



UK Government

National Policy Statement for Fusion Energy Generation EN-8

Appraisal of Sustainability Appendices Vol. I



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Appendix A. Glossary & List of Abbreviations

Table A-1: List of Abbreviations

Abbreviation	Term
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty (Now National Landscape)
AoS	Appraisal of Sustainability
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
BAT	Best Available Techniques
BCCUS	Bioenergy with Carbon Capture Usage and Storage
BEIS	Department for Business, Energy and Industrial Strategy
BIM	Building Information Management
BMV	Best and Most Versatile
BNG	Biodiversity Net Gain
CCA	Climate Change Act
CCC	Climate Change Committee
CCR	Carbon Capture Ready
CCS	Carbon Capture and Storage
CCUS	Carbon Capture Usage and Storage
CfD	Contracts for Difference
CHP	Combined Heat and Power
CO ₂	Carbon Dioxide
CNP	Critical National Priority

CPS	Carbon Price Support
CSNP	Centralised Strategic Network Plans
DCO	Development Consent Order
DECC	Department for Energy and Climate Change
Defra	Department for Environment, Farming and Rural Affairs
DfT	Department for Transport
DNOs	Distribution Network Operators
DTI	Department for Trade and Industry
DWSZ	Drinking Water Safeguard Zone
EA	Environment Agency
EIA	Environmental Impact Assessment
EfW	Energy from Waste
EMF	Electro-Magnetic Field
EP	Environmental Permitting
EPR	Environmental Permitting Regulations
EPS	Emissions Performance Standards
EQLS	European Quality of Life Survey
ES	Environmental Statement
ETS	Emission Trading Scheme
EU	European Union
FCERM	Flood and Coastal Erosion Risk Management
FRA	Flood Risk Assessment
GDF	Geological Disposal Facility
GHG	Greenhouse Gas
GVA	Gross Value Added

GW	Giga Watt
HDD	Horizontal Directional Drilling
HGV	Heavy Goods Vehicle
HND	Holistic Network Design
HIA	Health Impact Assessment
HMT	HM Treasury
HRA	Habitats Regulation Assessment
IED	Industrial Emissions Directive
IPCC	Intergovernmental Panel on Climate Change
kV	Kilo Volt
kWh	Kilo Watt hour
LDD	Local Development Document
LNG	Liquefied Natural Gas
LNR	Local Nature Reserve
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
Mcm	Million standard cubic metres
MMO	Marine Management Organisation
MNR	Marine Nature Reserves
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
MW	Mega Watt
MWe	Mega Watt equivalent
NDC	Nationally Determined Contribution
NE	Natural England

NESO	National Energy System Operator
NGCC	Natural Gas Combined Cycle
NMVOC	Non-Methane Volatile Organic Compound
NNR	National Nature Reserves
NOx	Nitrogen Oxides
NPPF	National Planning Policy Framework
NPPG	National Planning Policy Guidance
NPS	National Policy Statement
NRW	Natural Resource Wales
NSIP	Nationally Significant Infrastructure Project
NVZ	Nitrate Vulnerable Zone
NZ	Net Zero
ODPM	Office of the Deputy Prime Minister
OECD	Organisation for Economic Co-operation and Development
OHA	Offshore Hybrid Assets
PM	Particulate Matter
PPP	Plans, Policies and Programmes
PV	Photovoltaic
RBD	River Basin District
RBMP	River Basin Management Plan
RO	Renewables Obligation
SA	Sustainability Appraisal
SAC	Special Areas of Conservation
SAM	Scheduled Ancient Monument
SCI	Sites of Community Importance

SCR	Selective Catalytic Reduction
SEA	Strategic Environmental Assessment
SF6	Sulphur Hexafluoride
SLVIA	Seascape and Landscape Visual Impact Assessment
SNCI	Site Nature Conservation Interest
SO2	Sulphur Dioxide
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TAN	Technical Advice Note
UK	United Kingdom
UKCIP	UK Climate Impacts Programme
UKETS	UK Emissions Trading Scheme
WFD	Water Framework Directive
WfH	Waste from Households
WHS	World Heritage Site

Appendix B. Recommendations made

A key element of the AoS process is to make recommendations to those developing the plan, policy or programme (in this instance draft Fusion NPS EN-8), in respect of how the NPS can be strengthened in sustainability terms. Such recommendations often arise after early drafts of proposals are shared with the AoS team and early assessments against the AoS Framework take place to iteratively inform further development of the proposals, until such time a complete document is available for formal assessment and reporting.

In relation to draft EN-8, this is part of a wider suite of Energy NPS's as follows:

- EN-1: Overarching National Policy Statement for Energy
- EN-2: National Policy Statement for Natural Gas Infrastructure
- EN-3: National Policy Statement for Renewable Electricity Generation
- EN-4: National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines
- EN-5: National Policy Statement for Electricity Networks Infrastructure
- EN-6: National Policy Statement for new Nuclear Generation greater than 1GW and deployable by 2025 (now superseded by EN-7)
- EN-7: National Policy Statement for new Nuclear Generation

AoS was carried out previously on EN-1 to EN-5 (in 2023) and EN-7 (in 2024). EN-1, EN-3 and EN-5 were updated again in 2025 and this update was also subject to AoS.

The AoS processes followed for each iteration of the respective NPSs were comprehensive and robust, resulting in a suite of Energy NPSs that had sustainability at their core and were used to help inform the development of EN-8. In particular, draft EN-8 makes close reference to EN-1 and as such, its development benefitted from the AoS process undertaken in respect of that overarching NPS resulting in a strengthened policy in sustainability terms.

As such, there was less of a requirement for new recommendations to be made in the AoS of draft EN-8 as far as alignment with sustainability objectives and targets, although for example alignment had to be checked with the latest Government Environmental Improvement Plan targets published in December 2025, after the publication of updated EN-1. Nevertheless, the AoS process played an ongoing and iterative role in the development of draft EN-8 and a number of recommendations were made to the drafting of EN-8 for public consultation, in view of the uncertainties that still surround the deployment of fusion technology at scale. Those key recommendations were as follows.

- Commensurate description of fusion energy infrastructure (as currently known) to allow a robust, pragmatic and proportionate understanding and assessment.
- Development of a robust set of 'Reasonable Alternatives' that reflect the current understanding of fusion energy infrastructure.
- Series of recommendations relating to the structure, approach and layout of the NPS and how certain concepts could be better explained in sustainability terms and link better back to EN-1 policy, in particular CNP.

- Series of recommendations around clarifications related to suitability of applicants' sites, radioactive waste disposal, contaminated land and issues such as absence of reference to invasive species.

These recommendations were incorporated into the NPS as appropriate.

Appendix C. Responses to Consultation

Table B-1: AoS Related Consultation Comments and Responses

Respondent	Question	Answer	Response
Assystem Energy & Infrastructure LTD	13 - 20	Not answered	No action required.
Commonwealth Fusion Systems	13 - 20	Not answered	
Cumberland Council	13	No answer	
	14 - 19	Don't know	
	20 - Do you have further suggestions regarding the scope of the AoS and its proposed assessment of NPS EN-8 on fusion energy?	We do not propose to offer substantive views or comments on this section of the consultation	
Dalton Nuclear Institute	13 -20	Not answered	
Environment Agency	13 - 20	Not answered	
Fusion Industry Association	13 - 20	Not answered	
	13	Not answered	

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Fusion Industry Taskforce (FIT)	14	Not answered	
	15 - 19	Don't know	
	20	Not answered	
Helion Energy	13 - Have there been any omissions of policies, plans or programmes relevant to the scoping of the AoS?	Not that Helion is aware off	No action required.
	14 - 19	Don't know	
	20 - Do you have further suggestions regarding the scope of the AoS and its proposed assessment of NPS EN-8 on fusion energy?	No	
Historic England	13 -17	Not answered	No action required.
	18 - Do the AoS objectives and decision-making questions provide a sound framework against which to	Historic England advises the following - Amend the questions related to Objective 5 'Protect and enhance cultural heritage assets and their settings, and the wider historic environment' as follows;	Updated AoS Framework Objective 5 with amendments.

	assess the sustainability performance of the emerging NPS EN-8?	Question 1. Insert 'Where possible seek to avoid impacts on designated heritage assets', conserve and enhance designated heritage assets and their settings (World Heritage Sites, Scheduled Monuments, Listed Buildings and structures...etc Question 5. Add the following to Ensure appropriate archaeological assessment prior to development 'to establish the significance of archaeological remains and the impact of the proposed development (on the significance)'. Add a further question, 'Ensure adequate archaeological mitigation prior to and/or during development i.e. to consider if archaeological remains identified by the assessment will be impacted, damaged or disturbed by the development)'	
	19	Not answered	No action required.
	20	Not answered	
Kent County Council	13 – 20	Not answered	No action required.
National Trust	13 – 20	Not answered	No action required.
Natural England	13 - Have there been any omissions of policies, plans or programmes	Natural England recommends including the following: The updated National Planning Policy Framework (December 2023)	Plans and policies have been added to Appendix C and the AoS report in line with comments.

relevant to the
scoping of the AoS?

- National Infrastructure Assessment 2023 (rather than 2018)
- Government response to the Managing radioactive substances and nuclear decommissioning policy consultation (this is now available)
- The Green Infrastructure Framework in full (rather than just the introduction)
- The Statutory Metric for BNG (no longer metric 4.0)
- Biodiversity and the Natural Environment:
 - Local Nature Recovery Strategies Policy Paper (June 2023)
 - Nature Recovery Networks
 - Delivering 30by 30 on land in England (December 2023)
 - Natural Capital approach
 - Healthy soils
 - Strengthen the 'contribute' text to require delivery
 - Management of Hedgerows (England) Regulations 2024
- Nature Based Solutions for climate mitigation and adaptation (within multiple themes: Biodiversity and the Natural Environment; Greenhouse Gas Emissions; and Adaptation to a Changing Climate)
- Noise impacts at sea as well as on land:
- Land Use, Soil and Agriculture
 - The protection of Best and Most Versatile agricultural land (not best value). This is because the ALC system is based on the inherent soil and site properties and not the current

	‘value’ of the land. This is in line with the 25YEP and the National Planning Policy. ▫ The protection of peat soils. ▫ Suggested rewording Bullet 5 on page 34 from ‘Ensure appropriate management and storage of soils during construction’ to ‘Ensure the sustainable management, storage and use of soils during construction’. ● Landscapes and Townscapes: ▫ The duty within the Levelling Up and Regeneration Act to further the purposes of protected landscapes. ● Social themes: ▫ Access to natural green space ▫ The protection of public rights of way including national trails and the King Charles III England Coast path	Amendments made to AoS Report Section 4.
14 - Do you agree that the baseline data that have been, or will be collected, are relevant and of sufficient detail to support the AoS?	No Natural England has the following comments and queries on the relevance and detail of baseline data: ● What consideration will be given to local designations – e.g. Local Wildlife Sites? ● The discussion in the summary on pages 37 and 38 talks about ‘prevent, reduce or compensate for’ any negative effect. We advise using the mitigation hierarchy terms ‘avoid, mitigate, compensate’. In addition, we would welcome a move towards delivering beneficial effects (environmental outcomes). ● Areas of Outstanding Natural Beauty are now named National Landscapes	Local designations, such as Local Wildlife Sites, Green Infrastructure, Irreplaceable habitat and priority habitat data are too small to be displayed clearly on maps of England and Wales, however information on these features has been added to Appendix D Baseline Data and Contextual Information. Mitigation hierarchy text added to the summary in Section 4 of AoS Report.

	• There are more irreplaceable habitats to be considered (not just ancient woodland and ancient and veteran trees). • Natural England suggests adding the following: ▫ The Broads (with National Parks) ▫ Green Infrastructure mapping data ▫ Irreplaceable habitat and priority habitat data ▫ Peat maps ▫ Agricultural land classification maps	Baseline data in Appendix D added to reflect all types of irreplaceable habitats. The Broads is shown on Landscape map and in Appendix D Baseline information under National Parks.
15 - Do you agree with the selection and definition of key sustainability issues?	No Natural England supports the inclusion of biodiversity as a key sustainability issue, recognising a declining trend. We highlight the importance of assessing impacts at a landscape scale, including fragmentation and isolation of habitats and species. We advise including the risks of climate change to nature and nature recovery. We can clarify that is agricultural land (rather than soil) which is graded, using soil, site and climatic characteristics and interactions. We advise including consideration of soil health and the delivery of soil ecosystem services beyond the provision of food. This would require sustainable soil management.	EN-8 reflects the requirements of EN-1

16 - Are there any key baseline data available that have not been identified that are, or could be, use in support of the issues?

Yes

Natural England recommends using the following additional data.

Biodiversity:

- Proposed SACs, potential SPAs, proposed Ramsar sites and areas secured as sites compensating for damage to a European site.
- Protected species (protected under the Wildlife and Countryside Act, Habitats and Species Regulations.)
- Priority Species and Priority Habitats (rather than the current reference to Priority Species and their habitats).
- Local as well as national data sets. Data could be collected from local sources, e.g. records centres and Local Nature Recovery Strategy maps (when available)
- Wetlands Bird Survey (WeBS) data from the British Trust for Ornithology

Air Quality:

- Air Pollution Information System (apis.ac.uk)
- Communities and wellbeing:
- People and Nature Survey data
- Green Infrastructure mapping data.

Recommendations added to Appendix D Baseline and AoS Report Section 4.

Soils & Agricultural land:

- The strategic scale 1:250,000 Provisional Agricultural Land Classification (ALC) mapping does not differentiate Grade 3 into Subgrades 3a and 3b; therefore, the extent and location of BMV (Grade 1, 2 and 3a) cannot be determined from this mapping, however it does provide a strategic guide to land quality, primarily to support regional and county level planning. In England, a map assigning the likelihood of BMV agricultural land has been created as a companion to the Provisional ALC maps. The best agricultural land (Best and Most Versatile) has greater protection than non-BMV land. BMV agricultural land is normally determined as a result of detailed ALC site survey. The inclusion of 'high likelihood' of BMV; and the main peat areas to the baseline data is recommended.
- Peat map / peaty soils location data

Green Infrastructure mapping data is too small to be displayed clearly on maps of England and Wales, however baseline information has been added to Appendix D.

Reference to 'high likelihood' of BMV and peat mapping is in Appendix D Baseline under Soils, Geology, and Land Use: Agricultural Land Classification.

17 - Do you agree with the implications and opportunities that have been identified for the emerging NPS EN-8?

No

Natural England wishes to note the following:

Biodiversity:

- Biodiversity Net Gain requirements for NSIPs are currently under development and so cannot yet be fully reflected

Biodiversity Net Gain requirements for NSIPs text amended in AoS Report Section 5.

Text added to AoS Report Section 5 regarding mitigation hierarchy

- We support following the mitigation hierarchy and inclusion of Protected Species, Priority Species and Priority Habitats.
- We recommend the inclusion of Protected Species, Priority Species and Priority Habitats.
- We welcome the inclusion of natural capital and wider ENG.
- We welcome the inclusion of Local Nature Recovery Strategies/Nature Recovery Networks.
- Explicit reference to Nature Based Solutions for climate mitigation and adaptation would be a useful addition here.

Greenhouse gas emissions and Climate Change adaptation:

- We welcome the inclusion of Nature Based Solutions and the particular reference to woodland creation, peatland restoration and Natural Flood Management.

Air Quality:

- We advise strengthening the implications and opportunities in relation to protected habitats and protected species. The focus currently appears to be on air quality for human health.

Water Environment:

- Impacts on water resources, water quality and water temperature could lead to adverse effects on protected habitats and species.

Soil and Contaminated Land

- We advise avoiding development on Best and Most Versatile agricultural land.
- We advise that there should be sustainable management, storage and use of soils during construction.

Landscapes, Waterscapes and Townscapes:

- There are opportunities for landscape enhancements to be secured where effects are on protected landscapes (National Landscapes and National Parks). We note the importance of protecting the setting of (as well as considering direct effects on) National

Landscapes and National Parks.

- We have some concerns around the implications of the text on page 69, where it is stated that “the NPS should recognise the difficulty of achieving landscape protection...”.
- Natural England advises considering impacts on tranquillity during construction, operation and decommissioning.

	More could be said about the interactions of effects, which can be significant.	
18 - Do the AoS objectives and decision-making questions provide a sound framework against which to assess the sustainability performance of the emerging NPS EN-8?	No Natural England suggests the following changes: • Objective 2 –including a guide question to encourage the use of Nature Based Solutions for climate adaptation. • Objective 3 (biodiversity) Including guide questions about protecting and enhancing internationally designated sites (SPA, SAC, Ramsar) • Objective 3 – rephrasing the second guide question – to protect all important habitats and protected species, not just those on local wildlife sites. • Objective 3 – including supporting the delivery of Local Nature Recovery Strategies. • Objective 3 – changing the wording to Priority Habitats and Priority Species. • Objective 3 – strengthening the guide questions that start with ‘minimise’, with reference to the mitigation hierarchy (avoid, mitigate, compensate). • Objective 3 –including Irreplaceable Habitats	Changes made to AoS Framework in Section 6 of AoS Report.

- Objective 4 – including the avoidance of compensation sites
- Objective 6 – seeking to further the purposes of National Landscapes and National Parks
- Objective 6 – rewording the guide question on ‘reduce tranquillity’ to make it positive (e.g. protect tranquillity)
- Objective 6 – Including the protection of dark skies
- Objective 8 – Including the avoidance of adverse air quality effects on Habitats Sites and Sites of Special Scientific Interest.
- Objective 9 – including sustainable soil management and protecting and enhancing soil health.
- Objective 11 – including promoting access to nature for people and improving local Green Infrastructure provision

19 - Do you agree that aligning the assessment scale of the emerging NPS EN-8 with that of the AoS of EN-1 to EN-5 is a reasonable approach?

Yes

No action required.

	20 - Do you have further suggestions regarding the scope of the AoS and its proposed assessment of NPS EN-8 on fusion energy?	Natural England makes the following suggestions: • Identifying what other plans and programmes are included in the incombination/cumulative assessment. • Recognising the importance of an iterative AoS – with assessors and those preparing the NPS working together. • Setting out how alternatives will be identified and assessed.	
Sizewell C	13 - 20	Not answered No comments from SZC for the AoS	No action required.
The Institute of Acoustics	13 - Have there been any omissions of policies, plans or programmes relevant to the scoping of the AoS?	The AoS includes a small number of noise and vibration-related policies, plans, or programmes, including: • WHO Guidelines for Community Noise (1999) • WHO Night Noise Guidelines for Europe (2009) • WHO Environmental Noise Guidelines for the European Region (2018) • Environmental Noise (England) Regulations 2006 as amended by The Environmental Noise (England) Amendment Regulations 2018	Plans and policies have been added to Appendix C and the AoS Report in line with comments.

- JNCC guidelines for minimising the risk of injury to marine mammals from geophysical surveys 2017
- JNCC Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise 2010
- Noise Policy Statement for England (NPSE):
- TAN 11: Noise 1997
- PAN 1/2011 Planning and Noise
- Environmental Noise (Scotland) Regulations (2006) as amended by The Environmental Noise (Scotland) Amendment Regulations 2018

These are high-level documents and are generally not directly used to assess the impacts of construction and operational noise and vibration of nationally significant infrastructure projects in the UK.

The Appraisal of Sustainability (AoS) scoping report does not explicitly mention a number of noise and vibration-related policies and guidance, which are integral to the noise assessment framework in EN-1. These are:

- Noise and Soundscape Action Plan 2018 to 2023: The Welsh Government's overarching policy on noise.

- Planning Practice Guidance for Noise: This guidance provides advice on how planning can manage potential noise impacts in new development proposals. It covers aspects such as assessing noise levels, mitigation measures, and acceptable noise standards.
- Environmental Protection Act 1990 (Part III): This act deals with statutory nuisance, including noise nuisance, providing a framework for managing noise pollution through local authorities.
- Control of Pollution Act 1974: This act includes provisions for controlling noise from construction sites and other operations, allowing local authorities to impose noise control measures.
- The Noise Insulation Regulations 1975 (as amended): These regulations require noise insulation to be provided for buildings affected by high levels of noise from new or altered roads.
- The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996: These regulations require noise insulation to be provided for buildings affected by high levels of noise from new or altered railways.

In addition to the omitted policy and guidance documents above, the AoS also omits the following British Standards that also appear in EN-1:

- BS 4142: Methods for rating and assessing industrial and commercial sound.
- BS 6472: Guide to evaluation of human exposure to vibration in buildings (1 Hz to 80Hz).
- BS 8233: Guidance on sound insulation and noise reduction for buildings.
- BS 5228: Code of practice for noise and vibration control on construction and open sites, which is divided into parts including:
 - BS 5228-1: Noise
 - BS 5228-2: Vibration

14 - Do you agree that the baseline data that have been, or will be collected, are relevant and of sufficient detail to support the AoS?

No

The AoS places emphasis on the importance of Road and Rail Important Areas and Quiet Areas defined by strategic noise mapping created under the Environmental Noise (England) Regulations 2006. There are, however, other noise sources that can influence the baseline environment. Consequently, in practice, baseline data used for the assessment of most nationally significant infrastructure structure projects must rely on project and site-specific surveys of the existing environment and consideration of existing noise sensitive

EN-8 reflects the requirements of EN-1

receptors. This can include locations that are particularly sensitive to noise, such as residential areas, schools, hospitals, parks, and areas valued for their soundscape or landscape quality, including marine life.

The IOA endorses an assessment approach that is more in line with the Overarching National Policy Statement for Energy, EN-1.

15 - Do you agree with the selection and definition of key sustainability issues?

Yes

No action required.

The IOA agrees that the following noise and vibration sustainability issues from the AoS are important:

- disturbance from construction and operational noise and vibration on nearby receptors, which include residential areas, schools, hospitals, parks, and areas valued for their soundscape or landscape quality;
- development affects the historic environment through loss, damage or changes to setting for instance from visual intrusion, increased traffic, noise, or air pollution; and
- the loss of tranquillity due to noise and vibration

The IOA would also add the importance of considering the effects of construction and operational noise and vibration on local wildlife,

Text emphasising importance of effects of construction and operational noise and vibration on local wildlife, marine life and protected species added to AoS Report Section 5.

	including marine life, especially on protected species.	
16 - Are there any key baseline data available that have not been identified that are, or could be, use in support of the issues?	Yes The Overarching National Policy Statement for Energy (EN-1) provides detailed guidance on the collection of noise and vibration baseline data as part of the environmental assessment process for proposed energy infrastructure projects. The IOA recommends the use of baseline data more aligned with EN-1. To satisfy EN-1, the applicant must describe the existing noise environment, which includes the current levels of noise at different times of the day, evening, and night, as well as seasonal variations if relevant. This involves deploying noise monitoring equipment at various strategic locations within the study area to gather representative data. The noise assessment should identify noise-sensitive receptors such as residential areas, schools, hospitals, and other community facilities. This is crucial for understanding the potential impacts on human health and well-being. The assessment must also consider areas particularly valued for their soundscape or landscape quality.	EN-8 reflects the requirements of EN-1
17 - Do you agree with the implications and opportunities	Yes	No action required

that have been identified for the emerging NPS EN-8?

The IOA agrees that there are opportunities to:

- avoid harm to heritage assets due to excess noise and vibration;
- minimise noise and vibration from construction and operational activities on residential amenity and on sensitive locations, receptors and views; and
- minimise issues that can affect communities and their facilities including air, noise and light pollution, as well as vibration.

The IOA would also like to highlight that, through the effective management and control of noise, it is possible to more generally:

- avoid significant adverse impacts on health and quality of life from noise;
- mitigate and minimise other adverse impacts on health and quality of life from noise; and
- where possible, contribute to improvements to health and quality of life through the effective management and control of noise.

18 - Do the AoS objectives and decision-making questions provide a sound framework against which to assess the

No

The IOA believes that, whilst the objectives and decision-making questions are important, they should be made more general to reflect the decision-making guidance in EN-1, which states that

sustainability
performance of the
emerging NPS EN-
8?

through the effective management and control of
noise, it is possible to:

- avoid significant adverse impacts on health and quality of life from noise;
- mitigate and minimise other adverse impacts on health and quality of life from noise; and
- where possible, contribute to improvements to health and quality of life through the effective management and control of noise.

19 - Do you agree
that aligning the
assessment scale of
the emerging NPS
EN-8 with that
of the AoS of EN-1
to EN-5 is a
reasonable
approach?

Yes

The IOA agrees that aligning the assessment scale of the emerging NPS EN-8 with that of the AoS of EN-1 to EN-5 is a reasonable approach.

No action required.

20 - Do you have
further suggestions
regarding the scope
of the AoS and its
proposed
assessment of NPS
EN-8 on fusion
energy?

See previous question responses

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UK Nuclear Free Local Authorities	13 - 20	Not answered	No action required.
Wildlife and Countryside Link	13 - 19	Not answered	No action required.
	20 - Do you have further suggestions regarding the scope of the AoS and its proposed assessment of NPS EN-8 on fusion energy?	We disagree with the consultation's approach to proposed EN-8 which will not allow full consideration of reasonable alternatives at a strategic spatial level. This prevents robust and specific comparison of alternative sites and assessment of indirect and in combination effects. Due to the proposed open-sited approach, consideration by DESNZ in the Appraisal of Sustainability (AoS) and Habitats Regulations Assessment (HRA) of the proposed fusion energy NPS and the consideration by developers in Environmental Impact Assessment (EIA) and any HRA required when bringing forward projects will be necessarily high-level and nonspatial, because no specific sites will be identified. This means that the consideration of reasonable alternatives at the strategic level will not be specific or comprehensive or be able to compare alternative sites (this is acknowledged in the consultation document), which could mean that harm to the natural environment is not always avoided as well as or as much as it could be. In addition, without identifying specific sites, environmental assessments are unable to assess indirect and in combination effects with any specificity	Issues relating to spatial context of the NPS are set out in EN-1 and EN-1 and are addressed within the 'geographical and temporal scope' of the AoS

Appendix D. Review of Policies, Plans and Programmes

Note: The following review of Plans, Policy is not to be considered an exhaustive list and elements may have been superseded. It is the purpose of this list to demonstrate the context of the NPS and associated AoS and to show how these are broadly influenced in setting Objectives for both.

Table C-1: Key Plans, Policies and Legislation - International

CROSS - THEMATIC		
Nature-based solutions for climate change mitigation (2021)	This report analyses the current state of knowledge regarding the role of Nature-based Solutions (NbS) in climate change mitigation. It shows that in order to keep temperature rising to 1.5 degrees and achieve net zero by 2050 a significant contribution from NbS is both necessary and possible, provided the necessary finance is made available. It assesses the role that carbon offsets can play in the overall finance package.	The AoS should consider objectives which promote Nature-based solutions.
Nature-Based Solutions for Climate Adaptation (2024)	Nature-based Solutions for adaptation, a subset of NbSs, are actions to protect, conserve, restore, sustainably use, and manage natural ecosystems to strengthen the resilience of communities and ecosystems to the impacts of climate change. They involve assessing how climate change will affect ecosystems and people of all genders and social backgrounds and identifying how ecosystems could help address these impacts to people. NbS for adaptation is also known as ecosystem-based adaptation (EbA) and ecosystem-based disaster risk reduction.	The AoS should consider objectives which promote Nature-based solutions.

BIODIVERSITY

Convention on Biological Diversity 2010	Sets out a conservation plan to protect global biodiversity, and an international treaty to establish a fair and equitable system to enable nations to co-operate in accessing and sharing the benefits of genetic resources. The new global vision is “By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential to all people”.	Ensure protection of biodiversity within AoS framework.
Kumming-Montreal Global Biodiversity Framework 2023	The Kunming-Montreal Global Biodiversity Framework, building on the Strategic Plan for Biodiversity 2011–2020, its achievements, gaps, and lessons learned, and the experience and achievements of other relevant multilateral environmental agreements, sets out an ambitious plan to implement broad-based action to bring about a transformation in our societies’ relationship with biodiversity by 2030, in line with the 2030 Agenda for Sustainable Development and its Sustainable Development Goals, and ensure that, by 2050, the shared vision of living in harmony with nature is fulfilled. The vision of the Framework is a world of living in harmony with nature where “by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a	Ensure AoS framework taken account of goals and targets set out in this framework.

healthy planet and delivering benefits essential for all people.”

The mission of the Framework for the period up to 2030, towards the 2050 vision is: To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet by conserving and sustainably using biodiversity and by ensuring the fair and equitable sharing of benefits from the use of genetic resources, while providing the necessary means of implementation.

The Framework has four long-term goals for 2050 related to the 2050 Vision for biodiversity.

GOAL A: The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050; human induced extinction of known threatened species is halted, and, by 2050, the extinction rate and risk of all species are reduced tenfold and the abundance of native wild species is increased to healthy and resilient levels; and the genetic diversity within populations of wild and domesticated species, is maintained, safeguarding their adaptive potential.

GOAL B: Biodiversity is sustainably used and managed and nature’s contributions to people, including ecosystem functions and services, are

valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.

GOAL C: The monetary and non-monetary benefits from the utilization of genetic resources and digital sequence information on genetic resources, and of traditional knowledge associated with genetic resources, as applicable, are shared fairly and equitably, including, as appropriate with indigenous peoples and local communities, and substantially increased by 2050, while ensuring traditional knowledge associated with genetic resources is appropriately protected, thereby contributing to the conservation and sustainable use of biodiversity, in accordance with internationally agreed access and benefit-sharing instruments.

GOAL D: Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access to and transfer of technology to fully implement the Kunming-Montreal Global Biodiversity Framework are secured and equitably accessible to all Parties, especially developing country Parties, in particular the least developed countries and small island developing States, as well as countries with economies in transition, progressively closing the biodiversity finance gap of \$700 billion per year, and aligning financial flows with the Kunming-

Montreal Global Biodiversity Framework and the 2050 Vision for biodiversity.

The Framework has 23 action-oriented global targets for urgent action over the decade to 2030. The actions set out in each target need to be initiated immediately and completed by 2030. Together, the results will enable achievement towards the outcome-oriented goals for 2050. Actions to reach these targets should be implemented consistently and in harmony with the Convention on Biological Diversity and its Protocols, and other relevant international obligations, taking into account national circumstances, priorities and socioeconomic conditions.

1. Reducing threats to biodiversity

TARGET 1: Ensure that all areas are under participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes addressing land- and sea-use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.

TARGET 2: Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

TARGET 3: Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

TARGET 4: Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to

maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.

TARGET 5: Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.

TARGET 6: Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands.

TARGET 7: Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.

TARGET 8: Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

2. Meeting people's needs through sustainable use and benefit-sharing

TARGET 9: Ensure that the management and use of wild species are sustainable, thereby providing

social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.

TARGET 10: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.

TARGET 11: Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-

based approaches for the benefit of all people and nature.

TARGET 12: Significantly increase the area and quality, and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature, and contributing to inclusive and sustainable urbanization and to the provision of ecosystem functions and services.

TARGET 13: Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030, facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.

3. Tools and solutions for implementation and mainstreaming

TARGET 14: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, and fiscal and financial flows with the goals and targets of this framework.

TARGET 15: Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:

(a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains, and portfolios;

(b) Provide information needed to consumers to promote sustainable consumption patterns;

(c) Report on compliance with access and benefit-sharing regulations and measures, as applicable;

in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.

TARGET 16: Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.

TARGET 17: Establish, strengthen capacity for, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.

TARGET 18: Identify by 2025, and eliminate, phase out or reform incentives, including subsidies,

harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least \$500 billion per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.

TARGET 19: Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, mobilizing at least \$200 billion per year by 2030, including by:

- (a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least \$20 billion per year by 2025, and to at least \$30 billion per year by 2030;
- (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and

implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances;

(c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments;

(d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards;

(e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises;

(f) Enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions[1] and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity;

(g) Enhancing the effectiveness, efficiency and transparency of resource provision and use;

TARGET 20: Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the Framework.

TARGET 21: Ensure that the best available data, information and knowledge are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent, in accordance with national legislation.

TARGET 22:

Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.

TARGET 23: Ensure gender equality in the implementation of the Framework through a gender-responsive approach, where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.

The principal aims of the Convention are to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix 3. To this end the Convention imposes legal obligations on

Bern Convention

Ensure protection of wild plant and animal species and their natural habitat within AoS framework.

	contracting parties, protecting over 500 wild plant species and more than 1000 wild animal species.	
Ramsar Convention 1971	The Convention covers all aspects of wetland conservation and wise use. The Convention has three main 'pillars' of activity: the designation of wetlands of international importance as Ramsar sites; the promotion of the wise-use of all wetlands in the territory of each country; and international co-operation with other countries to further the wise-use of wetlands and their resources.	Ensure protection of Ramsar sites within AoS framework.
Convention on the Conservation of Migratory Species of Wild Animals 1979 (Bonn Convention)	The Convention is an international treaty of the United Nations which provides a global platform for the conservation and sustainable use of migratory animals and their habitats. This treaty brings together the States through which migratory animals pass, the Range States, and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range.	Ensure protection of migratory animals and their habitats
Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) 1999	This is an intergovernmental treaty dedicated to the conservation of migratory waterbirds and their habitats across Africa, Europe, the Middle East, Central Asia, Greenland and the Canadian Archipelago. Developed under the framework of the Bonn Convention and administered by the United Nations Environment Programme (UNEP), AEWA brings together countries and the wider international conservation community in an effort to	Ensure protection of migratory waterbirds within AoS framework.

establish coordinated conservation and management of migratory waterbirds throughout their entire migratory range.

This strategy is a comprehensive long-term plan to protect nature and reverse degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030. AS a core part of the European Green Deal, it will also support green recovery following the Covid-19 pandemic. Specific commitments and actions to be delivered by 2030 include:

EU Biodiversity Strategy for 2030

- Establishing a larger EU-wide network of protected areas on land and at sea
- Launching an EU nature restoration plan
- Introducing measures to enable the necessary transformative change
- Introducing measures to tackle the global biodiversity challenge

Ensure protection of biodiversity within AoS framework.

CLIMATE CHANGE

UN Framework Convention on Climate Change 1992, Kyoto Protocol 1997, Paris Agreement 2015 etc.

A series of international agreements setting targets and legally binding agreements for industrialised countries to cut their greenhouse gas emissions. The Paris Agreement is the latest international agreement and its overarching goal is to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursue

Ensure reduction of greenhouse gas emissions within the AoS framework.

efforts “to limit the temperature increase to 1.5°C above pre-industrial levels.”

Note is also made of the UK Nationally Determined Contribution that commits to reducing greenhouse gases by 68% by 2030 compared to 1990 levels.

Following the UK’s departure from the EU, the UK is released from the EU Renewable Energy Directive 2009 (2009/28/EC) and EU Energy Efficiency Directive (2012/27/EU). The Trade and Cooperation (TAC) reaffirms a number of the UK and EU ambitions relating to energy, notably:

UK-EU TAC Agreement 2021

The UK and EU should recognise the mutual benefit in cooperation in areas of shared interest such as nuclear research.

In recognition of the importance of a secure, affordable and sustainable energy system in relation to climate change, subsidies in relation to energy shall be aimed at by the UK and EU.

The UK and EU shall facilitate removal of obstacles to trade and investment relating to energy efficient products and services and renewable energy.

Ensure an objective considering alternative / renewable technologies for energy production is included within the AoS framework.

Ensure an objective relating to the prudent use of natural resources (including energy) is included within the AoS framework.

Glasgow Climate Pact (2021)	The agreements reached at the COP26 through the Glasgow Climate Pact include reducing coal emissions by 40% as well as a pledge to phase out fossil fuel subsidies. While no firm dates were set for these goals, the pact also included the goals of ending deforestation and cutting 30% of methane emissions by 2030.	Ensure reduction of greenhouse gas emissions within the AoS framework.
European Green Deal (2020)	This deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring no net emissions of greenhouse gases by 2050, economic growth decoupled from resource use and no person and no place is left behind. A set of proposals have been proposed by the European Commission to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Important topics addressed by this deal include: Transforming our economy and societies. This will; • Reduce emissions • Create jobs and growth • Address energy poverty • Reduce external energy dependency • Improve our health and wellbeing • Making transport sustainable for all	Ensure reduction of greenhouse gas emissions within the AoS framework.

The EC proposes more ambitious targets for reducing CO2 emissions of new cars and vans:

- 50% reduction of emissions by vans by 2030
- 0 emissions from new cars by 2035

HERITAGE

World Heritage Convention 1972	This convention noted that the cultural heritage and the natural heritage are increasingly threatened with destruction not only by the traditional causes of decay, but also by changing social and economic conditions which aggravate the situation with even more formidable phenomena of damage or destruction and considered that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world.	Ensure protection of cultural heritage and natural heritage within AoS framework.
Convention on the Protection of Underwater Cultural Heritage 2001	The UNESCO Convention on the Protection of the Underwater Cultural Heritage is intended to enable States to better protect their submerged cultural heritage. The Convention;	Ensure protection of underwater cultural heritage within AoS framework.

sets out basic principles for the protection of underwater cultural heritage;

provides a detailed State cooperation system; and

provides widely recognized practical rules for the treatment and research of underwater cultural heritage.

The UK has not ratified the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage, but the Annex to the 2001 Convention – Rules Concerning Activities Directed at the Underwater Cultural Heritage – provides an accepted model of ‘best practice’ for underwater archaeology.

Convention on the Protection of the Archaeological Heritage (1992) – the ‘Valetta Convention’.

The European Convention for the Protection of the Archaeological Heritage (revised) replaced and updated the original London Convention of 1969. It reflected the change in the nature of threats to the archaeological heritage. It established a body of new basic legal standards for Europe, to be met by national policies for the protection of archaeological assets as sources of scientific and documentary evidence, in line with the principles of integrated conservation. It makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. It is concerned in particular with arrangements to be made for co-operation among

Ensure protection of archaeological heritage within AoS framework.

archaeologists and town and regional planners in order to ensure optimum conservation of archaeological heritage.

LANDSCAPE

The European Landscape Convention is part of the Council of Europe's work on natural and cultural heritage, spatial planning and the environment.

The convention states that:

the landscape contributes to the formation of local cultures and that it is a basic component of the European natural and cultural heritage, contributing to human well-being and consolidation of the European identity

European Landscape Convention 2000 – the 'Florence Convention'

that developments in agriculture, forestry, industrial and mineral production techniques and in regional planning, town planning, transport, infrastructure, tourism and recreation and, at a more general level, changes in the world economy are in many cases accelerating the transformation of landscapes.

The aims of this Convention are to promote landscape protection, management and planning, and to organise European co-operation on landscape issues.

Ensure protection of landscapes within AoS framework.

MARINE ENVIRONMENT

	The Convention for the Protection of the Marine Environment of the North-East Atlantic is the current legislative instrument regulating international cooperation on environmental protection in the North-East Atlantic. This specifically addresses: Prevention and elimination of pollution from land-based sources; Prevention and elimination of pollution by dumping or incineration; Prevention and elimination of pollution from offshore sources; Assessment of the quality of the marine environment; On the protection and conservation of the ecosystems and biological diversity of the maritime area.	
The OSPAR Convention 1992		The AoS should consider protection of the marine environment of the North-East Atlantic.

NOISE

WHO Guidelines for Community Noise 1999	The World Health Organisation (WHO) publication entitled ‘Guidelines for Community Noise’ (1999), provides guidance with regard to recommended internal and external noise levels for various building uses, outlining the potential health impacts	Ensure potential health impacts associated with noise are considered in the AoS framework.
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	associated with noise. Specifically, the document recommends internal and external noise levels that would provide an acoustic environment that is conducive to uninterrupted speech and sleep. The World Health Organisation (WHO) Night Noise Guidelines for Europe (NNG) 2009 are health-based guidelines and are to be considered an extension and update to the WHO Guidelines for Community Noise 1999. These guidelines were updated in 2018. The main purpose of these guidelines is to provide recommendations for protecting human health from exposure to environmental noise originating from various sources: transportation (road traffic, railway and aircraft) noise, wind turbine noise and leisure noise. WHO NNG provides evidence based policy advice to member states in the development of future legislation and policy action in the area of control and surveillance of night noise exposure. The WHO Regional Office for Europe has developed these guidelines, based on the growing understanding of the negative health impacts of exposure to environmental noise. The main purpose of these guidelines is to provide recommendations for protecting human health from exposure to environmental noise originating from various sources: transportation (road traffic, railway	
WHO Night Noise Guidelines for Europe 2009 and 2018 update		Ensure that night noise is addressed through the AoS framework.
Environmental noise guidelines for the European Region		Ensure potential health impacts associated with noise are considered in the AoS framework.

and aircraft) noise, wind turbine noise and leisure noise. They provide robust public health advice underpinned by evidence, which is essential to drive policy action that will protect communities from the adverse effects of noise. The guidelines are published by the WHO Regional Office for Europe.

EU Environmental Noise Directive (2002)

This Directive concerns noise from road, rail and air traffic and from industry. It focuses on the impact of such noise on individuals, complementing existing EU legislation which sets standards for noise emissions from specific sources.

Ensure potential health impacts associated with noise are considered in the AoS framework.

HUMAN HEALTH

The report prepared by the Commission on Social Determinants of Health aims to:

Improve daily living conditions.

WHO Closing the Gap: Social Determinants of Health 2008

Tackle inequitable distribution of power, money and resources.

Measure and understand the problem and assess the impact on action.

Recommendations are made to tackle inequalities

The AoS should consider the improvement of health and equitable distribution of resources equity.

TRANSBOUNDARY EFFECTS

Espoo Convention on Environmental Impact Assessment in a Transboundary Context 1991	The Convention was adopted in 1991 and entered into force in September 2007. The Convention and Protocol lie in an area of mixed competence (environment). The UK and the EU are parties to the Convention. The EU has implemented the EIA Directive that has been transposed into UK domestic law. The Convention sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligations of Parties to consult each other on all major projects under consideration that are likely to have significant transboundary effects. A revision to the Convention in 2004 indicated that affected Parties should be allowed to participate in scoping as appropriate. The Protocol on SEA (Kiev, 2003) augments the Espoo Convention and requires Parties to assess the environmental effects of their plans and programmes. The protocol also proposes extensive public participation in Government decision-making. The UK has signed but not ratified the Protocol. The EU has ratified, and implements through the SEA Directive, transposed in UK domestic law via the SEA Regulations.	As a matter of course, Espoo Parties will be engaged as part of the new NPS and AoS consultation process. Transboundary Consultation under the Espoo convention will also be undertaken if it is concluded that proposed activities are likely to cause a significant adverse impact in the environment in another State of the European Economic Area.
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Aarhus Convention 2001

The Aarhus Convention is a multilateral environmental agreement through which the opportunities for citizens to access environmental information are increased and transparent and reliable regulation procedure is secured. It encourages access to information, public participation and access to justice.

The NPS and AoS will be consulted upon and open to scrutiny as per the requirement of the relevant regulations.

Table C-1 - Key Plans, Policies and Legislation - National (United Kingdom)

CROSS - THEMATIC		
Environmental Protection Act 1990	This act brings in a system of integrated pollution control for the disposal of wastes to land, water and air. There are three parts of the Act. These are:	Ensure that prevention and minimisation of pollution to air and water is considered in the AoS framework.
	Part I- establishes integrated pollution control and gives Local Authorities new powers to control air pollution from a range of prescribed processes; Part II- improves the rules on waste disposal; and Part III- covers statutory nuisances and clean air.	
Environment Act 2021	The Environment Act 2021 requires that the Secretary of State prepare an Environmental Improvement Plan (EIP) for significantly improving the natural environment. EIPs must have a minimum duration of 15 years. The Environment Act also required government to set long-term, legally binding environmental targets.	The AoS needs to consider this far-reaching piece of legislation in terms of four priority areas: air quality, water, biodiversity and resource efficiency and waste.
	The first EIP was published in 2018. The government must complete a statutory review of the EIP at least every 5 years. Its first revision (EIP23) was published in January 2023 and includes 13 legally binding environmental targets set under the EA 2021, which cover biodiversity (including the Apex target to reverse the decline in species abundance by the end of 2030), air quality (PM2.5), water, resource efficiency and waste reduction, tree and woodland cover, and Marine Protected Areas. In July 2024 the government announced a second statutory review and revision of the EIP.	

Key relevant provisions:

Biodiversity Net Gain

The Act provides for a biodiversity net gain requirement for NSIPs that once commenced, will apply to NSIPs in England unless excluded development.

The Act outlines that the biodiversity gain objective for NSIPs is to be set out and defined in a policy statement called a 'biodiversity gain statement'. The biodiversity gain objective will require that development increases its pre-development biodiversity value of the on-site habitat by the value specified in the biodiversity gain statement (which must be at least 10%). The biodiversity gain statements will also prescribe the processes through which biodiversity gains may be calculated, demonstrated, and verified.

The Act sets out that following commencement of the schedule, the Secretary of State must amend the national policy statements when they are next reviewed so as to include a biodiversity gain statement. In the time between the schedule being commenced and a review of a national policy statement, a separate 'biodiversity gain statement' may be issued which would have the same effect as a statement integrated within a national policy statement.

Once these provisions are commenced, the Secretary of State must be satisfied that the biodiversity gain objective set out in the relevant biodiversity gain statement is met, in order for consent to be granted.

