equality	DECC Defra, Environment Agency, DCLG Devolved Administrations and Agencies Annual
	12. Radioactive and Associated Hazardous Waste This is a cross-cutting theme and as such should satisfy the other AoS objectives.	Interim storage of waste on sites should be monitored to determine the status of storage and the findings of radiological monitoring that will be taking place	• Quantities of waste stored in site • Radiological measurements	Health and Safety Executive/ Nuclear Directorate Periodically
Key: * (Objectives in the AoS of EN-6 are themed. Numbers in brackets refer to the numbers given to the Objectives in the SEA Scoping Report March 2008)				

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