Waste and resource efficiency

The Act gives wide ranging powers to make regulations about who producer obligations should apply to and which products or materials should be covered. These powers are intended to prevent waste/reduce the amount of a product that becomes waste and increase re-use, redistribution, recovery and recycling. Producers can get

ahead of these regulations, and minimise any eventual requirements to pay disposal costs, by designing products with these objectives in mind.

The Environment Act 2021 places a duty on Ministers of the Crown to have due regard to the environmental principles policy statement. The policy statement sets out how policymakers should apply environmental principles to support environmental protection and enhancement. The final version of the strategic policy statement was laid in Parliament on 31 January 2023. The duty will commence on 1 November 2023.

The 5 principles in this policy statement are internationally recognised as successful benchmarks for environmental protection and enhancement. When making policy, and where relevant, ministers will need to consider the:

- Integration principle: look at opportunities to embed environmental protection and/or enhancement
- Prevention principle: prevent environmental harm before it occurs or contain existing damage
- Rectification at source principle: environmental damage should be addressed at its origin to avoid the need to remedy its effects later
- Polluter pays principle: the costs of pollution should be borne by those causing it
- Precautionary principle: where there are threats of serious or irreversible environmental damage, a lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation

The assessment approach used in the AoS should enshrine these five international principles, as appropriate, in the various topics of the AoS Framework.

Environmental
Principles Policy
Statement 2023

The purpose of these principles is to guide ministers and policymakers towards opportunities to prevent environmental damage and enhance the environment. However, the principles are not rules and they cannot dictate policy decisions by

ministers. Policymakers should consider and use the principles iteratively from the outset and during subsequent stages in policy development. They should identify the potential environmental effects (positive or negative) and use the principles to inform and influence the design of the policy. The 5 principles play an important role to support Environmental Improvement Plans and to delivering on our net zero commitment to tackle climate change.

The integration principle is overarching and simply requires that policymakers should look for opportunities to embed environmental protection into policy. Not all environmental principles are of the same nature or function; they serve different purposes and will focus the policy in different ways. Some of the environmental principles will be appropriate for all relevant policy areas. Other principles will only be relevant in circumstances where there are specific factors for their use. In order for the principles to be most cost-effective and lead to better environmental outcomes, it is preferable for environmental damage to be prevented under the prevention principle. When environmental damage is already occurring, policymakers should consider the timeliness and urgency of policy interventions intended to achieve environmental protection. If it is to be addressed after it has occurred, then the rectification at source and polluter pays principles should be considered to reduce, mitigate or disincentivise damage.

This order of consideration is not fixed and may be adjusted if a different order more appropriately addresses a policy's environmental effects. Where a significant adverse effect is likely as a result of a policy, it may be necessary to consider all principles in determining the best policy.

Many actions can be taken based on applying the principles, either alone or in combination with others. Possible actions that could be taken as a result of having considered the principles may include:

- Amending policy options or including an additional policy option in the initial design of a policy, which reflects consideration of the environmental principles. In some cases, considering a principle may introduce a new option as a different solution to the policy problem. For example, one where the polluter may pay. This option would then be subject to the same policy evaluation as the existing options.
- Reframing the policy to accommodate the principles. In some cases, the policy design may need to be amended to ensure that a specific principle is applied. This could include the framing of the problem, the detail of how the policy option may work, or how it may be implemented.
- Embedding a principle in law or guidance. If policymakers want the principles to be used in decision-making or the implementation of a policy, this approach may be appropriate. This could be relevant where proposed legislation might include associated powers, duties or obligations that may have a significant effect on the environment.
- Postponing a policy until further evidence is gained. If a policymaker is unsure on whether action is appropriate, they should gather further evidence. Applying the precautionary principle may encourage policymakers to explore the potential environmental damage before moving forwards. Or, where the risk is serious, they may amend, postpone or discontinue the policy in rare cases.

Clean Growth
Strategy 2017

The Clean Growth Strategy deals specifically with the challenge of trying to grow the UKs economy whilst reducing its emissions. This issue is dealt with across multiple strategies, and several sectors have a large role to play. This strategy details the approach of each sector and sets out key policies for each.

The guiding principles of the Clean Growth Strategy are to, through nurturing low carbon technologies, processes, and systems:

AoS needs to address the importance of reducing GHG emissions, as well as the full range of air pollutants whilst maximising the social and economic benefit of the transition.

meeting the UK’s domestic commitments at the lowest possible net cost to UK taxpayers, consumers, and businesses; and

maximising the social and economic benefits for the UK from this transition.

The key policies to achieve this are sorted into the following categories:

- accelerating clean growth;
- improving business and industry efficiency (25% of emissions);
- improving our homes (13% of emissions);
- accelerating the shift to low carbon transport (24% of emissions);
- delivering clean, smart, flexible power (21% of emissions);
- enhancing the benefits and value of our natural resources (15% of emissions);
- leading in the public sector (2% of emissions); and
- government leadership in driving clean growth.

This strategy has four broad objectives:

- Sustainable consumption and production – working towards achieving more with less.
- Natural resource protection and environmental enhancement
- From local to global, building sustainable communities
- Climate change and energy

UK Sustainable
Development Strategy
2005

Ensure the AoS considers
the full range of
sustainability issues.

Our landscapes and seascapes are inseparable from our culture, bearing the imprints of generations of land use. Our physical and mental health is reliant on the quality of the environment. There must also be access to a variety of well-managed and

	maintained green spaces for leisure, sport, recreation and general public benefit to help people choose healthy lifestyles, in urban as well as rural areas.	
UK Shared Framework for Sustainable Development; One Future – Different Paths 2005	This framework document sets out the common goals and challenges of the UK Government and devolved administrations of Scotland, Wales and Northern Ireland. Each devolved administration will have its own strategy document but the framework demonstrates the commitment to work together on shared goals and challenges This framework document sets out what those are, and is an affirmation that the whole of the UK will work to common goals without compromising the strengths which our diversity of approach offers. This legislation sets out how the planning system should deal with nationally significant infrastructure projects (NSIP). The legislation created a regime of National Policy Statements (NPS). These NPS give reasons for the policy set out in the statement, and must include an explanation of how the policy takes account of Government policy relating to the mitigation of, and adaptation to, climate change. They include the Government’s objectives for the development of nationally significant infrastructure in a particular sector and state: • How this will contribute to sustainable development. • How these objectives have been integrated with other Government policies. • How actual and projected capacity and demand have been taken into account. • Consider relevant issues in relation to safety or technology. • Circumstances where it would be particularly important to address the adverse impacts of development. • Specific locations, where appropriate, in order to provide a clear framework for investment and planning decisions. Each NPS sets out Government policy for the infrastructure it covers and the reasons for that policy. This includes the need for new infrastructure; the relative weight to be	Ensure the AoS considers the full range of sustainability issues.
The Planning Act 2008		The AoS should be undertaken in accordance with the requirements of the Act.

given to specified criteria such as the benefits of new infrastructure and the adverse impacts that it might have; and, when action should be taken to mitigate adverse impacts. NPSs can set out criteria to be used in deciding whether a location is suitable for a type of infrastructure. They can also identify specific locations that are or might be suitable or unsuitable for a type of infrastructure.

Setting out a clear Government policy in this way establishes clear Ministerial accountability for the policy choices that underlie planning decisions on nationally significant infrastructure schemes. It also:

- provides the primary basis for decisions by the Infrastructure Planning Commission on the applications it receives;
- reduces the need for discussion at public inquiries about what is or should be Government policy – avoiding a situation in which an attempt is made to determine what the national need is on a case by case basis; and
- gives prospective infrastructure providers clarity as to what proposals are or are not in line with Government policy.

The Act sets out the scale of development which should be considered a Nationally Significant Infrastructure Project, and therefore have to be determined through the Development Consent Order process.

This legislation introduced the independent Infrastructure Planning Commission (IPC), to take decisions on major infrastructure projects (transport, energy, water and waste).

The Environmental Permitting (England and Wales) (Amendment)

The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023 update the Environmental Permitting (England and Wales) Regulations 2016. The 2023 Amendment introduces new permitting provisions for groundwater remediation, injection activities, and ground source heating and cooling systems.

The AoS should consider the protection of the environment from water extraction and waste and pollution discharges to the

National Policy Statement for Fusion Energy Generation EN-8 AoS Appendices

(England) Regulations 2023	The regulations provide an integrated framework for the regulation of activities that could harm the environment or human health. They require operators of “regulated facilities” to obtain a permit or to register some activities, which would otherwise require permits, as “exempt facilities”. They cover six main areas of environmental activity: waste regulation, emissions to the environment from industrial processes (air, water and land), water discharges, radioactive substances, energy efficiency and flood risk activities. The aim of the regime is to: • Protect the environment so that statutory and Government policy environmental targets and outcomes are achieved. • Deliver permitting and compliance with permits and certain environmental targets effectively and efficiently in a way that provides increased clarity and minimises the administrative burden on both the regulator and the operators. • Encourage regulators to promote best practice in the operation of facilities.	environment and include appropriate objectives if necessary.
The Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018	These Regulations amend the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. These new regulations set out the procedures to be followed in relation to environmental impact assessment linked to nationally significant infrastructure projects in England and Wales. The objective is to provide a high level of protection of the environment and to help integrate environmental considerations into the preparation of proposals for development to reduce their impact on the environment.	The AoS framework should consider including objectives to promote environmental impact reduction.
Localism Act 2011	The Act aims to shift power from central government to the hands of individuals, communities and councils.	The AoS should seek to align with the aims of the Act to shift power to

Moreover, the Act aims to push power downwards and outwards to the lowest possible level, including individuals, neighbourhoods, professionals and communities as well as local councils and other local institutions.

individuals, communities and councils.

The Localism Act includes five key measures that underpin the Government's approach to decentralisation:

- Community rights: which ensure that community organisations have a fair chance to bid to take over land and buildings that are important to them.
- Neighbourhood planning: new rights will allow local communities to shape new development by coming together to prepare neighbourhood plans.
- Housing: councils will get a higher flexibility to manage their housing stock for meeting local demand.
- General power of competence: local authorities will have the legal capacity to do anything an individual could do that isn't specifically prohibited.
- Empowering cities and other local areas: public functions will be transferred to local authorities in order to improve local accountability or to promote economic growth.

Environmental
Assessment of Plans
and Programmes
Regulations 2004

To comply with the Environmental Assessment of Plans and Programmes Regulations 2004, if it is determined that a proposed plan or programme, or a modification to an existing plan or programme, is likely to have a significant environmental effect it will need a Strategic Environment Assessment (SEA).

SEA is an integral part of the NPS AoS and the AoS will ensure compliance with the SEA Regulations.

Planning Practice
Guidance – Natural
Environment 2019

Explains key issues in implementing policy to protect and enhance the natural environment, including local requirements covering:

Agricultural land, soil and brownfield land of environmental value

A local planning authority must consult Natural England before granting planning permission for large-scale non-agricultural development on best and most versatile

To consider as part of identification of issues and opportunities for the NPS

land that is not in accord with the development plan. Natural England has published guidance on development on agricultural land.

Green infrastructure

Green infrastructure opportunities and requirements need to be considered at the earliest stages of development proposals, as an integral part of development and infrastructure provision, and taking into account existing natural assets and the most suitable locations and types of new provision.

Biodiversity, geodiversity and ecosystems

Development plans and planning decisions have the potential to affect biodiversity or geodiversity outside as well as inside relevant designated areas.

Planning authorities and neighbourhood planning bodies can work collaboratively with other partners, including Local Nature Partnerships, to develop and deliver a strategic approach to protecting and improving the natural environment based on local priorities and evidence. Equally, they need to consider the opportunities that individual development proposals may provide to conserve and enhance biodiversity and geodiversity, and contribute to habitat connectivity in the wider area (including as part of the Nature Recovery Network).

As set out in the Government's 25 Year Environment Plan, the Nature Recovery Network is an expanding and increasingly connected network of wildlife-rich habitat across England. It comprises a core network of designated sites of importance for biodiversity and adjoining areas that function as stepping stones or wildlife corridors, areas identified for new habitat creation and up to 25 nature recovery areas for targeted action. Defra, Natural England and other government bodies are working with national and local partnerships to deliver the Network, which includes support for

developing maps and advice to show where actions to improve and restore habitats would be most effective.

Local ecological networks can make a significant contribution to developing the Nature Recovery Network.

Guidance on ecosystems services (the benefits people obtain from ecosystems, such as food, water, flood and disease control and recreation) and using an ecosystems approach is available. This guidance can, where appropriate, inform plan-making and decision-making on planning applications.

Information on biodiversity and geodiversity impacts and opportunities needs to inform all stages of development (including site selection and design, pre-application consultation and the application itself). An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate. Pre-application discussions can help to scope whether this is the case and, if so, the survey work required.

Plans, and particularly those containing strategic policies, can be used to set out a suitable approach to both biodiversity and wider environmental net gain, how it will be achieved, and which areas present the best opportunities to deliver gains. Such areas could include those identified in: natural capital plans; local biodiversity opportunity or ecological network maps; local green infrastructure strategies; strategic flood risk assessments; water cycle studies; air quality management plans; river basin management plans; and strategic protected species licensing areas. Consideration may also be given to local sites including where communities could benefit from improved access to nature.

Landscape

The National Planning Policy Framework is clear that plans should recognise the intrinsic character and beauty of the countryside, and that strategic policies should provide for the conservation and enhancement of landscapes. This can include nationally and locally-designated landscapes but also the wider countryside.

Where landscapes have a particular local value, it is important for policies to identify their special characteristics and be supported by proportionate evidence. Policies may set out criteria against which proposals for development affecting these areas will be assessed. Plans can also include policies to avoid adverse impacts on landscapes and to set out necessary mitigation measures, such as appropriate design principles and visual screening, where necessary. The cumulative impacts of development on the landscape need to be considered carefully.

Levelling Up and
Regeneration Act
2023

This act introduces wide-ranging reforms to the planning system including the introduction of National Development Management Policy (NDMP) amendments to the local and neighbourhood planning Nationally Significant Infrastructure (NSIP) process, and the Infrastructure Levy.

The AoS should be undertaken in accordance with the requirements of the Act.

BIODIVERSITY

Wildlife and
Countryside Act 1981

An Act prohibiting and limiting actions involving wild animals, and the primary piece of legislation for wildlife protection in the UK. Prohibitions include taking, injuring, killing and disturbing. It is also an offence to disturb places used for shelter and protection.

The Act [inter alia] prohibits certain methods of killing or taking wild animals; amends the law relating to protection of certain mammals; restricts the introduction of certain animals and plants; amends the Endangered Species (Import and Export) Act 1976; amends the law relating to nature conservation, the countryside and National Parks; and amends the law relating to public rights of way.

Ensure that wildlife protection covered within AoS framework.

Countryside and Rights of Way Act 2000 (CROW Act)	This Act contains five Parts and 16 Schedules and provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation, and provides for better management of Areas of Outstanding Natural Beauty (AONB) (now National Landscapes). The Act is compliant with the provisions of the European Convention on Human Rights, requiring consultation where the rights of the individual may be affected by these measures.	Ensure that public access to the countryside and protection of National Landscapes is considered as part of the AoS framework.
Conservation of Habitats and Species Regulations 2017 as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019	The regulations consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites. This legislation aims to protect and conserve natural habitats and species of European importance in the UK (the legislation relates to England and Wales only). It makes it an offence to deliberately capture, injure, or kill a species or well as to damage or destroy a breeding or resting place in Schedule 2 of the Regulations or deliberately pick, collect, cut uproot or destroy plant species in Schedule 5.	Ensure protection of protected sites and species in AoS Framework.
The Conservation of Offshore Marine Habitats and Species Regulations 2017	The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2017 implement the species protection requirements of the Habitats and Birds Directives offshore (more than 12 nautical miles from the coast). The Offshore Marine Regulations apply to the offshore marine area, offshore marine installation and certain ships and crafts.	Ensure consideration and protection of all designated offshore sites.

	It is recognised that Pollinators face many pressures which have led to declines in numbers, and a reduction in the diversity of species to be found in many parts of the country.	
National Pollinator Strategy 2014-2024	As a response, DEFRA developed the National Pollinator Strategy (2014-2024), a ten-year initiative which aimed to build a solid foundation to bring about the best possible conditions for bees and other insects to flourish. Its overarching vision was to ensure pollinators thrive so that they can carry out their essential service to people of pollinating flowers and crops, while providing other benefits for native plants, the wider environment, food production and all of us.	Ensure the protection of bees and other insects within the AoS.
The Invasive Alien Species (Enforcement and Permitting) Order 2019	The Invasive Alien Species (Enforcement and Permitting) Order 2019 ensures an enforcement regime is in place to enforce the Principal EU Regulation (1143/2014) in England and Wales, which is designed to prevent, minimise or mitigate the adverse impact of the introduction and spread of invasive alien species.	Ensure AoS considers introduction and spread of invasive alien species.
The Great Britain Invasive Non-native Species Strategy 2023	Invasive Non-native Species are one of the top five drivers of biodiversity loss globally. They threaten Great Britain's ability to meet wider environmental targets and respond to climate change. Strategy sets out aims to guide collaboration between government, voluntary organisations, NGOs, researchers, businesses and the public to 2030.	Ensure the AoS considers the potential for the spread of INNS.
National Parks and Access to Countryside Act 1949	The Act established powers to declare National Nature Reserves (NNRs); to notify sites of Sites of Special Scientific Interest (SSSI's) and for local authorities to establish Local Nature Reserves (LNRs). These provisions were strengthened by the Wildlife & Countryside Act 1981. An NNR is an area which is among the best examples of a particular habitat. NNRs are of national importance. They are in many cases owned and managed by the statutory	Ensure protection of sites designated for nature conservation at the national and local level in the AoS framework.

authority, (for example English Nature), but not always. An NNR, unlike an SSSI, has to be managed appropriately to retain its special status.

Section 40 of the Act is amended by the Environment Act 2021 which introduced a strengthened 'biodiversity duty'. Public authorities who operate in England must consider what they can do to conserve and enhance biodiversity in England.

This means that, as a public authority, you must:

1. Consider what you can do to conserve and enhance biodiversity.
2. Agree policies and specific objectives based on your consideration.
3. Act to deliver your policies and achieve your objectives

Natural Environment
and Rural
Communities Act
2006

Ensure biodiversity
conservation within AoS
framework.

You must meet the biodiversity duty if you are a public authority, such as a:

- government department or public body
- local authority or local planning authority
- statutory undertaker – a business that has public authority duties for their land and delivers something of public importance

Headline messages:

The Economics of
Biodiversity: The
Dasgupta Review,
2021

We have collectively failed to engage with Nature sustainably, to the extent that our demands far exceed its capacity to supply us with the goods and services we all rely on.

Our unsustainable engagement with Nature is endangering the prosperity of current and future generations. Biodiversity is declining faster than at any time in human history. Current extinction rates, for example, are around 100 to 1,000 times higher than the baseline rate, and they are increasing. Such declines are undermining

The AoS should reflect the fact that current demands on Nature far exceed its capacity to supply us with the goods and services we all rely on.

Nature's productivity, resilience and adaptability, and are in turn fuelling extreme risk and uncertainty for our economies and well-being.

At the heart of the problem lies deep-rooted, widespread institutional failure. Nature's worth to society – the true value of the various goods and services it provides – is not reflected in market prices because much of it is open to all at no monetary charge. These pricing distortions have led us to invest relatively more in other assets, such as produced capital, and underinvest in our natural assets. Moreover, aspects of Nature are mobile; some are invisible, such as in the soils; and many are silent. Governments almost everywhere exacerbate the problem by paying people more to exploit Nature than to protect it, and to prioritise unsustainable economic activities.

The solution starts with understanding and accepting a simple truth: our economies are embedded within Nature, not external to it.

We need to change how we think, act and measure success. The change required should be geared towards three broad transitions.

Ensure that our demands on Nature do not exceed its supply, and that we increase Nature's supply relative to its current level.

Change our measures of economic success to guide us on a more sustainable path.

Transform our institutions and systems – in particular our finance and education systems – to enable these changes and sustain them for future generations.

This programme monitors woodland and trees within Great Britain. It includes the most in depth survey carried out on Britain's woodland and trees to date. The NFI provides an extensive and unique record of key information about our forests and woodlands. Woodland surveys and compiled forest inventories have been carried out at 10-15 year intervals since 1924.

National Forest
Inventory

The AoS should consider
this inventory.

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Hedgerow Regulations 1997	These regulations introduce new arrangements for local planning authorities in England and Wales, with the aim to protect important hedgerows in the countryside, by controlling their removal through a system of notification.	Consider the protection of important hedgerows within the AoS.
UK Peatland Strategy 2018	The UK Peatland Strategy aims to drive and co-ordinate action across the UK, supported by country level plans that will establish a course for peatland conservation and management at a more detailed level. This strategy recognises there are different peatlands and types of pressures within the UK and seeks to provide common goals across the four devolved administrations of England, Northern Ireland, Scotland and Wales. The Strategy has the 2040 vision of ‘ Our peatlands are protected, enhanced, sustainably managed and are recognised for their intrinsic value and the public benefits they provide’ and the 2040 target of ‘ Two million hectares of peatland in good condition, under restoration or being sustainably managed by 2040’. This renewed UKBF refreshes the “broad enabling structure” of the 2012 framework in the context of the new commitments by: Setting out the shared objectives for co-operation and collaboration between the four countries of the UK;	The AoS must consider the protection and restoration of peatland.
UK Biodiversity Framework (UKBF) 2024	Establishing a governance structure for overseeing and achieving the shared objectives. The UK is committed to taking positive action and is party to Multilateral Environmental Agreements such as the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change, and the Convention on International Trade in Endangered Species. The Kunming Montreal Global Biodiversity Framework, agreed at the COP 15 sets out its purpose as ‘aiming to catalyze, enable and galvanize urgent and transformative action by Governments, and subnational and local authorities, with the involvement of all of society, to halt and	The AoS must consider the protection and restoration of biodiversity.

reverse biodiversity loss, to achieve the outcomes it sets out in its Vision, Mission, Goals and Targets...' (Convention on Biological Diversity 2022).

This UK Biodiversity Framework sets out four objectives for cross-UK work relating to biodiversity policy and supporting evidence:

1. To contribute to informing and developing the UK's position in international agreements and policy making.
2. To coordinate collective achievement of the UK's international obligations.
3. To enable and support country input to reporting required under the UK's international obligations.
4. To inform each other of domestic policy developments and collaborate to achieve shared aims where there is benefit in doing so at a UK level.

NBSAPs are the main instrument for planning the implementation of the Convention on Biological Diversity (CBD) at the national level.

The UK NBSAP for 2030 draws on the commitments made by the UK, the UK Overseas Territories, and Crown Dependencies to summarise and emphasise our collective ambition and determination to work together to address biodiversity loss. The UK NBSAP commits the UK to achieving all 23 of the Kunming-Montreal Global Biodiversity Framework targets at home. that include actions that need to be initiated immediately and completed by 2030.

The UK submitted a set of 23 National Targets to the CBD on 1st August 2024. These sit alongside the NBSAP and include a subset of country-level commitments to illustrate the actions by which the GBF will be delivered in the UK.

UK National
Biodiversity Strategy
and Action Plan
(NBSAP) 2025

The AoS must consider
the protection of
biodiversity.

JNCC guidelines for minimising the risk of injury to marine mammals from unexploded ordnance (UXO) clearance in the marine environment	These guidelines outline measures to minimise potential injury from the clearance through detonation of unexploded ordnance (UXO) in the marine environment. Separate guidance is provided for when using explosives for other purposes (e.g. decommissioning). The aim of these guidelines is to reduce the risk of deliberate or reckless injury to marine mammals to as low as reasonably possible by outlining relevant measures that can be implemented as part of consenting regimes for UXO clearance works within UK seas.	The AoS must consider the protection of the marine environment.
AIR QUALITY		
Air Quality Standards Regulations 2010 as amended by The Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019	These regulations set legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO2). As well as having direct effects, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems. It also incorporates the 4th air quality daughter directive that sets targets for levels in outdoor air of certain toxic heavy metals and polycyclic aromatic hydrocarbons.	Ensure the inclusion of major air pollutants that impact human health within the AoS framework.
Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007	This Air Quality Strategy sets out air quality objectives and policy options to further improve air quality in the UK from today into the long term. As well as direct benefits to public health, these options are intended to provide important benefits to quality of life and help to protect our environment.	Ensure the inclusion of an air quality objective within the AoS framework.
Air Quality Strategy: framework for local authority delivery		
Clean Air Strategy 2019	The Clean Air Strategy explains how the UK Government will tackle all sources of air pollution, sets out policy direction, and outlines measures that will drive the move to	Ensure the inclusion of an air quality objective dealing with the topics of cleaner energy sources,

zero emission transport modes. The strategy links into other national level policies, outlining the same targets and strategies across multiple documents.

The strategy includes numerous aims and goals, many drawn from other policy documents, that are collated in brief in the executive summary. These are framed in the following topics:

- shifting to “cleaner” energy sources (e.g. phasing out coal-fired power stations)
- protecting the nation’s health;
- protecting the environment;
- securing clean growth and innovation;
- action to reduce emissions from transport;
- action to reduce emissions at home;
- action to reduce emissions from farming;
- action to reduce emissions from industry; and
- leadership at all levels.

The Clean Air Strategy effectively summarises government policy with an impact on air quality from multiple different areas. Multiple government initiatives are listed where action has been taken by central government. Of particular importance, and reinforced by the Clean Air Strategy, is the adoption of challenging and enforceable local Air Quality Strategies.

Jointly produced by the DfT and DEFRA, this national plan determines an approach for areas with the worst levels of traffic-related air pollution to mitigate the effects. It sets out the framework for Clean Air Zones, allowing for targeted action to improve air quality in the “shortest possible time” as required by legal obligations to meet NO₂ concentration thresholds.

protection of health, protection of the environment, reduce emissions from transport, homes and industry within the AoS framework.

Air Quality Plan for Nitrogen Dioxide in the UK, 2017

Ensure the inclusion of meeting NO₂ concentration thresholds within the AoS framework.

The document also sets out plans for ending the sale of new, conventional petrol and diesel cars and vans by 2040. The plan argues that NO₂ accumulation is a local issue, as the pollutants do not disperse widely like greenhouse gasses. In line with this local approach, the plan sets out support to local authorities, including:

- setting up a £255 million Implementation Fund;
- establishing a Clean Air Fund; and
- providing £100m for retrofitting and new low emission buses.

The plan outlines the introduction of several new funding streams that local authorities can utilise to finance measures to reduce NO₂ emissions.

The key messages from this document are:

- There is a link between air pollution and climate change as these originate from similar activities, for example;
- transport and electricity generation. These links should be considered when managing policy;
- The UK's commitment to build a low carbon economy by 2050 will reduce air pollution but choices made to achieve;
- this will impact upon the extent of air quality improvements;
- Air quality/climate change co-benefits could be achieved by promoting actions such as low-carbon vehicles;

However, benefits for climate change may have negative impacts on air pollution and vice versa which need to be taken into consideration.

Action will be required at international, national, regional and local levels to ensure that policies regarding air pollution and climate change are aligned to maximise co-benefits.

Air Pollution: Action in a Changing Climate (Defra, 2010)

The AoS framework should consider including objectives which seek to limit air pollution and reduce the impacts of air pollution on climate change.

The National
Emission Ceilings
Regulations 2018

These Regulations implement in the United Kingdom Directive 2016/2284/EU of the European Parliament and the Council relating to national emission ceilings or certain atmospheric pollutants. The Regulations require the Secretary of State to prepare an annual inventory of emissions of certain pollutants and to ensure in each year from 2020 until 2029 anthropogenic emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter occurring within the United Kingdom do not exceed the national emission reduction commitments.

Ensure that limitation of emissions of pollutants is addressed within the AoS framework through the inclusion of an appropriate objective.

CLIMATE CHANGE

Climate Change Act
2008 and its 2050
Target Amendment
Order, 2019

The Act aims to improve carbon management, helping the transition towards a low-carbon economy in the UK and to demonstrate UK leadership internationally. Key provisions of the Act include:

- a legally binding target of at least an 80% cut in greenhouse gas emissions by 2050 and a reduction in emissions of at least 34% by 2020 (both against 1990 baseline). Note the 2050 target has now been amended to Net Zero
- a carbon budgeting system that caps emissions over five-year periods;
- creation of the Committee on Climate Change;
- further measures to reduce emissions, including measures on biofuels;
- a requirement for the Government to report at least every five years on the risks to the UK of climate change, and to publish a programme setting out how these will be addressed.

The Act also introduces powers for Government to require public bodies and statutory undertakers to carry out their own risk assessment and make plans to address those risks

Ensure that reduction of greenhouse emissions is addressed within the AoS framework through the inclusion of an appropriate objective.

UK Net Zero Strategy
2021

The UK's new Net Zero Strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet the net zero target by 2050. It sets out, how the UK Government plans to deliver its emissions targets of Net Zero in 2050 and a 78%

The AoS must be guided by this important overarching strategy to

reduction from 1990 to 2035 (-63% relative to 2019). It puts forward an achievable and affordable vision that will bring net benefits to the UK.

meet the net zero target by 2050.

Government sets out that the exact technology and energy mix in 2050 cannot be known now, and the path to net zero will respond to the innovation and adoption of new technologies over time. It is expected to rely on the following key green technologies and energy carriers, which interact to meet demand across sectors and to remain low carbon:

Electricity from low carbon generation and storage technologies meets higher demand for low carbon power in buildings, industry, transport, and agriculture.

Hydrogen can complement the electricity system, especially in harder to electrify areas like parts of industry and heating, and in heavier transport such as aviation and shipping. A range of low carbon production methods could be used.

Carbon capture usage and storage (CCUS) can capture CO₂ from power generation, hydrogen production, and industrial processes – storing it underground or using it. This technology also supports negative emissions from engineered greenhouse gas removals – bioenergy with carbon capture and storage (BECCS) and Direct Air Carbon Capture and Storage (DACCS).

Biomass combined with CCUS can remove carbon from the atmosphere and support low carbon electricity and hydrogen generation. Biomass and other wastes can also support low carbon fuels for industry, buildings, and transport.

The Road to Zero strategy is a broad governmental “next steps” policy that outlines an ambition to decarbonise transport, and to strengthen the UK’s offering in design and manufacturing of zero emission vehicles, and the role of zero emission road vehicles in the government’s Industrial Strategy. The strategy is aligned to other national policies mentioned in this section.

The Road to Zero
2018

AoS needs to recognise the importance of decarbonising transport.

The policy sets targets for 50-70% of new car sales, and up to 40% of new van sales to be ultra-low emission by 2030. To support this, emphasis is given to several key policies:

- reducing emissions from the vehicles already on our roads;
- driving the uptake of the cleanest vehicles;
- reducing emissions from heavy goods vehicles (HGVs) and road freight;
- putting the UK at the forefront of the design and manufacturing of zero emission vehicles; and
- supporting the development of one of the best electric vehicle infrastructure networks in the world
- supporting local actions.

The strategy sets out in detail the challenges brought about by the emissions of road transport, and the specifics of how different types of road transport produce these emissions. The strategy also acknowledges the difficulty in maintaining a required level of road use for vital travel, commerce, and services, whilst restricting vehicle choice. Given the significant consequences of failing to act to reduce emissions, the report strikes a balance to prioritise reductions in emissions and maintain economic growth.

Although the strategy refers to changes in travel modes for certain types of journeys, the emphasis of the report lies with maintaining a required level of road travel, with reductions in emissions achieved through encouraging a high proportion of low-emission vehicles on the roads.

UKCP18

The UK Climate Projections (UKCP) provides the most up-to-date assessment of how the UK climate may change in the future. UKCP18 provides a new set of climate projections and tools to access climate data. The major innovations in UKCP18 include the use of new observations of weather and climate, inclusion of a more

The AoS framework should promote an

	recent generation of climate models from around the world and the results from latest Met Office global and regional climate models. The projections can then be used to inform guidance such as the Environment Agency's guidance on flood risk assessment. The aim of this strategy is to show how the UK can have a thriving industrial sector aligned with the net zero target, without pushing emissions and business abroad, and how government will act to support this. This strategy is part of a series of publications from government, which combined show how the net zero transition will take place across the whole UK economy. The strategy aims to: • show how the UK can have a thriving industrial sector aligned with the net zero target, without pushing emissions and business abroad • show how and when government will act to support this, while sharing the costs and risks fairly between industry, its customers and the taxpayer • start a conversation with industry, its workforce, customers and communities about the future of industry in a net zero world. The strategy identifies that beyond electricity generation, nuclear may also play a role in the provision of process heat to industry.	improved resilience to climate change. The AoS should consider including objectives that address the reduction of carbon emissions, as well as objectives that promote the transformation to a low carbon industrial sector. The AoS should consider including objectives that address GHG emissions reduction, as well as promote the transformation to an
Industrial Decarbonisation Strategy 2021		
National Infrastructure Strategy 2020	The National Infrastructure Strategy sets out the government's plans to transform the UK's infrastructure networks. It is based around three central objectives: economic recovery; levelling up and strengthening the Union; and meeting the UK's net zero emissions target by 2050. This will be enabled by clear support for private investment and through a comprehensive set of reforms to the way infrastructure is delivered.	

	This Strategy sets out early actions that the government will take to build the infrastructure needed to achieve net zero, improve air quality, create a greener urban environment, and minimise the impact of flooding.	energy-efficient low carbon economy.
UK Infrastructure: A 10 Year Strategy 2025	The Strategy sets out the government's long-term plan for economic, housing and social infrastructure to drive growth. In the 10 Year Infrastructure Strategy, the government is prioritising long-term outcomes over short-term announcements, providing the certainty and stability needed to attract investment, boosting British supply chains and jobs, and taking a joined-up view to improve planning and delivery across all types of infrastructure. Backed by £725 billion of government funding for infrastructure over the next decade, the Strategy covers both economic and social infrastructure for the first time.	Ensure the AoS aligns with the government's long-term plan for economic, housing and social infrastructure to drive growth.
National Infrastructure Assessment 2023	The Assessment analyses the UK's long-term economic infrastructure needs, outlining a strategic vision over the next 30 years and setting out recommendations for how identified needs should be met. The Assessment provides a long term strategy for how to adapt the UK's infrastructure to deal with the pressures of climate change.	Ensure that adaptation of infrastructure to climate change is addressed within the AoS framework.
UK Climate Change Risk Assessment 2022, Presented to Parliament pursuant to Section 56 of the Climate Change Act 2008	The UK government is required to undertake an assessment of the risks from climate change faced by the UK every five years under the Climate Change Act 2008. The third UK Climate Change Risk Assessment (CCRA3) identifies sixty-one UK-wide climate risks and opportunities that cross-cut multiple sectors of the economy. The potential impact of these risks includes changes to health and productivity, and disruption to households, businesses and public services. Estimated damages caused by climate change could be at least 1% of GDP by 2045 and the report highlights that more action is needed in the majority of risk areas to increase resilience and reduce the costs associated with climate change. Decision making, such as for new housing or infrastructure, should consider the effects of climate	Ensure that assessment of risks and opportunities from climate change is addressed within the AoS Framework.

change to avoid the need for costly remedial actions later and this should include low probability, high impact events, and interdependent or cascading risks

NAP3

Every 5 years, the government produces an assessment of the risks and opportunities from climate change and reports on how we will adapt in the NAP. This approach to climate adaptation is world leading, placing the UK at the forefront of global efforts to manage climate risk.

NAP3 explains the government's plans to adapt to climate change over the next 5 years from 2023 to 2028, including: protecting the natural environment; supporting business in adapting to climate change; adapting infrastructure (for example, our electricity networks and railways); protecting buildings and their surroundings (for example, from hotter temperatures); protecting public health and communities; mitigating international impacts on the UK (for example, on food supplies imported from abroad).

The Climate Change Act and the Climate Change (Scotland) Act require Northern Ireland, Wales, and Scotland to have their own plans for climate adaptation. These plans are closely aligned, and Northern Ireland, Wales, and Scotland have contributed to NAP3.

Climate Adaptation Reporting

The government's strategy for the fourth round of climate adaptation reporting under the Adaptation Reporting Power (ARP). ARP was introduced under the CCA 2008. It gives the Secretary of State the power to direct organisations with functions of a public nature and statutory undertakers to produce reports detailing:

- the current and future projected impacts of climate change on their organisation

The Third National Adaptation Programme (NAP3) and the Fourth Strategy for Climate Adaptation Reporting 2023, Presented to Parliament pursuant to Section 58 of the Climate Change Act 2008

The AoS should consider how infrastructure planning aligns with short term plans by UK Government, and how adaption measures within the NAP can be supported

- proposals for adapting to climate change
- an assessment of progress towards implementing the policies and proposals set out in previous reports

Reporting is usually undertaken in a 5-yearly cycle. Following strong support for the proposals in our consultation, the fourth round of reporting will be undertaken to a different timescale than previous rounds. This will improve the alignment of adaptation reporting with other elements of the statutory framework for climate change adaptation. The closing date for the next round will therefore be brought forward to late 2024 (from 2026). After this, reporting will return to its 5-yearly cycle.

The second National Adaptation Programme (NAP) sets out government's response to the second Climate Change Risk Assessment (CCRA), showing the actions government is, and will be, taking to address the risks and opportunities posed by a changing climate. It sets out the key actions needed in relation to the following six priority areas of climate change risks for the UK;

- Natural environment;
- Reducing pressures from spreading diseases and non-native invasive species;
- Infrastructure;
- People and the built environment;
- Business and industry; and
- Local government.

The AoS should consider objectives which promote resilience to the impacts of climate change.

Climate Change:
Second national
adaptation
programme (2018-
2023)

Planning Practice
Guidance – Climate
Change 2019

Advises how planning can identify suitable mitigation and adaptation measures in plan-making and the planning application process to address the potential impacts of climate change. The role of planning in supporting the delivery of appropriately sited renewable or low-carbon energy is specifically addressed.

Ensure that climate
change resilience is
addressed within the AoS
framework through the

inclusion of an appropriate objective.

The design principles for national infrastructure are:

Climate, people, places and value
Design principles for national infrastructure, National Infrastructure Commission, 2021

- Mitigate greenhouse gas emissions and adapt to climate change: The design of our infrastructure must help set the trajectory for the UK to achieve net zero greenhouse gas emissions by 2050 or sooner.
- Good infrastructure is designed for the benefit of people and will plan for future changes in demographics and population.
- Provide a sense of identity and improve our environment: Well-designed infrastructure supports the natural and built environment. Projects should seek to deliver a net biodiversity gain, contributing to the restoration of wildlife on a large scale while protecting irreplaceable natural assets and habitats.
- Achieve multiple benefits and solve problems well:
- Good design finds opportunities to add value beyond the main purpose of the infrastructure.

Design principles for national infrastructure are important considerations for the AoS framework.

Independent Assessment of UK Climate Risk, Committee on Climate Change 2021

Provides the advice to Government on priorities for the forthcoming national adaptation plans and wider action. It is informed by extensive new evidence gathered for the accompanying Climate Change Risk Assessment (CCRA3) Technical Report. More than 60 risks and opportunities have been identified, fundamental to every aspect of life in the UK covering natural environment, health, homes, infrastructure, and the economy.

The Committee identifies eight risk areas that require the most urgent attention in the next two years:

- Risks to the viability and diversity of terrestrial and freshwater habitats and species from multiple hazards

The AoS needs to consider relevant areas of climate change risk as set out in the independent assessment.

- Risks to soil health from increased flooding and drought
- Risks to natural carbon stores and sequestration from multiple hazards leading to increased emissions
- Risks to crops, livestock and commercial trees from multiple hazards
- Risks to supply of food, goods and vital services due to climate-related collapse of supply chains and distribution networks
- Risks to people and the economy from climate-related failure of the power system
- Risks to human health, wellbeing and productivity from increased exposure to heat in homes and other buildings
- Multiple risks to the UK from climate change impacts overseas

Ten principles for good adaptation planning that should form the basis for the next round of national adaptation plans are also recommended. These are intended to bring adaptation into mainstream consideration by government and business.

The Carbon Budget Delivery Plan fulfils statutory duties under the Climate Change Act 2008 setting out a package of quantified and unquantified proposals and policies, and associated timescales and delivery risks, that enable Carbon Budgets 4-6 to be met.

Carbon Budget
Delivery Plan (2023)

The delivery plan also sets out:

- wider matters in connection with carbon budgets
- the contribution of these proposals and policies to sustainable development
- the impact the package has on sectors of the economy

The AoS should consider including objectives that address the reduction of carbon emissions and decarbonisation of the energy system

HERITAGE

National Policy Statement for Fusion Energy Generation EN-8 AoS Appendices

Historic Buildings and Ancient Monuments Act 1953	This Act provides for the preservation and acquisition of buildings of outstanding historic or architectural interest and their contents and related property, and to amend the law relating to ancient monuments and other objects of archaeological interest.	The AoS should consider risks to historic buildings and ancient monuments
Heritage Protection for the 21st Century 2007	The paper sets out a vision of a unified and simpler heritage protection system, which will have more opportunities for public involvement and community engagement. The proposed system will be more open, accountable and transparent. It will offer all those with an interest in the historic environment a clearer record of what is protected and why; it will enable people who own or manage historic buildings and sites to have a better understanding of what features are important; it will streamline the consent procedures and create a more consultative and collaborative protection system. It is predominantly aimed for England and Wales with some UK wide elements.	Ensure historic environment protection within AoS framework.
Ancient Monuments and Archaeological Areas Act 1979	Under the Act a monument which has been scheduled is protected against any disturbance including unlicensed metal detecting. Permission must be obtained for any work which might affect a monument above or below ground. Historic England gives advice to the Government on each application. In assessing an application, the Secretary of State will try to ensure any works on protected sites are beneficial to the site or are essential for its long-term sustainability.	Ensure protection of ancient monuments and archaeological areas within AoS framework.
Protection of Military Remains Act 1986	The Protection of Military Remains Act 1986 prohibits entering and tampering with wrecked military vessels or aircraft. All military aircraft is automatically protected under this legislation, but vessels need to be designated individually. The Act enabled the government to establish controlled sites around wrecks in UK water or protected places for those in international water. The legislation is administered by the Ministry of Defence.	Ensure protection of wrecked military vessels or aircraft within AoS framework.

National Heritage Act 1983 (as amended 2002)	The 1983 Act established the Historic Buildings and Monuments Commission and delegated the functions of scheduling of ancient monuments and listing of historic buildings. The National Heritage Act 2002 broadened the powers of Historic England in two ways. It allowed Historic England to become involved in underwater archaeology in English territorial water and to trade in overseas countries. These powers have now been transferred to Historic England.	Ensure protection of ancient monuments and historic buildings and underwater archaeology within AoS framework.
The Protection of Wrecks Act 1973	The Protection of Wrecks Act 1973 allows the Government to designate a restricted area around the site of a vessel lying on or in the seabed in UK territorial waters if they are satisfied that, on account of the historical, archaeological or artistic importance of the vessel, or its contents or former contents, the site ought to be protected from unauthorised interference.	Ensure protection of designated wrecks within AoS framework.
Heritage Statement: One Year On (2018)	This heritage statement sets out how the government will support the heritage sector and help it to protect and care for our heritage and historic environment in the coming years, in order to maximise the economic and social impact of heritage and to ensure that everyone can enjoy and benefit from it. It also provides progress updates from the Government Heritage Statement 2017, and areas to deliver further change in the future.	Ensure protection of heritage and historic environment within AoS framework.
Planning (Listed Buildings and Conservation Areas) Act 1990	Governs special controls in respect of buildings and areas of special architectural or historic interest. Any alteration, extension or demolition of a listed building in a way that affects its character as a building of special interest requires Listed Building Consent.	Ensure protection of listed buildings within AoS framework.
LANDSCAPE		
National Parks and Access to the Countryside Act 1949	This was an act that made provision for National Parks and the establishment of a National Parks Commission. It was also to confer on the Nature Conservancy and local authorities' powers for the establishment and maintenance of nature reserves, it made further provision for the recording, creation, maintenance and improvement of	Ensure protection of national parks and improvements of public

	public paths and for securing access to open country and to amend laws relating to rights of way.	paths included within the AoS framework.
	This Act set up the Broads Authority to manage the Broads for the purposes of: • Conserving and enhancing the natural beauty, wildlife and cultural heritage of the Broads • Promoting opportunities for understanding and enjoyment of the special qualities of the Broads by the public • Protecting the interests of navigation. The Norfolk and Suffolk Broads Act 1988 also documents the Authority's need to regard the needs of agriculture and forestry, and the economic and social interests of those who live or work in the Broads	Although the NPS will be 'non locational' there is a need to ensure protection of areas such as The Broads.
Norfolk and Suffolk Broads Act 1988 (and subsequent amendments)		
Countryside and Rights of Way Act 2000	The Countryside and Rights of Way Act 2000 (CROW Act) normally gives a public right of access to land mapped as 'open country' (mountain, moor, heath and down) or registered common land. These areas are known as 'open access land'. Activities such as sight seeing are enabled by this Act.	Ensure that the issue of protecting Rights of Way and access to open space is considered in the AoS.
WATER ENVIRONMENT		
Water Resources Act 1991	This Act aims to prevent and minimise pollution of water. The policing of this act is the responsibility of the Environment Agency and Natural Resources Wales. Under the act it is an offence to cause or knowingly permit any poisonous, noxious or polluting material, or any solid waste to enter any controlled water. Silt and soil from eroded areas are included in the definition of polluting material. If eroded soil is found to be polluting a water body or watercourse, the Environment Agency may prevent or clear up the pollution, and recover the damages from the landowner or responsible person	Ensure that water quality protection and enhancement and water availability is included within the AoS framework.

This Act focuses on water resource management, conservation, and protection of consumer interests, The four broad aims of the Act are:

- the sustainable use of water resources;
 - strengthening the voice of consumers;
 - a measured increase in competition; and
 - the promotion of water conservation.
- Water Act 2003
- The Act amends the Water Resources Act 1991 to improve long-term water resource management by: creating two new forms of abstraction licence; regulating anew abstraction and irrigation rights; empowering the Environment Agency to revoke or vary an abstraction licence without compensation if it has not been used for four years; and removing the entitlement to compensation if the Secretary of State directs that a licence without a time limit should be curtailed on the grounds of serious environmental damage.
 - It also amends the Water Industry Act 1991 so as to require water companies to prepare and publicise drought plans, to agree on and publicise water resource management plans and to further water conservation.

Ensure that the issue of water resources is addressed within the AoS.

This Act governs water resources, management, and usage. The purpose of the Act is to:

Water Act 2014

reform the water industry to make it more innovative and responsive to customers and to increase the resilience of water supplies to natural hazards such as drought and floods to bring forward measures to address the availability and affordability of insurance for those households at high flood risk and ensure a smooth transition to the free market over the longer term.

Ensure that the issue of water resources is addressed within the AoS.

	The Act makes extensive amendments to the Water Industry Act 1991 with respect to the water licensing regime and a sewerage licensing regime. It focuses mainly on retail market arrangements in the water industry across the United Kingdom.	
Water Industry Act 1991	This Act sets out the main powers and duties of the water and sewerage companies, thus replacing those set out in the Water Act 1989, and defined the powers of the Director General of Water Services (now the Water Services Regulation Authority (Ofwat)). This Act sets out the duties for water companies in England and Wales including the need for supply licensing, as well as water resources management plans and general supply duties.	Ensure that the issue of water resources is addressed within the AoS.
The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017	Looks at the ecological health of surface water bodies as well as traditional chemical standards. In particular, it will help deal with, amongst others diffuse pollution, habitat, ecology, hydromorphology, barriers to fish movement, water quality, flow and sediment. The core aim of the Water Framework Directive is to protect the UK's water environments by preventing their deterioration and improving their quality. It does this by setting ecological targets and environmental objectives. Successful implementation will help to protect all elements of the water cycle and enhance the quality of our groundwater, rivers, lakes, estuaries and seas.	The AoS should consider objectives of preventing and improvement of the quality of the water environment.
Flood and Water Management Act 2010	This act provides for a better, more comprehensive management of flood risk for people, homes and businesses, helps safeguard community groups from unaffordable rises in surface water drainage charges and protects water supplies to the consumer. The key concepts include: • Flood and Coastal Erosion Risk Management; • Strategies for Natural flood and coastal erosion; • The establishment of regional flood and coastal communities.	Ensure that management of flood risk for the benefit of people, homes and businesses within the AoS framework.
River Basin Management Plans	These plans set out how organizations, stakeholders and communities will work together to improve the water environment. A RBD covers an entire river system,	Ensure that water quality protection and

	including river, lake, groundwater, estuarine and coastal water bodies and are designed to protect and improve the quality of the water environment.	enhancement is included within the AoS framework.
Shoreline Management Plans & Guidance 2006	Shoreline management plans (SMP) provide a long-term strategic plan which identify approaches for managing the flood and coastal erosion risks at every stretch of coastline. Shoreline management plans are developed and owned by the local councils and coastal protection authorities, with members mainly from local councils, Natural England, the MMO and the Environment Agency. There are 22 SMP's covering England and Wales. They identify the most sustainable approach to managing the flood and coastal erosion risks to the coastline in the short term (0-20 years), medium term (20-50 years) and long term (50-100 years). They are long term non-statutory plans which set out the agreed high-level objective for coastal flooding and erosion management for each SMP area. There are 20 SMPs which cover the English coast. 2006 Guidance Managing the shoreline involves identifying the best ways to manage risks to people and the developed, historic and natural environment, and how to put these into practice. A range of responses is available for managing risks, including: • removing risks by avoiding or moving inappropriate development in vulnerable areas (such as through planning how land is used); • reducing the likelihood of damaging events through management work that prevents damage (such as managing beaches, cliffs, dunes, saltmarshes and so on) or using back-up and secondary defence systems (such as for tidal defence); • reducing the consequences of risks by providing early-warning systems (such as flood warning systems operated by the Environment Agency); and	Ensure that flood and coastal erosion risks to the coastline are included as an objective within the AoS framework.

- reducing the risks associated with potentially damaging events through flood and coastal defence schemes or altering buildings to reduce the chance of flood damage.

The most appropriate measures will depend on the problem, and on technical, environmental, social and economic circumstances. Some of these approaches are not covered by shoreline management. However, in many cases the response will involve a combination of measures including, for example, working with local planning authorities to achieve the same objectives.

Flood Risk
Management Plans

Flood risk management plans explain the risk of flooding from rivers, the sea, surface water, groundwater and reservoirs. FRMPs set out how risk management authorities will work with communities to manage flood risk between 2021-2027. They must cover areas of the river basin district (RBD) where flood risk is significant. These areas are called flood risk areas (FRAs). The Environment Agency and lead local flood authorities (LLFAs) identify FRAs through preliminary flood risk assessments.

FRMPs also meet the aims of the National Flood and Coastal Erosion Strategy for England.

Ensure that risk of flooding from sea, surface water, groundwater and reservoirs is included within the AoS framework.

Salmon and
Freshwater Fisheries
Act 1975

Created to protect particularly salmon and trout from commercial poaching, to protect migration routes, to prevent wilful vandalism and neglect of fishery's and to ensure correct licensing and water authority approval. Part II of the Act deals with obstructions to the passage of fish, including fishing weirs, screens and sluices; dictating when and where they can be used. Part III explains the proper times of fishing, selling and exporting fish.

The AoS should consider protection of salmon and freshwater fish.

Eels (England and
Wales) Regulations
2009

These regulations afford powers to the Environment Agency and Natural Resource Wales to implement measures for the recovery of European eel stocks all freshwater and estuarine waters and have important implications for operators of abstractions and discharges.

The AoS should consider protection and enhancement of freshwater and estuarine

		waters as a habitat for eels.
	The Fisheries Act will enable the UK to control who fishes in their waters through a new foreign vessel licencing regime and ends the current automatic rights for EU vessels to fish in UK waters.	
Fisheries Act 2020	Underpinning the Act is a commitment to sustainability, ensuring that fish and aquaculture activities are environmentally sustainable in the long term. The UK Government and Devolved Administrations are required to develop new fisheries management plans for managing fisheries to benefit the fishing industry and the marine environment. This includes a marine planning system, which makes provision for a statement of the Government's general policies, and the general policies of each of the devolved administrations, for the marine environment, and also for marine plans which set out in more detail what is to happen in the different parts of the areas to which they relate. Welsh Ministers are the marine licensing authority in Wales, and the administration and determination of marine licenses has been delegated to NRW.	The AoS should give particular regard to sustainable management of fisheries.
Marine and Coastal Access Act 2009	Key areas of the Act include: • a Marine Management Organisation under which many of the existing, diverse areas of marine regulation are centralised; • streamlined the marine licensing system and provides powers to create joined-up marine planning policy; • introduced measures to reform fisheries management; • provided a framework for establishing marine conservation zones; • enabled the creation of a walkable route around the English and Welsh coast.	The AoS should seek to align with the aims of the Act and protect the marine and coastal environment.

The Marine Works
(Environmental
Impact Assessment)
Regulations 2007

The regulations requires that certain types of project with the potential to significantly affect the environment have an environmental impact assessment before a marine licence decision is made.

The AoS should consider where EIAs are required if projects have the potential to significantly affect the environment.

UK Marine Policy
Statement 2011

The Marine Policy Statement (MPS) is the framework for preparing Marine Plans and taking decisions affecting the marine environment. The MPS will facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the high level marine objectives and thereby:

- Promote sustainable economic development;
- Enable the UK's move towards a low-carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects;
- Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and our heritage assets; and
- Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues.

The AoS framework should consider sustainable use of the marine environment, in particular relating to water quality and use of the coastal zone.

Marine strategy part
one: UK updated
assessment and
Good Environmental
Status, 2019

This strategy provides an updated assessment of our seas and sets objectives, targets and indicators for achieving Good Environmental Status.

The AoS should consider objectives, targets and indicators for achieving Good Environmental Status in the marine environment.

Marine Strategy Part
two, 2021

This updated UK Marine Strategy Part Two sets out the monitoring programmes that we propose to use to provide the evidence to support the 2024 assessment of progress towards achieving GES within the UK Marine Strategy area.

The AoS should consider marine monitoring

		indicators set out on the Marine Strategy.
Marine strategy part three: 2025 UK programme of measures	This strategy outlines the measures that contribute towards Good Environmental Status (GES) in UK seas. These regulations require Defra to: • publish a situation report on the disposal of urban wastewater and sludge • assess compliance with these regulations in each agglomeration (each area where wastewater is collected to be treated or discharged) • publish a report on the level of that compliance, identified reasons for non-compliance, and proposed measures to achieve compliance with these regulations The Plan sets stringent new targets to protect people and the environment. This will require water companies to deliver the largest infrastructure programme in water company history. Water companies will have to achieve targets set out in the plan: • by 2035, water companies will have to improve all storm overflows discharging into or near every designated bathing water; and improve 75% of overflows discharging to high priority nature sites • by 2050, this will apply to all remaining storm overflows covered by our targets, regardless of location	The AoS should consider the measures that contribute towards Good Environmental Status in the UK seas.
Urban Wastewater Treatment Regulations 1994		The AoS should consider the disposal of urban wastewater.
Storm overflows discharge reduction plan		The AoS should consider storm overflow discharge.
Reservoirs Act 1975	The Act places a duty on the Environment Agency in England and Wales and LAs in Scotland to maintain a register of large raised reservoirs which can contain more than 25,000m ³ of water above the natural level of any part of the land adjoining the	The AoS should consider provision to prevent escapes of water from large reservoirs or from

	reservoir. The Secretary of State appoints specialist engineers to panels set up under the Act - hence the engineers are referred to as 'Panel Engineers'.	lakes or lochs artificially created or enlarged.
National Policy Statement: Water Resources Infrastructure	The National Policy Statement (NPS) aims to: • streamline the planning permission process for nationally-significant water infrastructure projects • enable new water supply infrastructure • provide planning guidance for applicants The NPS will be used as the primary basis for examination by the Examining Authority. It will be used by the Secretary of State to consider development consent applications for nationally-significant water resource infrastructure projects.	The AoS should consider the need for planning permission for water infrastructure.
The Water Resources (Abstraction and Impounding) (Amendment) Regulations 2008 (England and Wales)	These regulations are for ensuring that duties are fulfilled to secure the proper and efficient use of water resources, including the regulation of water abstraction from sources of supply, including rivers, lakes, canals and underground sources through a system of licensing to protect rights to abstract water and minimise damage to the environment. They also deal with procedural matters concerning applications to the Environment Agency for licences to abstract and impound water.	The AoS should consider implications relating to the abstraction and impoundment of water.
The Water Abstraction and Impounding (Exemptions) Regulations 2017	These regulations partly implement the abstraction elements of the Water Act 2003, providing exemptions for abstraction activities that have insignificant impacts on the water environment, which would otherwise become licensable.	The AoS should consider implications relating to the abstraction of water.
NOISE		
Environmental Noise Regulations 2006	Environmental noise is regulated in England by the Environmental Noise (England) Regulations 2006 (as amended). Noise is a devolved matter so regulated in Wales by the Environmental Noise (Wales) Regulations 2006 (as amended), in Scotland by the Environmental Noise (Scotland) Regulations 2006 (as amended) and in Northern	Ensure the impact of environmental noise is

	Ireland by the Environmental Noise (Northern Ireland) Regulations 2006. The Regulations seek to manage the impact of environmental noise through strategic noise mapping and the preparation and implementation of Noise Action Plans on a 5 yearly cycle. Under these regulations, the fourth round of strategic noise mapping has been completed and updated Noise Action Plans are currently being prepared.	addressed through the AoS framework.
JNCC guidelines for minimising the risk of injury to marine mammals from geophysical surveys (seismic survey guidelines) 2017	These guidelines outline measures to minimise potential injury to marine mammals (cetaceans and seals) from geophysical surveys (e.g. seismic air-guns, sub-bottom profiling equipment).	Ensure the impact on marine mammals is addressed through the AoS framework.
JNCC Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise 2010	Jointly produced by JNCC, Natural England and Natural Resources Wales, these guidelines outline measures to minimise potential injury from pile driving during offshore wind farm construction and other industries that use piling (e.g. oil and gas, harbour construction).	Ensure the impact on marine mammals is addressed through the AoS framework.
Reducing marine noise Policy Paper	This policy paper sets out Defra’s ongoing work and upcoming plans to minimise noise in our seas. The UK government encourages all marine industries to take all necessary steps to reduce their noise and plans to implement a series of further actions to support this including: • Reducing noise from offshore wind • Reducing noise from other sources	Ensure the impact on marine environment is addressed through the AoS framework.

- Consideration of UK wide noise threshold values
- International Cooperation

Planning Practice Guidance for Noise (2019)	This guidance sets out how the planning process should address potential noise impacts in new development proposals. It provides direction on assessing noise levels, identifying and implementing effective mitigation measures, and ensuring compliance with acceptable noise standards.	Ensure the impact of noise is addressed through the AoS framework.
Environmental Protection Act 1990 (Part III)	Part III of this act deals with statutory nuisance, including noise nuisance, providing a framework for managing noise pollution through local authorities. Authorities must investigate complaints, issue abatement notices, and enforce compliance, with non-compliance treated as a criminal offence. Individuals can also seek remedies through the courts.	Ensure the impact of noise is addressed through the AoS framework.
Control of Pollution Act 1974	This act makes provisions with respect to waste disposal, water pollution, noise, atmospheric pollution and public health. This includes provisions for controlling noise from construction sites and other operations, allowing local authorities to impose noise control measures.	Ensure the impact of noise is addressed through the AoS framework.
The Noise Insulation Regulations 1975 (as amended)	These regulations set out when highway authorities must offer noise insulation or grants to properties affected by new or significantly altered roads. These provisions aim to mitigate the impact of road traffic noise on residential amenity.	Ensure the impact of noise is addressed through the AoS framework.
The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996	These regulations require authorities responsible for constructing or altering railways, tramways, or other guided transport systems to provide noise insulation or grants for eligible residential buildings significantly affected by increased noise.	Ensure the impact of noise is addressed through the AoS framework.

The following British Standards are related to noise:

British Standards
related to noise

- BS 4142: Methods for rating and assessing industrial and commercial sound.
- BS 6472: Guide to evaluation of human exposure to vibration in buildings (1 Hz to 80Hz).
- BS 8233: Guidance on sound insulation and noise reduction for buildings.
- BS 5228: Code of practice for noise and vibration control on construction and open sites, which is divided into parts including:
 - BS 5228-1: Noise
 - BS 5228-2: Vibration

Ensure the impact of noise is addressed through the AoS framework.

TRANSPORT

Sets out the vision that “clean transport is better transport”. Provides a detailed plan of commitments, actions and timings for decarbonisation of the UK transport network, which are framed around the strategic priorities of:

Decarbonising
Transport: A Better,
Greener Britain 2021

- Accelerating modal shift to public and active transport;
- Decarbonising road transport;
- Decarbonising goods freight;
- UK as a hub for green transport technology and innovation;
- Place-based solutions to emissions reduction;
- Reducing carbon in a global economy.

Ensure that decarbonisation of the transport sector, with a particular emphasis on road and goods freight transport is included within the AoS framework.

ENERGY

The Energy White
Paper 2020

The White Paper builds on the Ten Point Plan for a Green Industrial Revolution to outline the Government’s strategy for delivering net zero greenhouse gas emissions by 2050 through:

The AoS should consider including objectives that address the reduction of greenhouse gas

	• Shifting from fossil fuels and towards new low-carbon power and renewables, for example by investing £385 million in the Advanced Nuclear Fund; • Maintaining the affordability of energy for consumers; • Increasing energy efficiency of households, buildings and the energy system as a whole; and • Creating up to 250,000 ‘green’ jobs by 2030 in a ‘Green Industrial Revolution’.	emissions, as well as objectives that promote the transformation to an energy-efficient low carbon economy.
Energy Act 2023	The Act’s aim is for security and independence of energy supply in the United Kingdom using different methods including nuclear, oil, gas, hydro, and wind, with which the eventual outcome being decreased energy bills for the general population. The Act contains 14 parts, including different measures to achieve the goal of reduced and affordable energy prices Lays the foundation for the UK’s “Green Industrial Revolution” and how this relates to reaching Net Zero greenhouse gas emissions by 2050. The cumulative effect of the Plan will be to reduce UK emissions by 180 Mt CO₂e between 2023 and 2032. Key components of the Plan are:	The AoS should consider the need for secure and independent energy supply. The AoS should consider including objectives that address the reduction of greenhouse gas emissions, as well as objectives that promote the transformation to an energy-efficient low carbon economy.
The Ten Point Plan for a Green Industrial Revolution 2020	• Investment in renewables such as offshore wind and hydrogen; • Investment in new and advanced nuclear power; • Carbon removal through investment in CCUS and wildlife protection; • Demand reduction through shifts in transport and improving the efficiency of buildings; • Protecting our natural environment; and • Accelerating green finance and innovation.	

British Energy Security Strategy 2022	Builds on the 'Ten point plan for a green industrial revolution', and the 'Net zero strategy'. This plan comes in light of rising global energy prices, provoked by surging demand after the pandemic as well as Russia's invasion of Ukraine. This will be central to weaning Britain off expensive fossil fuels, which are subject to volatile gas prices set by international markets we are unable to control, and boosting our diverse sources of homegrown energy for greater energy security in the long-term. With regard to nuclear, the Strategy outlines the target that by 2050 up to a quarter of electricity consumed in Great Britain will be from nuclear (up to 24 GW by 2050). Nuclear may also have a part to play in production of hydrogen. Aimed to accelerate the commercialisation of innovative "clean" energy technologies and processes into the 2020s and 2030s. The Programme budget of £505M consisted of 6 themes: • £70M in smart systems • £90M in the built environment (energy efficiency and heating) • £100M in industrial decarbonisation and CCUS • £180M in nuclear innovation • £15M in renewables innovation • £50M in support for energy entrepreneurs and green financing The Programme was replaced by the Net Zero Innovation Portfolio.	The AoS must be guided by this important overarching strategy.
Energy Innovation Programme (EIP) (2015-2021)		The AoS must acknowledge the Government's efforts to accelerate clean energy innovation.
Net Zero Innovation Portfolio and Advanced Nuclear Fund (2021-2025)	Net Zero Innovation Portfolio is a £1B fund, announced in the 2020 Ten Point Plan for a Green Industrial Revolution. It aims to accelerate commercialisation of low-carbon technologies and decrease the costs of decarbonisation. The 10 priority areas are:	The AoS must acknowledge the Government's efforts to

- Future offshore wind
- Nuclear advanced modular reactors (supported through the aligned £385M Advanced Nuclear Fund)
- Energy storage and flexibility
- Bioenergy
- Hydrogen
- Homes
- Direct air capture and greenhouse gas removal
- Advanced CCUS
- Industrial fuel switching
- Disruptive technologies

accelerate clean energy innovation.

The Plan identifies progress and commitments made towards decarbonising the energy sector. Regarding nuclear these include:

- Reaffirmed the aim to deliver up to 24 GW nuclear capacity by 2050
- Setting up Great British Nuclear
- Developing the new Nuclear NPS
- Planned publication of the Low Carbon Fuels Strategy
- Continued support through the £385M Advanced Nuclear Fund
- Establishment of revenue models such as the Nuclear Regulated Asset Base (RAB) model
- Committing to provide £1.7B of direct government funding to take one nuclear project to Final Investment Decision this parliament. The aim is for two projects in the next parliament (including SMRs)

Powering up Britain:
The Net Zero Growth
Plan 2023

The AoS must acknowledge the Government's commitment to deliver clean energy capacity.

Clean Power by 2030 is the UK Government next milestone and requires much urgent action across the UK: build the grid that Britain needs, overturning decades of delay; install clean sources of power at a pace never previously achieved; identify the energy mix needed for the 2030 power system and reorder the connection queue to achieve it; develop a flexible system that can accommodate and store Britain's renewable resources; deliver these benefits to consumers, people, households, and businesses as swiftly as possible. The high ambition means 43-50 GW of offshore wind, 27-29 GW of onshore wind, and 45-47 GW of solar power. These will be complemented by flexible capacity, including 23-27 GW of battery capacity, 4-6 GW of long-duration energy storage, and development of flexibility technologies including gas carbon capture utilisation & storage, hydrogen, and substantial opportunity for consumer-led flexibility.

UK Government
Clean Power 2030
Action Plan: A new
era of clean electricity

The steps in this Action Plan will reform planning and consenting processes, contract new renewable power generation at the scale required, encourage long-duration energy storage and first-of-a-kind flexible clean capacity and open the path to clean power and new opportunities for consumers to save.

The AoS must recognise the Government's commitment to deliver clean power.

The following major actions are set out to accelerate delivery:

- **Electricity Networks and connections:** reform the grid connections process and reduce the queue to connect. Around two twice as much new infrastructure will be needed in the nation's grid by 2030 as has been built in the past decade. Regulatory reform will ensure Clean Power 2030 is better integrated into planning and decision making, so investment can be made ahead of need and the time taken to build and deliver network projects can be reduced in line with 2030 requirements.
- **Planning and consenting** signal key projects for clean power and speed up planning and consenting processes. First, upgrading the planning system itself, equipping organisations with the flexibility they need to manage the increased caseload it faces. Next ensure the system can prioritise 2030-critical projects:

brought onshore wind back into the Nationally Significant Infrastructure Project (NSIP) regime; bringing forward a Planning and Infrastructure Bill with measures to streamline the delivery of critical infrastructure in the planning process; ensuring reformed planning system enhances the restoration of nature.

- **Renewable and nuclear project delivery:** deliver renewable capacity needed by 2030. The Contracts for Difference allocation process must meet 2030 ambitions so a package of targeted measures will be implemented. Great British Energy will provide support to deliver the Local Power Plan, putting local authorities and communities at the heart of restructuring our energy economy. Committed to nuclear, including the lifetimes of existing nuclear projects where possible, and the development of emerging low carbon and renewable technologies that will play an important role beyond 2030.
- **Electricity market reform:** A significant increase in short-duration flexibility of 29-35 GW is needed. This is the difference between the current capacity of batteries, interconnectors, and consumer-led flexibility, and capacities in 2030 under the DESNZ 'Clean Power Capacity Range'. Reforming the transmission network charging (Transmission Network Use of System (TNUoS) charges) is critical in order to enable the increased deployment of future generation.
- **Short-duration energy storage and flexibility:** As we build an energy system reliant increasingly on variable renewables, improving the flexibility of the wider electricity system is key. A Low Carbon Flexibility Roadmap will be published next year, with new actions to drive clean power flexibility by 2030. We will introduce new market reforms to provide batteries and consumer-led flexibility with appropriate and fair access to, and utilisation within, relevant markets, and we will consult on how grid-scale batteries could be referenced in future planning reforms, and on including grid-scale batteries within the Environmental Permitting Regulations.

- Long-duration flexibility: We are projected to need 40-50 GW dispatchable and long-duration flexible capacity in 2030 to support the system in extended periods of low renewable output. Drive the development of low carbon long-duration flexibility- Final Investment Decision for Net Zero Teesside, the world's first at scale gas power plant with carbon capture, and also developing a Hydrogen to Power business model which will de-risk investment and bring forward capacity. Scale up deployment of pump storage hydropower and foster further innovation in more nascent long-duration storage technologies such as liquid air energy storage.
- Supply chains and workforce: Clean power by 2030 is a signal to investors to locate in the UK and build strong domestic supply chains for key aspects of our clean power system. Actions to support and accelerate delivery will give developers greater route-to-market certainty, but we will go further, including with the forthcoming Industrial Strategy, which will include a sector plan for clean energy industries - convene a new supply chains and workforce industry forum for key Clean Power 2030 sectors; the Clean Industry Bonus will support manufacturing in coastal and energy communities and cleaner, more sustainable supply chains; increased transparency and predictability in future Contracts for Difference allocation rounds will support investment. The National Wealth Fund will focus at least £5.8 billion of its capital on green hydrogen, carbon capture, ports, gigafactories, and green steel, while Great British Energy will support the growth of clean power supply chains around the UK.

Beyond 2030

This report by the National Energy Systems Operator maps the way to a clean, secure and affordable energy future whilst delivering on the Climate Change Committee's Sixth Carbon Budget and Crown Estate Scotland's ScotWind leasing round.

The AoS must consider the electricity network transition to net-zero.

Future Energy Scenarios: NESO Pathways to Net Zero 2025	It sets out ‘National Blueprints’ and ‘Regional Blueprints’ to build grids needed for a decarbonised power system. They combine onshore, offshore, and innovative solutions to create a single modern holistic electricity network. Previous FES frameworks assessed the future of energy supply and demand through scenarios, exploring a wide range of credible outcomes for how Great Britain could meet net zero. The new framework explores a range of routes to net zero in 2050 for energy demand and supply by considering the choices that can be made and the uncertainties. The critical enablers for success fall within four main areas: • Energy efficiency • Demand and flexibility • Infrastructure and energy supply • Switching to low carbon technologies	The AoS must consider the future energy scenarios.
Offshore Wind Leasing Round 4	Offshore Wind Leasing Round 4 creates the opportunity for c.8GW of new offshore wind projects in the waters around England and Wales by the end of the decade. Round 4 further strengthens the UK’s world leading offshore wind sector, creating jobs and investment, and delivering green, reliable, affordable energy to millions more homes. It’s part of the Crown Estate’s commitment to supporting the UK’s low carbon future while ensuring healthy, biodiverse seas. The new projects join a strong pipeline of UK offshore windfarms already in operation, construction and planning, and will help put the UK on track to meet the government target for 40GW of offshore wind capacity by 2030. The Offshore Wind Leasing Round 4 Agreements for Lease signing concluded in January 2023.	The AoS must consider the potential for offshore wind.

	The second phase of the Round 5 leasing process (Invitation to Tender Stage 1) is underway as of August 2024.	
Offshore Wind Leasing Round 5	Offshore Wind Leasing Round 5 seeks to establish a new floating wind sector in the Celtic Sea off the coasts of South Wales and South West England. It is expected to be the first phase of commercial development in the Celtic Sea, bringing an opportunity to create up to 4.5GW of new renewable energy capacity, while acting as a springboard for new social, economic and environmental opportunities. In its Autumn Statement in November 2023, the UK Government confirmed its intention to unlock space for a further 12GW of capacity in the Celtic Sea.	The AoS must consider the potential for offshore wind.
Offshore wind extension projects 2017	In February 2017, The Crown Estate launched an opportunity for existing wind farms to apply for project extensions. In August 2019, The Crown Estate announced the conclusion of the HRA, confirming that seven of the 2017 extension application projects, representing a total generating capacity of 2.85GW, would progress to the award of development rights.	The AoS must consider the potential for offshore wind.
Managing radioactive substances and nuclear decommissioning policy: government response (2024)	This document provides a summary of responses to the consultation by the UK Government and devolved administrations, Managing Radioactive Substances and Nuclear Decommissioning, which was published on 1st March 2023 and closed on 24th May 2023. It includes a short summary of the consultation proposals, a summary of the substantive points raised by consultees and the UK Government and devolved administrations' response to the points raised. The consultation sought views on a consolidated and updated UK-wide policy framework on managing radioactive substances and nuclear decommissioning. The consultation included proposals to amend, update and clarify some of these policies with the aim of driving improvements in nuclear decommissioning and clean-up	The AoS must align with UK-wide policy framework on managing radioactive substances and nuclear decommissioning

programmes along with the management of radioactive materials, and the waste they generate.

Table C-2 - Key Plans, Policies and Legislation - Regional (England, Wales, Northern Ireland & Scotland)

England

CROSS - THEMATIC

The 25 Year Environment Plan, published in 2018, is the first Environmental Improvement Plan. The government must complete a statutory review of the EIP at least every 5 years. Its first revision (EIP23) was published in January 2023 and includes 13 legally binding environmental targets set under the EA 2021. In July 2024 the government announced a second review and revision of the EIP.

Environmental Improvement Plan (25 Year Environment Plan 2018, EIP23 and all future revisions)

The apex goal is improving nature and halting the decline in biodiversity.

This is a large task but we have already started: we have created or restored wildlife habitats the size of Dorset, we are investing more than £750 million in tree-planting and peatland restoration through our Nature for Climate Fund, and we have established a network of marine protected areas across 35,000 square miles of English waters.

We have also driven action on the global stage, reflecting that restoring nature is not just a national endeavour but also international: at UN Nature Summit COP15, we agreed a new Global Biodiversity Framework, with 23 global targets, including 30% of global land and 30% of global ocean to be protected by 2030. And our goals and targets at home will support progress towards the UN’s Sustainable Development Goals internationally.

The AoS must recognise that the apex goal is improving nature and halting decline in biodiversity.

To make further progress, we will:

- launch the Species Survival Fund to create, enhance and restore habitats
- create, restore, and extend around 70 areas for wildlife through projects including new National Nature Reserves, and the next rounds of the Landscape Recovery Projects
- protect 30% of our land and sea for nature through the Nature Recovery Network and enhanced protections for our marine protected areas. We intend to designate the first Highly Protected Marine Areas this year
- implement the Environment Act 2021, including rolling out Local Nature Recovery Strategies to identify areas to create and restore habitat, and Biodiversity Net Gain to enhance the built environment
- support a transformation in the management of 70% of our countryside by incentivising farmers to adopt nature friendly farming practices
- publish an updated Green Finance Strategy, setting out the steps we are putting in place to leverage in private finance to deliver against these goals. We have a goal to raise at least £500 million per year of private finance into nature's recovery by 2027 and more than £1 billion by 2030

This goal is at the apex of our plan: all the other goals will help us to achieve it.

The Government's 25-Year Environment Plan sets out the Government's position on environmental improvements, focussed on delivering cleaner air and water across the country, protecting at-risk wildlife, and improving natural habitats.

25 Year Environment
Plan 2018

The plan sets the following key actions:

- Using and managing land sustainably, including embedding an "environmental net gain" principle into development.
- Recovering nature and enhancing the beauty of landscapes.

The AoS will need to consider implications of key actions and key targets for delivering clean air and water, protecting at-risk wildlife and improving natural

- Connecting people to the environment to improve health and wellbeing.
- Increase resource efficiency and reducing pollution.
- Securing clean, healthy and productive and biologically diverse seas and oceans.
- Protecting and improving the global environment.

habitats set out in the 25YP.

The following targets are set out in the 25 Year Plan:

Clean air:

- meeting legally binding targets to reduce emissions of five damaging air pollutants; this should halve the effects of air pollution on health by 2030
- maintaining the continuous improvement in industrial emissions by building on existing good practice and the successful regulatory framework

Clean and plentiful water:

- clean and plentiful water by improving at least three quarters of our waters to be close to their natural state as soon as is practicable by:
- reducing the damaging abstraction of water from rivers and groundwater, ensuring that by 2021 the proportion of water bodies with enough water to support environmental standards increases from 82% to 90% for surface water bodies and from 72% to 77% for groundwater bodies
- reaching or exceeding objectives for rivers, lakes, coastal and ground waters that are specially protected, whether for biodiversity or drinking water as per our River Basin Management Plans

Thriving plants and wildlife:

At sea: reversing the loss of marine biodiversity and, where practicable, restoring it; increasing the proportion of protected and well-managed seas, and better managing existing protected sites; making sure populations of key species are sustainable with appropriate age

structures; ensuring seafloor habitats are productive and sufficiently extensive to support healthy, sustainable ecosystems

On land and in freshwaters: restoring 75% of our one million hectares of terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long term; creating or restoring 500,000 hectares of wildlife-rich habitat outside the protected site network, focusing on priority habitats as part of a wider set of land management changes providing extensive benefits; taking action to recover threatened, iconic or economically important species of animals, plants and fungi, and where possible to prevent human induced extinction or loss of known threatened species in England and the Overseas Territories; increasing woodland in England in line with our aspiration of 16.5% tree canopy cover by 2050.

Reducing the risks of harm from environmental hazards:

Reduce the risk of harm to people, the environment and the economy from natural hazards including flooding, drought and coastal erosion by:

- making sure everyone is able to access the information they need to assess any risks to their lives and livelihoods, health and prosperity posed by flooding and coastal erosion
- bringing the public, private and third sectors together to work with communities and individuals to reduce the risk of harm
- making sure that decisions on land use, including development, reflect the level of current and future flood risk
- ensuring interruptions to water supplies are minimised during prolonged dry weather and drought
- boosting the long-term resilience of our homes, businesses and infrastructure
- Using resources from nature more sustainably and efficiently:

- ensure that resources from nature, such as food, fish and timber, are used more sustainably and efficiently. We will do this by:
- maximising the value and benefits we get from our resources, doubling resource productivity by 2050
- improving our approach to soil management: by 2030 we want all of England's soils to be managed sustainably, and we will use natural capital thinking to develop appropriate soil metrics and management approaches
- increasing timber supplies
- ensuring that all fish stocks are recovered to and maintained at levels that can produce their maximum sustainable yield
- ensuring that food is produced sustainably and profitably

Enhancing beauty, heritage and engagement with the natural environment:

Conserve and enhance the beauty of our natural environment, and make sure it can be enjoyed, used by and cared for by everyone. We will do this by:

- safeguarding and enhancing the beauty of our natural scenery and improving its environmental value while being sensitive to considerations of its heritage.
- making sure that there are high quality, accessible, natural spaces close to where people live and work, particularly in urban areas, and encouraging more people to spend time in them to benefit their health and wellbeing
- focusing on increasing action to improve the environment from all sectors of society

Mitigating and adapting to climate change:

- Take all possible action to mitigate climate change, while adapting to reduce its impact. We will do this by:

- continuing to cut greenhouse gas emissions including from land use, land use change, the agriculture and waste sectors and the use of fluorinated gases
- making sure that all policies, programmes and investment decisions take into account the possible extent of climate change this century
- implementing a sustainable and effective second National Adaptation Programme

Minimising waste:

- Minimise waste, reuse materials as much as we can and manage materials at the end of their life to minimise the impact on the environment. We will do this by:
- working towards our ambition of zero avoidable waste by 2050
- working to a target of eliminating avoidable plastic waste by end of 2042
- meeting all existing waste targets – including those on landfill, reuse and recycling – and developing ambitious new future targets and milestones
- significantly reducing and where possible preventing all kinds of marine plastic pollution – in particular material that came originally from land

The Plan introduces and references a number of external targets. Importantly it notes that 40% of the UK's final energy consumption is the responsibility of the transport sector. The plan includes:

- meeting legally binding targets to reduce emissions of five damaging air pollutants (intended to halve the effects of air pollution on health by 2030);
- ending the sale of new conventional petrol and diesel cars and vans by 2040;
- continuing to cut greenhouse gas emissions including from land use, land use change, the agriculture and waste sectors and the use of fluorinated gases; and
- making sure that all policies, programmes and investment decisions take into account the possible extent of climate change this century.

The 25 Year Environment Plan has a specific soil health target of ‘improving our approach to soil management: by 2030 we want all of England’s soils to be managed sustainably, and we will use natural capital thinking to develop appropriate soil metrics and management approaches’. There are other actions in the Plan which will need to recognise the synergies and dependencies on soil health such as use of natural flood management solutions, SUDS, climate change mitigation and adaptation, though these do not always recognise the key role of healthy soils in the successful achievement of these aims.

Similarly, the aim that development is in the right places, avoiding best and most versatile agricultural land and in embedding the ‘environmental net gain’ principle reflects a natural capital approach in spatial planning which aims to minimise the impact of development on finite land and soil resources.

Sets out the Government’s planning policies for England and was revised in December 2024. The most relevant changes in the context of the Energy NPS are as follows:

Chapter 2: Achieving Sustainable Development now acknowledges that members of the UN have agreed to pursue the 17 Global Goals for Sustainable Development in the period to 2030. Minor edits have been made to phrasing, setting out clearly that the environmental objective is now to protect and enhance, and to improve biodiversity, where before the requirement was simply to contribute to these matters.

National Planning
Policy Framework
2024 (amended 2025)

The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development and supporting infrastructure in a sustainable manner. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. At a similarly high level, members of the United Nations – including the United Kingdom – have agreed to pursue the 17 Global Goals for Sustainable Development in the period to 2030. These address social progress, economic well-being and environmental protection.

The AoS will need to consider full range of sustainability issues set out in the NPPF. This is a core document and area of consideration.

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

These objectives should be delivered through the preparation and implementation of plans and the application of the policies in this Framework; they are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area.

The NPPF is accompanied by relevant Planning Practice Guidance as follows:

Air quality (2019): Provides guidance on how planning can take account of the impact of new development on air quality;

Appropriate assessment (2019): Guidance on the use of Habitats Regulations Assessment

Climate change (2019): Advises how to identify suitable mitigation and adaptation measures in the planning process to address the impacts of climate change.

Environmental Impact Assessment (2020): Explains requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

Flood risk and coastal change (2022): Advises how to take account of and address the risks associated with flooding and coastal change in the planning process.

Green Belt (2019): Advice on the role of the Green Belt in the planning system

Hazardous substances (2019): Explains planning controls relating to the storage of hazardous substances in England and how to handle development proposals around hazardous establishments.

Healthy and safe communities (2022): Guidance on promoting healthy and safe communities.

Historic environment (2019): Advises on enhancing and conserving the historic environment.

Land affected by contamination (2019): Provides guiding principles on how planning can deal with land affected by contamination.

Light pollution (2019): Advises on how to consider light within the planning system.

Natural environment (2024): Explains key issues in implementing policy to protect and enhance the natural environment, including local requirements.

Noise (2019): Advises on how planning can manage potential noise impacts in new development.

Open space, sports and recreation facilities, public rights of way and local green space (2014): Gives key advice on open space, sports and recreation facilities, public rights of way and the new Local Green Space designation.

Tree Preservation Orders and trees in conservation areas (2014): Explains the legislation governing Tree Preservation Orders and tree protection in conservation areas

Renewable and low carbon energy (2023): Guidance to help local councils in developing policies for renewable and low carbon energy and identifies the planning considerations.

Waste (2015): Provides further information in support of the implementation of waste planning policy.

Water supply, wastewater and water quality (2019): Advises on how planning can ensure water quality and the delivery of adequate water and wastewater infrastructure.

Chapter 14: Meeting the challenge of climate change, flooding and coastal change now includes the NPPF's support for the transition to net zero by 2050 and now includes overheating and water scarcity as climate impacts. Minor changes have been made to phrasing including the NPPF now outlines should help reduce greenhouse gas emissions, instead of before when it could help reduce greenhouse gas emissions and how local planning authorities should give significant weight to support energy efficiency and low carbon heating improvements instead of supporting these improvements.

New development should be planned for in ways that:

a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through incorporating green infrastructure and sustainable drainage systems; and

b) help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings in plans should reflect the Government's policy for national technical standards.

Local planning authorities should also give significant weight to the need to support energy efficiency and low carbon heating improvements to existing buildings, both domestic and non-domestic (including through installation of heat pumps and solar panels where these do not already benefit from permitted development rights). Where the proposals would affect conservation areas, listed buildings or other relevant designated heritage assets, local planning authorities should also apply the policies set out in chapter 16 of this Framework.

Environmental
Damage (Prevention
and Remediation)
(England) Regulations
2015 as amended by
The Environmental
Damage (Prevention
and Remediation)
(England)
(Amendment)
Regulations 2019

These regulations impose obligations on operators of certain activities requiring them to prevent or remediate environmental damage. They apply to damage to protected species, natural habitats, sites of special scientific interest (SSSIs), water and land.

Ensure that the issue of protection and enhancement of biodiversity and designated sites is addressed through an Objective in the AoS framework.

Planning for the
Future White Paper
2020

The Planning for the Future white paper sets out the Government's proposals for "once in a generation" reform of England's planning system. It proposes significant change to the current planning system in England to increase housing delivery, speed up and streamline both the plan-making and decision-making processes and better promote 'beautiful' design are supported.

The three pillars of the white paper are;

Noted – the NPS forms part of the wider planning system.

- Planning for development;
- Planning for beautiful and sustainable places; and
- Planning for infrastructure and connected places.

The Marine Management Organisation's (MMO) required character assessments for the north east, north west, south east and south west marine plan areas to support decision making through the marine planning process. This follows previous character assessments completed for the south and east marine plan areas.

MMO Marine
Character Areas
(2018)

The Marine Policy Statement (MPS, 2011) states that, when developing marine plans, visual, cultural, historical and archaeological impacts should be considered for all coastal areas. The MPS adds that any wider social and economic impacts of a development or activity on coastal landscapes and seascapes should also be considered, taking into account existing character and quality. The objectives of this project were:

The AoS will need
to consider Marine
Character Areas.

- to produce a report for each of the 4 marine plan areas (NE NW SE SW), comprising the marine character area profiles
- to create a single, unified GIS data layer – a national map of seascape for all marine plan areas.
- to use stakeholder engagement to validate, refine and agree the seascape character assessments

Natural England
(2023).
Geoconservation:
Principles and
Practice (NE802)

The publication explores the principles and practice of geoconservation, and sets out why geoconservation matters, who benefits, and how sites are selected and monitored. It focusses on the principles and practice of delivering geoconservation on the ground. It explores the threats which arise, approaches to site management, and the positive opportunities to deliver geoconservation which sometimes occur as a result of development proposals or land use change.

The AoS will need
to consider
potential impacts
on geodiversity
and geoheritage.

A range of real case studies are used to illustrate interventions which have been successful in conserving, enhancing and promoting geoheritage sites and some which have not. Although

primarily aimed at supporting geoconservation and nature recovery in England, the principles, practice and case studies set out in the publication should also be of relevance to anyone anywhere interested in or involved with conserving, recovering or enhancing geodiversity and geoheritage.

BIODIVERSITY

Biodiversity 2020: A strategy for England's wildlife and ecosystem services	This is a new biodiversity strategy for England which builds on the Natural Environment White Paper and provides a comprehensive picture of how the government are implementing international and EU commitments. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. It builds on the successful work that has gone before, but also seeks to deliver a real step change.	Ensure the protection and enhancement of biodiversity is included as an objective within the AoS.
Delivering 30by30 on land in England (2023)	In 2020, the government committed to protecting 30% of the UK's land by 2030 (30by30). This document demonstrates how the government is taking action to deliver 30by30 on land in England. It also introduces DEFRA's 30by30 criteria, which sets out how areas can contribute towards 30by30 in England, alongside a map showing the areas which can already count and broad areas with potential to count to 30by30 in future.	The AoS should establish objectives which align with the recommendations.
The Town and Country Planning (Trees Preservation) (England) Regulations 2012	The regulations are made under the powers conferred on the Secretary of State by sections 202A to 202G, 206(1)(b), 212, 213(1)(b), 316(1), 323 and 333(1) of the Town and Country Planning Act 1990. The Regulations require an application to be made for cutting down, topping, lopping or uprooting of any tree with a tree preservation order. This application must: • be made in writing to the authority • include all of the information specified on the form • be accompanied by:	The AoS will need to consider potential impacts on important trees.

- a plan which identifies the tree or trees to which the application relates;
- information specifying the work to be undertaken;
- a statement of the applicant's reasons for making the application; and
- appropriate evidence describing any structural damage to property or in relation to tree health or safety, as applicable.

These Regulations set long-term targets in respect of three matters within the priority area of biodiversity under section 1 of the Environment Act 2021. Regulations 4, 7 and 14 specify targets for the purposes of the Secretary of State's duty in section 1 of the 2021 Act to set a long-term target in respect of biodiversity. Regulation 11 specifies a target for the purposes of the Secretary of State's duty in section 3 of the 2021 Act to set a target in respect of a matter relating to the abundance of species.

Long-term biodiversity target: species' extinction risk target: The long-term biodiversity target for species' extinction risk is to reduce the risk of species' extinction by 2042, when compared to the risk of species' extinction in 2022.

The Environmental
Targets (Biodiversity)
(England) Regulations
2023

Measurement of species' extinction risk target: The target is met by 31st December 2042 if the extinction risk value for 2042 calculated in accordance with paragraph (2) has a greater value than the baseline value, with the extinction risk value for 2042 and the baseline value being expressed as values in a range from 1 to 0 where—

(a) a value of 1 would indicate that all baseline species were of Least Concern; and

(b) a value of 0 would indicate that all baseline species were Regionally Extinct.

(2) The Secretary of State must ensure that an extinction risk value for 2042 is calculated in 2042 using the same methodology that was used to calculate the baseline value(3), to indicate the aggregate risk of extinction for all baseline species at the time of its calculation.

The AoS will need to consider the risk of species' extinction 2042 target.

(3) In this regulation— “baseline species” means a species listed in the 2022 Red List Index for England; “the baseline value” means the value of 0.9070, being the value set out in the 2022 Red List Index for England to indicate the aggregate risk of extinction for all baseline species.

(4) In this regulation— (a)a species is considered to be of Least Concern when it is classified as such for the purposes of calculating the 2022 Red List Index for England;

(b)a species is Regionally Extinct when it is classified as such for the purposes of calculating the 2022 Red List Index for England.

Reporting date for the species’ extinction risk target: For the purposes of section 6(1) of the 2021 Act (environmental targets: reporting duties), the reporting date for the target in regulation 4 is 1st July 2043.

2050 Target

The Environmental
Targets (Woodland
and Trees Outside
Woodland) (England)
Regulations 2022

This regulation specifies a long-term target in accordance with section 1(1) of the 2021 Act in respect of the percentage of land in England covered by woodland and trees outside woodland. The target is that by the end of 31st December 2050 at least 16.5% of all land in England is covered by woodland and trees outside woodland.

Measurement

To determine whether the target in regulation 3 is met, the area of land covered by woodland and trees outside woodland is to be calculated by the Forestry Commission.

Building on ambitions outlined in the 25 Year Environment Plan, Government will focus on:

England Trees Action
Plan 2021-2024

Nature Recovery: The government will continue to improve the condition and increase the extent of most precious woodland habitats, such as protected sites and irreplaceable ancient woodlands.

The AoS will need
to consider the
2050 woodland
target.

The AoS must
recognise the
multi benefits
trees and

Levelling up through a thriving forest economy:.. The government will encourage demand for UK grown timber which can reduce the carbon footprint from imports and reduce emissions by replacing carbon-intensive materials and encourage innovative green finance for trees and woodlands. woodlands can provide.

Trees and woodlands for water and soil: The right trees and woodland in the right places along and near rivers and within water catchments present opportunities for improving water quality, for flood alleviation and nature recovery. Soil is critical to supporting trees and woodland and the government will improve the understanding of appropriate soil management to sequester carbon and protect this precious resource from degradation and inappropriate tree establishment.

Trees and woodlands for people in town and country: Trees and woodlands can cool the settlements, improve air quality and contribute to community cohesion and sense of place. The government will take steps to improve public access to trees and woodlands in a responsible way, encourage community-led tree planting and invest in partnerships with communities and local government.

Heritage and Landscape: Trees and woodlands are important features in the landscapes. The government will encourage greater landscape scale planning which will enhance and transform landscape character, while protecting and conserving heritage assets from inappropriate tree planting and during woodland management.

Trees outside woodlands: Trees throughout the environment such as wood pastures, ancient and veteran trees, scrub, scattered and hedgerow trees contribute to England's natural beauty and are important spaces for nature. The government must continue to protect and enhance these features.

Healthy, resilient trees and woodlands: The government will act now to help the trees and woodlands adapt, to enhance their resilience to stresses by reducing risks and encouraging greater diversity.

Government Forestry and Woodlands Policy Statement 2013	The Policy Statement is designed to enable the forestry sector to protect, improve and expand forestry assets so that these benefits can be maximised now and maintained for the future. The policy aims to ensure a forestry sector and woodland resource that keeps growing and providing benefits, despite threats such as pests and diseases and climate change, without requiring more government intervention. To achieve this the Policy Statement sites key objectives (in priority order): • Protecting the nation’s trees, woodlands and forests from increasing threats such as pests, diseases and climate change. • Improving their resilience to these threats and their contribution to economic growth, people’s lives and nature. • Expanding them to further increase their value.	It is important for the AoS to consider the protection of important trees, woods and forests.
30x30 Government Commitment 2024	The Prime Minister has committed in September 2020 to protect 30% of the UK’s land by 2030. Existing National Parks, Areas of Outstanding Natural Beauty and other protected areas already comprise approximately 26% of land in England. An additional 4% – over 400,000 hectares, the size of the Lake District and South Downs national parks combined – will be protected to support the recovery of nature. The government will work with the Devolved Administrations to agree an approach across the UK, and with landowners and civil society to explore how best to increase the size and value of our protected land. The government has committed significant new investment to support environmental enhancement and protection in England through the Nature for Climate Fund and the new Environmental Land Management (ELM) scheme.	The AoS must consider the 30% land protection target to support the recovery of nature.

This guidance introduces natural capital and how to apply it. The guidance is structured around 3 applications of natural capital framework:

Enabling a Natural Capital Approach guidance (2025)

- incorporating natural capital into policy or project appraisal, building on HM Treasury's Green Book Appraisal guidance
- natural capital accounting, building on the work of the Office for National Statistics to develop UK natural capital accounts

The AoS should consider the Natural Capital Approach

place-based implementation of natural capital principles

The Nature Recovery Network (NRN) is a major commitment in the government's 25 Year Environment Plan. By bringing together partners, legislation and funding, we can restore and enhance the natural environment.

The NRN will help us deal with 3 of the biggest challenges we face: biodiversity loss, climate change and wellbeing.

Establishing the NRN will:

Nature Recovery Network, Defra and Natural England 2024

- enhance sites designated for nature conservation and other wildlife-rich places - newly created and restored wildlife-rich habitats, corridors and stepping stones will help wildlife populations to grow and move
- improve the landscape's resilience to climate change, providing natural solutions to reduce carbon and manage flood risk, and sustaining vital ecosystems such as improved soil, clean water and clean air
- reinforce the natural and cultural diversity of our landscapes, and protect our historic natural environment
- enable us to enjoy and connect with nature where we live, work and play - benefiting our health and wellbeing

The AoS should advocate the establishment of the NRN.

Through our work to create the NRN, by 2042 we will:

- restore 75% of protected sites on land (including freshwaters) to favourable condition so nature can thrive
- create or restore 500,000 hectares of additional wildlife-rich habitat outside of protected sites
- recover threatened and iconic animal and plant species by providing more, diverse and better connected habitats
- support work to increase woodland cover
- achieve a range of environmental, economic and social benefits, such as carbon capture, flood management, clean water, pollination and recreation.

The Nature For Climate Peatland Grant Scheme (NCPGS), administered by Natural England, has awarded Restoration Grant funding to five successful applicants. Over the next four years they will each receive a share of £16 million from the Nature for Climate Fund, to restore peatland. This is Natural England's first round of NCPGS Restoration Grants, with more rounds planned for the next two years.

Nature for Climate Fund

Peatlands are Earth's largest terrestrial carbon store, holding more than twice the amount of carbon in all the world's forests. They cover 10.9% of England's land area. Unfortunately, 87% of our peatlands are degraded. In this state, they do not capture and store carbon but emit an estimated 10 million tonnes of carbon dioxide equivalent every year.

The NCPGS aims to capture this carbon by setting 35,000 ha of degraded peatland on a path to restoration by 2025. This will help deliver the UK's Net Zero target. It will contribute to the Nature Recovery Network with wider benefits to biodiversity, water quality and natural flood management

The Green Book, Central government guidance on appraisal and evaluation 2022

The Green Book is guidance issued by HM Treasury on how to appraise policies, programmes and projects. It also provides guidance on the design and use of monitoring and evaluation before, during and after implementation.

The AoS must consider the restoration of peatland to support the recovery of nature.

The AoS should advocate accounting for social cost of GHG

The key specialisms involved in public policy creation and delivery, from policy at a strategic level to analysis, commercial strategy, procurement, finance, and implementation must work together from the outset to deliver best public value. The Treasury's five case model is the means of developing proposals in a holistic way that optimises the social / public value produced by the use of public resources.

Aspects of particular interests to the AoS:

Greenhouse gas emissions and energy efficiency values - the creation of GHGs has a social cost based on its contribution to climate change. To estimate the social cost of an intervention it is necessary to include the costs of emitting GHGs. Energy efficiency has a direct social value, in addition to the value of a reduction in GHGs, as the energy saved itself has a direct benefit to society (similarly, activities that create extra demand for energy have a direct energy cost).

Assessing and valuing effects on the natural environment - Understanding natural capital provides a framework for improved appraisal of a range of environmental effects alongside potentially harmful externalities such as air pollution, noise, waste and GHGs. Natural capital stock levels should be systematically measured and monitored for the social costs and benefits of their use to be understood and controlled (see report to the Natural Capital Committee). A focus solely on the marginal valuation of a loss in services may overlook the potential for large reductions in stocks. This could then lead to dramatic reductions in present or future services. Similarly, the cumulative effects of multiple decisions on natural capital stocks need to be considered. Where appropriate therefore, and particularly for major impacts, assessments should consider whether affected natural assets are being used sustainably.

Vulnerability to climate change - The Climate Change Risk Assessment (CCRA) should be used to consider current and potential future climate risks and vulnerability to risks of an intervention. The CCRA provides a framework that quantifies interactions with climate risk. It enables a consideration of the role of climate in altering the scale and distribution of costs and

and effects on natural environment and use of Climate Change Risk Assessment (CCRA to consider current and potential future climate risks and vulnerability to risks of energy projects.

benefits over the lifetime of the proposal. Supplementary guidance, Accounting for the effects of Climate Change provides steps to determine whether climate risks are relevant in relation to the appraisal of an intervention.

In January 2023, Natural England launched the Green Infrastructure (GI) Framework to support the creation of good quality Green Infrastructure which maximises benefits for people and nature.

Good quality Green Infrastructure (GI) has an important role to play in our urban and rural environments for improving health and wellbeing, air quality, nature recovery and resilience to and mitigation of climate change, along with addressing issues of social inequality and environmental decline.

Natural England
Green Infrastructure
Framework

The Green Infrastructure Framework is a commitment in the Government's 25 Year Environment Plan. It supports the greening of our towns and cities and connections with the surrounding landscape. Networks of green and blue spaces and other natural features can bring big benefits for nature and climate, health and prosperity. At present access to green and blue spaces varies considerably across the country, and there are opportunities for these important assets to be better managed for the environment and to deliver a wider range of multifunctional benefits.

The GI Framework will help local planning authorities and developers meet requirements in the National Planning Policy Framework to consider GI in local plans and in new development. It can support better planning for good quality GI, and help to target the creation or improvement of GI, particularly where existing provision is poorest.

AoS should promote the important role of good quality Green Infrastructure.

Natural England's
Green Infrastructure
Standards for
England 2023

The Green Infrastructure Standards are a key component of the Green Infrastructure Framework. The Standards aim to provide clarity on the quality and quantity of green infrastructure needed to deliver climate change adaptation, net zero and well being benefits. They define what good green infrastructure "looks like". The five headline Standards are:

- Green Infrastructure Strategy Standard

AoS should promote the important role of good quality

- Accessible Greenspace Standard
- Urban Nature Recovery Standard
- Urban Greening Factor Standard
- Urban Tree Canopy Cover Standard

Green
Infrastructure.

The Headline Green Infrastructure Standards distinguish the recommended levels of achievement for major new developments and for area wide application.

This is the third adaptation report Natural England has produced to report under the Adaptation Reporting Power (ARP) of the Climate Change Act 2008. The report outlines the following themes in developing response to the biodiversity and climate crises in an integrated way:

Natural England's
climate change risk
assessment and
adaptation plan 2021
(published 2022)

Climate change
adaptation reporting:
third round

- planning climate change adaptation with the aim of restoring ecological process at a landscape scale as part of nature recovery to enhance resilience and accommodate inevitable change.
- working on adaptation can deliver multiple benefits, including integrating climate change mitigation, biodiversity and enhancing the quality of life for people.
- recognising the benefits of local level adaptation and delivering adaptation in a place-based way.
- using a natural capital and ecosystem approach to account for the multiple benefits that nature provides to society
- developing adaptive management that takes account of change in the natural world both in the policy advice and delivery space.
- ensuring different work programmes have a joined-up approach to adaptation.
- developing the evidence base to support practical adaptation, including monitoring and evaluation of adaptation actions.

AoS should
consider risks and
opportunities to
biodiversity of
climate change
adaptation.

- developing a joined-up approach to Nature-based Solutions which deliver mitigation and adaptation with measurable benefits for nature and people.

Key overarching risks and opportunities:

- Risks to the viability of the Nature Recovery Network and the recovery of threatened species and habitats
- Risks to the status of protected sites for biodiversity and geodiversity
- Risks to the ability of the SSSI network, Marine Protected Area (MPAs), NNRs and protected landscapes to adapt to climate change.
- Risks to natural capital and its contribution to agriculture, fisheries and sustainable development including farm advice and net gain.
- Risks to the viability of natural areas for people to access and connect with nature.
- Risks and Opportunities for different species and habitats under changing climatic conditions.
- Opportunities for landscape scale measures to tackle climate change that enhance the natural environment.
- Opportunities for nature recovery and nature-based solutions to help nature and society adapt to climate change.
- Opportunities for nature-based solutions to provide additional space for people to connect with nature and cope with climate change.

Nature Networks
Evidence Handbook
(NERR081) Natural
England 2020

The handbook aims to help the designers of nature networks by identifying the principles of network design and describing the evidence that underpins the desirable features of nature networks. It builds on the Making Space for Nature report of Lawton et al. 2010), outlining some of the practical aspects of implementing a nature network plan, as well as describing the tools that are available to help in decision making.

The AoS will need to consider the implementation of nature networks.

To make a nature network, in contrast to an ecological network, we need to involve people from the earliest stages in planning and design, to create an overarching vision for the network, taking into account their needs and the services that a landscape provides to society.

When developing a more detailed plan for a nature network, it is important to consider the constraints and opportunities provided by the landscape, geology and ecosystems within the landscape, and the need to build resilience to climate change.

A suite of ecological rules of thumb to aid practitioners are provided, including a hierarchy of priority actions: (a) improve core wildlife sites; (b) increase the size of core sites; (c) increase the number of core sites; (d) improve the 'permeability' of the surrounding landscape for the movement of wildlife; and (e) create corridors of connecting habitat. In addition, there is a need to develop a number of Large Nature Areas (c. 5-12,000 ha) within a country that will provide centres from which wildlife will brim over into the countryside.

The Environmental Benefits from Nature Tool - Beta Test Version, Natural England 2024

The Environmental Benefits from Nature tool is designed to work alongside the Biodiversity metric calculation tool and provide developers, planners and other interested parties with a means of enabling wider benefits for people and nature from biodiversity net gain. The tool uses a habitat-based approach to provide a common and consistent means of considering the direct impact of land use change across 18 ecosystem service services.

The AoS should advocate the use of this tool.

The Statutory Biodiversity Metric Calculation Tool, Defra, 2023

It has been developed by Natural England and the University of Oxford in partnership with Defra, the Forestry Commission and the Environment Agency to support Government's 25 Year Environment Plan commitment to expand net gain approaches to include wider Natural Capital benefits such as flood protection, recreation and improved water and air quality.

The Statutory Biodiversity Metric can be used or specified by any development project, consenting body or landowner that needs to calculate biodiversity losses and gains for terrestrial and/or intertidal habitats.

The AoS should advocate the latest version of

Carbon Storage and Sequestration by Habitat, Natural England 2021	Achieving ‘net zero’ greenhouse gas (GHG) emissions by 2050 is a statutory requirement for the UK and England. It will require major changes in the way we manage the land, coast, and sea, alongside decarbonisation of the energy, transport and other sectors. The natural environment can play a vital role in tackling the climate crisis as healthy ecosystems take up and store a significant amount of carbon in soils, sediments and vegetation. Alongside many other negative impacts, the destruction and degradation of natural habitats has resulted in the direct loss of carbon stored within them. Restoring natural systems can start to reverse this damage at the same time as supporting and enhancing biodiversity, alongside delivering co-benefits for climate change adaptation, soil health, water management and society.	the statutory biodiversity metric. The AoS should advocate the protection and restoration of natural habitats as they deliver carbon storage benefits alongside many other benefits.
Climate Change Adaptation Manual: Evidence to support nature conservation in a changing climate, RSPB, Natural England, 2020	The need for climate change adaptation has become widely recognised in the last 20 years. The environmental sector was one of the first to identify the need and to start developing approaches to adaptation. Initially much of the focus was on identifying general principles. This was an essential first step, but adaptation needs to be embedded into decision-making in specific places and circumstances. There can be a big gap between general principles and specific applications. Effective adaptation requires local knowledge and experience, combined with relevant scientific information and an understanding of practical options. It will be assisted by sharing good practice and evidence of what techniques have worked in particular places and situations. Utilise the concept of sustainable adaptation to look at the prerequisites for a long-term, integrated approach to adaptation, including the synergies and trade-offs associated with cross-sectoral adaptation. Four key principles: • Adaptation should aim to maintain or enhance the environmental, social and economic benefits provided by a system, while accepting and accommodating inevitable changes to it.	The AoS should embed sustainable climate change adaptation on energy infrastructure decision-making processes

- Adaptation should not solve one problem while creating or worsening others. Action that has multiple benefits and avoids creating negative effects for other people, places and sectors should be prioritised.
- Adaptation should seek to increase resilience to a wide range of future risks and address all aspects of vulnerability, rather than focusing solely on specific projected climate impacts.
- Approaches to adaptation should be flexible and not limit future action

Adaptation often needs to be developed with less knowledge and more uncertainty than is usual when making management decisions. Accepting uncertainty and adopting approaches such as adaptive management to deal with it is widely advocated.

As part of the Government's legally binding commitments to end the historic and on-going declines of nature in England and for nature to recover, local nature recovery strategies are required. The Secretary of State for Environment, Food and Rural Affairs has appointed 48 responsible authorities to lead on preparing a local nature recovery strategy for their area. They will identify practical, achievable proposals developed with the input of people who know and understand the area. Together these 48 strategy areas cover the whole of England with no gaps or overlaps.

Local Nature
Recovery Strategies
Policy Paper June
2023

This paper provides further information on:

- What local nature recovery strategies will look like
- How they will be prepared
- Who can be involved with preparing local nature recovery strategies
- How local nature recovery strategies will be delivered
- When strategies will be reviewed and updated.

The AoS will need to consider local nature.

The Biodiversity Gain Requirements Regulations 2024	These regulations prescribe categories of planning permission to which the biodiversity gain requirement that would otherwise be imposed as a general condition of planning permission do not apply. They define what amounts to “irreplaceable habitat” for the purposes of Part 2 of Schedule 7A to the Town and Country Planning Act 1990 and modifies the application of that Schedule to planning permission in relation to such habitat. This narrow and focused list of exemptions has been deemed necessary to keep the policy ambitious but proportionate:	While these regulations are not directly relevant to Nationally Significant Infrastructure Projects and apply to developments under the Town and Country Planning Act, it is considered important to note wider requirements for Biodiversity Net Gain and ensure that Biodiversity Gain is considered within the AoS framework.
	Temporary exemption for small developments - To lessen the initial burden on Local Planning Authorities’ processing capacity for biodiversity gain, these Regulations will extend the transition period for small sites until April 2024.	
	De minimis exemption - This exemption will ensure the biodiversity net gain planning condition is not applied to development of such a small scale that it would result in negligible or no loss of habitat value.	
	Householder applications - The biodiversity net gain planning condition will not apply to householder applications because of the expected low impact on biodiversity.	
	High Speed Railway Transport Network - The Exemption for the High Speed Railway Transport remains in place to cover development ancillary to the remaining phases of the high speed transport network.	
	Biodiversity gain sites - This exemption removes the biodiversity net gain planning condition for projects which only enhance biodiversity for the purpose of net gain.	
	Self-build and custom build applications - The biodiversity gain planning condition will not apply in relation to planning permission for small-scale self-build or custom build development, where local planning authorities are satisfied that individuals have had the primary input into the final design and layout of a house to be occupied as homes for those individuals.	

Making Space for Nature 2010	An independent review, chaired by Professor Sir John Lawton, of England's wildlife sites and ecological network considered whether England's collection of wildlife areas represented a coherent and robust ecological network that would be capable of responding to the challenges of climate change and other pressures, was published in 2010, with recommendations to help achieve a healthy natural environment that will allow plants and animals to thrive. The Making Space for Nature review summarised what needed to be done in four words: more, bigger, better and joined, and set out some guiding principles and 24 recommendations.	The AoS will need to consider local nature ecological networks.
Defra Policy paper: Notice of designation of sensitive catchment areas 2024	Department for Environment, Food and Rural Affairs (Defra) published a notice on 25 January 2024 which outlines 19 catchment areas which have been designated as "sensitive for phosphorus or nitrogen where a habitats site is wholly or partly in England is considered in an unfavourable condition by virtue of pollution from nutrients in the water from one of both of these nutrients." The areas include SACs, SPAs, Sites of Special Scientific Interest (SSSIs) and Ramsar sites. In designated catchments, water companies have a duty to ensure wastewater treatment works serving a population equivalent over 2,000 meet specified nutrient removal standards by 1 April 2030 where the designation takes effect from 25 January 2024. Competent authorities (including local planning authorities) considering planning proposals for development draining via a sewer to a wastewater treatment works subject to the upgrade duty are required to consider that the nutrient pollution standard will be met by the upgrade date for the purposes of Habitats Regulations Assessments.	The AoS will need to consider sensitive catchment areas.
England Peat Action Plan 2021	The England Peat Action Plan sets out the government's long-term vision for the management, protection and restoration of our peatlands, so that they provide a wide range of benefits to wildlife, people and the planet. The 25 Year Environment Plan set out the ambition to create and deliver a new ambitious framework for peat restoration in England. The plan sets out how it will achieve this and what it will deliver which include:	The AoS must consider the protection and restoration of peatland.

Secure our peatlands’ carbon store so they meet their contribution to Net Zero by 2050. This cannot be achieved by only restoring upland peat but will require significant changes to how we manage our lowland peat.

Deliver Natural Flood Management and improve water quality, to increase drought resilience and the sustainability of our water supplies.

Protect and restore our peatland habitats so they are healthy, well-functioning ecosystems rich in wildlife. These wildlife rich peatlands will form a key part of our Nature Recovery Network.

Drive private investment in peatland restoration through natural capital markets that allow the accreditation and sale of the ecosystems services that healthy peatlands can provide

Protect the historic environment of peatlands so the important evidence of our past can be preserved for the future, and ensure that restoration projects deliver cultural heritage, education and enjoyment, alongside other public goods.

Management of Hedgerows (England) Regulations 2024	These regulations detail the management of hedgerows in England. The document outlines the hedgerows to which the regulations apply, prescribed criteria and general maintenance requirements for “important” hedgerows. The regulations lay out offences and enforcement measures.	Consider the protection of important hedgerows within the AoS.
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LANDSCAPE

National Character Areas (England), Natural England 2023	A National Character Area (NCA) is a natural subdivision of England based on a combination of landscape, biodiversity, geodiversity and economic activity. There are 159 Character Areas, each of which is distinctive with a unique 'sense of place'. These broad divisions of landscape form the basic units of cohesive countryside character, on which strategies for both	The AoS needs to consider national character areas.
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ecological and landscape issues can be based. The Character Area framework is used to describe and shape objectives for the countryside, its planning and management.

This circular is relevant to those bodies with appropriate statutory functions and will be of interest to all those who have a key role in contributing to the success of the Parks, including landowners and land managers, private companies and voluntary bodies. In relation to the Parks, it sets out:

English National
Parks and Broads UK
Government Vision
and Circular 2010

- A vision for the English National Parks and the Broads for 2030
- The key outcomes the Government is seeking over the next five years to ensure early progress towards the vision and suggested actions for achieving those outcomes;
- The key statutory duties of the National Park authorities (NPAs) and the Broads Authority (together 'the Authorities') and how they should be taken forward
- Policy on governance of the Authorities
- The contributions needed from others.

The AoS should include objectives specific to the protection of landscape features and designated areas including National Parks and Broads UK.

WATER ENVIRONMENT

The National Flood
and Coastal Erosion
Risk Management
Strategy for England
(FCERM) 2020

The Flood and Water Management Act 2010 places a statutory duty on the Environment Agency to develop a National Flood and Coastal Erosion Risk Management Strategy for England. This strategy describes what needs to be done by all risk management authorities (RMAs) involved in flood and coastal erosion risk management for the benefit of people and places.

RMAs must exercise their flood and coastal erosion risk management (FCERM) activities, including plans and strategies, consistently with the strategy. Through its 'strategic overview' role the Environment Agency exercises its strategic leadership for all sources of flooding and coastal change. This strategy seeks to better manage the risks and consequences of flooding from rivers, the sea, groundwater, reservoirs, ordinary watercourses, surface water, sewers and coastal erosion.

The AoS must consider flood and coastal erosion risk management for the benefit of people and places.

	The strategy provides a framework for guiding the operational activities and decision making of practitioners. The strategy sets out the long-term delivery objectives the nation should take over the next 10 to 30 years. It also includes shorter term, practical measures RMAs should take working with partners and communities.	
The Environmental Targets (Marine Protected Areas) Regulations 2023	The regulations create a legally binding target that requires at least 70% of protected features in MPAs to be in a favourable condition by 31 December 2042, with the remaining features to be in a recovering condition. This target will set, for the first time, a time-bound target for the recovery of protected features.	The AoS framework should consider protection and enhancement of MPAs
Plan for Water: our integrated plan for delivering clean and plentiful water, 2023	The Department for Environment, Food and Rural Affairs (Defra) Plan for Water sets out the actions we will take to: • transform management of the water system • clean up the water environment • create a sustainable supply of water for people, businesses and nature The plan covers both the water environment, how clean it is, and water resources, how much of it we have. It brings together the significant action already taken, along with more investment, stronger regulation and tougher enforcement on those who pollute.	The AoS framework should consider protection and enhancement of the water environment
National Framework for Water Resources 2025: water for growth, nature and a resilient future	This national framework explores England's long term water needs, setting out the scale of action needed to ensure resilient supplies and an improved water environment. The Framework's aims are to: • support long-term water resources planning across all sectors of use so that it enables growth • enable sustainable abstraction of water across catchments	The AoS framework should consider protection and enhancement of the water environment as a resource

- strengthen multi-sector planning and resilience
- support an integrated approach to water management

Water Resource Management Plan (WRMP)	WRMPs are required by water companies within England and Wales, to set out how a secure supply of water will be achieved for customers and a protected and enhanced environment. The duty to prepare and maintain a WRMP is set out in sections 37A to 37D of the Water Industry Act 1991. They must be prepared every 5 years and reviewed annually.	The AoS framework should consider the protection, enhancement and resilience of the water environment.
Abstraction licensing strategies	The Environment Agency controls how much water is taken with a permitting system. The Environment Agency regulate existing licences and grant new ones. To do this they use: • the catchment abstraction management strategy (CAMS) process • abstraction licensing strategies The publication ‘managing water abstraction’ sets out the approach and regulatory framework within which the Environment Agency will manage water resources.	The AoS framework should consider the protection, enhancement and resilience of the water environment.
Regional Water Resources Management Plans	Following consultation on draft water resources management plans, water companies have now published statements of response and revised draft plans. These statements build on the draft plans and include changes in response to consultation feedback, and an update to the guidelines following policy and legislation changes. The revised draft plans have significant improvements and mark a key milestone before plans are finalised. The Department for Environment, Food and Rural Affairs (Defra) has written to companies individually about next steps for their water resources management plan, with many requiring further actions before the plans can be finalised. These plans are a positive step forward as, upon implementation, they should:	The AoS framework should consider the protection, enhancement and resilience of the water environment.

- improve resilience to extreme droughts
- ensure we are prepared for the future impacts of climate change
- serve a growing population and thriving economy
- mark a transition to longer term planning to protect and improve the environment

The 5 regional water resources groups have produced new plans that cross water company boundaries and work with other sectors to ensure optimum solutions to securing future water supplies and environmental resilience. These plans include adopting a long-term environmental destination to protect and improve water environments of the region. The regional plans are the result of notable work and collaboration across the regional group members, and mark a step change to strategic water resources planning. Water Resources East finalised its regional plan in late 2023. We are anticipating that other regions will finalise their plans during 2024.

HUMAN HEALTH

Public Health England – Strategy (2020-2025)	This strategy outlines the focus of Public Health England to help protect people and help people to live longer in good health. It notes that the most important contributors to a life in good health, including mental health, are to have a job that provides a sufficient income, a decent and safe home and a support network. Among a range of issues the strategy also sets out the need for cleaner air	AoS needs to consider the need for improving air quality, as well as the need to consider effects on vulnerable groups as well as the wider population.
Contaminated Land (England) Regulations 2006 as amended by the Contaminated	Outlines the regulations on contaminated land in order to prevent new land becoming contaminated by polluting substances whilst also tackling historic contamination of sites as it poses risks to human health and the environment.	Ensure that the issue of contamination is addressed through

Land (England)
(Amendment)
Regulations 2012

an Objective in the
AoS framework.

AIR QUALITY

These Regulations set an annual mean concentration target. The target is that by the end of 31st December 2040 the annual mean level of PM2.5 in ambient air must be equal to or less than 10 µg/m³ (“the target level”).

The Environmental
Targets (Fine
Particulate Matter)
(England) Regulations
2023

The annual mean concentration target is met by 31st December 2040 if, at every relevant monitoring station, the annual mean level of PM2.5 in ambient air, calculated in accordance with regulation 15 and rounded to the nearest whole number of µg/m³, is equal to or less than the target level in the year 2040.

The AoS will need
to consider the
PM2.5 annual
level target

Reporting date

For the purposes of section 6(1) of the 2021 Act the reporting date for the annual mean concentration target is 15th July 2041.

SOILS

Safeguarding our
Soils: a strategy for
England 2011

The purpose of this strategy is to highlight the areas in which soil will be prioritised and to focus attention on tackling degradation threats. The vision of this paper is to try and ensure that by 2030, all England’s soils will be managed sustainably and depredation threats tackled successfully and that this will improve the quality of England’s soils and safeguard their ability to provide essential services for future generations. Key topics include:

- Better protection for agricultural soils
- Protecting and enhancing stores of soil carbon
- Building the resilience of soils to a changing climate

Ensure that
protection of soil
resources is
included as an
objective within
the AoS
framework.

- Preventing soil pollution
- Future research and monitoring.

The Outcome Indicator Framework is a comprehensive set of indicators describing environmental change that relates to the 10 goals within the 25 Year Environment Plan. The framework contains 66 indicators, arranged into 10 broad themes.

Healthy Soils

Indicator E7: Healthy Soils underpins the multiple functions of soils in food production, supporting wildlife, regulating water and regulating climate. More work is being done to define exactly what the indicator will include but it could include physical properties (such as a measure of soil structure), chemical properties (such as soil carbon, nutrients and pH), bare ground (soil) and a measure of soil biological activity. This indicator is not limited to agricultural soils.

Ensure that protection of soil resources is included as an objective within the AoS framework.

WASTE

These regulations implement the revised EU Waste Framework Directive 2008/98 which sets requirements for the collection, transport, recovery and disposal of waste. It outlines that it is a requirement for businesses to confirm that they have applied the waste management hierarchy when transferring waste and include a declaration to this effect on their waste transfer note or consignment note. The regulations apply to businesses that:

Waste (England and Wales) Regulations 2011 as amended by The Waste (England and Wales) (Amendment) Regulations 2014

- Produce waste
- Import or export waste
- Carry or transport waste
- Keep or store waste
- Treat waste
- Dispose of waste
- Operate as waste brokers or dealers

Ensure that waste minimisation and resource efficiency are included as an Objective within the AoS.

National Review of Waste Policy in England 2011	This document is a review of waste policy in England and is guided by a waste hierarchy which is a guide to sustainable waste management and a legal requirement. Key objectives are the use of more sustainable approaches to the use of materials and to improve the service to householders and businesses in order to deliver environmental benefits and support economic growth. This review covers a range of topics including: • Sustainable use of materials and waste prevention • Regulations and enforcement • Food waste • Energy recovery • Infrastructure and planning • Next steps in waste policy.	Ensure that waste minimisation and resource efficiency are included as an Objective within the AoS.
Waste Management Plan for England 2021	The Waste Management Plan for England is an analysis of the current waste management situation in England. The plan does not introduce new policies or change how waste is managed in England. Its aim is to bring current waste management policies together under one national plan. The Plan does not apply to certain wastes covered by other legislation (e.g. radioactive waste).	No implications. Informative only.
Waste Prevention Programme for England 2023	This Programme sets out the government's view of the key roles and actions which should be taken to move towards a more resource efficient economy. As well as describing the actions the government is taking to support this move, it also highlights actions businesses, the wider public sector, the civil society and consumers can take to benefit from preventing waste.	Ensure that waste minimisation and resource efficiency are included as an Objective within the AoS.
Resources and Waste Strategy for England,	This strategy sets out how material resources will be preserved by minimising waste, promoting resource efficiency and moving towards a circular economy in England. It	The AoS should embed waste

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DEFRA and Environment Agency 2018	combines actions we will take now with firm commitments for the coming years and gives a clear longer-term policy direction in line with our 25 Year Environment Plan. It sets out to double resource productivity and eliminate avoidable waste of all kinds (including plastic waste) by 2050, minimise the damage caused to our natural environment by reducing and managing waste safely and carefully and deal with waste crime. A more circular economy (re-use, remanufacture, repair, recycle) will keep resources in use for as long as possible. It will allow us to extract maximum value from them, then recover and regenerate products and materials at the end of their lifespan.	minimisation, resource efficiency and circular economy in energy infrastructure decision making processes
National Planning Policy for Waste 2014	This document sets out detailed waste planning policies. It should be read in conjunction with the National Planning Policy Framework and National Policy Statements for Waste Water and Hazardous Waste. The policy provides guidance to local planning authorities in planning for future facilities and determining planning applications.	The AoS should consider including objectives to recommend that waste generated following new energy development is dealt with in a sustainable manner, consistent with the waste hierarchy.
The Environmental Targets (Residual Waste) (England) Regulations 2023	The Regulations specify the standard to be achieved in respect of the target and the date by which it must be achieved. Regulation 2 makes provision in respect of a long-term target to ensure that the total mass of residual waste per head of population in England does not exceed 287 kilograms by 31st December 2042.	The AoS must consider residual waste per head of population target
NOISE		

Noise Policy
Statement for
England 2010

The objectives of the Noise Policy Statement for England (NPSE) sets out three noise levels to be defined by the noise assessor: These are as follows:

- NOEL – No Observed Effect Level. This is the level below which no effect can be detected. Below this level there is no detectable effect on health and quality of life due to noise.
- LOAEL – Lowest Observed Adverse Effect Level. This is the level above which adverse effects on health and quality of life can be detected.
- SOAEL – Significant Observed Adverse Effect Level – This is the level above which significant adverse effects on health and quality of life can occur.

The NPSE considers that the noise levels above the SOAEL would be seen to have, by definition, significant adverse effects and would be considered unacceptable. Where the assessed noise levels fall between the LOAEL and the SOAEL noise levels the policy statement requires that:

“all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development. This does not mean that such adverse effects cannot occur but that efforts should be focused on minimising such effects”

Where noise levels are below the LOAEL it is considered there will be no adverse effect. Once the noise levels are below the NOEL there will be no observable change.

Environmental Noise
(England) Regulations
(2006) (as amended)

The Environmental Noise (England) Regulations 2006 (as amended) covers noise from roads, rail, aviation and industry. The regulations seek to manage the impact of environmental noise through the preparation and adoption of strategic noise mapping in relation to agglomerations, major roads, major railways and major airports, every 5 years and the preparation and implementation of Noise Action Plans to manage noise issues in relation to those areas and noise sources.

Ensure that the health and well-being of people is addressed through an objective in the AoS framework and that noise issues are considered.

Ensure that AoS ensures environmental noise is addressed.

The Noise Action Plans identify Important Areas (areas exposed to the highest levels of noise). The relevant authorities are responsible for the investigation of these areas and, where appropriate, decisions around what noise mitigation is appropriate

Wales

CROSS-THEMATIC

Environmental
Damage (Prevention
and Remediation)
(Wales) Regulations
2009, updated with
Amendment (No. 2)
Regulations 2015

These regulations impose obligations on operators of certain activities requiring them to prevent or remediate environmental damage. They apply to damage to protected species, natural habitats, sites of special scientific interest (SSSIs), water and land.

Ensure that the issue of protection and enhancement of biodiversity and designated sites is addressed through the AoS framework.

Future Wales – The
National Plan 2040

The Planning (Wales) Act 2015 (the 2015 Act) requires the Welsh Government to develop a National Development Framework (NDF). Wales's first NDF, Future Wales: the National Plan 2040 (Future Wales), was published in February 2021.

Future Wales sets out the direction for development in Wales to 2040. It is a development plan with a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of our communities.

Future Wales sets out a 20 year land use framework and must be reviewed at least every five years. It is a material consideration in planning decisions and all Strategic Development Plans (SDPs) and Local Development Plans (LDPs) must be in conformity with it.

The AoS should consider objectives which promote resilience to the impacts of climate change.

The purpose of Future Wales is to:

- set out where nationally important growth and infrastructure is needed and how the planning system can deliver it;
- provide direction for SDPs and LDPs;
- support the determination of applications under the Developments of National Significance (DNS) regime;
- sit alongside PPW, which provides the context for land use planning; and
- support national economic, transport, environmental, housing, energy and cultural strategies and ensure they can be delivered through the planning system. The Plan recognises the role that nuclear (GW-scale, SMRs and AMRs) could play in providing low carbon energy and bringing economic benefits to the North-West of Wales.

Legislation introduced by the National Assembly for Wales enabling the planning and management of the natural resources of Wales in a more sustainable, pro-active and joined-up way than was previously possible. The Act has seven main parts:

- Sustainable management of natural resources
- Climate change
- Charges for carrier bags
- Collection and disposal of waste
- Fisheries for shellfish
- Marine licensing
- Flood and coastal erosion committee

Environment (Wales)
Act 2016

The AoS should give particular regard to sustainable management of natural resources, climate change, fisheries and marine licencing and flood and coastal erosion.

Wellbeing of Future
Generations (Wales)
Act 2015

The act explains what is meant by ‘sustainable development’ and requires public bodies to carry out sustainable development. It requires bodies to set well-being objectives that are to

The AoS should include objectives that measure

	contribute to the achievement of well-being goals and to take steps to meet those objectives, and further requires indicators that measure progress towards achieving the well-being goals. In addition, Well Being Plans, prepared by Public Service Boards under the Wellbeing of Future Generations (Wales) Act assess the state of well being in that area and set local objectives accordingly.	sustainability, and be considerate of well-being objectives/goals.
State of Natural Resources Report (SoNaRR) for Wales 2020	This is Wales' second assessment of sustainable management of natural resources, including Wales' impact globally. It assesses the extent to which natural resources in Wales are being sustainably managed, and recommends a proactive approach to building resilience. The report links the resilience of Welsh natural resources to the well-being of the people of Wales.	The AoS should include objectives reflective of natural resource uptake, sustainable management and reliance.
State of Natural Resources Report 2025 - interim report 2024	Natural Resources Wales are currently working on the third State of Natural Resources Report, due to be published at the end of 2025. This Interim Report outlines their plans for SoNaRR2025, highlights key new evidence on what has changed since SoNaRR 2020, and the main messages that are emerging from that evidence. The third SoNaRR will address how Natural Resources Wales will respond to challenges including nature loss, climate change, pollution and waste, integrated action, and a regenerative economy to finance nature recovery.	The AoS should include objectives reflective of natural resource uptake, sustainable management and reliance.
Natural Resources Policy (Welsh Government) 2017	The focus of the Natural Resources Policy is the sustainable management of Wales' natural resources, to maximise their contribution to achieving goals within the Well-being of Future Generations Act. The policy sets out three National Priorities: • Delivering nature-based solutions, • Increasing renewable energy and resource efficiency,	The AoS should consider the uptake of natural resources during construction and ensure resource

- Taking a place-based approach

The Policy sets the context for Area Statements, ensuring that the national priorities for delivering sustainable management of natural resources inform the approach to local delivery.

Key policy areas were identified as being important to deliver Natural Resources Policy. One such policy area is energy, including nuclear energy – which can drive sustainable growth.

Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs, stated below).

There are a number of goals and objectives in relation to the following topics:

- People and Places: Achieving Well-being Through Placemaking
- Strategic and Spatial Choices
- Active and Social Places
- Productive and Enterprising Places
- Distinctive and Natural Places

The document offers advice and guidance, for example, how local planning authorities should plan, manage and write Local Development Plans.

PPW and Future Wales are supported by a range of other policy and guidance documents, including Technical Advice Notes (TANs) which contain detailed guidance in specific areas.

Technical Advice Notes (TANs):

TAN 2: Planning and Affordable Housing (2006)

TAN 3: Simplified Planning Zones (1996)

efficiency is integrated in development design through objectives specific to sustainable and efficient resource use.

The AoS objectives should address environmental protection including protecting biodiversity, conserving landscapes, preserving the historic environment, protecting water resources and the coastal environment, protecting land quality and air quality. It should also include objectives which

Planning Policy Wales
(Edition 12, February
2024)

TAN 4: Retail and Commercial Development (2016)

TAN 5: Nature Conservation and Planning (2009)

TAN 6: Planning for Sustainable Rural Communities (2010)

TAN 7: Outdoor Advertisement Control (1996)

TAN 10: Tree Preservation Orders (1997)

TAN 11: Noise (1997)

TAN 12: Design (2016)

TAN 13: Tourism (1997)

TAN 14: Coastal Planning (March 1998)

TAN 15: Development and Flood Risk (2004)

TAN 16: Sport, Recreation and Open Space (2009)

TAN 18: Transport (2007)

TAN 19: Telecommunications (2002)

TAN 20: Planning and the Welsh Language (2017)

TAN 21: Waste (2017)

TAN 23: Economic Development (2014)

TAN 24: The Historic Environment (2017)

support economic development, adapting to climate change and reducing greenhouse gas emissions.

One Wales: One Planet – the Sustainable Development Scheme for Wales (2009)	The document sets out the steps and actions necessary to achieve sustainable development in Wales, for example, an indicative route map of the journey Wales will need to take to use only its fair share of the earth's resources. The vision for a Sustainable Wales is as follows: Lives within its environmental limits, using only its fair share of the earth's resources so that our ecological footprint is reduced to the global average availability of resources, and we are resilient to the impacts of climate change. Healthy, biologically diverse and productive ecosystems that are managed sustainably. A resilient and sustainable economy that is able to develop whilst stabilising, then reducing, its use of natural resources and reducing its contribution to climate change. Communities which are safe, sustainable and attractive places for people to live and work, where people have access to services, and enjoy good health. A fair, just and bilingual nation in which citizens of all ages and backgrounds are empowered to determine their own lives, shape their communities and achieve their full potential.	The AoS should consider objectives which support the reduction of greenhouse gas emissions alongside other economic, social and environmental effects of new energy development.
Welsh Government Rural Communities - Rural Development Programme (2014-2020)	This Rural Development Programme is a 7-year investment programme supporting a wide range of activities to achieve its three main objectives: • Fostering the competitiveness of agriculture. • Ensuring the sustainable management of natural resources, and climate action. • Achieving a balanced territorial development of rural economies and communities including the creation and maintenance of employment. All projects funded by the Programme must align with one or more of the six European Rural Development Priorities.	The AoS framework should consider including objectives which encourage sustainable management of agriculture and the environment.

Note the RDP was extended to 2023.

This Technical Advice Note provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation.

Some key principles which the town and country planning system in Wales should seek to achieve include:

Development which provides a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally.

Helping to ensure that development does not damage, or restrict access to, or the study of, geological sites and features or impede the evolution of natural processes and systems especially on rivers and the coast.

Planning to accommodate and reduce the effects of climate change by encouraging development that will reduce damaging emissions and energy consumption and that help habitats and species to respond to climate change.

Local authorities have an important role in delivering biodiversity objectives at a local level. Local Biodiversity Action Plans and Local Agenda 21 Plans can inform development plan preparation and development plan policies may help to maintain or enhance biodiversity.

This Technical Advice Note provides guidance on how the planning system can contribute to:

- Sustainable rural economies.
- Sustainable rural housing.
- Sustainable rural services.
- Sustainable agriculture.

It advises planning authorities to produce development plans which set out the spatial vision for rural communities. This should be based on a sound understanding of the functional

The AoS should contain objectives relating to the protection of biodiversity and geological resources.

The AoS should consider objectives relating to the protection and sustainable development of rural areas.

TAN 5: Nature Conservation and Planning 2009

TAN 6: Planning for Sustainable Rural Communities 2010

linkages within the area and the potential for improving the sustainability of the existing settlement pattern.

Development plans should also clearly define local need by taking into account the social, economic and environmental characteristics of the area.

TAN 11: Noise 1997

This note provides advice on how the planning system can be used to minimise the adverse impact of noise without placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business. It outlines some of the main considerations which local planning authorities should take into account when drawing-up development plans, policies and when determining planning applications for development which will either generate noise or be exposed to existing noise sources.

The AoS framework should consider an objective that will enable the assessment of such effects on human health.

Noise and vibration should also be considered when assessing effects on other environmental receptors.

TAN 13: Tourism 1997

The Wales Tourist Board has responsibility for promoting and developing tourism in Wales. It has a duty to advise the

Government and other public bodies, including local authorities, on matters affecting tourism. While 'tourism' cannot be regarded as a single or distinct category of land use, the issues it raises should be addressed in preparing or revising development plans and may feature in development control decisions. Development plans may provide guidance on opportunities for

The AoS framework should consider a number of objectives addressing environmental protection which

	larger scale or innovative projects, appropriate facilities for the countryside or designated areas and the provision of facilities in historic towns and seaside resorts.	indirectly positively impact on tourism.
		The AoS needs to include objectives relating to flood risk and the need to manage runoff effectively.
		As the siting of energy infrastructure in a flood risk area could generate significant adverse consequences, appropriate criteria in relation to flood risk need to be considered as part of the process of developing the new NPS.
TAN 15: Development, Flooding and Coastal Erosion 2021	This TAN provides technical guidance that supplements Planning Policy Wales (PPW) in relation to flooding and coastal erosion. It provides a framework within which the flood risks arising from rivers, the sea and surface water, and the risk of coastal erosion can be assessed. It also provides advice on the consequences of the risks and adapting to and living with flood risk.	
TAN 16: Sport, Recreation and Open Space (2009)	This Technical Advice Note advises on the role of the planning system in making provision for sport and recreational facilities and informal open spaces, as well as protecting existing facilities and open spaces in urban and rural areas in Wales. Topics discussed include preparation of Open Space Assessments, keeping of existing facilities, provision of new facilities and planning for allotments and spaces for children's and	The AoS should consider objectives which seek to protect areas of open space and areas

young people's play. It also considers how planning agreements can help to ensure the provision and maintenance of facilities.

used for sport and recreation.

The AoS should consider objectives that do not adversely affect the efficiency of the transport system and seek to reduce greenhouse gas emissions from transportation sources.

TAN 18: Transport
2007

At the heart of this TAN is the need for an efficient and safe transport system. It acknowledges the significant impact that transport can have upon human health and the environment.

Planning Policy Wales and the Wales Transport Strategy aim to secure the provision of transport infrastructure that improves access, builds a stronger economy, improves road safety and fosters more sustainable communities.

The preparation of the new NPS should consider the principles of sustainable transport. There will be a need for safe, efficient transport connections to enable the delivery of raw materials and the siting of new

		energy infrastructure should not adversely affect the strategic transport infrastructure.
	This Technical Advice Note, in conjuncture with Planning Policy Wales, sets a framework for facilitating the delivery of sustainable waste management infrastructure throughout the planning process.	The development and operation of the facilities would generate waste throughout the project lifecycle.
TAN 21: Waste 2014	The TAN encourages local planning authorities to create a partnership approach with Natural Resources Wales, others in local and central government, the waste management industry, the voluntary sector and the general public is encouraged. This is because the developing legal environmental and technological circumstances influencing waste resource management will require changes of priorities and solutions that the land use planning system is unable to deliver on its own.	The AoS should consider the management of wastes associated with the development, operation and decommissioning of new energy infrastructure.
CLIMATE CHANGE		
Working together to reach net zero: all	The first All Wales Plan published alongside Net Zero Wales Carbon Budget 2 (2021-25). It demonstrates the commitment from Welsh Government's partners in working together to reach Net Zero.	The AoS should consider objectives which

Wales plan 2021-2025

support the reduction of greenhouse gas emissions where possible.

The AoS should consider objectives which improve the resilience of energy infrastructure to changing climatic conditions throughout the project's lifecycle.

This Plan sets out how Wales aims to meet the second carbon budget (2021-2025) and associated target. The Plan sets out 123 policies and proposals, alongside commitments and actions across Wales.

Net Zero Wales: Carbon Budget 2 (2021 – 2025)

The sector pathway chapters in the Plan are: electricity and heat generation, transport, residential buildings, industry and business, agriculture, land use, waste management and public sector.

The Plan includes the vision for a decarbonised energy system which provides wider economic and social benefits for Wales than the system currently in place.

The AoS should consider including objectives that address the reduction of carbon emissions and decarbonisation of the energy system

Policy Statement on Local ownership of energy generation in

The intent of this policy is to retain social and economic benefit from future energy developments located in Wales. It expects all new energy projects in Wales to include at least an element of local ownership, in order to retain wealth within Wales and provide real benefit

The AoS must consider the implications of this

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Wales – benefitting Wales today and for future generations	to communities across Wales. It defines ‘community ownership’ of a renewable energy project as a renewable energy or renewable storage development located in Wales, which is wholly owned by a social enterprise whose assets and profits are committed to the delivery of social and/or environmental objectives. It sets out that the Welsh Government supports renewable and low carbon energy projects developed by communities, or benefit the host community or Wales as a whole. This strategy sets out what we are doing already, and what we will do in the future, to respond to the changing climate. This strategy represents a new approach to considering the interrelated actions needed for addressing climate adaptation and resilience in Wales. In developing the strategy, the following principles were applied:	local ownership policy statement in the context of NSIPs.
Climate Adaptation Strategy for Wales 2024	• A focus on delivery of climate adaptation outcomes • A systems-based approach, addressing interdependencies between different sectors and stakeholders • A wider perspective of collective action across Wales, recognising the needs and roles of different stakeholders in delivering climate adaptation • Integration with other societal goals, such as decarbonisation, social justice and nature recovery	Ensure Climate Change adaptation is considered as an objective within the AoS
Adapting to Climate Change: Guidance for Flood and Coastal Erosion Risk Management Authorities in Wales 2022	This guidance aims to inform the design and resilience of flood and coastal risk management schemes, which should consider credible and reasonable climate change impacts.	Ensure climate change adaptation is considered as an objective within the AoS
The Climate Change (Wales) Regulations	Consideration of the impact on well-being of more ambitious climate targets. The Welsh Government is proposing to increase Wales’s climate targets in response to the latest climate science and the recommendations of the Climate Change Committee. The Regulatory Impact	The AoS should consider objectives which

2021: integrated impact assessment	Assessment (RIA) estimates the costs and benefits of the CCC's recommended Balanced Pathway to net zero in 2050. However, the actual impact of meeting our targets on our well-being goals and objectives depends on the measures and policies chosen. These policies will be set out in a report for each carbon budget period, the next being published in November 2021. Policies to deliver our carbon budgets are subject to an engagement process and their own impact assessments.	support the Climate Change Regulations.
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The Climate Change (Wales) Regulations 2021:

- The Environment (Wales) Act 2016 (Amendment of 2050 Emissions Target) Regulations 2021
- The Climate Change (Interim Emissions Targets) (Wales) (Amendment) Regulations 2021
- The Climate Change (Carbon Budgets) (Wales) (Amendment) Regulations 2021
- The Climate Change (Net Welsh Emissions Account Credit Limit) (Wales) Regulations 2021

WASTE

The Waste (Miscellaneous Provisions) (Wales) Regulations 2011	The regulations are designated for the purposes of section 2(2) of the European Communities Act 1972 in relation to the prevention, reduction and management of waste. They amend the Waste (England and Wales) Regulations 2011 by replacing regulation 13. They state that from 1 January 2015, waste collection authorities must collect waste paper, metal, plastic and glass separately. They also impose a duty on waste collection authorities, from that date, when making arrangements for the collection of such waste, to ensure that those arrangements are by way of separate collection. The duties apply to waste classified as waste from households and waste that is classified as commercial or industrial waste.	The AoS should consider including objectives that promote the reduction of waste sent for disposal and encourage re-use, recycling and recovery of waste.
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Waste Separation
Requirements
(Wales) Regulations
2023

These Regulations set out waste separation requirements in Wales (for the purposes of section 45AA of the Environmental Protection Act 1990 (c. 43) (the “1990 Act”)) with the aim of ensuring that waste is managed in a manner that promotes high quality recycling. The separation requirements apply in respect of all premises other than domestic properties and caravans. However, hospitals are not required to present waste separately for collection until 6 April 2026.

Separation requirements are specified in relation to the presentation of waste for collection (regulation 3), the collection of waste (regulation 4) and the handling of waste that has been collected (regulation 5).

‘Beyond Recycling’ is the Welsh Governments updated waste strategy, published in 2021. The strategy’s six core themes include:

- Driving innovation in materials use
- Upscaling prevention and re-use
- Building on our recycling record
- Investing in infrastructure
- Enabling community and business action
- Aligning Government levers

Beyond Recycling
2021

The AoS should consider including objectives that promote the reduction of waste sent for disposal and encourage re-use, recycling and recovery of waste.

The AoS should consider including objectives that promote the reduction of waste sent for disposal and encourage re-use, recycling and recovery of waste.

BIODIVERSITY

The Town and
Country Planning
(Trees) (Amendment)
(Wales) Regulations
2017

The regulations are made under the powers conferred on the Secretary of State by sections 198(8) and 333(1) of the Town and Country Planning Act 1990. They aim to ensure the protection of trees.

The AoS will need to consider potential impacts on important trees.

The Regulations require an application to be made for cutting down, topping, lopping or uprooting of any tree with a tree preservation order. This application must:

- be made in writing to the authority
- include all of the information specified on the form be accompanied by:
- a plan which identifies the tree or trees to which the application relates;
- information specifying the work to be undertaken;
- a statement of the applicant's reasons for making the application; and
- appropriate evidence describing any structural damage to property or in relation to tree health or safety, as applicable.

The Town and Country Planning (Development Management Procedure) (Wales) Order 2012 as amended by The Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2017

The central aim of the Regulation is to protect the environment, including species and habitats, from developments. They consolidate with modification the provisions of the Town and Country Planning (General Development Procedure) Order 1995.

This Order provides for procedures connected with planning applications, consultations in relation to planning applications, the determination of planning applications, appeals, local development orders, certificates of lawful use or development, the maintenance of registers of planning applications and related matters.

The AoS must consider objectives which seek to protect the environment from the harmful impacts of development.

Woodlands for Wales 2018

This document details Welsh Government's fifty-year strategy for woodlands and trees in Wales. It recognises Wales's trees as an important asset in delivering the Government's key priorities of driving green growth, resilience and safety and tackling poverty.

The AoS framework should include objectives which address the

The vision of the strategy is as follows:

protection of
woodland.

“Wales will be known for its high-quality woodlands that enhance the landscape, are appropriate to local conditions and have a diverse mixture of species and habitats”.

It is envisaged that real local and national social and community benefits, thriving woodland-based industries and a better-quality environment throughout Wales can be achieved through delivery of the strategy.

CONTAMINATED LAND

The Contaminated
Land (Wales)
Regulations 2006 as
amended by the
Contaminated Land
(Wales) (Amendment)
Regulations 2012

These regulations make provision, in relation to Wales, for the identification and remediation of contaminated land under Part 2A of the Environmental Protection Act 1990. It sets out the regime to deal with contaminated land and provides a system to identify and remediate sites where contamination is causing unacceptable risk to human health and/or the wider environment.

The AoS
framework should
address the
potential of land
contamination and
appropriate
consideration
should be given to
potential impacts
and how they can
be addressed.

HERITAGE

Historic Environment
Act (Wales) 2023

The Historic Environment (Wales) Act 2023 and its associated measures are intended to provide a robust structure for protecting and managing the historic environment. Of note, Part 2 makes provision about conservation monuments of special historic interest, Part 3 makes provision for conservation of buildings of architectural or historic interest, Part 4 relates to conservation areas, while Part 6 provides for a register of historic parks and gardens, place names and historic environment records.

Ensure historic
environment
objective within
AoS framework.

Historic Environment and Climate Change in Wales – Sector Adaptation Plan 2020	This adaptation plan sets out raise awareness of the risks and opportunities of climate change for the historic environment of Wales and the need for adaptation. Our objective is to encourage collaboration and action across all sectors that will: • increase our knowledge and understanding of the threats and opportunities for the historic environment from changing weather and climate in the short, medium and long term • increase our capacity by developing the awareness, skills and tools to manage the impacts of climate change on the historic environment • build the resilience of the historic environment by taking action to adapt and respond to the risks, reduce vulnerability and maximise the benefits. This TAN is to provide guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning and Listed Building (LBC) applications. This TAN provides specific guidance on how the following aspects of the historic environment should be considered: • World Heritage Sites • Scheduled monuments • Archaeological remains • Listed buildings • Conservation areas • Historic parks and gardens • Historic landscapes • Historic assets of special local interest	Ensure historic environment is considered and note challenges posed by a changing climate.
Technical Advice Note 24: The Historic Environment 2017	• World Heritage Sites • Scheduled monuments • Archaeological remains • Listed buildings • Conservation areas • Historic parks and gardens • Historic landscapes • Historic assets of special local interest	Ensure historic environment objective within AoS framework.

Welsh Government 2018 Ministers Priorities for the Historic Environment	The Priorities for the Historic Environment of Wales by Lord Elis-Thomas AM, Minister for Culture, Tourism and Sport include ambitions under the following themes: • Caring for our historic environment • Making skills matter • Cherishing and enjoying our historic environment • Making our historic environment work for our economic well-being • Delivering through partnership	The AoS should consider including objectives which aim to protect heritage assets and the historic environment.
WATER ENVIRONMENT		
Water Strategy for Wales 2015	The strategy sets out the strategic direction for water policy in Wales over the next 20 years and beyond. The vision for the strategy is to “ensure that Wales continues to have thriving water environment which is sustainably managed to support healthy communities, flourishing businesses and the environment. We want the people of Wales to receive first class, value for money water services with water used efficiently, safely and respectfully by all”.	The AoS should consider objectives which contribute to the sustainable use of water resources.
Flood and Water Management Act 2010	An Act to make provision about water, including provision about the management of risks in connection with flooding and coastal erosion.	The AoS should consider objectives concerning the the management of risks in connection with flooding and coastal erosion.

National Strategy for
Flood and Coastal
Erosion Risk
Management in
Wales 2020

This Strategy sets out Welsh policies on flood and coastal erosion risk management. It establishes a delivery framework that meets the needs of Wales, and sets out four overarching objectives for managing flood and coastal erosion risk in Wales:

- Reducing the consequences for individuals, communities, businesses and the environment from flooding and coastal erosion
- Raising awareness of and engaging people on flood and coastal erosion risk
- Providing an effective and sustained response to flood and coastal erosion events
- Prioritising investment in the most at risk communities.

The AoS should include objectives specific to coastal erosion risk management. Development near the coast has the potential to lead to coastal erosion through changing-coastal processes.

Welsh National
Marine Plan (Welsh
Government 2019)

The Welsh National Marine Plan is the first marine plan for Wales and represents the start of a process of shaping seas to support economic, social, cultural and environmental objectives. Marine planning will guide the sustainable development of our marine area by setting out how proposals will be considered by decision makers.

It sets out the vision for the Welsh inshore and offshore marine plan regions as:

- Welsh seas are clean, healthy, safe, productive and biologically diverse;
- Through an ecosystem approach, natural resources are sustainably managed and our seas are healthy and resilient, supporting a sustainable and thriving economy;
- Through access to, understanding of and enjoyment of the marine environment and maritime cultural heritage, health and well-being are improving;
- Through Blue Growth more jobs and wealth are being created and are helping coastal communities become more resilient, prosperous and equitable with a vibrant culture; and

The AoS should establish objectives which align with the aims of the Plan and protect the marine and coastal environment.

	Through the responsible deployment of low carbon technologies, the Welsh marine area is making a strong contribution to energy security and climate change emissions targets.	
Flood Consequence Assessments: climate Change Allowances 2021	When considering new development proposals, Technical Advice Note 15: Development and Flood Risk (TAN15, now superseded) states that it is necessary to take account of the potential impact of climate change over the lifetime of development. The Flood Consequence Assessment guidance document sets out the climate change allowances that should be used in flood consequence assessments submitted in support of relevant planning applications, and to inform development plan allocations.	The AoS must take into account this guidance document.
Shoreline Management Plans applicable in Wales	A Shoreline Management Plan policy describes how a stretch of shoreline is most likely to be managed to address flood and/or erosion – although this is subject to conditions. Stretches of coast are divided into ‘management units’, and for each of these one of four different management policies are agreed, as follows: - No active intervention – there is no planned investment in defending against flooding or erosion, whether or not an artificial defence has existed previously - Hold the (existing defence) line – an aspiration to build or maintain artificial defences so that the position of the shoreline remains. - Sometimes, the type or method of defence may change to achieve this result - Managed realignment – allowing the shoreline to move naturally, but managing the process to direct it in certain areas. This is usually done in low-lying areas, but may occasionally apply to cliffs.	The AoS should establish objectives which align with the aims of the Plan and protect the shoreline environment and prevent flooding and/or erosion.
Capacity of the network (drainage and wastewater management plan): action plan 2023	To understand the scale of improvement needed the capacity of the drainage and sewerage networks over the long term must be assessed. To do this a Drainage and Wastewater Management Plan (DWMP) has been developed and will be consulted on by water companies with customers, stakeholders, regulators, and local authorities.	The AoS should consider the capacity of the drainage and

		wastewater network.
The Welsh Government Guiding Principles for Developing Water Resources Management Plans (WRMPs) 2022	These guiding principles are addressed to and apply to water undertakers whose area is wholly or mainly in Wales. The document explains the key policy priorities the government expects WRMP's to address.	The AoS should consider the water resources.
Introduction of Strategic Resource Areas for Tidal Stream Energy (January 2025)	In 2019, we introduced Wales's first marine plan, setting out our vision for the sustainable development of our seas and establishing a new planning system. Today, I would like to update the Senedd on a significant step forward in the implementation of the plan, the introduction of the first marine planning Strategic Resource Areas (SRAs). SRAs are a new and innovative marine planning tool which will indicate which sectors may have priority over others in specific areas. We must plan carefully for the future of our seas, understanding the opportunities for generating sustainable and green energy while also protecting and enhancing our unique, irreplaceable marine environment. SRAs are an important part of doing this. They will help us understand where there are opportunities to take forward sustainable development and how these relate to the most environmentally sensitive areas which we must protect. They will also help ensure that the decisions we take today have the interests of the future at their heart.	The AoS must take into account the SRAs.
Welsh National Marine Plan Implementation Guidance (June 2020)	This supplementary Implementation Guidance supports the Welsh National Marine Plan and is a consideration for Public Authorities in taking decisions which may affect the plan area. It provides further detail on WNMP policies to help ensure they are implemented effectively and consistently; it does not introduce new planning policy. This IG sits alongside other non-statutory plan related policy, guidance and evidence to support marine planning for Wales and will be updated periodically.	The AoS should establish objectives which align with the aims of the Welsh National Marine

The Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021	These Regulations make provision concerning the protection of waters against pollution by nitrates from agricultural sources. The Welsh Government announced regulatory measures to address agricultural pollution on 27 January 2021. The regulations apply to all farms across Wales and came into force on 1 April 2021.	Plan and protect the marine and coastal environment. The AoS should establish objectives which protect waters against pollution by nitrates from agricultural sources.
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LANDSCAPE

Valued and Resilient: The Welsh Government's Priorities for Areas of Outstanding Natural Beauty and National Parks (July 2018)	Designated Landscapes: Valued and Resilient outlines key priority areas following consideration of the outcomes from the Review of Designated Landscapes, Future Landscapes Wales Programme and responses to the Taking forward Wales' sustainable management of natural resources consultation. It provides clarity of purpose for the National Parks and AONBs (now National Landscapes) in the context of the UK's exit from the European Union and at the close of a period of review. It calls on the designated landscapes managing bodies to deliver on a number of Welsh Government priorities, including the Nature Recovery Plan, a refreshed woodland strategy, the decarbonisation agenda, and Cymraeg 2050. Its 10 cross-cutting themes aim to improve resilience and realise the full value of Wales' landscapes: • Landscapes for everyone • Exemplars of the sustainable management of natural resources • Halting the loss of biodiversity	Ensure that the need to improve resilience of National Parks and National Landscapes is considered in the AoS.
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- Green energy and decarbonisation
- Realising the economic potential of landscape
- Growing tourism and outdoor recreation
- Thriving Welsh language
- All landscapes matter
- Delivering through collaboration
- Innovation in resourcing

The objective of the Welsh Government's Biodiversity Deep Dive was to develop a set of collective actions we can take immediately to support meaningful delivery of the CBD '30 by 30' goal, recognising the capabilities we have in Wales and reflecting our duties and approach under the Wellbeing of Future Generations and Environment (Wales) Acts. The recommendations include:

Welsh Government's
Biodiversity Deep
Dive:
Recommendations
(2022)

- Transform the protected sites series so that it is better, bigger, and more effectively connected
- Create a framework to recognise Nature Recovery Exemplar Areas and Other Effective Area-based Conservation Measures (OECMs) that deliver biodiversity outcomes
- Unlock the potential of designated landscapes (National Parks and Areas of Outstanding Natural Beauty) to deliver more for nature and 30 by 30
- Continue to reform land and marine management and planning (including spatial) to deliver more for both protected sites and wider land / seascapes
- Build a strong foundation for future delivery through capacity building, behaviour change, awareness raising and skills development
- Unlock public and private finance to deliver for nature at far greater scale and pace

The AoS should
establish
objectives which
align with the
recommendations.

- Develop and adapt monitoring and evidence frameworks to measure progress towards the 30x30 target and guide prioritisation of action
- Embed Nature Recovery in policy and strategy in public bodies in Wales

ENERGY

NRW has produced technical guidance which is relevant to the energy technologies covered by the AoS. These provide information on:

- Marine aggregate extraction
- Offshore wind developments
- Marine renewable energy developments
- Using adaptive management for marine developments
- Scoping an Environmental Impact Assessment for marine developments
- Marine ecology datasets for marine developments - guidance for developers on the datasets NRW holds that is useful in scoping assessments.
- Marine vertebrate conservation legislation in Wales
- Benthic habitat assessments for marine developments
- Marine physical processes and Environmental Impact Assessment (EIA)

Natural Resources
Wales Technical
Guidance

The AoS should consider guidance provided by NRW Technical Notes.

NRW has further relevant guidance under development which will be added to their website as soon as it is available.

Decarbonisation of
industry and business
(2024)

This research report contributes to setting foundations for future developments in decarbonisation of Industry and Business in Wales. As per Carbon Budget 2, Welsh Governments work on decarbonisation is split into eight sectors. Among these sectors, Industry and Business is responsible for 38.1 per cent of total Welsh emissions in 2019.

The AoS should establish objectives which support

	A series of key recommendations for potential expansion of the NAEI and additional data sets that can be used to aid the analysis already being undertaken by Welsh Government are included.	decarbonisation of Industry and Business.
Energy Generation in Wales 2023	The Energy Generation in Wales 2023 report sets out the energy generation capacity in Wales at the end of 2023 and analyses changes over time. The report aims to support the Welsh Government in developing energy policy and help to evidence the economic, social, and environmental benefits of Welsh energy projects.	For information
Challenges and Opportunities of decarbonising Wales' energy system by 2035 (2023)	Decarbonising the electricity generation system in Wales will be a necessary step towards reaching net zero. This note summarises the challenges and opportunities electricity decarbonisation will present, within the context of Welsh and UK policy. It forms part of WCPP's work to support the Wales Net Zero 2035 Challenge Group, which was established as part of the Welsh Labour / Plaid Cymru Co-operation agreement to examine potential pathways to net zero by 2035. Specifically, it is a contribution to challenge area 2: How could Wales meet energy needs by 2035 while phasing out fossil fuels?	The AoS should establish objectives which support decarbonisation of energy systems.
TRANSPORT		
Llwybr Newydd: the Wales Transport Strategy 2021	The Wales Transport Strategy sets out the vision for an accessible, sustainable and efficient transport system. The Strategy sets out three priorities over the next 5 years: • Priority 1: Bring services to people in order to reduce the need to travel • Priority 2: Allow people and goods to move easily from door to door by accessible, sustainable and efficient transport services and infrastructure • Priority 3: Encourage people to make the change to more sustainable transport	The AoS should consider objectives which support the use of sustainable transport.
AIR QUALITY		

Environment (Air Quality and Soundscapes) (Wales) Act 2024	The Act seeks to improve the quality of the air environment and reduce the impacts of airborne pollution on human health, nature, the environment and our economy. The Act includes duties for Welsh ministers to set at least one long-term target in respect of the annual mean level of PM2.5 in ambient air in Wales and set long-term targets in respect of one of the following pollutants: • ammonia; • PM10; • ground level ozone; • nitrogen dioxide; • carbon monoxide; • sulphur dioxide	The AoS should consider objectives which support the improvement of air quality.
Clean Air Plan for Wales: Healthy Air, Healthy Wales (2020)	The aim of the Clean Air Plan for Wales is to improve air quality and reduce the impacts of air pollution on human health, biodiversity, the natural environment and our economy. The Plan is structured around four core themes, with actions to enable collaborative approaches to reducing air pollution. People: Protecting the health and well-being of current and future generations Environment: Taking action to support our natural environment, ecosystems and biodiversity Prosperity: Working with industry to reduce emissions, supporting a cleaner and more prosperous Wales Place: Creating sustainable places through better planning, infrastructure and transport.	The AoS should consider objectives which support the improvement of air quality.
The Air Quality Standards (Wales)	The Air Quality Standards (Wales) Regulations 2010 set out definitions, designates the Welsh Ministers as the competent authority and requires the Welsh Ministers to divide Wales into	The AoS framework should

National Policy Statement for Fusion Energy Generation EN-8 AoS Appendices

Regulations 2010, as amended by The Air Quality Standards (Wales) (Amendment) (EU Exit) Regulations 2019	zones and agglomerations for the purposes of these Regulations. The Regulations also deal with the assessment of ambient air quality and imposes certain requirements on the Welsh Ministers to draw up air quality plans in relation to limit values and target values and short-term action plans in relation to alert thresholds. These regulations are amended by The Air Quality Standards (Wales) (Amendment) (EU Exit) Regulations 2019.	consider including objectives which seek to limit air pollution and improve air quality.
NOISE		
Environmental Noise (Wales) Regulations 2006	These Regulations implement Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise. Duties include the requirement for National Assembly for Wales (the Assembly) to identify the noise sources for which strategic noise maps must be made and for the Assembly to make strategic noise maps for agglomerations, major roads, major railways and major airports. They also set out that the Assembly must publish guidance on how the priorities in action plans should be identified and sets out the requirements for the action plans.	Ensure that AoS ensures environmental noise is addressed.
Welsh Government Noise and Soundscape Plan for Wales 2023 to 2028	The Noise and Soundscape Plan 2023-2028 is Wales's national strategy on soundscapes, meaning the sound environment as perceived or experienced and/or understood by a person or people, in context.	Ensure that AoS ensures noise is addressed.
Noise and Soundscape Action Plan 2018 to 2023: The Welsh Government's overarching policy on noise	This Action Plan sets out Wales' approach to managing environmental noise and creating appropriate soundscapes. Under the Environmental Noise Regulations, the Welsh Ministers have an obligation to draw up action plans for places near major roads and major railways, and for agglomerations. The Regulations apply to environmental noise to which humans are exposed in particular in built-up areas, in public parks or other quiet areas in an agglomeration, and near schools, hospitals and other noise-sensitive buildings and areas.	AoS should ensure that environmental noise is addressed.

Scotland

CROSS-THEMATIC

Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017	Environmental Impact Assessment (EIA) is a means of drawing together, in a systematic way, an assessment of the likely significant environmental effects arising from a proposed development.	Energy infrastructure has the potential to fall under Schedule 1 and 2 developments in the EIA 2011 regulations and therefore would be subject to an Environmental Impact Assessment.
The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013	This Order provides for procedures connected with Pre-application consultation, applications for planning permission, the planning authority, consultations, local development orders, certificates of lawful use or development and the maintenance of registers of planning applications.	AoS Objectives which seek to protect the environment as a result of development should be considered.
National Planning Framework 4 (2023)	Sets out Scotland's spatial principles, regional priorities, national developments and national planning policy. Part 1 – A National Spatial Strategy for Scotland 2045	The AoS needs to include a comprehensive set of objectives

	Sets out 6 overarching spatial principles which play a key role in delivering UN SDGs and Scottish national outcomes: • Just transition • Conserving and recycling assets • Local living • Compact urban growth • Rebalanced development • Rural revitalisation Part 2 – National Planning Policy Sets out 33 policies on topics including: tackling the climate and nature crises, climate mitigation and action, and biodiversity.	that promote environmental protection.
Planning Advice Note (PAN) 3/2010 Community Engagement	Sets out effective community engagement in the planning process.	The AoS process should consider objectives which include effective community engagement in the planning process.
PAN 33 Development of Contaminated Land (Revised Oct 2000)	Sets out the role of the planning system in addressing historical contamination. It considers: The implications of the new contaminated land regime for the planning system; • the development of contaminated land; • the approach to contaminated land in development plans;	The AoS should consider objectives which address the assessment and use of

- the determination of planning applications when the site is or may be contaminated, and;
- where further information and advice can be found.

contaminated land sites.

Contaminated land sites may be suitable for the development of energy infrastructure if appropriate management measures are implemented.

The AoS should consider a comprehensive set of objectives that promote environmental protection such that they complement environmental targets and positively work towards their achievement.

PAN 51 Planning,
Environmental
Protection and
Regulation (Revised
2006)

Supports the existing policy role of the planning system in relation to the environmental protection regimes.

PAN 2/2011 Planning and Archaeology (2011)

This PAN is intended to inform the day-to-day work of a range of local authority advisory services and other organisations that have a role in the handling of archaeological matters within the planning process.

The AoS should consider archaeology through the inclusion of an objective relating to the historic environment.

PAN 71 Conservation Area Management (2004)

This PAN complements existing national policy and provides further advice on the management of conservation areas. It identifies good practice for managing change, sets out a checklist for appraising conservation areas and provides advice on funding and implementation.

The AoS should take into account the potential impact of development in Conservation Areas.

PAN 60 Natural Heritage (2000)

This PAN provides advice on how development and the planning system can contribute to the conservation, enhancement, enjoyment and understanding of Scotland's natural environment and encourages developers and planning authorities to be positive and creative in addressing natural heritage issues.

Natural heritage should be considered in the AoS and the framework should include objectives to conserve and safeguard native species, wildlife habitats, ecosystems, geology and natural beauty and

		amenity of the countryside.
PAN 1/2011 Planning and Noise (2011)	This PAN provides advice on the role of the planning system in helping to prevent and limit the adverse effects of noise.	The AoS should consider objectives which address noise impacts during construction, operation and decommissioning.
Blue Economy Vision for Scotland 2022	The Vision sets out Scotland's long-term ambition for blue economy to 2045. It demonstrates how much Scotland values its marine environment and its significance. This is captured in six outcomes sitting across a range of environmental, social and economic ambitions.	The AoS should ensure protection of the marine environment and consider economic impacts.
HERITAGE		
Historic Environment Policy for Scotland 2019	This policy statement is designed to support and enable good decision-making about changes to the historic environment. HEPS sets out a series of principles and policies for the recognition, care and sustainable management of the historic environment. It is relevant to a wide range of decision-making at national and local levels. It is supported by detailed policy and guidance.	The AoS should consider including objectives which aim to protect heritage assets and the historic environment.

Our Past, Our Future, The Strategy for Scotland's Historic Environment 2023	Our Past, Our Future is Scotland's national strategy for the historic environment for the period 2023-2028. Our Past, Our Future is mission-orientated, driving forward a collective sector approach to sustaining and enhancing the benefits of Scotland's historic environment for people and communities, now and into the future. It targets activity where the historic environment can deliver the most benefit for the people of Scotland over the next years. A national strategy team, hosted by Historic Environment Scotland work to support the strategy implementation, delivery and reporting.	The AoS should consider including objectives which aim to protect heritage assets and the historic environment.
BIODIVERSITY		
The Nature Conservation (Scotland) Act 2004 (Authorised Operations) Order 2011	This Order describes the types of operations undertaken which affect a site of special scientific interest (SSSI) but which do not require the consent of Scottish Natural Heritage under sections 13 (operations by public bodies etc.) and 16 (operations by owners or occupiers of sites of special scientific interest) of the Nature Conservation (Scotland) Act 2004. The Regulations are of relevance to environmental planning projects as well as remediation projects. Their overall aim is to protect and conserve species in the UK.	The AoS should take into account impacts upon habitats and species, and should consider provision for the preservation and protection of biodiversity and the environment.
Scottish Biodiversity Strategy to 2045 (2024)	Sets out the framework for addressing the twin crises of biodiversity loss and climate change. The strategy identifies the vision of a future where Scotland's natural environment is restored and supports thriving communities and wildlife. The strategy proposes outcomes and key actions that will enable this vision to be achieved.	Ensure the protection and enhancement of biodiversity is included as an objective within the AoS.

Scottish Biodiversity Delivery Plan 2024–2030	This is the first in a series of delivery plans which form part of Scotland’s strategic framework for biodiversity, in conjunction with the Scottish biodiversity strategy. It includes actions needed to ensure Scotland is on track to achieving the vision and outcomes in the strategy.	Ensure the protection and enhancement of biodiversity is included as an objective within the AoS.
Wildlife and Natural Environment (Scotland) Act 2011 (as amended)	The Act affected game-shooting, species protection, and introduced new wildlife offences into Scotland such as vicarious liability. Amongst other things it: • abolished the designation of areas of special protection for wild birds; • increased regulation of snaring practices; • introduced a closed season for the killing of mountain hares; • introduced a new regime for controlling invasive non-native species; • changed arrangements for deer management and deer stalking; • strengthened badger protection; • required Scottish Ministers to present an annual report to Parliament of offences relating to wildlife crime; • changed the legislation relating to the burning of moorland (muirburn), previously prescribed in the Hill Farming Act 1946; • made operational changes to how Sites of Special Scientific Interest are managed; • required three-yearly reports to be published by public bodies on compliance with the Biodiversity Duty.	Ensure the protection and enhancement of biodiversity is included as an objective within the AoS.
Scotland’s Forestry Strategy 2019-2029	This Strategy provides an overview of contemporary Scottish forestry, presents a 50-year vision for Scotland’s forests and woodlands, and sets out a 10-year framework for action.	The AoS framework should consider

Forestry and Land Management (Scotland) Act 2018	Objectives • Increase the contribution of forests and woodlands to Scotland’s sustainable and inclusive economic growth • Improve the resilience of Scotland’s forests and woodlands and increase their contribution to a healthy and high quality environment • Increase the use of Scotland’s forest and woodland resources to enable more people to improve their health, well-being and life chances	objectives which focus upon environmental protection and the avoidance of loss of forests.
	Priorities • Ensuring forests and woodlands are sustainably managed • Expanding the area of forests and woodlands, recognising wider land-use objectives • Improving efficiency and productivity, and developing markets • Increasing the adaptability and resilience of forests and woodlands • Enhancing the environmental benefits provided by forests and woodlands • Engaging more people, communities and businesses in the creation, management and use of forests and woodlands	
	The Forestry and Land Management (Scotland) Act 2018 makes new provisions regarding Scottish Ministers’ functions in relation to forestry. The Act sets out the following, among other things; • a duty to prepare a forestry strategy; • a duty to promote sustainable forest management; and • permissions and rules regarding felling.	The AoS framework should consider objectives which focus upon avoidance of loss of forests.

Forestry (Felling) (Scotland) Regulations 2019	The Regulations set out the process for applications for felling permission, directions for restocking, directions for felling and rules surrounding appeals and compensation.	The AoS should consider the potential impacts of tree felling.
Control of Woodland Removal 2025	At a national scale Scotland is continuing to expand its woodland resource, to counteract historic deforestation. The Scottish Government has developed a policy on the control of woodland removal to provide direction for decisions on woodland removal in Scotland.	The AoS will need to consider control of woodland removal.
The Town and Country Planning (Tree Preservation Order and Trees in Conservation Areas) (Scotland) Regulations 2010	The regulations are made under the powers conferred on the Secretary of State by sections 160(8), 161(3) and (4), 173 and 275 of the Town and Country Planning (Scotland) Act. The Regulations require an application to be made for cutting down, topping, lopping or uprooting of any tree with a tree preservation order or within a Conservation Area. This application must: • specify the operations for which consent is sought; • give reasons for carrying out such operations; • identify the protected tree or trees which would be affected by such operations; and • The protected tree or trees must be identified by means of a map or plan of a size and scale sufficient for the purpose.	The AoS needs to recognise the importance of trees, including those which may be isolated, or of particular age (veteran trees) and which may be of importance in a local context.
AIR QUALITY		
The Air Quality Standards (Scotland) Regulations (2010)	Regulations made under powers conferred by section 2(2) of the European Communities Act. It details the limit or target values for several pollutants considered of concern for human health for the purpose of Air Quality Management.	The AoS should seek objectives to avoid air quality impacts. New power stations have the potential

The Air Quality (Scotland) Amendments Regulations 2016	The regulations set out the objectives adopted in Scotland for the purpose of Local Air Quality Management. The achievement or likely achievement of an air quality objective prescribed by the regulations shall be determined by reference to the quality of air at locations; which are situated outside of buildings or other natural or man-made structures; and where members of the public are regularly present.	to result in emissions to air throughout the project lifecycle. The AoS should seek objectives to avoid air quality impacts. New power stations have the potential to result in emissions to air throughout the project lifecycle.
Cleaner Air for Scotland – the Road to a healthier future (the Scottish Government 2015)	The purpose of Cleaner Air for Scotland – The Road to a Healthier Future (CAFS) is to provide a national framework which sets out how the Scottish Government and its partner organisations propose to achieve further reductions in air pollution and fulfil legal responsibilities as soon as possible.	The AoS should seek objectives to avoid air quality impacts. New power stations have the potential to result in emissions to air throughout the project lifecycle.

CONTAMINATED LAND

Contaminated Land (Scotland) Regulations (2000 and 2005)	Regulations made to ensure the proper management and remediation of contaminated land which is causing or has the potential to cause significant harm or significant pollution of the water environment. These have been produced by Scottish Ministers in exercise of powers under the Environmental Protection Act (1990). Topics covered include pollution of controlled waters, remediation notices and appeals to Scottish Ministers.	Land contamination and potential impacts and how they can be addressed should be considered in the AoS.
NOISE		
Environmental Noise (Scotland) Regulations (2006) (as amended)	The Environmental Noise (Scotland) Regulations 2006 introduced strategic noise mapping and noise action planning for areas such as large urban areas and major transport corridors. It is stated that Scottish Ministers must prepare Strategic Noise Maps and Noise Action Plans which identify Quiet Areas and areas where management of noise is required- identified as Noise Management Areas (NMAs). The Noise Action Plans must include measures to manage noise.	Noise and vibration impacts to local population should be considered in the AoS.
CLIMATE CHANGE		
Climate Change (Scotland) Act 2009	An Act of the Scottish Parliament to set a target for the year 2050, an interim target for the year 2020, and to provide for annual targets, for the reduction of greenhouse gas emissions; to provide about the giving of advice to the Scottish Ministers relating to climate change; to confer power on Ministers to impose climate change duties on public bodies; to make further provision about mitigation of and adaptation to climate change; to make provision about energy efficiency, including provision enabling council tax discounts; to make provision about the reduction and recycling of waste; and for connected purposes.	AoS objectives should seek to reduce greenhouse gas emissions during other stages of energy infrastructure development, for example, the transportation of

		raw materials and waste.
		The AoS should consider objectives which improve the resilience of energy infrastructure to changing climatic conditions throughout the project's lifecycle.
Climate Change (Emissions Reduction Targets) (Scotland) Act 2024	The Climate Change (Emissions Reduction Targets) (Scotland) Act 2024, which amends the 2019 Act, sets targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 48.5% by 2020, 75% by 2030, 90% by 2040. The Act embeds the principles of a Just Transition, which means reducing emissions in a way which tackles inequality and promotes fair work, at the heart of Scotland's approach to reaching net-zero. Scottish Ministers are required to set Scottish carbon emission budgets and targets and draft climate change plans in support of achieving net-zero by 2045.	The AoS should consider objectives to reduce GHG emissions throughout the project's lifecycle.
Securing a Green Recovery on a Path to Net Zero: climate	This update to Scotland's 2018-2032 Climate Change Plan sets out the Scottish Government's pathway to the new and ambitious targets set by the Climate Change Act 2019. It is a key strategic document on the green recovery from COVID-19. The Government have	AoS objectives should seek to ensure that development is resilient and

change plan 2018–2032 - update	committed to reduce emissions by 75% by 2030 (compared with 1990) and to net zero by 2045	adaptable to the impacts of climate change, throughout the project lifecycle.
	Part 1 of the Update sets out the progress that is being made in delivering the commitments and the further actions to be taken to secure a green recovery from the COVID-19 pandemic. Part 2 of the update is dedicated to the 'Coordinated Approach' to meeting the emissions reduction targets. This section looks at how to take a cross-cutting, systems based approach that harnesses opportunities for inclusive jobs, growth and well-being.	
	The second Scottish Climate Change Adaptation Programme sets out policies and proposals to prepare Scotland for the challenges that will be faced as our climate continues to change in the decades ahead. The Programme is a requirement of the Climate Change (Scotland) Act 2009 and addresses the risks set out in the UK Climate Change Risk Assessment (UK CCRA) 2017, published under section 56 of the UK Climate Change Act 2008.	AoS objectives should seek to ensure that development is resilient and adaptable to the impacts of climate change, throughout the project lifecycle.
Climate Ready Scotland Scottish Climate Change Adaptation Programme 2019-2024	The Programme takes an outcomes-based approach, derived from both the UN Sustainable Development Goals and Scotland's National Performance Framework. There are seven outcomes in the programme: • Outcome 1: Our communities are inclusive, empowered, resilient and safe in response to the changing climate • Outcome 2: The people in Scotland who are most vulnerable to climate change are able to adapt and climate justice is embedded in climate change adaptation policy • Outcome 3: Our inclusive and sustainable economy is flexible, adaptable and responsive to the changing climate. • Outcome 4: Our society's supporting systems are resilient to climate change • Outcome 5: Our natural environment is valued, enjoyed, protected and enhanced and has increased resilience to climate change	

- Outcome 6: Our coastal and marine environment is valued, enjoyed, protected and enhanced and has increased resilience to climate change
- Outcome 7: Our international networks are adaptable to climate change.

WATER ENVIRONMENT

The Regulations– more commonly known as the Controlled Activity Regulations (CAR) – and their further amendments apply regulatory controls over activities which may affect Scotland's water environment. This includes:

- groundwater,
- wetlands (directly associated with surface and groundwater bodies);
- rivers;
- lochs;
- transitional waters (estuaries and saline lagoons); and
- coastal waters (3nm from territorial baseline).

The controlled activities include:

- abstractions from surface and groundwater;
- impoundments of rivers, lochs, wetlands and transitional waters;
- groundwater recharge;
- engineering in rivers, lochs and wetlands;
- engineering activities in the vicinity of rivers, lochs and wetland which are likely to have a significant adverse impact upon the water environment;
- activities liable to cause pollution;
- direct or indirect discharge of List I substances to groundwater;

The Water
Environment
(Controlled Activities)
(Scotland)
Regulations 2011

The AoS should consider objectives which focus on the protection of all aspects of the water environment.

- any other activities which directly or indirectly is liable to cause a significant
- adverse impact upon the water environment.

In order to ensure proportionate controls over activities, the Regulations provide for three levels of control: General Binding Rules (GBR), Registrations and Water Use Licences. SEPA can move activities between registration and licences and from GBR to registration or licences as it considers necessary in order to protect the water environment.

Flood Risk
Management Act
(Scotland) 2009

The Flood Risk Management (Scotland) Act 2009 introduced a more sustainable and modern approach to flood risk management. It designated all local authorities, SEPA, Scottish Water and Scottish Ministers, as 'Responsible Authorities', and laid the duty upon them to work to reduce flood risk. It placed a great deal of emphasis on the importance of partnership working and co-operation among authorities to help achieve the goal of reducing flood risk.

Ensure that flood risk management is included as an objective within the AoS framework.

The Marine (Scotland) Act provides a framework which will help balance competing demands on Scotland's seas. It introduces a duty to protect and enhance the marine environment and includes measures to help boost economic investment and growth in areas such as marine renewables.

The Marine (Scotland)
Act 2010

The main measures include:

- Marine planning: a new statutory marine planning system to sustainably manage the increasing, and often conflicting, demands on our seas
- Marine licensing: a simpler licensing system, minimising the number of licences required for development in the marine environment to cut bureaucracy and encourage economic investment
- Marine conservation: improved marine nature and historic conservation with new powers to protect and manage areas of importance for marine wildlife, habitats and historic monuments

Ensure that AoS framework addresses competing demands on seas

- Seal conservation: much improved protection for seals and a new comprehensive licence system to ensure appropriate management when necessary
- Enforcement: a range of enhanced powers of marine conservation and licensing

The Marine Works
(Environmental
Impact Assessment)
(Scotland)
Regulations 2017

The regulations requires that certain types of project with the potential to significantly affect the environment have an environmental impact assessment before a marine licence decision is made.

The AoS should consider where EIAs are required if projects have the potential to significantly affect the environment.

Scotland's National
Marine Plan 2015

This plan covers the management of both Scottish inshore waters (out to 12 nautical miles) and offshore waters (12 to 200 nautical miles). The plans vision for the marine environment is:

‘Clean, healthy, safe, productive and diverse seas; managed to meet the long term needs of nature and people.’

However, this policy is in the process of being superseded by National Marine Plan 2.

The AoS should consider objectives which focus on the protection of the water environment.

WASTE

Scotland's Zero
Waste Plan (2010)

The plan sets the strategic direction for waste policy for Scotland, informed by improved understanding of the environmental consequences of how we use and dispose of resources, and by the requirements of European legislation. The Zero Waste Plan is underpinned by a determination to achieve the best overall outcomes for Scotland's environment, by making best practical use of the approach in the waste management hierarchy: waste prevention, reuse, recycling and recovery.

This Zero Waste Plan is deliberately concise and strategic in its approach. It looks to set the goals Scotland needs to achieve in the future, and focuses on the key areas of activity with the potential to make the greatest contribution to deliver those goals. At the heart of the Zero

The AoS should consider waste recycling from the construction and operation of energy infrastructure.

Waste Plan is a change of mindset, a need for every one of us to start viewing waste as a potential resource and to think about how to use that resource most efficiently.

However, Annex B of the plan has been superseded by the Scottish Planning Policy 2014.

Scottish Planning
Policy 2014

The Scottish Planning Policy sets out national planning policies reflecting Scottish Ministers' priorities for the operation of the planning system and the development and use of land. It promotes sustainable economic growth, supports placemaking, and guides decisions across all planning authorities in Scotland, covering key areas such as housing, town centres, infrastructure, natural heritage, and climate change.

The AoS should consider objectives that support sustainable growth, placemaking, and development in housing, infrastructure, town centres, natural heritage, and climate resilience.

These regulations outline and expand on the duty of care responsibilities of businesses with respect to waste they produce.

The main compliance actions are as follows:

The Waste (Scotland)
Regulations 2012

- Segregate, store and transport your waste appropriately and securely
- Check that your waste is transported and handled by people or businesses that are authorised to do so
- Complete waste transfer notes to document all waste you transfer, and keep them as a record for at least two years.

The AoS should promote the reduction of waste sent for disposal and encourage re-use, recycling and recovery of waste should be considered.

- Take all reasonable steps to apply the waste management hierarchy before disposing of waste

From 1 January 2014, ensure glass, metal, plastic, paper and card is separated for collection. Take steps to avoid cross contamination of these materials

The AoS should also take account of the fact that radioactive waste will be created which will have to be managed.

ENERGY

The Strategy sets out the Scottish energy strategy for the period until 2050 and includes 2030 'whole-system' energy targets relating to renewables and energy efficiency. The Strategy is consistent with the Scottish Climate Change Act. The 2050 vision of the Scottish Energy Strategy priorities:

- Energy efficiency;
- Renewable and low carbon solutions;
- Consumer engagement and protection;
- System security and flexibility;
- Innovative local energy systems; and
- Strengthening the oil and gas industries.

Scottish Energy
Strategy: The Future
of Energy in Scotland
2017

For information

The Strategy is duty bound to assess new technologies and low carbon energy solutions.

Note: a draft of the Energy Strategy and Just Transition Plan was published in 2023, as of January 2025 formal issue is not yet available. The draft reiterates Scotland's firm opposition to building new nuclear power plants using current technologies.

Energy Strategy and Just Transition Plan 2023	The Strategy's vision is for Scotland to have an energy system that delivers affordable, resilient and clean energy supplies for Scotland's households, communities and business, to be achieved by 2045. The Strategy also sets out its aim to promote regional and local energy projects for community benefit and create more jobs in the renewable energy sector.	For information
Northern Ireland		
CROSS-THEMATIC		
Environmental Improvement Plan for Northern Ireland 2024	The Environmental Improvement Plan sets out Northern Ireland's strategic environmental outcomes and forms part of the Executive's Green Growth agenda. As such, it includes a mix of statutory and non-statutory targets and actions for the Department of Agriculture, Environment and Rural Affairs (DAERA) and all Northern Ireland Departments with responsibilities for environmental protection and enhancement This draft Strategy establishes NIs Green Growth vision and principles and sets out our commitments to tackling the climate crisis. A detailed Climate Action Plan is currently being developed, which will set out what will be done to deliver this. This strategy provides the overarching framework that brings together existing strategies and policies of government that supports the delivery of climate action, for example, the Energy Strategy.	The AoS should acknowledge that Northern Ireland has this new Environment Strategy.
The Draft Green Growth Strategy	Ten executive commitments have been set out within this strategy: • Embedding Green Growth – ensure that Green Growth is central to all policy and budgetary decisions by introducing a statutory Green Growth test and making Green Growth a budgetary priority • Legislating for Change - introduce legislation for reducing greenhouse gas emissions consistent with the UK's ambition to achieve net zero by 2050 and, to deliver upon this, we will develop clear targets and pathways in a Climate Action Plan from 2022	The AoS will need to consider the commitments of the Green Growth strategy and implications of actions for delivering climate action.

- A Fair Transition - ensure that the transition made will be a “Just Transition”, fair for all citizens, and will establish a Just Transition Commission in 2022
- People First - put citizens at the heart of the Green Growth policy development and delivery by ensuring ongoing engagement with young people and other key groups, including a Citizen Assembly Panel
- Supporting Behavioural Change - promote behavioural change by providing low carbon options, infrastructure, timely information, advice and support to citizens and businesses to enable them to make informed choices on the transition to a low emissions economy
- Evidence Based Decision Making - ensure decisions and actions associated with the transition to low emissions, green jobs and a clean environment are underpinned by robust and timely evidence and science
- Investing in Green Growth - transform the economy by working proactively with businesses, communities and all parts of government to maximise funding and investment opportunities for Green Growth and promote innovation, skills, research and technology
- Leading by Example - provide public sector leadership by delivering a government estate and fleet with net zero operational carbon emissions and ensure a Green Growth aligned procurement strategy for all government spend
- Working with Others - commit to ensure all government departments and the wider public sector work together to maximise decarbonisation efforts, and will work in partnership with neighbours across UK regions and the Republic of Ireland

Measuring Progress - ensure sound governance and reporting arrangements for the delivery of the Green Growth Strategy and Climate Action Plan by recommending that the Assembly establish a Standing Committee on Climate Action and agree a monitoring framework for measuring progress.

The Strategic
Planning Policy
Statement (SPPS) for
Northern Ireland

The objective of the planning system, consistent with Part 1, Section 1 of the Planning Act (Northern Ireland) 2011, is to secure the orderly and consistent development of land whilst furthering sustainable development and improving well-being. This means the planning system should positively and proactively facilitate development that contributes to a more socially economically and environmentally sustainable Northern Ireland.

The planning system sets out the following core planning principles:

- Improving Health and Well-being
- Creating and Enhancing Shared Space
- Supporting Sustainable Economic Growth
- Supporting Good Design and Positive Place Making
- Preserving and Improving the Built and Natural Environment

Within this planning system are a set of Planning Policy Statements (PPS) covering a variety of areas, to be implemented within and replaced by Local Development Plans when adopted.

The Natural Heritage PPS (PPS2) sets out the department of the Environment's planning policies for the conservation, protection and enhancement of Northern Ireland's natural heritage. It sets out the following objectives:

- to seek to conserve, enhance and restore the abundance, quality, diversity and distinctiveness of the region's natural heritage;
- to promote sustainable development; and
- to assist in meeting international, European, national and local responsibilities and obligations for natural heritage.

Also of note is the Renewable Energy PPS (PPS 18) which sets out the Department's planning policy for development that generates energy from renewable resources and that requires the submission of a planning application. It also encourages the integration of

The AoS will need to consider implications of key actions for development, especially regarding natural heritage and renewable energy.

renewable energy technology and greater application of the principles of Passive Solar Design in the design, siting and layout of new development. The objectives of the statement are:

- to ensure that the environmental, landscape, visual and amenity impacts associated with or arising from renewable energy development are adequately addressed;
- to ensure adequate protection of the Region’s built and natural, and cultural heritage features; and

to facilitate the integration of renewable energy technology into the design, siting and layout of new development and promote greater application of the principles of Passive Solar Design.

The Plan is the first five year review of the 25 year Environment plan and sets out the plan to deliver it. The Plan uses the ten goals set out in the 25-year Environment plan and sets out progress made against these, the targets and commitments for each and the plan to continue to deliver these targets and the overarching goals.

The Environment Improvement Plan for Northern Ireland 2023

Northern Ireland’s Plan, which was due to be published July 2023, will set out how DAERA, and other NI departments, intend to take to improve the natural environment, including measures needed to meet its long-term and interim targets.

The preparation and publication of an EIP is a statutory duty placed upon the Department of Agriculture, Environment and Rural Affairs (DAERA) by Schedule 2 to the Environment Act 2021 (the Act).

Ensure the protection and enhancement of biodiversity aligns with the targets and commitments of the plan, and is included in an objective within the AoS.

MARINE ENVIRONMENT

Review of the Marine Protected Areas Strategy for the Northern Ireland

Since the publication and implementation of the original MPA Strategy in 2014, several key strategic policy drivers have been developed at global, UK and Northern Ireland levels relating to biodiversity loss and climate change. Understanding of how MPAs function and the role

Ensure consideration of marine protected areas.

Inshore Area 2024 – 2030	that marine ecosystems play in climate change adaptation and mitigation has also grown significantly over this time.	
Consultation Document 2024	The review seeks to maximise co-benefits that a well-managed MPA network can provide, such as improved wider biodiversity and protected nursery grounds for commercial fish species, and societal benefits, including improved water quality and opportunities for recreation, eco-tourism, improved health and increased ocean literacy. The vision of the updated MPA Strategy is: <i>Northern Ireland's marine area is effectively conserved, managed, restored and valued through a network of ecologically representative, resilient and equitably governed protected areas.</i> The Marine Plan provides a framework of policies to be considered by public authorities taking decisions which affect or might affect the marine area through decision making processes. It is a material consideration in this regard. The Marine Plan (when adopted) will be used by Public Authorities in taking decisions which affect or might affect the marine area, including: • Authorisation or enforcement decisions • Decisions that relate to the exercise of any function capable of affecting the marine area. It is a single document made up of two plans, one for the inshore region and one for the offshore region. The inshore region extends from the Mean High Water Spring Tide mark out to, at most, 12 nautical miles (nm) and includes tidal rivers and sea loughs. The offshore region is the area that extends south-eastwardly from the 12nm territorial limit to the outer boundary of the Northern Ireland marine area (31nm at the farthest point).	Development of certain new energy infrastructure may result in transboundary effects in Northern Ireland's marine environment which will need to be considered by the AoS.
Marine Plan for Northern Ireland 2022		

Marine Act (Northern Ireland) 2013	This Act provides marine plans in relation to the Northern Ireland inshore region, to provide for marine conservation zones within this region and to make further provision in relation to marine licensing for certain electricity works in that region. It promotes the Uks aim of establishing an ecologically coherent network of Marine Protected Areas, so that marine biodiversity is protected, and international and European commitments are met.	The AoS should consider implications towards the protection of marine biodiversity and protected areas.
Integrated Coastal Zone Management Strategy for Northern Ireland 2006-2026	This strategy sets out long-term objectives for achieving sustainable coastal management in Northern Ireland, through improvements to existing management systems, the development of new management systems and identifying and dealing with potential areas of conflict. It aims to establish sustainable levels of economic and social activity in our coastal areas while protecting the coastal environment.	The AoS should consider objectives which align with the aims of the strategy and protect the marine and coastal environment.
Northern Ireland Regional Seascape Character Assessment 2014	The aim of this study was to provide a strategic understanding of different areas of regional seascape character along the entire Northern Ireland coast, to contribute to the aims of the European Landscape Convention through promoting the protection, management and planning of the seascape, and to support European cooperation on landscape issues. The objectives of the study were to: • Identify and map the different regional seascape character areas; • Describe the key features and characteristics of each seascape character area; and • Relate the description of each seascape character area to its neighbouring terrestrial landscape character areas (as described in the Northern Ireland Landscape Character	The AoS should consider objectives which protect the marine and coastal environment.

Assessment, 2000) and take account of boundaries identified in relation to neighbouring seascape areas for the British and Irish coastline.

The description and mapping of regional seascape character can provide practical tools and evidence to assist in responding to the increasing demands being placed upon the related marine and terrestrial environments.

While the 2014 assessment remains the most comprehensive strategic overview, it is now supported by updated digital datasets (2019) and the Northern Ireland Coastal Observatory (launched in 2023), which provide enhanced tools for visualising and analysing coastal change and seascape dynamics.

Data relating to coastal geomorphology can be viewed on the DAERA NI Coastal Maps:

<https://experience.arcgis.com/experience/b8454f3d62164518817e4c581b5555c8/page/Map-Viewers/>

OSPAR Agreement
(2025 update)

- The OSPAR Convention is a regional agreement through which 15 governments and the EU cooperate to protect the marine environment of the North-East Atlantic. The 'List of Decisions, Recommendations and Agreements Applicable within the Framework of the OSPAR Convention – Update 2025' outlines the actions to be taken by Contracting Parties.
- These are complemented by Other Agreements which set out:
 - issues of importance;
 - agreed programmes of monitoring, information collection or other work which the
- Contracting Parties commit to carry out;
 - guidelines or guidance on how any programme or measure should be implemented; and
 - actions to be taken by the OSPAR Commission on behalf of the Contracting Parties.

The AoS should consider guidance and information provided by the convention when setting objectives on the protection of the marine environment.

- In 2024, OSPAR clarified the distinctions between these instruments and retired several outdated measures. Implementation is now supported through the Measures and Actions Programme (MAP) and the Joint Assessment and Monitoring Programme (JAMP 2024–2028), which provide structured frameworks for tracking progress and assessing environmental status under the North-East Atlantic Environment Strategy (NEAES) 2030.

Northern Ireland Marine Protected Areas (MPAs) Strategy Review 2025	A review of the NI Marine Protected Areas Strategy occurred which was first published in 2014 and consultation on the Marine Protected Areas Strategy for the Northern Ireland Inshore Area 2024-2030 occurred in 2024. The first MPA Strategy set out what action the Department intended to take by 2020 to contribute to the delivery of an ecologically coherent MPA network in the North East Atlantic. The review seeks to maximise co-benefits that a well-managed MPA network can provide, such as improved wider biodiversity and protected nursery grounds for commercial fish species, and societal benefits, including improved water quality and opportunities for recreation, eco-tourism, improved health and increased ocean literacy.	The AoS should consider objectives which focus on the protection of the marine environment.
Northern Ireland Blue Carbon Action Plan Review 2025	The development of the Blue Carbon Action Plan took place in tandem with a review of the Marine Protected Areas (MPA) Strategy for the Northern Ireland inshore region (within 12 nautical miles of the coast). The concurrent review of the 2014 MPA Strategy offered a timely opportunity to consider the protection and restoration of blue carbon habitats within the existing MPA network, where appropriate. The Blue Carbon Action Plan for Northern reflects the need to embed nature-based projects in plans and policies to meet the Net Zero target.	The AoS should consider objectives which focus on the protection of the marine environment and climate.
Northern Ireland Seabird Conservation Strategy and Action	This strategy has been developed to restore and enhance seabird populations within marine areas and together with wider seabird strategies for England, Scotland and Wales, to improve the overall conservation status of seabird populations in the UK. Through this conservation strategy, the Department has proposed actions required to improve the evidence base for key	Ensure the consideration if biodiversity protection

Plan 2024 (consultation draft)	species and what management may be necessary to halt population decline and help facilitate their recovery.	
	Consultation on the Seabird Conservation Strategy and Action Plan for Northern Ireland occurred in 2024.	
Elasmobranch Conservation Strategy for Northern Ireland 2024 (consultation draft)	This Strategy has been developed to improve and restore elasmobranch populations (sharks, skates and rays) within the Northern Ireland marine area as current measures are not sufficient. Elasmobranch populations are assessed as part of the UK Marine Strategy and they are failing to meet Good Environmental Status (GES). Action is needed to help populations recover from past exploitation.	Ensure the consideration if biodiversity protection
CLIMATE CHANGE		
	The aim of the strategy is to ensure that energy in Northern Ireland is secure, affordable and clean now and in future. The strategy sets the following three targets:	
	• Deliver energy efficiency savings of 25% from buildings and industry by 2030. • Meet at least 70% of electricity consumption from a diverse mix of renewable sources by 2030. • Double the size of Northern Ireland's low carbon and renewable energy economy to a turnover of more than £2B by 2030.	
The Path to Net Zero Energy: Secure, Affordable, Clean 2021	The strategy centres around five key principles: • Placing people at the heart of energy future • Grow the green economy • Do more with less • Replace fossil fuels with renewable energy • Create a flexible, resilient and integrated energy system	The AoS should note that Northern Ireland is on a path to clean energy now and in the future which excludes generation of nuclear energy within its boundaries.

	Northern Ireland's first Blue Carbon Action Plan provides the foundation for the protection and restoration of blue carbon habitats. It will work to provide nature-based solutions to mitigate climate change through the absorption of carbon dioxide in the Northern Ireland inshore area.	
Northern Ireland Blue Carbon Action Plan 2025-2030	The aims of the Blue Carbon Action Plan are to: 1. Establish and maintain a framework that monitors and protects Northern Ireland's existing blue carbon habitats, supporting their active management, restoration and creation; 2. Promote blue carbon habitats as a nature-based solution for addressing the challenges presented by climate change and biodiversity loss, while highlighting wider societal benefits; and 3. Align the Blue Carbon Action Plan with cross-cutting policies relating to climate change, biodiversity and other environmental obligations, recognising the linkages between marine and terrestrial ecosystems.	The AoS should note that Northern Ireland is on a path to provide nature based solutions to help mitigate climate change.
Climate Change Act (Northern Ireland) 2022	Sets targets for the years 2030, 2040 and 2050 for the reduction of greenhouse gas emissions. Provides a system for carbon budgeting and reporting against targets and budgets.	AoS objectives should seek to ensure that development is resilient and adaptable to the impacts of climate change, throughout the project lifecycle.
BIODIVERSITY		

The Wildlife (Northern Ireland) Order 1985 (as amended)	The Act establishes the protection of birds, other animals and other wildlife including wild plants and new species introductions. Specific details include methods for killing or taking birds or animals, protecting nests and eggs and the power to grant licenses. Amendments to the 1985 order are made with respect to birds, enabling licences to be granted for killing wild birds and animals whilst increasing protection for birds more generally.	Ensure the protection and enhancement of biodiversity is included as an objective within the AoS.
Wildlife and Natural Environment Act (NI) 2011	This Act amends the Wildlife (NI) Order 1985 and the Environment (NI) Order 2002 and adds new provisions to protect a greater range of plants, animals, birds and to increase protection to Areas of Special Scientific Interest. It introduces new statutory duties upon government departments and public bodies to take action to further the conservation of biodiversity. Sections 4 to 28 of the Act relate to amendments to the Wildlife (Northern Ireland) Order 1985. Sections 29 to 34 relate to amendments to the Environment (Northern Ireland) Order 2002.	Ensure the protection and enhancement of biodiversity is included as an objective within the AoS.
The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended)	These regulations transpose the Habitats Directive in relation to Northern Ireland. They provide for the protection of sites in the UK that support habitats and species in need of conservation across Europe and full protection of species of European importance whether occurring within designated sites or not. The regulations include the power to grant protected species licences.	Ensure the protection of biodiversity is included as an objective within the AoS.
The Environment (Northern Ireland) Order 2002	This is the Order places obligations on individuals and organisations to protect and manage the environment. This includes reporting environmental incidents, obtaining permits, and complying with environmental standards.	Ensure the protection of biodiversity is included as an objective within the AoS.

The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017	The Regulations are concerned with general rules and administrative matters regarding the environmental impact assessment of the effects of certain public and private developments. This includes: ensuring that a number of that EIA development cannot be permitted without the consideration of environmental information; set out the matters that confirm that development is EIA development; ensure that, where the proposed development also requires a Habitats Regulations Assessment, the environmental impact assessment is coordinated with that assessment.	The AoS should consider where EIAs are required if projects have the potential to significantly affect the environment.
Biodiversity Strategy for NI to 2020	This Strategy sets out how Northern Ireland plans to meet its international obligations and local targets to protect biodiversity and ensure that the environment can continue to support people and the economy. It builds upon the first Biodiversity Strategy published in 2002 but adopts the modern and internationally agreed approach that emphasises the management of biological systems to deliver the materials and services upon which people depend – the ecosystem services approach. A number of high-level challenges have been identified which will require particular attention: • valuing the environment in the broadest context; • reducing the impact of climate change; • obtaining adequate resources for biodiversity projects from a wide range of sources; • encouraging ecosystem scale protection measures; • enhancing data gathering and management; • tackling invasive species; and • engaging society more fully to halt biodiversity loss.	Ensure the protection and enhancement of biodiversity is included as an objective within the AoS.
Environmental Improvement Plan (EIP) Northern Ireland	Northern Ireland's first Environment Strategy will form the basis for a coherent and effective set of interventions that can deliver real improvements in the quality of the environment and thereby: improve the health and well-being of all who live and work in Northern Ireland; create opportunities to develop Northern Ireland's economy; elevate Northern Ireland to an environmental leader; and enable us to play our part in protecting the global environment for	Ensure the protection and enhancement of biodiversity is included as an

	many decades to come. The Environment Strategy forms part of the Executive’s wider Green Growth agenda and, for the most part, is intended to be a high-level, Executive-endorsed strategy that will sit alongside both new and existing strategies. There are six Strategic Environmental Outcomes (SEOs) for the Environment Strategy, each with a set of actions, targets and desired outcomes: • Excellent Air, Water, Land & Neighbourhood Quality; • Healthy & Accessible Environment & Landscapes Everyone Can Connect With & Enjoy; • Thriving, Resilient & Connected Nature & Wildlife; • Sustainable Production & Consumption On Land & At Sea; • Zero Waste & Highly Developed Circular Economy; and • Fair Contribution To UK Net Zero GHG Emissions & Improved Climate Resilience & Adaptability. The Strategy has been developed alongside similar strategies for England, Scotland and Wales to restore and improve the conservation status of seabird populations in the UK as outlined in the programme of measures in the UK Marine Strategy . Furthermore, this will help deliver international obligations to protect and preserve the marine environment under the OSPAR North-East Atlantic Environment Strategy. The aim of this Strategy is: To improve the conservation status of seabirds in Northern Ireland through effective management of current and emerging threats, with the overall goal of meeting Good Environmental Status.	objective within the AoS. Ensure consideration of biodiversity.
Seabird Conservation Strategy and Action Plan for Northern Ireland		
Consultation Document 2024		

Elasmobranch Conservation Strategy for Northern Ireland Consultation Document 2024	This Strategy has been developed to improve and restore elasmobranch populations within the Northern Ireland marine area as current measures are not sufficient. Elasmobranch populations are assessed as part of the UK Marine Strategy and they are failing to meet Good Environmental Status (GES). Action is needed to help populations recover from past exploitation. On a broader scale, the Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic included a specific target (S5.06) to improve the knowledge of elasmobranchs, for which this conservation strategy hopes to build upon. The proposed aim of this strategy is to Develop management guidance to aid with conservation measures for the 12 priority species identified in Table 1, while delivering on international obligations to protect and preserve the marine environment.	Ensure consideration of biodiversity.
The Draft NI peatland policy	The aim of this strategy is to provide a framework for both conserving intact peatlands and the peatland restoration programme. The vision of the strategy is to protect, enhance and manage sustainably peatland habitats, which are recognised for their intrinsic value and of the benefits they provide – for wildlife, people and climate. It sets out five strategic objectives and 24 supporting actions: • Peatland Conservation, Restoration & Management; • Peatland Policies; • Capacity Building & Research; • Knowledge Sharing, Communication & Access; and • Governance, Implementation & Funding.	The AoS must consider the protection and restoration of peatland.
Environmental Liability (Prevention and Remediation) (Amendment)	These regulations transpose the provisions of the EC Environmental Liability Directive (SR2009/252) with regard to the prevention and remedying of environmental damage. They impose obligations on operators of economic activities to prevent, limit or remediate	The AoS must consider the environmental protection and

Regulations (Northern Ireland) 2011	environmental damage. The regulations apply only to the more serious cases of environmental damage and are in addition to existing environmental legislation.	remediation of environmental damage.
ENERGY		
	The Energy Strategy sets out a roadmap to achieve the highest levels of energy efficiency by 2050 as part of wider action to address climate change. It sets out two targets to drive these changes: • Energy Efficiency: Deliver energy savings of 25% from buildings and industry by 2030; and • Renewables: Meet at least 80% of electricity consumption from a diverse mix of renewable sources by 2030. This figure currently stands at 42%.	
Northern Ireland Energy Strategy	The Energy Strategy also focus on Green Energy. Currently energy accounts for almost 60% of Northern Ireland's greenhouse gas emissions. The Energy Strategy aims to: • Reduce energy-related emissions by 56% by 2030 (relative to 1990 levels) in line with the Climate Change Committee's (CCC) Carbon Budget Energy; • Grow Northern Ireland's economy and supporting the 10X Economic Vision; • Double the size of Northern Ireland's low carbon and renewable energy economy to more than £2bn turnover; and • Bring together the skills, technologies and behaviours needed to advance the vision of net zero carbon and affordable energy by 2050.	The AoS should consider targets and aims set out by the energy strategy.

Appendix E. Baseline Data and Contextual Information

Note that baseline data has been predominantly compiled through interpretation of open source, official and readily available data and statistics and includes, where relevant, the interpretation of Geographic Information Systems spatial data. Spatial data has also been mapped in a separate Appendix section in this document. While baseline review and data searches have been undertaken in October 2025 in order to provide a comprehensive basis from which to develop the AoS Framework, it is to be recognised that some sources are subject to infrequent review, maintenance or update. Where available source publishing dates or 'last updated' dates have been included in the baseline review and reference provided as footnotes.

Sustainability Topic / Baseline	England	Scotland	Wales	Northern Ireland
Climate Change:	In 2023, UK total net GHG emissions= 385 MtCO ₂ e ¹ .			
Regional distribution of net greenhouse gas emissions	In 2023, England's net GHG emissions was 284.8 MtCO ₂ e and had approximately 74.0% share of emissions in the UK ² .	In 2023, Scotland's net GHG emissions was 37.8 MtCO ₂ e and had approximately 9.8% share of emissions in the UK.	In 2023, Wales's net GHG emissions was 33.7 MtCO ₂ e and had approximately 8.8% share of emissions in the UK.	In 2023, Northern Ireland's GHG emissions was 18.2 MtCO ₂ e and had approximately 4.7% share of emissions in the UK.
Supporting Trend Data:				
UK GHG emissions decreased overall from 1990 to 2023 driven largely by a switch from using coal and heavy-emitting fuels in the energy supply and manufacturing industries to lower emission fuels such as natural gas and, more recently, renewable sources. Household emissions that come from heating homes and travelling, for commuting, social, domestic or leisure purposes, have been the largest contributor since 2015 as the emissions from energy supply decreased.				
In 2019, net territorial emissions in the UK of greenhouse gases were estimated to be 454.8 million tonnes carbon dioxide equivalent (MtCO ₂ e), a decrease of 2.8% compared to the 2018 figure of 468.1 million tonnes and 43.8% lower than they were in 1990 ³ .				
In 2020, net territorial greenhouse gas emissions in the UK were estimated to be 405.5 million tonnes carbon dioxide equivalent (MtCO ₂ e), a decrease of 9.5% compared to the 2019 figure of 447.9 million tonnes and 49.7%				

¹ Department for Energy Security and Net Zero (2025) *2023 UK Greenhouse Gas Emissions, Final Figures*. Available at: [2023 UK Greenhouse Gas Emissions, Final Figures](#)

² National Atmospheric Emissions Inventory (2024) *Greenhouse Gas Inventories for England, Scotland, Wales & Northern Ireland: 1990-2023*. Available at: [DA GHG Inventory 1990-2023 Report](#)

³ Department for Business, Energy & Industrial Strategy (2021) *2019 UK Greenhouse Gas Emissions, Final Figures*. Available: [2019 UK Greenhouse Gas Emissions, Final Figures](#)

lower than they were in 1990. The coronavirus (COVID-19) pandemic and the resulting restrictions introduced in 2020 across the UK had major impacts on various aspects of society and the economy, which led to a significant decrease in GHG emissions⁴.

In 2021, net territorial GHG emissions in the UK were estimated to be 426.5 million tonnes carbon dioxide equivalent (MtCO₂e), an increase of 5.0% from the 2020 figure of 406.3 million tonnes, but still 5.3% lower than in 2019, the most recent pre-pandemic year⁵.

In 2022, net territorial emissions in the UK of greenhouse gases were estimated to be 406.2 million tonnes carbon dioxide equivalent (MtCO₂e), which is down 3.5% compared to 2021 and 50.0% lower than in 1990⁶.

In 2023, net territorial emissions in the UK of greenhouse gases were estimated to be 385 million tonnes carbon dioxide equivalent (MtCO₂e), a decrease of 5% from the 2022 estimate and 53% lower than in 1990⁷.

Emissions of CO₂ are by far the largest component of total UK GHG emissions, of which the largest sources are power generation and road transport. Emissions have reduced from 1990 due to fuel switching, structural change, and improvements in end-use efficiency. The strong link between power generation and CO₂ emissions means that short term trends can be dominated by UK temperatures. In cold years like 1996 and 2010 there was an increase in demand for power for heating and in warm years like 2011 and 2014 there was a decrease. The second most important source of greenhouse gases is methane (CH₄). Annual emissions of CH₄ have reduced by over half since 1990. The main sources of CH₄ are agriculture, waste disposal, leakage from the gas distribution system and coal mining. Reductions in CH₄ emissions in the UK are driven by the increased utilisation of methane from landfills, a large decline in UK coal mining, investment in improvements to the natural gas supply infrastructure to reduce leakage and a reduction in livestock numbers. Emissions of nitrous oxide (N₂O) have also reduced by over half since 1990. Most N₂O emissions are generated from the agriculture sector, Agriculture sector N₂O emissions have

⁴ Department for Business, Energy & Industrial Strategy (2022) *2020 UK Greenhouse Gas Emissions, Final Figures*. Available: [2020 UK Greenhouse Gas Emissions, Final Figures](#)

⁵ Department for Business, Energy & Industrial Strategy (2023) *2021 UK Greenhouse Gas Emissions, Final Figures*. Available: [2021 UK Greenhouse Gas Emissions, Final Figures](#)

⁶ Department for Energy Security & Net Zero (2024) *2022 UK Greenhouse Gas Emissions*. Available: [2022 UK Greenhouse Gas emissions: one page summary](#)

⁷ Department for Energy Security and Net Zero (2025) *2023 UK Greenhouse Gas Emissions, Final Figures*. Available at: [2023 UK Greenhouse Gas Emissions, Final Figures](#)

decreased primarily due to reduced emissions from synthetic fertiliser application. N2O is also released during the production of nitric and adipic acid, a significant source in 1990 contributing to approximately half of all N2O emissions. Due to a decline in production together with the installation of abatement equipment, the Industrial Processes and Other Product Use (IPPU) sector now only contribute around 4% of N2O emissions. The smallest percentage reduction in emissions across the time series is for the F gases: HFCs, PFCs, NF3 and SF6. F-gas emissions have decreased since 1995, due mainly to the fall in F gas manufacture in the UK and the installation of abatement equipment at two of the three UK manufacturers. These emission reductions have been to some extent offset by the increases in the use of HFCs as substitutes for ozone depleting substances, particularly in refrigeration and air conditioning.⁸

Under the UK Climate Change Act 2008, the UK has so far set six ‘carbon budgets’. These set interim five-year caps on emissions from 2008 to 2037. The UK is currently in the fourth budget period (2023 to 2027). The UK met the first three carbon budgets and it is on track to meet the fourth (2023-27) which requires a 50% reduction in emissions below the base year. The fifth budget for 2028-2032 requires a 57% reduction in emissions below the base year, the sixth carbon budget for 2033-2037 would require a 78% reduction and the seventh budget for 2038-2042 a reduction of 87%. It is reported that emissions reductions will need to outperform the fourth carbon budget to be on a path to achieve the UK’s 2030 Nationally Determined Contribution (NDC), the Sixth Carbon Budget and Net Zero.⁹

**Climate
change:**

In 2023, the UK total territorial GHG emissions per sector in UK were¹⁰:

Contribution of
sectors to
greenhouse
gas emissions

Industry: 56,675.0 ktCO₂e
Commercial: 29,590.4 ktCO₂e
Public Sector: 10,379.8 ktCO₂e
Domestic: 76,896.6 ktCO₂e

⁸ Department for Energy Security and Net Zero (2023) *UK Greenhouse Gas Inventory, 1990 to 2021*. Available: [UK Greenhouse Gas Inventory, 1990 to 2021](#)

⁹ Climate Change Committee (2025) *2025 Progress Report to Parliament*. Available: [Progress in reducing emissions - 2025 report to Parliament - Climate Change Committee](#)

¹⁰ Department for Energy Security and Net Zero (2025) *UK local authority and regional greenhouse gas emissions statistics, 2005 to 2023*. Available: [UK local authority and regional greenhouse gas emissions statistics, 2005 to 2023 - GOV.UK](#)

Transport: 113,306.6 ktCO₂e

LULUCF: 1,119.7 ktCO₂e

Agriculture: 48,287.7 ktCO₂e

Waste: 19,838.2 ktCO₂e

In 2023, the total territorial
GHG emissions per sector
in England were:

Industry: 39,084.4 ktCO₂e

Commercial: 25,312.3
ktCO₂e

Public Sector: 8,559.4
ktCO₂e

Domestic: 63,148.1
ktCO₂e

Transport: 93,951.8
ktCO₂e

LULUCF: -598.3 ktCO₂e

Agriculture: 29,819.6
ktCO₂e

In 2023, the total territorial
GHG emissions per sector
in Scotland were:

Industry: 5,761.2 ktCO₂e

Commercial: 2,554.1
ktCO₂e

Public Sector: 1,008.2
ktCO₂e

Domestic: 7,077.9 ktCO₂e

Transport: 9,921.2 ktCO₂e

LULUCF: 2,351.0 ktCO₂e

Agriculture: 7,712.9
ktCO₂e

Waste: 1,397.5 ktCO₂e

In 2023, the total territorial
GHG emissions per sector
in Wales were:

Industry: 8,675.8 ktCO₂e

Commercial: 1,240.4
ktCO₂e

Public Sector: 474.6
ktCO₂e

Domestic: 3,757.3 ktCO₂e

Transport: 5,863.8 ktCO₂e

LULUCF: -628.9 ktCO₂e

Agriculture: 5,190.3
ktCO₂e

Waste: 916.2 ktCO₂e

In 2023, the total territorial
GHG emissions per sector
in Northern Ireland were:

Industry: 1,545.5 ktCO₂e

Commercial: 483.6 ktCO₂e

Public Sector: 337.5
ktCO₂e

Domestic: 2,838.3 ktCO₂e

Transport: 3,569.8 ktCO₂e

LULUCF: 2,178.6 ktCO₂e

Agriculture: 5,564.8
ktCO₂e

Waste: 999.8 ktCO₂e

Waste: 16,311.9 ktCO₂e

Supporting Trend Data¹¹:

In 2023, emissions in the agricultural sector account for 12% of UK total emissions and have declined by 1% since 2022 and have declined by 14% since 1990.

In 2023, emissions in the buildings and product uses sector account for 20% of UK total emissions and have declined by 6% since 2022. Between 1990 and 2023, emissions from residential buildings declined by 36% emissions from public sector buildings declined by 48% and emissions from commercial buildings increased by 5%.

In 2023, emissions in the industrial processes sector account for 14% of UK total emissions and have declined by 2% since 2022 and have declined by 66% since 1990.

In 2023, emissions in the fuel supply sector account for 8% of UK total emissions and have declined by 4% since 2022 and have declined by 61% since 1990.

In 2023, emissions in the electricity supply sector account for 11% of UK total emissions and have declined by 20% since 2022 and have declined by 78% since 1990.

In 2023, emissions in the domestic transport sector account for 29% of UK total emissions and have declined by 1% since 2022 and by 13% since 1990.

In 2023, emissions in the waste sector account for 5% of UK total emissions and have declined by 1% since 2022 and has declined by 72% since 1990.

In 2023, emissions in the LULUCF sector account for 0.3% of UK total emissions

¹¹ Department for Energy Security & Net Zero (2025) *2023 UK Greenhouse Gas Emissions, Final Figures*. Available: [2023 UK Greenhouse Gas Emissions, Final Figures](#)

Climate change:	The UK Climate Projections (UKCP18) and the State of the UK Climate reports (published annually) ¹² identify the following observed trends which are attributed to climate change ¹³ :
Climate Projections	• The most recent decade (2015–2024) has been on average 0.41°C warmer than the 1991–2020 average and 1.24°C warmer than 1961–1990. • The sea surface temperature in the UK for the most recent decade (2015–2024) has been on average 0.3°C warmer than the 1991–2020 average and 0.9°C warmer than 1961–1990. • Over the last 250 years in England and Wales, six of the 10 wettest winter half-years have occurred in the 21st Century so far, with October 2023 to March 2024 the wettest winter half-year on record. • The most recent decade 2015–2024 has been 2% wetter than 1991–2020 and 10% wetter than 1961–1990. • Observations suggest a slight increase in heavy rainfall across the UK in recent decades. • Since 1901, the sea level around the UK has risen by about 19.5 cm, with two-thirds of this rise happening in just over the last three decades.

The UKCP18 projects the following changes within the UK by the 2080-2099 decades, relative to a 1981-2000 baseline, with a medium emissions scenario¹⁴:

- Average summer temperatures across the UK will increase by 1.2 – 4.5 °C;
- Average summer rainfall will likely decrease, with projections ranging between -46 – +2%;
- Average winter rainfall will likely increase, with projections ranging between -9 – +38%, and;
- Sea levels in London will rise by 60 cm.

To provide context of how climate change may be manifested in individual regions, taking the north west region as an example, significant impacts across a range of sectors including health, infrastructure, economy and biodiversity

¹² Kendon, M et al (2024) *State of the UK Climate 2024*. Available: [State of the UK Climate in 2024 - Kendon - 2025 - International Journal of Climatology - Wiley Online Library](#)

¹³ Lowe, J. A., et al. (2018): UK Climate Projections 18 Science Overview Report, Met Office, Exeter, UK. Available: <https://www.metoffice.gov.uk/pub/data/weather/uk/ukcp18/science-reports/UKCP18-Overview-report.pdf>

¹⁴ Palmer, M., et al. (2018): UK Climate Projections 18 Marine Report, Met Office, Exeter, UK. Available: <https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18-marine-report-updated.pdf>

are anticipated as a result of future changes in climate. Specifically, cold related illnesses and mortality are likely to decrease due to milder winter however, the number of incidents of food poisoning, heat stress and heat related deaths may increase in summer. Domestic energy use may decrease in winter due to higher temperatures however it may increase during summer months as refrigeration and air conditioning demand increases. Wetter winters and more intense rainfall events throughout the year may result in a higher risk of flooding from rivers.

National key findings for temperature, precipitation and sea level rise for the different emissions scenarios are also detailed within UKCP18 as follows:

Variable	Annual Temperature Change (°C)					Winter precipitation change (%)					Summer precipitation change (%)				
Percentile	5 th	10 th	50 th	90 th	95 th	5 th	10 th	50 th	90 th	95 th	5 th	10 th	50 th	90 th	95 th
High emissions	0.7	0.9	1.8	2.7	3.0	-5	-5	7	21	25	-35	-31	-15	0	3
Medium emissions	0.5	0.7	1.4	2.3	2.5	-10	-7	4	17	21	-30	-26	-13	2	6
Low emissions	0.3	0.5	1.2	2.0	2.3	-8	-5	5	16	19	-28	-24	-11	1	5

	5 th	Central	95 th
High emissions	53	84	115
Medium emissions	37	60	83
Low emissions	29	49	70

UKCP18 absolute time mean sea level change (cm) projections over the 21st century in London under 3 different scenarios, with 5th and 95th percentile confidence intervals. The changes are given for the year 2100 relative to the 1981-2000 average.

Biodiversity and Ecosystems:

SPAs are strictly protected sites classified in accordance with Article 4 of the, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species¹⁵.

¹⁵ Joint Nature Conservation Committee (2013) Special protection Areas. Available: <http://jncc.defra.gov.uk/page-162>.

Special Protection Areas (SPAs)	SPAs are of national and international conservation importance.			
	There are also ‘potential Special Protection Areas (pSPAs) which are potential site boundaries not yet classified ¹⁶ . Areas can be secured as sites compensating for damage to a European site (e.g. SPAs) and are protected by government policy. All the locations of SPAs are shown in Figures 2A and 2B .			
	As of October 2024, there were 82 Classified SPAs in England, covering an area of 972,335 ha. There is one site crossing the England / Scotland border (135,750 ha), two across the England / Wales border (38,811 ha), two classified as England / offshore (747,933 ha) and one classified as England / Wales / Offshore (251,709 ha) ¹⁷ . SPAs in England are predominantly located in coastal and estuarine areas, with various sites distributed inland. Currently, there are 46 SPAs with marine	As of October 2024, there were 160 Classified SPAs in Scotland, covering an area of 1,709,659 ha. There is also one site crossing the England / Scotland border (135,750 ha.). SPAs are distributed widely throughout Scotland, with large concentrations in coastal and estuarine areas, islands and uplands.	As of October 2024, there were 17 Classified SPAs in Wales, covering an area of 342,141 ha. There are also two sites crossing the England / Wales border (38,811 ha), one classified as England / Wales / Offshore (251,709 ha) and one classified as Wales / Offshore (166,747 ha). SPAs are located in coastal and estuarine areas of Wales, with several situated in the central and northern highlands. Currently, there are 10 SPAs with marine components designated	As of October 2024, there were 16 Classified SPAs in Northern Ireland, covering an area of 113,985 ha. SPAs in Northern Ireland are primarily located in coastal and estuarine areas.

¹⁶ DEFRA (2019) *Potential Special Protection Areas (England)*. Available: <https://environment.data.gov.uk/dataset/b54f9a71-8ef7-4ffb-a85f-7d4e65fbd294>

¹⁷ Joint Nature Conservation Committee (2024) Classified Special Protection Areas (SPAs) in the UK. Available: <http://jncc.defra.gov.uk/page-1399>.

components designated partly or wholly within English waters. A total of 3 SPAs with marine components are located within both English and Welsh waters.	partly or wholly within Welsh waters.
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Solway Firth is a potential
SPA (pSPA) in the
northwest of England, as of
October 2025¹⁸.

Supporting Trend Data:

In the UK, the first SPAs were identified and classified in the early to mid-1980s. Classification has since progressed, with regular updating of both the number of classified SPAs and those that are in process of being classified (pSPA).

In response to stakeholder consultation, the Department for Environment, Food and Rural Affairs (Defra) convened an advisory group to take forward further consideration of SPA network development. The Third SPA Network Review, published in 2016, focused largely on terrestrial SPAs, but recognised the need for a review of implementation of the Birds Directive in the UK's marine environment¹⁹. As a result of this, it is likely that further marine SPAs will be designated in the future.

**Biodiversity
and
Ecosystems:**

SACs are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). The listed habitat types and species are those considered to be most in need of

¹⁸ Natural England (2025) *Potential Special Protection Areas (England)*. Available: [Potential Special Protection Areas \(England\) - data.gov.uk](https://data.gov.uk/dataset/potential-special-protection-areas-england)

¹⁹ Joint Nature Conservation Committee (2013) Special protection Areas. Available: <http://jncc.defra.gov.uk/page-162>.

Special Areas of Conservation (SACs) conservation at a European level (excluding birds). Sites of Community Importance (SCIs) are sites that have been adopted by the European Commission but not yet formally designated by the government of each country. Candidate SACs (cSACs) are sites that have been submitted to the European Commission, but not yet formally adopted. SACs / SCIs / cSACs cover marine as well as terrestrial areas²⁰.

SACs are of national and international conservation importance.

Areas can also be secured as sites compensating for damage to a European site (e.g. SACs), and are protected by government policy.

The locations of SACs are shown in **Figures 2A and 2B**

As of April 2025, there were 242 SACs, covering an area of 1,068,485 ha. There are three SACs crossing the England / Scotland border (112,894 ha) and seven across the England / Wales border (95,182 ha). Additionally, there are three SACs which are classified as England / Offshore (3,797,160 ha) and one classified as England / Wales / Offshore (584,210 ha)²¹. SACs are widely

As of April 2025, there were 239 SACs and one SCI in Scotland, covering an area of 2,291,069 ha. There are three SACs crossing the England / Scotland border (112,894 ha). Also, there are two SACs classified as Scotland / Offshore (182,276 ha). SACs in Scotland are widely and densely distributed throughout the country. Large concentrations are found in coastal and highland

As of April 2025, there were 85 SACs in Wales, covering an area of 590,353 ha. There are seven across the England / Wales border (95,182 ha), one classified as England / Wales / Offshore (584,210 ha) and one classified as Wales / Offshore (1,062,242 ha). SACs are widely distributed throughout Wales. There are also currently 11 SACs with marine components

As of April 2025, there were 57 SACs in Northern Ireland, covering an area of over 85,870 ha. There is also one SAC classified as Northern Ireland / Offshore (160,404 ha). SACs are widely distributed throughout Northern Ireland, with the largest being situated around the coast and border with the Republic of Ireland.

²⁰ Joint Nature Conservation Committee (2016) Special Areas of Conservation (SAC). Available: <http://jncc.defra.gov.uk/page-23>.

²¹ Joint Nature Conservation Committee (2016) Special Areas of Conservation/Sites of Community Importance in the UK as at 15 September 2016. Available: <http://jncc.defra.gov.uk/page-1456>.

distributed throughout England; however, the highest concentrations correspond with the more remote rural and upland locations. There are currently 40 SACs with marine components designated partly or wholly within English waters. This includes 3 SACs with marine components located within both English and Welsh waters, 2 within both English and Scottish waters²².

areas. There are currently 56 SACs with marine components designated partly or wholly within Scottish waters.

designated partly or wholly within Welsh waters.

As of October 2025, there are two Possible Special Areas of Conservation in England²³:

- Southern North Sea
- Bristol Channel
Approaches /
Dynesfeydd Mor
Hafren

²² Joint Nature Conservation Committee (2020) Special Areas of Conservation (SACs) with marine components (all UK waters). Available: [Special Areas of Conservation \(SACs\) with marine components \(all UK waters\) | JNCC Resource Hub](#)

²³ Natural England (2025) *Possible Special Areas of Conservation (England)*. Available: [Possible Special Areas of Conservation \(England\) - data.gov.uk](#)

Supporting Trend Data:

Member States of the European Union are required to report every six years on the conservation status of habitats and species listed on the annexes of the Habitats Directive. In general, the status of UK habitats of European importance declined over the reporting period 2007 – 2013 and were identified to have improved in the most recent assessment (2019). In 2007, 5% of UK habitats listed in Annex I of the EU Habitats Directive were in favourable conservation status, this figure decreased to 3% in 2013 before increasing again to 8% in 2019. The conservation status of 48% of the habitats was unfavourable-improving in 2007, it decreased to 31% in 2013 and 20% in 2019. The conservation status of 30% of the habitats was unfavourable-declining in 2007, this decreased to 25% in 2013 and 23% in 2019²⁴.

Biodiversity and Ecosystems: Ramsar sites are wetlands of international importance designated under the Ramsar Convention. In the UK, the first Ramsar sites were designated in 1976. The initial emphasis was on selecting sites of importance to waterbirds within the UK, and consequently many Ramsar sites are also Special Protection Areas (SPAs) classified under the Birds Directive²⁵.

Ramsar Sites

Ramsar sites are of national and international conservation importance.

There are also ‘potential Ramsar sites’ which are site boundaries not yet classified as Ramsar sites.

The locations of Ramsar sites are shown in **Figures 2A and 2B**

As of January 2025, there were 73 Ramsar sites in England, totalling an area of approximately 412,166 ha. There are three sites

As of January 2025, there were 51 Ramsar sites in Scotland, totalling an area of approximately 313,000 ha. There is one site

As of January 2025, there were 10 Ramsar sites in Wales, totalling an area of 11,366 ha. There were three sites crossing the

As of January 2025, there were 20 Ramsar sites in Northern Ireland, totalling an area of 88,152 ha. Ramsar sites in Northern

²⁴ Joint Nature Conservation Committee (2013) C3. Status of European habitats and species. Available: <http://jncc.defra.gov.uk/page-4239>

²⁵ Joint Nature Conservation Committee (2015) Ramsar sites in the UK, its Overseas Territories and Crown Dependencies. Available: <http://jncc.defra.gov.uk/page-161>

crossing the England / Wales border (40,553 ha total) and one site crossing the England / Scotland border (43,637 ha). Ramsar sites in England are predominantly located in coastal and estuarine areas, however there are smaller sites distributed inland throughout the country.	crossing the England / Scotland border (43,637 ha). Ramsar sites in Scotland are primarily located in coastal and estuarine areas, with various lochs being designated, particularly in the far north off the country.	England / Wales border, totalling 40,553 ha. Ramsar are located in coastal and estuarine areas of Wales, with several situated in the central and northern highlands.	Ireland are primarily located in coastal and estuarine areas. There are also two proposed Ramsar sites as of 2025 within Northern Ireland called Derryleckagh and Teal Lough, covering an area of approximately 240 ha ²⁷ .
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Teesmouth and Cleveland Coast is a Proposed Ramsar Site located in the northeast of England²⁶.

Supporting trend data is not available.

Biodiversity and Ecosystems:

NNRs contain examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in the UK. They are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them. In addition, they may be managed to provide public recreation that is compatible with their natural heritage interests.

National
Nature
Reserves
(NNRs) and

NNRs are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981. In Northern Ireland, Nature Reserves are designated under the Amenity Lands Act (Northern Ireland) 1965. In Scotland, whilst SNH remains the statutory

²⁶ Natural England (2025) *Proposed Ramsar (England)*. Available: [Proposed Ramsar \(England\) | Natural England Open Data Geoportal](#)

²⁷ Joint Nature Conservation Committee (2025) Ramsar Sites in the UK, the Crown Dependencies & UK Overseas Territories. Available: <https://jncc.gov.uk/our-work/ramsar-sites/#crown-dependencies-uk-overseas-territories-potential-sites>

Local Nature Reserves (LNRs)	designating authority, decisions to declare new NNR are shared with a Partnership Group of interested organisations ²⁸ .			
	NNRs are of national conservation importance.			
	The locations of NNRs are shown in Figures 2A and 2B .			
	Local Nature Reserves (LNRs) are a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities. Parish and Town Councils can also declare LNRs, but they must have the powers to do so delegated to them by a principal local authority. LNRs are places with wildlife or geological features that are of special interest locally. They offer people opportunities to study or learn about nature or simply to enjoy it. They range from windswept coastal headlands, ancient woodlands and flower-rich meadows to former inner-city railways, long abandoned landfill sites and industrial areas now re-colonised by wildlife.			
	As of April 2025, there are 224 NNRs in England, totalling an area over 110,000 ha. The largest is The Wash covering almost 8,800 hectares, while Dorset's Horn Park Quarry is the smallest at 0.32 ha ²⁹ . NNRs are widely distributed throughout England.	There are currently 43 NNRs in Scotland, covering just under 2% of Scotland's land area ³¹ . NNRs within Scotland cover a wide variety of Scotland's habitats and species from pine forest to blanket bog, from seabird colonies to mountain plants. NNRs are distributed throughout Scotland, with larger	As of June 2023, there are 76 NNRs in Wales. These cover a wide range of habitats from high mountains, peat bogs and woodlands, to sand dunes, mud flats and remote off-shore islands ³³ . There are approximately 100 LNRs in Wales, designated by the	There are 12 NNRs in Northern Ireland, totalling an area of 1,800 ha, noting this list was last updated November 2016. These are concentrated in the east and northeast of the country. They contain a wide range of species, communities and geology ³⁵ .

²⁸ Joint Nature Conservation Committee (2014) Protected areas designations directory. Available: <http://jncc.defra.gov.uk/page-1527>.

²⁹ Natural England (2025) *National Nature Reserves (England)*. Available: [National Nature Reserves in England - GOV.UK](#)

³¹ NatureScot (2021) *National Nature Reserves*. Available: [National Nature Reserves | NatureScot](#)

³³ Natural Resources Wales (2023) *National Nature Reserves*. Available: [Natural Resources Wales / National Nature Reserves](#)

³⁵ OpenDataNI (2016) *National Nature Reserves and Nature Reserves*. Available: [Portal | National Nature Reserves](#)

	As of April 2025, there are 1,710 LNRs in England ³⁰ .	concentrations within the north of the country.	Countryside Council for Wales ³⁴ .	There are 38 Nature Reserves in Northern Ireland cover 3,300 ha.
		There are 100 LNRs in Scotland, usually close to towns and cities. The most recent LNR designations were in December 2024 when Glasgow City Council declared 5 new sites ³² .		
	<i>Supporting trend data is not available</i>			
Biodiversity and Ecosystems	The SSSI / ASSI series has developed since 1949 as the suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. SSSIs were originally notified under the National Parks and Access to the Countryside Act 1949, and then were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010. ASSIs are notified under the Nature Conservation and Amenity Lands (Northern Ireland) 1985. Measures to improve ASSI protection and management are contained in the Environment (Northern Ireland) Order 2002 ³⁶ .			
Sites of Special Scientific Interest (SSSI) (England, Scotland and	SSSIs / ASSIs are of national conservation importance.			

³⁰ Natural England (2025) *Local Nature Reserves (England)*. Available: [Local Nature Reserves \(England\) | Natural England Open Data Geoportal](#)

³² NatureScot (2025) *Local Nature Reserves*. Available: [Local Nature Reserves | NatureScot](#)

³⁴ Natural Resources Wales (2024) *Local Green Spaces*. Available: [Natural Resources Wales / Local green spaces](#)

³⁶ Joint Nature Conservation Committee (2024) *Protected areas designations directory*. Available: [UK Protected Areas | JNCC - Adviser to Government on Nature Conservation](#)

Wales) and Areas of Special Scientific Interest (ASSI) (Northern Ireland)	The locations of SSSIs are shown in Figures 2A and 2B .			
NB: The SSSI / ASSI information shown includes sites designated for both biological and geological reasons.	As of April 2025, there are 4,128 SSSIs in England, covering about 1,102,456 ha ³⁷ . Some of these sites correspond with other designations, such as SACs, SPAs and NNRs. SSSIs are widespread throughout the whole of England and cover a wide variety of habitats and geological features.	As of September 2025, there were 1,422 SSSIs in Scotland covering about 1,011,00 ha or 13% of the country's surface area ³⁸ . Some of these sites correspond with other designations, such as SACs, SPAs and NNRs. SSSIs are widespread throughout the whole of Scotland and cover a wide variety of habitats and geological features.	As of January 2025, there are more than 1,000 SSSIs in Wales, covering about 12% of the country's surface area ³⁹ . Some of these sites correspond with other designations, such as SACs, SPAs and NNRs. SSSIs are widespread throughout the whole of Wales and cover a wide variety of habitats and geological features (NRW 2016).	As of October 2016, there are 394 ASSIs in Northern Ireland ⁴⁰ . ASSIs are widespread throughout the whole of Northern Ireland and cover a wide variety of habitats and geological features.

Supporting Trend Data:

The last assessment of the status of SSSIs and ASSIs was undertaken in 2005. This indicated that between 1999 and 2005, less than 50% of the biological features monitored in SSSIs and ASSIs were in favourable condition⁴¹.

MCZs are established to protect nationally important marine wildlife, habitats, geology and geomorphology and can be designated anywhere in English, Welsh and Northern Irish inshore and UK offshore waters⁴². They are

³⁷ Natural England (2024) *Sites of Special Scientific Interest*. Available: [Sites of Special Scientific Interest \(England\) | Natural England Open Data Geoportal](#)

³⁸ NatureScot (2024) *Sites of Special Scientific Interest (SSSIs)*. Available: <https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/national-designations/sites-special-scientific-interest-sssis>

³⁹ Natural Resources Wales (2023) *Site of Special Scientific Interest (SSSIs)*. Available: [Natural Resources Wales / Types of protected areas of land and sea](#)

⁴⁰ OpenDataNI (2016) *Areas of Special Scientific Interest*. Available: [Portal | Areas of Special Scientific Interest](#)

⁴¹ Joint Nature Conservation Committee (2010) *Common Standards Monitoring for Designated Sites: First Six Year Report*. Available: <http://jncc.defra.gov.uk/page-3520#download>

⁴² Joint Nature Conservation Committee (2014) Protected areas designations directory. Available: <http://jncc.defra.gov.uk/page-1527>.

Biodiversity and Ecosystems:	established under the Marine and Coastal Access Act (2009). In Northern Ireland, MCZs are designated under the Marine Act (Northern Ireland) (2013) ⁴³ .			
Marine Conservation Zones (MCZs)	It is also noted that the Welsh Government, with support from NRW and the Joint Nature Conservation Company (JNCC), are currently working with a task and finish group of marine stakeholders to identify possible Marine Conservation Zones (MCZs) within Welsh waters. ⁴⁴			
	MCZs are of national conservation importance.			
	The locations of MCZs are shown in Figures 2A and 2B .			
	As of May 2019, there are 91 MCZs within English waters. These are located in coastal and offshore locations and are designated for a range of habitats, wildlife conservation and geological features ⁴⁵ .	This designation is not applicable to Scotland.	There is one MCZ in Welsh water, Skomer, covering 130.2 ha. Skomer MCZ is situated around the island of Skomer and the Marloes Peninsula in Pembrokeshire, south west Wales. Skomer MCZ has species and habitats of national and international importance. These include grey seal, pink seafan, sponge communities,	There are currently five MCZs in Northern Irish waters ⁴⁷ : • Strangford Lough • Carlingford Lough (NB this area is adjacent to the border with the Republic of Ireland) • Outer Belfast Lough • Waterfoot • Rathlin

⁴³ Joint Nature Conservation Committee (2019) *Marine Conservation Zones*. Available: [Marine Conservation Zones | JNCC - Adviser to Government on Nature Conservation](#)

⁴⁴ JNCC (2022) *Welsh MPA Network Completion project launched*. Available: [Welsh MPA network project | JNCC - Adviser to Government on Nature Conservation](#)

⁴⁵ UK Government (2019) *Marine Conservation Zone designations in England*. Available: [Marine conservation zone designations in England - GOV.UK](#)

⁴⁷ DAERA (2024) *Marine Conservation Zones*. Available: [Marine Conservation Zones | Department of Agriculture, Environment and Rural Affairs](#)

eelgrass and algal communities⁴⁶.

Supporting trend data is not available

Biodiversity and Ecosystems:	NCMPAs are designated by Scottish Natural Heritage through the Marine (Scotland) Act (2010) and the Marine and Coastal Access Act (2009). NCMPAs are protected to reinforce the existing network of designated sites (SPAs, SACs, Ramsar) and introduce spatial protection for a wider range of marine wildlife, habitats and geology, previously not represented in the network.			
Nature Conservation	NCMPAs are of national conservation importance.			
Marine Protected Areas (NCMPAs)	Additionally, Priority Marine Features have been developed by Marine Scotland, the Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH). These are habitats and species that are a priority for conservation in Scotland's seas. Many of these are protected through the existing network of Marine Protected Areas. ⁴⁸			
	This designation is not applicable to England.	There are 36 NCMPAs in Scottish waters, 13 of which are offshore. They cover approximately 10% of the Scottish seas. These are primarily designated to protect marine habitats and species ⁴⁹ .	This designation is not applicable to Wales.	This designation is not applicable to Northern Ireland.

Supporting trend data is not available

⁴⁶ Natural Resources Wales (2021) *Skomer Marine Conservation Zone*. Available: [Natural Resources Wales / Skomer Marine Conservation Zone](#)

⁴⁸ Scottish Government (2025) *Marine environment*. Available: [Priority Marine Features - Marine environment - gov.scot](#)

⁴⁹ JNCC (2019) *Nature Conservation Marine Protected Areas*. Available: [Nature Conservation MPAs | JNCC - Adviser to Government on Nature Conservation](#)

Biodiversity and Ecosystems:	Ancient Woodland is land that has had continuous woodland cover since at least 1600AD (England and Wales) and 1750AD (Scotland) and is identified within the Ancient Woodland Inventory. As Ancient Woodlands have developed over such long timescales, they have unique features such as relatively undisturbed soils and communities of plants and animals that depend on the stable conditions that Ancient Woodland provides. These are often rare and vulnerable species.			
Ancient Woodland	There are two types of Ancient Woodland classification in England, Wales and Scotland; Ancient semi-natural woods and plantations on Ancient Woodland sites. Ancient semi-natural woods are woods that have developed naturally and may have existed since woodland first colonised the UK after the last glaciation. Plantations on Ancient Woodland sites are ancient woods that were felled and planted with non-native trees ⁵⁰ .			
	In Northern Ireland, four classifications of Ancient Woodland exist: Ancient Woodland; Probably Ancient Woodland; Possibly Ancient Woodland, and; Long Established Woodland ⁵¹ .			
	Ancient Woodland is irreplaceable and is of national conservation importance; however it does not have statutory protection in its own right.			
	The location of Ancient Woodland sites are shown in Figures 2A and 2B .			
	As of June 2024, there are over 52,000 ancient woodland sites in England ⁵² . Ancient Woodland sites are scattered throughout England, with the densest	Native woodlands occur in most of mainland Scotland and on several islands. As of May 2022, there are around 352,000 ha of	There are around 95,000ha of Ancient Woodland in Wales as of April 2025 ⁵⁴ .	The Inventory of Ancient and Long-Established Woodland identifies 2,374 sites, totalling 9,964ha in Northern Ireland. Of this, only 151ha is classified as Ancient Woodland (present

⁵⁰ Woodland Trust (2008) *KEY for classification of woods on the inventory and definitions of different antiquity classifications*. Available: <http://www.backonthemap.org.uk/NR/rdonlyres/7F3F67AD-5A28-4897-A039-3FC97841B6D5/0/080612Updateddecisionkeyforwebsiteandreport.pdf>

⁵¹ Woodland Trust (2016) *Ancient Woodland*. Available: <https://www.woodlandtrust.org.uk/visiting-woods/trees-woods-and-wildlife/woodland-habitats/ancient-woodland/>

⁵² UK Government Data (2024) *Ancient Woodland (England)*. Available: [Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK](#)

⁵⁴ DataMapWales (2024) *Ancient Woodland Inventory 2021*. Available: [Ancient Woodland Inventory 2021 | DataMapWales](#)

concentrations being in the south east.	ancient woods in Scotland ⁵³ .	since 1600AD) with 5,662ha classified as Long-Established Woodland, 3,269ha as Possibly Ancient Woodland, 882ha of Probably Ancient Woodland.
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Supporting Trend Data:

Within Northern Ireland, 1,500ha of classifiable woodland was lost from 1960 – 2007, although only 16ha of this can be stated to be truly Ancient Woodland (present since 1600AD)⁵⁵. Trends are less clear within the rest of the UK, however the preservation of Ancient Woodland is increasing recognised within planning policy.

Biodiversity and Ecosystems

Priority Habitat is habitat listed as being of principal importance for the purpose of conserving or enhancing biodiversity. In each of the four countries different lists have been produced in line with relevant legislation.

Priority Habitat

In England, the Priority Habitat Inventory (PHI) is a spatial dataset that maps priority habitats identified in the UK Biodiversity Action Plan, under Section 41 of the Natural Environment and Rural Communities Act (2006). The PHI currently maps 27 terrestrial and freshwater priority habitats across England⁵⁶.

In Scotland, priority habitats are listed in the Scottish Biodiversity list, including information on the selection criteria met and habitats identified in Annex 1 of the “Habitats Directive” which occur in Scotland⁵⁷.

⁵³ NatureScot (2022) *Ancient Woodland Inventory*. Available: [ancient woodland inventory scotland - Search](#)

⁵⁵ Woodland Trust (2007) *Preliminary Report*. Available: <http://www.backonthemap.org.uk/NR/rdonlyres/09F70BD6-8E68-4328-90B7-05DFE9483550/0/070115Preliminaryreport.pdf>

⁵⁶ Natural England (2025) *Priority Habitats Inventory (England)*. Available: [Priority Habitats Inventory \(England\) | Natural England Open Data Geoportal](#)

⁵⁷ NatureScot (2022) *Scottish Biodiversity List*. Available: <https://www.nature.scot/scotlands-biodiversity>

In Wales, priority habitats are listed in section 7 of the Environment (Wales) Act 2016⁵⁸. The Welsh Ministers publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

In Northern Ireland, as part of the Northern Ireland Biodiversity Strategy, the Department maintains lists of Northern Ireland Priority Habitats which require conservation action. These are now maintained as part of the WANE Act. The list of Northern Ireland Priority Species is currently under review⁵⁹.

In England, there are 1.86 million hectares of terrestrial and coastal priority habitats as of 2023. These habitats represent around 14% of the total land area of the country. For the 27 main habitat types, deciduous woodland accounts for around 41% of the total priority habitats resource in England. Blanket bog and upland heath each account for around 13%, while coastal and floodplain grazing marsh make up around 12%. Rarer habitats, such

In Scotland, there are 41 terrestrial habitats, and 20 marine habitats listed on the Scottish Biodiversity list.

In Wales, there are 16 main terrestrial habitats split into 36 terrestrial priority habitats, and 4 main marine habitats split into 19 marine priority habitats.

In Northern Ireland, there are 22 priority habitats listed⁶¹.

⁵⁸ Wales Biodiversity Partnership (2025) Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity. Available: <https://www.biodiversitywales.org.uk/Section-7>

⁵⁹ DAERA (2025) Habitat and Species Action Plans. Available: <https://www.daera-ni.gov.uk/articles/habitat-and-species-actions-plans>

⁶¹ DAERA (2025) Natural Environment Map Viewer. Available: <https://gis.daera-ni.gov.uk/arcgis/apps/webappviewer/index.html?id=bb721449cb8949e7a4f90c722bd2d80b>

as traditional orchards, ponds, and limestone pavements, together constitute 1% of the total resource.

More up to date data will be provided on DEFRA website in early 2026⁶⁰.

Supporting Trend Data:

Priority habitats can be designated as protected areas called Sites of Special Scientific Interest (SSSIs). They can also be outside of these SSSI protected areas but be under Higher Level Stewardship (HLS) or Countryside Stewardship (CS) agreements or fall within Forestry Commission (FC) ‘Managed woodland’. Some priority habitats, however, fall outside of the protection of all these schemes.

The ‘Living England Map’ shows the extent and distribution of 16 different habitats across England for 2022-23. The bespoke habitat types mapped are aligned with the UK Biodiversity Action Plan’s broad habitat classification scheme⁶².

Biodiversity and Ecosystems

Biosphere Reserves are areas of terrestrial and coastal ecosystems promoting the conservation of biodiversity with sustainable use. Biosphere reserves serve to demonstrate integrated management of land, water and biodiversity. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) Man and the Biosphere (MAB) programme comprises a World Network of Biosphere Reserves⁶³.

Biosphere Reserves

Biosphere Reserves are comprised of three interrelated zones:

⁶⁰ DEFRA (2025) Extent and condition of priority habitats. Available: <https://www.gov.uk/government/statistics>
⁶² DEFRA (2024) Living England: a national habitat map for everyone. Available: <https://defraenvironment.blog.gov.uk/2024/>
⁶³ UNESCO (2017) Biosphere Reserves. Available: <http://www.unesco.org.uk/designation/biosphere-reserves/>

- 1) The Core Area (protected: the ‘natural’ state of the region’s ecosystems).
- 2) The Buffer Zone (conserves the core area, and can accommodate positive human engagement, including research, education, training, tourism, extensive agriculture, or sustainable forestry).
- 3) The Transition Area (where most of the region’s people live and work, using the natural resources in a sustainable manner).

Biosphere Reserves are non-statutory.

The locations of Biosphere Reserves are shown in **Figure 2A**.

There are three Biosphere Reserves in England.	There are two Biosphere Reserves in Scotland.	There is one Biosphere Reserve in Wales, Biosffer Dyfi.	There are no Biosphere Reserves in Northern Ireland.
Brighton and Lewes Downs:	Galloway and Southern Ayrshire:	The area around the river Dyfi (west Wales) is a special place for its people, its culture and the local environment. It hosts some of the finest and most inspiring landscapes and wildlife areas in Europe, as well as a passionate community that care strongly about their magnificent surroundings ⁶⁹ .	
The Brighton and Lewes Downs Biosphere reserve covers almost 400km2 of land and sea between the River Adur and the River Ouse, bringing together the three environments of countryside, coast, and city & towns under one united approach.	Covering almost 9,800km2 the Galloway and Southern Ayrshire Biosphere was granted its status in recognition of the special natural qualities that characterise the area. It is home to 95,000 people who work together to improve life whilst caring		

⁶⁹ Biosffer Dyfie Biosphere (2024) Available: [UNESCO Dyfi Biosphere Reserve Wales](#)

Brighton and Lewes Downs Biosphere 2017 ⁶⁴	for the natural environment. ⁶⁷
North Devon:	Wester Ross:
The North Devon Biosphere Reserve covers 3,300km ² of land and sea. The reserve extends from the catchments of the Rivers Taw and Torridge and out to the island of Lundy, with its core at Braunton Burrows sand dune system ⁶⁵ .	The newly designated area of Wester Ross extends from the tip of Knoydart northwards to Achiltibuie and the Summer Isles, including population centres in Kyle of Lochalsh, Lochcarron, Gairloch and Ullapool. The new designation replaces an earlier one for Beinn Eighe – a much smaller area that was managed solely for nature conservation, research and education ⁶⁸ .
Isle of Wight:	
It covers all 33 parishes on land, and stretches north across the Solent to the shores of the mainland and south into the Channel ⁶⁶ .	

⁶⁴ Brighton and Lewes Downs Biosphere (2017) Available: <http://biospherehere.org.uk/>

⁶⁵ North Devon Biosphere (2016). Available: [Home](#)

⁶⁶ Isle of Wight Biosphere (2024) Available: [Isle of Man Government - UNESCO Biosphere Isle of Man](#)

⁶⁷ Galloway and Southern Ayrshire Biosphere (2022) Available: [Galloway and Southern Ayrshire Biosphere](#)

⁶⁸ Wester Ross Biosphere (2024) Available: [About | Wester Ross Biosphere](#)

Supporting trend data not available.

Biodiversity and Ecosystems	Local Wildlife Sites are non-statutory areas identified for their significant biodiversity value. They are selected locally using robust, scientifically determined criteria and detailed ecological surveys. These sites act as vital components of ecological networks, providing stepping stones and corridors that support species movement and habitat connectivity. Although often small, they play a crucial role in maintaining the natural green fabric of towns and countryside. The Wildlife Trusts, in partnership with local authorities, statutory agencies, landowners, and other stakeholders, have developed systems for identifying, managing, and monitoring these sites to safeguard their ecological importance ⁷⁰ .			
Local Wildlife Sites	These sites are named differently across the UK.			
	Local Wildlife Sites cover around 5% of England and based on the responses from Local Wildlife Site partnerships, there were a total of 44,240 LWS reported, covering a total of 750,475 hectares (ha).	In Scotland, the equivalent designation is Local Nature Conservation Sites (LNCSSs). In 2023, there were over 3,400 sites across Scotland.	In Wales, locally designated sites are known as Wildlife Sites and Sites of Interest for Nature Conservation (SINCs). There are over 4,700 sites covering about 800 km ² (around 4% of Wales).	In Northern Ireland, locally designated sites are known as Sites of Local Nature Conservation Importance (SLNCIs). SLNCIs are identified through the relevant area plans and play a key role in maintaining ecological networks.

Supporting Trend Data:

The Wildlife Trusts, in partnership with Natural England, are working to improve the recognition, management, and protection of Local Wildlife Sites (LWS) to help achieve the 30by30 target.

⁷⁰ The Wildlife Trusts (2025) Available: [Local Wildlife Sites | The Wildlife Trusts](#)

	Local Wildlife Sites face significant pressures from lack of management and inappropriate management, which can lead to habitat degradation and loss of biodiversity. Development also poses a major risk, both through direct impacts such as land take and indirect effects like fragmentation and disturbance.
Biodiversity and Ecosystems Irreplaceable Habitat	Irreplaceable habitat is very difficult to restore, create or replace once it has been destroyed due to its age, uniqueness, species diversity, or rarity. They include some of England’s most ecologically valuable habitats, such as ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, coastal sand dunes, saltmarsh, and lowland fens. Development that results in the loss of irreplaceable habitat is only permitted in exceptional circumstances. The 10% Biodiversity Net Gain (BNG) requirement does not apply to these habitats because replacement is not possible; instead, adverse impacts must be minimised and a bespoke compensation strategy agreed with the planning authority.
Biodiversity and Ecosystems Protected Species	To safeguard biodiversity, several species are legally protected under UK legislation, including the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017. These laws provide protection to plants and animals considered vulnerable or of significant ecological importance. Their protection can include bans on killing, capturing, or disturbing individuals and on preventing damage to their habitats. Key groups of protected species include • Mammals, including Bats, Otters, Hazel Dormice and Water Voles, • Birds, including Barn Owls, Kingfishers and Peregrine Falcons • Reptiles and Amphibians including Great Crested Newts, Adders and Natterjack Toads, • Invertebrates including Stag Beetles and White-Clawed Crayfish
Biodiversity and Ecosystems	Supporting Trend Data: Between 1970 and 2023, populations of breeding farmland and woodland birds decreased by 61% and 35% respectively, and the population index for breeding water and wetland birds was 10% lower than in 1975⁷¹. The

⁷¹ Joint Nature Conservation Committee (2024) C5. Birds of the wider countryside and at sea. Available at: [UKBI - C5. Birds of the wider countryside and at sea | JNCC - Adviser to Government on Nature Conservation](#)

Biodiversity population of breeding seabirds is also in long-term decline, being 25% lower in 2023 than in 1986⁷². By 2021, the index of relative abundance of priority species in the UK had declined to 37% of its base-line value in 1970⁷³.

Long-term data on habitats is not available, however in 2007, 5% of UK habitats listed on Annex I of the Habitats Directive were in favourable conservation status, decreasing to 3% in 2013, before increasing again to 8% in 2019. The number of habitats classified as unfavourable improving decreased to 31% in 2013 and 20% in 2019 from 48% in 2007⁷⁴. Improvement was seen in the number of habitats assessed as unfavourable declining, with a 7% decrease between 2007 and 2019. 48% of UK habitats of European importance are assessed as being unfavourable stable⁷⁵.

Some aspects do show improvement. The area of land in higher-level or targeted agri-environment schemes was 3.5 million hectares in 2019, an increase of 3.2 million hectares since 1992⁷⁶. There has also been improvements in the number of fish stocks being sustainable harvested, forestry land being sustainably managed and reductions in marine and air pollution⁷⁷.

Increasingly, biodiversity is under pressure from development and increasing population, in addition to climate change. Overall climate change could lead to:

- Changes in phenology (including changes in the timings of seasonal events causing loss of synchronicity and increased competitive advantage for some species at the expense of others);

⁷² Joint Nature Conservation Committee (2024) C5. Birds of the wider countryside and at sea. Available at: [UKBI - C5. Birds of the wider countryside and at sea | JNCC - Adviser to Government on Nature Conservation](#)

⁷³ Joint Nature Conservation Committee (2024) C4. Status of UK priority species. Available: [UKBI - C4a. Species - abundance | JNCC - Adviser to Government on Nature Conservation](#)

⁷⁴ Joint Nature Conservation Committee (2020). *Status of UK habitats of European Importance*. Available at: [UKBI - C3a. European habitats | JNCC - Adviser to Government on Nature Conservation](#)

⁷⁵ Joint Nature Conservation Committee (2020). *Status of UK habitats of European Importance*. Available at: [UKBI - C3a. European habitats | JNCC - Adviser to Government on Nature Conservation](#)

⁷⁶ Joint Nature Conservation Committee (2020) B1a. *Area of land in agri-environment schemes*. Available at: [UKBI - B1a. Agri-environment schemes | JNCC - Adviser to Government on Nature Conservation](#)

⁷⁷ Joint Nature Conservation Committee (2016) *Overview of assessment of change for all indicators*. Over. Available at: [UKBI - Overview of trends 2023 | JNCC - Adviser to Government on Nature Conservation](#)

- Shifts in suitable climate conditions for individual species leading to change in species distribution, abundance and range;
- Changes in the community structure and ecosystem function of habitats which species occupy;
- Changes to the composition and structure of plant and animal communities (including arrival of non-natives, loss of native species and increase in pest species);
- Changes to habitats and ecosystems, such as altered water regimes, increased rates of decomposition in bogs and higher growth rates in forests; and
- Loss of physical space due to sea level rise and increased storminess⁷⁸.

It is also worth noting that opportunities exist to deal with challenges and risks to natural resources. For example the State of Natural Resources Report (SoNaRR)⁷⁹ for Wales has identified the following, which are also considered to be applicable to the rest of the United Kingdom

⁷⁸ Inter-Agency Climate Change Forum (2010). *Biodiversity and Climate Change – a summary of impacts in the UK*. Available at: [Biodiversity and Climate Change - a summary of impacts in the UK](#)

⁷⁹ Natural Resources Wales (2016) *The State of Natural Resources Report (SoNaRR): Assessment of the Sustainable Management of Natural Resources. Technical Report. Chapter 3*. Available at: [chapter-3-state-and-trends-final-for-publication.pdf](#)

	Declining natural resources	Resilience of ecosystems	Optimising benefits	Minimising negative impacts
Green infrastructure in and around urban areas		Contribute to connectivity within and between ecosystems	Multi-benefits of urban green-spaces such as water filtration, accessible places for health and recreation, connecting habitats, and supporting opportunities for community cohesion	Tackling health inequalities and air quality
Increasing woodland cover, and bringing more of our existing woodlands into appropriate management	Will address woodland resource	Contribute to diversity and connectivity of woodlands	Multiple benefits of woodland, including health and recreation benefits, fibre and fuel, and wider catchment management opportunities	
Coastal zone management and managed realignment	Addressing coastal squeeze	Supporting coastal habitat	Supporting coastal communities, for example through providing opportunities for tourism and employment	Future proofing from coastal flooding / sea level rises
Maintaining, enhancing and restoring floodplains and hydrological systems	Water availability	Capacity of catchments to deal with high and low flows; supporting water quality	Supporting recreation and economic activity	Flood risk Social cohesion, equity/local economy
Better soil management	Investment in soils for future productivity	Soils underpin everything	Preventing erosion, supporting other habitats and benefits	Erosion, costs of water treatment etc
Utilisation of our uplands to deliver multiple benefits	Restoring peatland, safeguarding carbon stores	Wider resilience of upland and lowland habitats and species that depend on them	Making better use of Wales natural assets	Tackling climate change; reducing flood risk

Biodiversity and Ecosystems

Significant damage continues to occur to shallow sediment habitats and reefs across UK waters due to bottom fishing practices⁸⁰, particularly beam trawling and other mobile bottom-contacting gear. While some recovery in sensitive fish species abundance has been observed in the Celtic Sea, evidence for population recovery in the

⁸⁰ OSPAR Commission. (2023). Benthic Habitats Thematic Assessment. [Benthic Habitats Thematic Assessment](#)

Damage to seabed habitats	Greater North Sea remains limited and uncertain ⁸¹ . According to the latest OSPAR Quality Status Report (2023), physical disturbance from bottom trawling remains the primary pressure on benthic habitats, contributing to reduced diversity and degradation of sensitive communities. Around the UK, coastal and offshore seabed sediment habitats—such as sands, gravels, and muds—are impacted by a range of activities, but bottom trawling is still considered the most widespread and damaging pressure, affecting ecosystem functioning and resilience ⁸² . The UK Marine Strategy Part One (updated 2025) confirms that an appropriate indicator has been developed to assess Good Environmental Status (GES) for benthic habitats, incorporating metrics on physical disturbance and habitat sensitivity ⁸³ . Additionally, the UK Government has proposed extending bans on bottom trawling in vulnerable Marine Protected Areas to support habitat recovery and biodiversity conservation ⁸⁴ .
Biodiversity and Ecosystems Birds	Along the coasts of the UK and Ireland, seabird populations continue to show mixed trends, with several species experiencing significant declines in breeding success and overall numbers. According to the Seabirds Count census (2015–2021, published 2023⁸⁵), 11 of 21 species with reliable data have declined by more than 10% since the previous census, including Arctic skua, great skua, black-legged kittiwake, northern fulmar, little tern, and European shag. These declines are attributed to a combination of climate change⁸⁶, reduced prey availability (notably sandeels), and the effects of the EU discard ban (phased in from 2015–2019)⁸⁷, which has impacted scavenging species such as gulls and skuas. Additionally, outbreaks of Highly Pathogenic Avian Influenza (HPAI) from 2021–2023 have severely affected some colonies. While species such as northern gannet and razorbill have shown population increases, regional variation is evident. Scotland, which holds over half of the UK and Ireland’s seabird population, has seen declines in 14 of 20 species, whereas England shows a mix of increasing, declining, and stable trends. In Northern Ireland, data from the

⁸¹ OSPAR Commission. (2017). Recovery in the Population Abundance of Sensitive Fish Species. [Recovery in the Population Abundance of Sensitive Fish Species](#)

⁸² JNCC. (2023). Assessment of the Status of Benthic Habitats. [msfd_ospar_-benthic-overview_project_summaryv05_edited.pdf](#)

⁸³ Defra. (2025). UK Marine Strategy Part One Update. <https://consult.defra.gov.uk/uk-marine-strategy-1/uk-marine-strategy-part-one-update-2025/>

⁸⁴ UK Government. (2025). Proposal to Extend Ban on Destructive Bottom Trawling. [Government proposes to extend ban on destructive bottom trawling - GOV.UK](#)

⁸⁵ Joint Nature Conservation Committee (JNCC). (2023). Seabirds Count – the fourth Breeding Seabird Census. Retrieved from <https://jncc.gov.uk/our-work/seabirds-count/>

⁸⁶ British Trust for Ornithology (BTO). (2025). Waterbirds in the UK 2023/24 – Wetland Bird Survey Annual Report. Retrieved from <https://www.bto.org/sites/default/files/wituk-2023-24-report-bto-jncc-rspb-naturescot.pdf>

⁸⁷ JNCC. (2023). Seabirds Count UK Press Release: Mixed Fortunes for Seabirds. Retrieved from <https://jncc.gov.uk/media/8476/seabirds-count-uk-press-release-2023-11.pdf>

BTO (2024) indicate a continued decline in northern fulmar, particularly in County Londonderry⁸⁸, while black-legged kittiwake populations appear stable or increasing at sites like Portrush and Muck Island. Common terns have increased in nesting numbers but face poor breeding success due to flooding and mink predation. Broader pressures such as adverse weather and food shortages remain key concerns. Waterbird populations are also declining at major sites on both the east and west coasts, with climate change driving changes in migration patterns—such as short-stopping in species like European white-fronted goose and goldeneye—and influencing the colonisation of southern species like egrets⁸⁹.

These findings underscore the complex and regionally variable impacts of environmental change on seabird and waterbird populations.

Additionally, the British Trust for Ornithology collates wetland bird survey data to facilitate their conservation. The Wetland Bird Survey (WeBS) is the principal scheme for monitoring the UK's wintering waterbird populations, providing an important indicator of their status and the health of wetlands. Survey results are reported in the annual publication *Waterbirds in the UK*, which comprises a summary report and updated species and sites numbers and trends and Low Tide maps via the WeBS Report Online interface⁹⁰.

**Biodiversity
and
Ecosystems**

Fish stocks

The latest updated assessment towards achieving good environmental status⁹¹ reported that demersal fish communities were recovering from over-exploitation in the past, but GES had not yet been achieved in either the Greater North Sea or the Celtic Seas, nor would be achieved for all fish communities by 2020. A partial assessment of pelagic shelf fish did not provide a clear result. ICES advise that several North Sea stocks are harvested unsustainably (e.g. cod, whiting, haddock, mackerel, and blue whiting). However, in both regions, recent trends in the number of sensitive species increasing in abundance suggest an improving situation and further decline in the population abundance of sensitive fish species has been halted (see also OSPAR Intermediate Assessment⁹²).

⁸⁸ British Trust for Ornithology (BTO). (2025). Northern Ireland Seabird Report 2024. Retrieved from <https://www.bto.org/our-work/science/publications/reports/nis-report/northern-ireland-seabird-report-2024>

⁸⁹ Frost, T. et al. (2020). Waterbird Population Trends and Climate Change Impacts. BTO Research. Summary available via BTO publications.

⁹⁰ BTO (2025) *Wetland Bird Survey Annual Report*. Available: [Wetland Bird Survey Annual Report | BTO](#)

⁹¹ Defra (2019) *UK Updated Assessment and Good Environmental Status*. Available: [Marine Strategy Part One: UK Updated Assessment and Good Environmental Status - Defra - Citizen Space](#)

⁹² OSPAR (2017) *Recovery in the Population Abundance of Sensitive Fish Species*. Available: [Recovery in the Population Abundance of Sensitive Fish Species](#)

Biodiversity and Ecosystems	The NRN will be a national network of wildlife-rich places. The NRN is a major commitment in the government’s 25 Year Environment Plan and part of the forthcoming Nature Strategy.			
Nature Recovery Network	Establishing the NRN will: • enhance sites designated for nature conservation and other wildlife-rich places - newly created and restored wildlife-rich habitats, corridors and stepping stones will help wildlife populations to grow and move • improve the landscape’s resilience to climate change, providing natural solutions to reduce carbon and manage flood risk, and sustaining vital ecosystems such as improved soil, clean water and clean air • reinforce the natural and cultural diversity of our landscapes, and protect our historic natural environment • enable us to enjoy and connect with nature where we live, work and play - benefiting our health and wellbeing			
	The aim is to use maps and data to identify priorities for nature’s recovery. Locally developed strategies, LNRS, will be introduced to help plan, prioritise and target action and investment in nature at a regional level across England. These Recovery Strategies will include a map of existing areas important for nature and identify areas the opportunity areas for nature.			
	As described below the legislative and mapped picture remains incomplete across the UK, however progress is evident across a number of areas. See the Wildlife Trusts ⁹³ , the West of England Nature Partnership ⁹⁴ the Wildlife Trust for Beds, Cambs and Northants ⁹⁵ and Wild Oxfordshire ⁹⁶ as examples of draft and published outputs that begin to take shape.			
	England	Scotland	Wales	Northern Ireland
	The Westminster Government’s 25 Year	RSPB Scotland, the Scottish Wildlife Trust and WWF Scotland launched in	The Welsh Government’s Nature Recovery Action	Official government policy to underpin a Nature Recovery Network is not

⁹³ The Wildlife Trusts (2024) *Space for nature*. Available: [Space for nature | The Wildlife Trusts](#)

⁹⁴ West of England Nature Partnership (2024) *WENP Board*. Available at: [Who we are](#)

⁹⁵ Wildlife Trust for Beds, Cambs & Northants (2024) *Nature Recovery Network Mapping*. Available: [Nature Recovery Network Maps | Wildlife Trust for Beds Cambs & Northants](#)

⁹⁶ Wild Oxfordshire (2022) *Oxfordshire’s Nature Recovery Network*. Available: [Oxfordshire’s Nature Recovery Network](#)

	Environment Plan (2018)⁹⁷, and its Environment Bill, both promote and support the development of a Nature Recovery Network for England, and there will be a legal requirement to create Local Nature Recovery Strategies (LNRSs). There are 48 LNRS areas for the whole of England.	2020 the Nature Recovery Plan which sets out 11 transformative actions for nature's recovery in Scotland⁹⁸. This includes linking up wild places by delivering a Scottish Nature Network.	Plan for Wales⁹⁹ has as one of its five themes, "Maintaining and Enhancing Resilient Ecological Networks". The plan identifies a broad range of initiatives, including mapping opportunities for the restoration of habitat.	yet in place. Ulster Wildlife Trust is working to build capacity to deliver a Nature Recovery Network, however¹⁰⁰.
Biodiversity and Ecosystems Climate change adaptation risks and opportunities	Supporting Trend Data: Overall scoring of the current risks and opportunities to overall aims and objectives of Natural England¹⁰¹. This includes the Impact (I) and Likelihood (L) ratings and assessment of medium- and long-term risks using two horizons of 2030 and 2050. To follow CCC advice of assessing risks to 4°C and planning adaptation to 2°C; UKCP18 projections considering RCP 2.6 as a low emissions scenario and RCP8.5 as a high emissions scenario. This overall risk assessment demonstrates the significant impacts we expect in the medium term, on a pathway for stabilising global warming below 2°C by 2100. Our adaptation plan actions outlined in the next section are designed to be the first step to dealing with these risks over the next five years. However, the plan will require regular reappraisal in response to the developing risks and impacts of climate change on our work. Many of these risks are interrelated due to the nature of climate change impacts on the natural environment. Addressing these risks and opportunities in an integrated way is also reflected in our adaptation actions.			

⁹⁷ UK Government (2023) *25 Year Environment Plan*. Available: [25 Year Environment Plan - GOV.UK](#)

⁹⁸ A Nature Recovery Plan (2020) *11 transformative actions for nature in Scotland*. Available: [A-Nature-Recovery-Plan.pdf](#)

⁹⁹ Welsh Government (2015) *Nature recovery action plan*. Available: [Nature recovery action plan | GOV.WALES](#)

¹⁰⁰ Ulster Wildlife (2024) *Nature Recovery Networks to create a Wilder Future*. Available: [Nature Recovery Networks | Ulster Wildlife](#)

¹⁰¹ Natural England (2021) *Climate Change risk assessment and adaption plan*. Available: [NE761 Edition 1 Natural Englands climate change risk assessment and adaptation plan \(2021\).pdf](#)

If international efforts to limit global temperatures rises are not successful and we continue on a pathway to 4°C global warming at the end of century we are likely to experience severe impacts to our aims in both the medium and long term. Adapting to these impacts is beyond the scope of this adaptation plan, which would require more urgent and significant action.

Risks	Medium term risk		Long term risk	
	RCP 2.6	RCP 8.5	RCP 2.6	RCP8.5
Risks to the viability of the Nature Recovery Network and the recovery of threatened species and habitats	9 moderate I – moderate L – possible	12 major I – major L – possible	16 major I - major L - likely	20 severe I – major L – almost certain
Risks to the status of protected sites for biodiversity and geodiversity	12 major I - moderate L - likely	16 major I - major L - likely	16 major I - major L - likely	20 severe I – major L – almost certain
Risks to the ability of the SSSI network, MPAs, NNRs and protected landscapes to adapt to climate change	12 major I - moderate L - likely	16 major I - major L - likely	16 major I - major L - likely	20 severe I – major L – almost certain

Risks to natural capital and its contribution to agriculture, fisheries and sustainable development including farm advice and net gain	12 major I - moderate L - likely	16 major I - major L - likely	16 major I - major L - likely	20 severe I – major L – almost certain
Risks to the viability of natural areas for people to access and connect with nature	3 minor I - minimal L - possible	6 moderate I - minor L - possible	12 major I - moderate L - likely	16 major I - major L - likely
Risks and opportunities for Natural England's role as a leader in nature recovery and climate change.	3 minor I - minimal L - possible	6 moderate I - minor L - possible	12 major I - moderate L - likely	16 major I - major L - likely
Risks and opportunities for different species and habitats under changing climatic conditions.	10 major I – minor L – almost certain	15 major I – moderate L – almost certain	15 major I – moderate L – almost certain	20 severe I – major L – almost certain

Sustainability Topic / Baseline	England	Scotland	Wales	Northern Ireland
Communities – Population, Employment, and Viability:	The population in the UK is measured through the Census. This provides an estimate of the overall population the UK and its distribution within countries and regions. The last Census was undertaken in 2021. The Office for National Statistics (ONS) also provides mid-year population estimates which provide annual and more recent data ¹⁰² . The mid-2024 population estimates for the United Kingdom was 69,281,437 ¹⁰³ .			
Population	The population of England in mid-2024 was 58,620,101 which accounts for 84.61% of the UK’s population ¹⁰⁴ .	The population of Scotland in mid-2024 was 5,546,900 which accounts for 8.1% of the UK’s population ¹⁰⁵ .	The population of Wales in mid-2024 was 3,186,581 which accounts for 4.6% of the UK’s population ¹⁰⁶ .	The population of Northern Ireland in mid-2024 was 1,927,855 which accounts for 2.78% of the UK’s population ¹⁰⁷ .
Supporting Trend Data:				

¹⁰² Office for National Statistics (2024) *Census 2021*. Available at: [Census - Office for National Statistics](#)

¹⁰³ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹⁰⁴ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹⁰⁵ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹⁰⁶ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹⁰⁷ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

The UK population is projected to rise by 2.1 million to 69.2 million over the decade to mid- 2030; this would be a 3.2% increase¹⁰⁸. By 2066 there is projected to be a further 8.6 million UK residents aged 65 years and over, totalling 20.4 million, making up 26% of the total population¹⁰⁹.

The UK population is increasing but at a slower rate. Decreasing numbers of births and net international migration have resulted in the slowest rate of growth that the UK has seen in 15 years, returning it to the level seen in mid-2004. Despite population growth slowing, 2019 was the 37th consecutive year (since 1982) that the total UK population has increased. UK population continues to grow in mid-2019, but at a slower rate than any year since mid-2004. International migration continues to increase and has increased rapidly since 2020, resulting in an increase to the UKs population¹¹⁰.

The proportion of pensioners in relative poverty is much lower now than during the 1960s (16% in 2023¹¹¹). Relative poverty rates for children and working-age adults rose during the 1980s. Despite some reduction for working-age adults with children, poverty rates for all groups are much closer than has historically been the case.

The proportion of the UK population identifying as lesbian, gay or bisexual (LGB) increased from 2.2% in 2018 to 3.8% in 2023¹¹². Younger people, aged 16 to 24 years, were most likely to identify as LGB in 10.3% in 2023 . There are regional variations, people in London were most likely to identify as LGB (2.8%), with people in the North East the least likely (1.8%)¹¹³.

Communities The densest areas of population within the UK are within towns and cities.
– Population,

¹⁰⁸ Office for National Statistics (2021) *Overview of the UK population: 2020*. Available: [Overview of the UK population - Office for National Statistics](#)

¹⁰⁹ Office for National Statistics (ONS), 2018. Living longer: how our population is changing and why it matters. [online] Available at: <<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/livinglongerhowourpopulationischangingandwhyitmatters/2018-08-13>>

¹¹⁰ Statista (2024) *Long term migration figures in the United Kingdom from 1964 to 2024*. Available: [UK long-term migration figures 2024 | Statista](#)

¹¹¹ Joseph Rowntree Foundation (JRF), 2025. UK Poverty 2025: The essential guide to understanding poverty in the UK. [online] Available at: <<https://www.jrf.org.uk/uk-poverty-2025-the-essential-guide-to-understanding-poverty-in-the-uk>>

¹¹² Office for National Statistics (ONS), 2023. Sexual identity, UK: 2023. [online] Available at: <<https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/sexuality/bulletins/sexualidentityuk/2023>>

¹¹³ UK Government (2021) *Trend Deck 2021: Demographics*. Available at: [Trend Deck 2021: Demographics - GOV.UK](#)

Employment, and Viability: The location of major settlements and areas of population.	The south east of England, in particular London and the surrounding areas are highly populated. Large urban areas are located along the south coast, including Brighton, Southampton, Portsmouth and Bournemouth. The midlands and north west are also locations of large urban areas, including Birmingham, Leicester, Nottingham, Greater Manchester and Liverpool. The east, north east and south west of England contain fewer major settlements, however large urban areas are located in these regions, including Newcastle, Sunderland, Leeds and Bristol. (GIS Mapping) <i>Supporting trend data is not available.</i>	The largest settlements in Scotland are Glasgow and Edinburgh, both of which are located in the south of the country. The east coast has several areas of population including Aberdeen, Inverness and Dundee. The highland areas and north and west coasts of Scotland are comparatively sparsely populated. (GIS Mapping)	The most populated area of Wales is the south coast, where the large urban areas of Cardiff, Newport, Bridgend and Swansea are located. The north coast has fewer major urban settlements, however areas of population are present in Rhyl, Colwyn Bay and Bangor. Central and western Wales have smaller towns and villages distributed throughout the regions. (GIS Mapping)	The major settlements in Northern Ireland are Belfast to the east and Londonderry to the northwest. The area surrounding Belfast is particularly densely populated, with smaller urban areas including Bangor, Lisburn and Carrickfergus located in close proximity to Belfast. Smaller towns and villages are distributed through the rest of the country. (GIS Mapping)
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Communities – Population, Employment, and Viability:	The Office for National Statistics compared the age structures of each of the UK countries. This was split into three categories: 0-14, 15-64 (i.e. working age) and 65+. Mid-year population estimates provide annual and more recent data on these age structures ¹¹⁴ .			
Age Structure – Working age population	In mid-2024, in the UK, the estimated number of the population in each age group was:			
	• 0 – 14: 11,757,865 (16.97%) • 15 – 64: 44,361,906 (64.03%) • 65+: 13,161,666 (19.00%) •			
	In mid-2024, in England, the estimated percentage of the population in each age group was ¹¹⁵ :	In mid-2024, in Scotland, the estimated percentage of the population in each age group was ¹¹⁶ :	In mid-2024, in Wales, the estimated percentage of the population in each age group was ¹¹⁷ :	In mid-2024, in Northern Ireland, the estimated percentage of the population in each age group was ¹¹⁸ :
	• 0 – 14: 10,055,699 (17.5%) • 15 – 64: 37,583,310 (64.11%)	• 0 – 14: 834,752 (15.05%) • 15 – 64: 3,573,272 (64.42%)	• 0 – 14: 508,775 (15.96%) • 15 – 64: 1,985,302 (62.31%)	• 0 – 14: 358,639 (18.60%) • 15 – 64: 1,220,022 (63.29%)

¹¹⁴ Office for National Statistics (2024). *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹¹⁵ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹¹⁶ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹¹⁷ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹¹⁸ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

• 65+: 10,981,092 (18.73%)	65+: 1,138,876 (20.53%)	65+: 692,504 (21.73%)	65+: 349,194 (18.12%)
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Supporting Trend Data:

In mid-2023, there were 12.9 million people aged 65 years and over (18.9%) and 2.5% were aged 85 years and over. From mid-2013 to mid-2023, the number of children (those aged under 15 years) increased to 11.6 million from 11.3 million and the working age population (those aged 16 to 64 years) increased to 43.7 million from 41.6 million. The number of people aged 65 years and over increased by 22.9% to 12.4 million. The number of people aged 65 years and over increased to 12.9 million from 11.1 million, the largest percentage growth of any group.¹¹⁹

Communities – Population, Employment, and Viability: The definition of unemployed people within the UK is specified by the International Labour Organisation. This defines unemployed people as being without a job, having been actively seeking work in the past four weeks and are available to start work in the next two weeks, or people who are out of work, have found a job and are waiting to start it in the next two weeks¹²⁰.

Unemployment

As of July 2025, the unemployment rate in England is 4.8% ¹²¹ .	As of July 2025, the unemployment rate in Scotland is 3.9% ¹²² .	As of July 2025, the unemployment rate in Wales is 4.9% ¹²³ .	As of July 2025, the unemployment rate in Northern Ireland is 2.6% ¹²⁴ .
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¹¹⁹ Office for National Statistics (2024) *Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics](#)

¹²⁰ Office for National Statistics (2020) *A guide to labour market statistics*. Available: [A guide to labour market statistics - Office for National Statistics](#)

¹²¹ Office for National Statistics (2024) *LFS: ILO unemployment rate: England: All: %: SA*. Available: [LFS: ILO unemployment rate: England: All: %: SA - Office for National Statistics](#)

¹²² Office for National Statistics (2024) *LFS: ILO unemployment rate: Scotland: All: %: SA*. Available: [LFS: ILO unemployment rate: Scotland: All: %: SA - Office for National Statistics](#)

¹²³ Office for National Statistics (2024) *LFS: ILO unemployment rate: Wales: All: %: SA*. Available: [LFS: ILO unemployment rate: Wales: All: %: SA - Office for National Statistics](#)

¹²⁴ Office for National Statistics (2024) *LFS: ILO unemployment rate: Northern Ireland: All: %: SA*. Available: [LFS: ILO unemployment rate: Northern Ireland: All: %: SA - Office for National Statistics](#)

Supporting Trend Data:

The unemployment rate has fluctuated in the UK since 1992. A general decrease in unemployment rates can be seen throughout the UK since the period of economic recession between 2009 and 2012, however this is largely dependent on economic performance.

Since the coronavirus pandemic, unemployment rates have begun to increase. However, as this is still ongoing and is seen as temporary, there is still some uncertainty about the accuracy of this data and the effects on unemployment that will be present in the long-term.

Communities – Population, Employment, and Viability:	This is a measure of people, who are economically active, expressed as a percentage of all people (aged 16-64).			
	Economic Activity Rates	As of July 2025 , the economic activity rate in England was 79.5% ¹²⁵ .	As of July 2025, the economic activity rate in Scotland was 77.3% ¹²⁶ .	As of July 2025, the economic activity rate in Wales was 75% ¹²⁷ . As of July 2025, the economic activity rate in Northern Ireland was 73.1% ¹²⁸ .

Supporting Trend Data:

Economic activity rates in the UK have not varied significantly since 1992.

The locations of strategic rail links are detailed below.

¹²⁵ Office for National Statistics (2024) *LFS: Economic activity rate: England: Aged 16-64: All: %: SA*. Available: [LFS: Economic activity rate: England: Aged 16-64: All: %: SA - Office for National Statistics](#)

¹²⁶ Office for National Statistics (2024) *LFS: Economic activity rate: Scotland: Aged 16-64: All: %: SA*. Available: [LFS: Economic activity rate: Scotland: Aged 16-64: All: %: SA - Office for National Statistics](#)

¹²⁷ Office for National Statistics (2024) *LFS: Economic activity rate: Wales: Aged 16-64: All: %: SA*. Available: [LFS: Economic activity rate: Wales: Aged 16-64: All: %: SA - Office for National Statistics](#)

¹²⁸ Office for National Statistics (2024) *LFS: Economic activity rate: Northern Ireland: Aged 16-64: All: %: SA*. Available: [LFS: Economic activity rate: Northern Ireland: Aged 16-64: All: %: SA - Office for National Statistics](#)

Communities – Supporting Infrastructure: Locations of Strategic Rail Links	The strategic rail network in England is well developed. All major cities are connected as are the majority of significant towns. Extensive rail networks are located around large conurbations such as London and Greater Manchester, with the major cities in the midlands being well connected. Remote, rural and coastal areas are less well served by rail.	The larger cities of Scotland are located in the south of the country and as such, this is where the majority of the strategic rail network is focused. This extends up the east coast to the cities of Dundee, Aberdeen and Inverness. The far north and western regions of Scotland are far less served by rail. This is largely as a result of fewer major urban centres being located in these areas.	Both the north and south coast of Wales are well connected by rail, linking the major coastal cities such as Cardiff and Swansea in the south, and Llandudno, Bangor and Holyhead in the north. Few major branch lines extend from these links, and the central and western regions of Wales are comparatively poorly served by rail.	The strategic rail network in Northern Ireland is concentrated in the east of the country around Belfast and the surrounding cities of Lisburn, Antrim, Bangor and Carrickfergus. The network extends to the north and northwest, with Londonderry being the most westerly point. The central and southwest regions are poorly served by rail.
	(GIS mapping)	(GIS mapping)	(GIS mapping)	(GIS mapping)

Supporting Trend Data:

Major new strategic rail projects currently being undertaken in the UK include High Speed Two (HS2), Crossrail, Northern Powerhouse Rail and Midlands Engine. Upgrades to lines and electrification projects are continually taking place. It is considered unlikely that future projects will significantly increase the strategic rail network.

Communities – Supporting Infrastructure: Locations of strategic road networks	The locations of motorways and primary roads are detailed below.			
	England is covered by a comprehensive network of motorways and A roads. All major cities are served by motorways, whilst towns	The major cities of Glasgow and Edinburgh are served by the motorway network which extends north to Perth. The	The south and north coast of Wales are the only areas with motorway connections. The remaining regions are	The motorway network in Northern Ireland is focused around Belfast in the east, with two links extending north west and south west.

(motorways and primary roads)	and larger villages are connected by A routes. Areas not serviced by these connections are generally rural and in areas of low population. (GIS mapping)	west coast has a substantial network of A roads linking the major coastal cities. The A road network in highland areas and the west coast are less extensive, although most towns and large villages are connected. (GIS mapping)	serviced by the A road network which links the major towns and villages. Comparatively the central and upland regions are less provisioned with strategic network links. (GIS mapping)	These terminate in Randalstown and Dungannon respectively. The remaining regions are well connected by the A road network, which services towns and the majority of larger villages. (GIS mapping)
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Supporting Trend Data:

The strategic road network in the UK is constantly undergoing maintenance and improvements to improve efficiency, such as managed motorways. It is considered unlikely that significant new strategic road networks will be developed.

Communities – Supporting Infrastructure:

The locations of major airports¹²⁹ (+500,000) passenger per year as of 2023) are detailed below.

Location of Airports	Major Airports in England as of 2023 are: • Heathrow • Gatwick • Manchester • Stanstead • Luton	Major Airports in Scotland as of 2023 are: • Edinburgh • Glasgow • Aberdeen • Inverness • Prestwick	The only major airport in Wales as of 2023 is Cardiff.	Major Airports in Northern Ireland as of 2023 are: • Belfast International • Belfast City (George Best)
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¹²⁹ UK Civil Aviation Authority (2024) *UK airport data 2023*. Available: [Table 01 Size of UK Airports PDF Annual.rdl](#)

- Birmingham
- Bristol
- Newcastle
- Liverpool (John Lennon)
- Leeds Bradford
- East Midlands International
- London City
- Bournemouth
- Southampton
-

Supporting Trend Data:

The proposed expansion of London Heathrow Airport is likely to increase airport capacity in the south east of England if approved, in addition to smaller-scale improvements at other airports. It is considered unlikely that other significant new airports will be developed, although capacity may be increased through development at existing sites.

**Communities
– Supporting
Infrastructure:**

The locations of major ports (handling +2m tonnes of freight per year as of 2023¹³⁰) are detailed below.

- | | | | |
|-------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|
| • As of December 2024, there are 12 | • As of December 2024, there are four | • As of December 2024, there are two | • As of December 2024, there are two |
|-------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|

¹³⁰ UK Government (2024) *Port and domestic waterborne freight statistics: data tables (PORT)*. Available at: [Port and domestic waterborne freight statistics: data tables \(PORT\) - GOV.UK](#)

Location of Ports	major ports in England:	major ports in Scotland:	major ports in Wales:	major ports in Northern Ireland:
	• Bristol • Dover • Felixstowe • Grimsby & Immingham • Harwich • Hull • Liverpool • London • Medway • Portsmouth • Southampton • Tees and Hartlepool	• Clyde • Forth • Orkney • Sullem Voe •	• Port Talbot • Milford Haven	• Belfast • Larne

Supporting Trend Data:

It is considered unlikely that significant new strategic port development will take place.

Health and Well-Being:	Radiation levels in the UK are monitored regularly. This is undertaken by the Radioactive Incident Monitoring Network (RIMNET), the Environment Agency, Public Health England, the Scottish Environment Protection Agency (SEPA) Northern Ireland Environment Agency (NIEA), Natural Resources Wales (NRW) and operators of nuclear sites.
Radioactivity levels in the environment	Environment agencies monitor radioactivity to:

- check whether radiation exposure conforms to legal limits;
- check that radioactivity in food and the environment from authorised releases and discharges does not affect people’s health or the environment;
- gather long-term information on concentrations and trends so that we can identify any changes and take action if required, and;
- assess the public’s total exposure to radiation around nuclear sites

Monitoring includes several high volume air samplers, which are capable of detecting tiny amounts of radioactive particles in the air. Analysis can be carried out for short lived radionuclides. Results are published in Radioactivity in Food and the Environment (RIFE) reports. The latest RIFE report was published in 2024 and contains data for 2023¹³¹.

In 2023, people living around the Cumbrian coast (near Sellafield), Capenhurst and Amersham were the most exposed from sources of artificial radioactivity. The highest exposure was 23% of the legal limit in 2023 due to people eating locally produced seafood (fish and crustacea) around the Cumbrian coast. This is	In 2023 in Scotland, people eating food collected from areas along the Dumfries and Galloway coastline were the most exposed from releases of radioactivity. The exposure in 2023 was approximately 2% of the legal limit, and as in previous years, this was mostly due to the effects of past discharges from the Sellafield site.	In 2023, the highest exposure in Wales was for those people living near the Trawsfynydd nuclear power station, which is being decommissioned. This was due to them consuming locally produced food (milk), containing radioactivity released from, mainly historical, permitted discharges from the station. The exposure was approximately 3% of the legal limit	In Northern Ireland, exposure to the public from artificial radioactivity in 2023 was estimated to be less than 1% of the legal limit.
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¹³¹ Environment Agency (2024) *Monitoring radioactivity*. Available: <https://www.gov.uk/guidance/monitoring-radioactivity>

down from 24% of the legal limit in 2022.¹³²

Supporting Trend Data:

Overall, between 2022 and 2023 there have been no significant changes to the radioactivity measured in food and the environment around UK nuclear sites and other locations remote from these sites. Exposure from all sources of naturally occurring and artificial radioactivity to members of the public was well below legal limits, demonstrating that radioactivity in food and the environment is safe.¹³³

Health and Well-Being:

The Measuring National Well-being (MNW) programme set out to establish measures to understand and monitor national well-being¹³⁴.

The Measuring National Well-being programme

In April – June 2024, the percentage of UK adults that said they had a very high life satisfaction was 24.6% which was a decrease from 30.5% in April – June 2019. Meanwhile 5.4% said they had a low level of life satisfaction in April – June 2024 which has increased from 4.5% in April – June 2019¹³⁵. During the following quarter (July – September 2024) the figure for low level of life satisfaction decreased to 4.7%.

In April – June 2024, the percentage of UK adults that said that the feeling of things they do in life is worthwhile was a very high level was 32.8% which has decreased from 36.5% in April – June 2019. Meanwhile 3.9% said they had a low level of feeling the things they do in life is worthwhile. There hasn't been much of a long term change as the number in April – June 2019 was 3.7%.

¹³² Environment Agency (2024) *RIFE 29 Summary, Radioactivity in Food and the Environment, 2023*. Available: [RIFE 29 Summary, Radioactivity in Food and the Environment, 2023 - GOV.UK](#)

¹³³ Environment Agency (2024) *RIFE 29 Summary, Radioactivity in Food and the Environment, 2023*. Available: [RIFE 29 Summary, Radioactivity in Food and the Environment, 2023 - GOV.UK](#)

¹³⁴ Office for National Statistics (2019) *Measuring national well-being in the UK: international comparisons, 2019*. Available: [Measuring national well-being: Life in the UK - Office for National Statistics](#)

¹³⁵ Office for National Statistics (2024) *UK Measures of National Well-being Dashboard*. Available: [UK Measures of National Well-being Dashboard - Office for National Statistics](#)

In April – June 2024, the percentage of UK adults said that had a very high level of happiness was 31.7% which has decreased from April – June 2019 from 36.2%. Meanwhile 8.5% said they had a low level of happiness in April – June 2024 which has slightly increased from 8.2% in April – June 2019.

In April – June 2024, the percentage of UK adults that had a very high level of anxiety was 23.4% which has increased from 21.2% in April – June 2019. Meanwhile 33.1% said they had a very low level of anxiety in April – June 2024 which has decreased from 40.4% in April – June 2019.

In the financial year ending (FYE) 2023 median household disposable income decreased by an average of 0.3% per year between FYE 2020 and FYE 2023, compared with a longer-term average increase of 0.8% per year over the 10 years leading up to 2023 (FYE 2013 to FYE 2023) with median household disposable income in the UK was £34,500, a decrease of 2.5% from FYE 2022.¹³⁶

Of adults in Great Britain, 86.5% said that they were fairly or very satisfied with their accommodation, when asked in September 2024. This shows no short-term change (85.1% in September to October 2023). Long-term change is not assessed because data for these comparisons are not available¹³⁷.

Of adults in Great Britain, 67.1% said that they were fairly or very satisfied with their health in general, when asked in September 2024. This shows no short-term change (66.9% in September to October 2023). Long-term change is not assessed because data for these comparisons are not available¹³⁸.

Of adults in Great Britain, 69.0% said that they were fairly or very satisfied with their main job in September 2024. This shows no short-term change (69.6% in September to October 2023). Long-term change is not assessed because data for these comparisons are not available.¹³⁹

¹³⁶ Office for National Statistics (2024) *Average household income, UK: financial ending 2023*. Available: [Average household income, UK - Office for National Statistics](#)

¹³⁷ Office for National Statistics (2024) *UK Measures of National Well-being Dashboard*. Available: [UK Measures of National Well-being Dashboard - Office for National Statistics](#)

¹³⁸ Office for National Statistics (2024) *UK Measures of National Well-being Dashboard*. Available: [UK Measures of National Well-being Dashboard - Office for National Statistics](#)

¹³⁹ Office for National Statistics (2024) *UK Measures of National Well-being Dashboard*. Available: [UK Measures of National Well-being Dashboard - Office for National Statistics](#)

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Health and Well-Being:	The IMD is the official measure of relative deprivation for small areas (Lower-Super Output Areas) in England. The Index ranks every small area in England from 1 (most deprived) to 33,755 (least deprived) ¹⁴⁰ .			
The English Index of Multiple Deprivation (IMD) 2019	The SIMD shows where the most deprived areas in Scotland and is a relative measure of deprivation. Scotland is split into 6,976 zones with indicators measured including income, employment, education, health, access to services, crime and housing ¹⁴¹ .			
The Scottish Index of Multiple Deprivation (SIMD) 2020	The WIMD is the official measure of relative deprivation for small areas in Wales. WIMD ranks all small areas in Wales from 1 (most deprived) to 1,909 (least deprived) ¹⁴² .			
The Welsh Index of Multiple Deprivation (WIMD) 2019	The NIMDM comprises seven domains of deprivation, each developed to measure a distinct form or type of deprivation. This provides a mechanism for ranking the 890 Super Output areas (SOAs) from the most deprived (rank 1) to the least deprived (rank 890) ¹⁴³ .			
	A check of the Ministry of Housing, Communities and Local Government report of Index of Multiple Deprivation in January 2025 shows the most recent data available. As of 2019 the southeast, southwest and east of England are the least deprived areas in the UK.	A check of the Scottish Government's report of Index of Multiple Deprivation in January 2025 shows the most recent data available. As of January 2020, the most deprived areas in Scotland are concentrated around the populated central areas of Glasgow, Edinburgh	A check of the Welsh Government's report of Index of Multiple Deprivation in January 2025 shows the most recent data available. As of August 2022, the south east and northeast coast are the most deprived areas in Wales. Deprivation is most	A check of the Northern Ireland Statistics and Research Agency report of Northern Ireland Multiple Deprivation Measure in January 2025 shows the most recent data available. As of November 2017 the most deprived areas of Northern Ireland are the urban centres of Belfast in

¹⁴⁰

Oxford Consultants for Social Inclusion (OCSI). (2025). What are the English Indices of Deprivation? A beginner's guide to the IMD. Available at: <https://ocsi.uk/2025/10/10/what-are-the-english-indices-of-deprivation-a-beginners-guide-to-the-imd/>

¹⁴¹ Scottish Government (2020) *Scottish Index of Multiple Deprivation 2020*. Available: [Scottish Index of Multiple Deprivation 2020 - gov.scot](https://www.gov.scot/publications/scottish-index-of-multiple-deprivation-2020/pages/introduction.aspx)

¹⁴² Welsh Government (2019) *Welsh Index of Multiple Deprivation*. Available: [Welsh Index of Multiple Deprivation 2019: analysis relating to areas of deep-rooted deprivation | GOV.WALES](https://gov.wales/welsh-index-of-multiple-deprivation-2019)

¹⁴³ Northern Ireland Statistics and Research Agency (2017) *Northern Ireland Multiple Deprivation Measure 2017 (NIMDM2017)*. Available: [Northern Ireland Multiple Deprivation Measure 2017 \(NIMDM2017\) | Northern Ireland Statistics and Research Agency](https://www.nisra.gov.uk/publications/northern-ireland-multiple-deprivation-measure-2017)

Northern Ireland Multiple Deprivation Measure (NIMDM) 2017	Deprivation increases in urban areas, with towns and cities generally being more deprived than rural areas. The northwest and northeast are the most deprived areas of England. Middlesbrough, Knowsley, Kingston upon Hull, Liverpool and Manchester are the five local authority districts with the largest proportions of highly deprived neighbourhoods in England.	Stirling, Perth, Kilmarnock and Dundee. Pockets of deprivation are also located in other urban centres throughout the country, such as Stranraer in the southwest, Oban in the west and Aberdeen in the East. The islands of Stornoway and the Orkneys are comparatively deprived to the majority of Scotland.	concentrated in the southeast, around the urban areas of Cardiff, Newport, Swansea and Bridgend. The smaller towns within the valleys of the southeast, such as Caerphilly and Merthyr Tydfil are similarly deprived. Comparatively the rural areas of Wales are considerably less deprived.	the east and Derry in the northwest. Deprivation is also recorded in rural areas, including around Cookstown in central Northern Ireland, Crossmaglen in the south and Strabane in the west. The lowest deprived areas are North Down, Fermanagh and South Tyrone, Strangford and South Antrim.
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Supporting Trend Data:

It is not advised to compare the deprivation measures across the UK as data definitions, collection methods and base populations are not the same across the devolved administrations.

Overall, 88 per cent of neighbourhoods that are in the most deprived decile according to the Index of Multiple Deprivation 2019 (IMD2019) were also the most deprived according to the IMD2015. As was the case in previous versions of the Indices, IMD2019 reveals concentrations of deprivation in large urban conurbations, areas that have historically had large heavy industry manufacturing and/or mining sectors (such as Birmingham, Nottingham, Hartlepool), coastal towns (such as Blackpool or Hastings), and parts of east London. There are also pockets of deprivation surrounded by less deprived places in every region of England.

Six council areas have a larger share of the 20% most deprived data zones in Scotland compared with SIMD 2020v2 . Three council areas have a smaller share. The rest have changed by less than 2 percentage points. The

councils with the largest decrease are Glasgow City, Renfrewshire, and City of Edinburgh. The councils with the largest increase are Aberdeen City, North Lanarkshire, Moray, East Lothian, Highland, and North Ayrshire.

In WIMD 2019, there were pockets of high relative deprivation in the South Wales cities and valleys, and in some North Wales coastal and border towns. The overall picture is similar to that of WIMD 2014. Seven of the ten most deprived areas from WIMD 2014 remained in the ten most deprived areas in WIMD 2019.

Since the 2017 update of the NIMDM, patterns of deprivation have remained broadly consistent with previous versions.

Health and Well-Being:

People and Nature Survey

The People and Nature Survey (PaNS) is Natural England’s flagship social science and statistics project, collecting data on how people engage with the natural environment. It explores enjoyment, access, attitudes, and the role of nature in wellbeing. PaNS provides insights into trends in environmental use, motivations for protection, and actions taken at home and in communities. It includes two nationally representative annual surveys: one of 25,000 adults (16+) and one of 2,000 children (8–15).

The most recent Adults’ PaNS focused on data collected between April 2024 and March 2025. The key findings include:

- 66% of adults had visited a green and natural space in the last 14 days.
- 69% of adults agreed that local green spaces were within easy walking distance.
- More people visit green spaces when local green spaces are a short walk away.
- Getting fresh air and physical health and exercise were the main reasons for people taking a visit to a green and natural space

Health and Well-Being:

Green and Blue

Open space, which includes all open space of public value, can take many forms, from formal sports pitches to open areas within a development, linear corridors and country parks. It can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to green infrastructure, as well as being

Infrastructure
and Open
Green Space

an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development¹⁴⁴.

There are approximately 165,587 Open Green spaces within Great Britain, with the main typologies as follows:

- Religious Grounds
- Public Park Or Garden
- Play Space
- Playing Field
- Cemetery
- Golf Course
- Other Sports Facility
- Allotments Or Community Growing Spaces
- Bowling Green
- Tennis Court

**Health and
Well-Being:**

In Wales, Quiet Areas are formally designated under the Environmental Noise (Wales) Regulations 2006. These are areas where planning policy should consider noise management more carefully. The areas designated include¹⁴⁵:

Quiet Areas

- Cardiff and Penarth;
- Newport; and
- Swansea and Neath Port Talbot.

¹⁴⁴ MHCLG (2014) Open space, sports and recreation facilities, public rights of way and local green space. Available: <https://www.gov.uk/guidance/open-space-sports-and-recreation-facilities-public-rights-of-way-and-local-green-space>

¹⁴⁵ Gov.Wales (2025). *Quiet Area Maps*. Available: [Quiet area maps | GOV.WALES](#)

Historic Environment:	World Heritage Sites are designated to meet the UK’s commitments under the World Heritage Convention and the sites are designated for their globally important cultural or natural interest and require appropriate management and protection measures ¹⁴⁶ . There are 35 World Heritage Sites in the United Kingdom.			
World Heritage Sites	The location of World Heritage Sites are shown in Figures 5A and 5B. Note: Frontiers of the Roman Empire is located in both England and Scotland. Pontcysyllte Aqueduct and Canal is located in both England and Wales			
	As of July 2024, there are 18 World Heritage Sites in England¹⁴⁷:	As of 2025 , there are seven World Heritage sites in Scotland: - The Flow Country - Forth Bridge - Frontiers of the Roman Empire - Heart of Neolithic Orkney - New Lanark - Old and New Towns of Edinburgh - St Kilda	As of July 2024, there are four World Heritage Sites in Wales: - Blaenavon Industrial Landscape - Castles and Town Walls of King Edward in Gwynedd - The Slate Landscape of Northwest Wales - Pontcysyllte Aqueduct and Canal	As of July 2024, there are two World Heritage Sites in Northern Ireland: - Giant’s Causeway and Causeway Coast - Gracehill

¹⁴⁶ UNESCO (2024) World Heritage Convention - *United Kingdom of Great Britain and Northern Ireland*. Available: [United Kingdom of Great Britain and Northern Ireland - UNESCO World Heritage Convention](#)

¹⁴⁷ UNESCO (2024) *World Heritage Sites*. Available: [World Heritage Sites – UNESCO UK](#)

- The English Lake District
- Frontiers of the Roman Empire
- Gorham's Cave Complex
- Great Spas of Europe
- Ironbridge Gorge
- Jodrell Bank Observatory
- Maritime Greenwich
- Palace of Westminster
- Pontcysyllte Aqueduct and Canal
- Royal Botanic Gardens, Kew
- Saltaire
- Stonehenge
- Studley Royal Park
- Tower of London

Supporting Trend Data:

The first World Heritage Sites within the UK were designated in 1986. Sites can continue to be nominated, with the last site on the UK mainland being The Slate Landscape of Northwest Wales, designated in 2021. Of all the sites in the UK, only the Liverpool Maritime Mercantile City site has been placed on the List of World Heritage in Danger. The list presently comprises 53 sites in total worldwide. These are sites at which conditions are present to threaten the characteristics for which a site was placed on the World Heritage List¹⁴⁸.

Historic Environment Scheduling is the process of legal protecting selected monuments of national importance, with a view to securing their long term preservation. The monitoring of Scheduled Monuments is undertaken by Historic England. Scheduled Monuments are not always visible above ground.

Scheduled Monuments The condition of Scheduled Monuments is monitored as part of Historic England’s ‘Heritage at Risk’ programme. Local government archaeological services, plus independent national and local heritage organisations and community groups can also play important roles in their curation, plus that of non-scheduled but nationally important monuments. It is to be noted that a monument not designated as a Scheduled Monument does not necessarily imply that it is not of national importance¹⁴⁹.

As of July 2024, there are almost 20,000 Scheduled Monuments located throughout England¹⁵⁰.

As of 2023 , there are approximately 8,200 Scheduled Monuments located throughout Scotland¹⁵¹.

As of April 2023, there are over 4,000 Scheduled monuments located throughout Wales¹⁵².

As of March 2024, there are over 2000 Scheduled Historic Monuments located throughout Northern Ireland¹⁵³

¹⁴⁸ UNESCO (2024) *World Heritage Convention - United Kingdom of Great Britain and Northern Ireland*. Available: [United Kingdom of Great Britain and Northern Ireland - UNESCO World Heritage Convention](#)

¹⁴⁹ Department for Culture, Media and Sport (2013) *Scheduled Monuments & nationally important but non-scheduled monuments*. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/249695/SM_policy_statement_10-2013_2_.pdf

¹⁵⁰ Historic England (2024) *Scheduled Monuments*. Available: <https://www.historicengland.org.uk/listing/what-is-designation/scheduled-monuments/>

¹⁵¹

Historic Environment Scotland. (n.d.). Scotland Rural Development Programme. Available at: <https://www.historicenvironment.scot/media/9859/scotland-rural-development-programme.pdf>

¹⁵² Welsh Government (2024) *Scheduled Monuments*. Available: [Scheduled Monuments | DataMapWales](#)

¹⁵³ Department for Communities (2024) *Scheduled Historic Monuments*. Available: [Scheduled Historic Monuments | Department for Communities](#)

Supporting Trend Data:

Applications for sites to be Scheduled can be made at any time and is an ongoing process. Since 2007 the number of Scheduled Monuments has increased by approximately 2,000 in England, 400 in Wales and 163 in Northern Ireland. Wales has an ongoing planned policy of enhancing the number of sites on the Schedule.

Historic Environment: Conservation Areas are designated for their special architectural and historic interest and were first designated in 1967. There are many different types including:

- Conservation Areas
- the centres of our historic towns and cities
 - fishing and mining villages
 - 18th and 19th-century suburbs
 - model housing estates
 - country houses set in their historic parks
 - historic transport links and their environs, such as stretches of canal

Most Conservation Areas are designated by the local planning authority and as such are best identified on a local basis.

The locations of Conservation Areas are shown in **Figure 5A and 5B**.

As of October 2023, there are approximately 10,000 Conservation Areas in England. ¹⁵⁴ ,	As of August 2024, there are over 600 Conservation Zones in Scotland ¹⁵⁵ .	As of 2023, there are over 500 Conservation Areas in Wales. ¹⁵⁶	As of 2025, there are 60 Conservation Areas in Northern Ireland. ¹⁵⁷
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¹⁵⁴ Historic England (2023) *What is a Conservation Area?* Available: [Conservation Areas | Historic England open data](#)

¹⁵⁵ Historic Environment Scotland (2024) *Conservation Areas - Scotland*. Available: [Conservation Areas - Scotland - data.gov.uk](#)

¹⁵⁶ Welsh Government (2024) *Conservation Areas*. Available: [Conservation areas | Cadw](#)

¹⁵⁷157

Historic Environment:	Listing of buildings is concerned with recognising the buildings special architectural and historic interest, with a view to protecting the building, under the planning system for future generations to enjoy. All buildings built before 1700 which survive in anything like their original condition are listed, as are most of those built between 1700 and 1840. Particularly careful selection is required for buildings from the period after 1945. Usually, a building has to be over 30 years old to be eligible for listing ¹⁵⁸ .
Listed Buildings	

There are three categories of listed building:

- Grade I buildings are of exceptional interest,
- Grade II* buildings are particularly important buildings of more than special interest;
- Grade II buildings are of special interest; it is the most likely grade of listing for a homeowner.

Due to the numbers, listed buildings are best identified on a local basis.

As of November 2024, there are 370,000 Listed Buildings in England ¹⁵⁹ .	As of January 2025, there are around 47,000 listed building records in Scotland ¹⁶⁰ .	As of 2024, there are over 30,00 listed buildings in Wales ¹⁶¹	As of 2025 , there are over 9,100 Listed Buildings in Northern Ireland ¹⁶² .
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Historic Environment:	The purpose of the Register of Historic Battlefields in England is to offer protection through the planning system and to promote a better understanding of their significance and public enjoyment. If the site of a battle is to merit registration it has to have been an engagement of national significance, and to be capable of close definition on the ground. In Scotland, Historic Battlefields are listed in the Inventory of Historic Battlefields. The Inventory of Historic Battlefields in Wales is a non-statutory Inventory which means there is no primary legislation enacted to protect entire battlefields.
Historic Battlefields	

¹⁵⁸ Historic England (2021) Listed Buildings. Available: <https://historicengland.org.uk/listing/what-is-designation/listed-buildings/>

¹⁵⁹ Historic England (2024) *What are Listed Buildings?* Available: [What are Listed Buildings? How England's historic buildings are protected | Historic England](#)

¹⁶⁰ Historic Environment Scotland (2025) *What is listing?* Available: [What is Listing? | Public Body for Scotland's Historic Environment](#)

¹⁶¹ Welsh Government (2024) *Listed Buildings*. Available: [Listed Buildings | DataMapWales](#)

¹⁶² Department for Communities (2024) *Listed Buildings – An Introduction*. Available: [Listed Buildings - An Introduction | Department for Communities](#)

Locations of Historic Battlefields in England and Scotland are shown in **Figures 5A and 5B**.

As of October 2024, there are 47 registered battlefields in England. ¹⁶³	As of August 2020, there are 40 sites on the Inventory of Historic Battlefields in Scotland ¹⁶⁴ .	As of August 2020, there are over 700 historic battlefields in Wales ¹⁶⁵ .	There is no formal register of historic battlefields in Northern Ireland.
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Supporting Trend Data:

Public consultation demonstrated strong public support for the recognition of the importance of historic battlefields in Wales and the inventory was only recently created following legislation introduced in 2016.

Historic Environment: The purpose of Registers of Historic Parks and Gardens in England is to encourage the protection of gardens, grounds and other open spaces which are of historic importance.

Registered Parks and Gardens Historic Environment Scotland maintains the Inventory of Gardens and Designed Landscapes which identifies historic grounds and designed landscapes intentionally laid out for artistic effect.

In Wales, Cadw maintains the Register of Parks and Gardens of Special Historic Interest.

In Northern Ireland, the Department for Communities maintains the Register of Historic Parks, Gardens and Demesnes.

Locations of Parks and Gardens are shown in **Figures 5A and 5B**.

As of October 2024, there are over 1,700 Registered Parks and Gardens on the	As of June 2024, there are 368 Gardens and	As of February 2022, there are nearly 400 registered	As of September 2024, there are over 700 historic parks, gardens and
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¹⁶³ Historic England (2024) *What are Registered Battlefield?* Available: [What Are Registered Battlefields? | Historic England](#)

¹⁶⁴ Historic Environment Scotland (2020) *Designations 2020 Onwards*. Available: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=e8d84fb0-7b16-49cc-a87a-abce00884e10>

¹⁶⁵ Cadw (2024) Historic Battlefields in Wales. Available: [Historic battlefields in Wales | Cadw](#)

	National Heritage List in England ¹⁶⁶	Designated Landscapes in Scotland ¹⁶⁷ .	historic parks and gardens in Wales ¹⁶⁸ .	demesnes in Northern Ireland ¹⁶⁹ .
	<i>Supporting trend data is not available.</i>			
Historic Environment:	Historic landscape characterisation (HLC) can be used to help secure good quality, well designed and sustainable places. It is a method of identification and interpretation of the varying historic character within an area that looks beyond individual heritage assets as it brigades understanding of the whole landscape and townscape into repeating HLC Types ¹⁷⁰ .			
Historic Landscape Characterisation	HLCs are typically held by the relevant local Historic Environment Record in England ¹⁷¹ . The Welsh equivalent is the Registered Historic Landscapes ¹⁷² .			
	There is no Historic Landscape Characterisation in Scotland and Northern Ireland.			
Historic Environment:	The Ancient Monuments and Archaeological Areas Act 1979 allows the Government to designate as an area of archaeological importance any area which appears to merit treatment as such. In England there are five areas designated as areas of archaeological importance under the Ancient Monuments and Archaeological Areas Act 1979: the historic city centres of Canterbury, Chester, Exeter, Hereford and York ¹⁷³ .			
Areas of Archaeological Importance				

¹⁶⁶ Historic England (2024) *What are Registered Parks and Gardens?* Available: [What Are Registered Parks and Gardens? | Historic England](#)

¹⁶⁷ Historic Environment Scotland (2024) *Gardens and Designated Landscapes*. Available: [Downloads](#)

¹⁶⁸ Cadw (2024) *Registered historic parks and gardens*. Available: [Registered historic parks and gardens | Cadw](#)

¹⁶⁹ Department for Communities (2024) *Historic Parks, Gardens and Demesnes*. Available: [Historic Parks, Gardens and Demesnes | Department for Communities](#)

¹⁷⁰ Historic England (2021) *Historic Landscape Characterisation*. Available: <https://historicengland.org.uk/research/methods/characterisation/historic-landscape-characterisation/#Section4Text>

¹⁷¹ Archaeology Data Service (2018) *Historic Landscape Characterisation* Available: <https://archaeologydataservice.ac.uk/archives/view/HLC/index.cfm>

¹⁷² Cadw (2024) *Registered Historic Landscapes*. Available: [Registered historic landscapes | Cadw](#)

¹⁷³ Historic England (2021) *Areas of Archaeological Importance*. Available: <https://historicengland.org.uk/advice/hpg/has/archaeologicalimportance/>

Historic Environment:	The Protection of Wrecks Act (1973) allows the Government to designate a wreck to prevent uncontrolled interference. Designated sites are identified as being likely to contain the remains of a vessel, or its contents, which are of historical, artistic or archaeological importance (174).
Protected Wrecks	The protected wreck designation has been replaced in Scotland by Historic Marine Protected Areas (Historic MPAs). Historic MPAs protect marine historic assets of national importance in territorial waters around Scotland (out to 12 nautical miles). This includes historic shipwrecks and aircrafts. The Scottish Government designate marine protected areas (Historic MPAs) under the Marine (Scotland) Act 2010 and Historic Environment Scotland advise Scottish Government.

Locations of Protected Wrecks are shown in **Figures 5A and 5B**.

As of January 2025, there are 57 Protected Wrecks in English Waters. The majority of these are located along the south coast ¹⁷⁵ .	As of March 2025, there are 10 Historic MPAs in Scottish waters. These are primarily located on the western coast and extend to northern regions ¹⁷⁶ .	As of July 2017, there are 6 Protected Wrecks in Welsh waters. These are primarily located around the north west and north coast, with one being located off Pembrokeshire in the south west ¹⁷⁷ .	As of December 2024, there is 1 Protected Wreck in Northern Irish waters, La Girona, which is located on the North Antrim coast ¹⁷⁸ .
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Supporting trend data is not available.

¹⁷⁴ Historic England (2021) *Protected Wreck Sites*. Available: <https://www.historicengland.org.uk/advice/planning/consents/protected-wreck-sites/>

¹⁷⁵ Historic England (2024) *Protected Wreck Sites Planning Consents*. Available: [Protected Wreck Sites Planning Consents | Historic England](#)

¹⁷⁶ Scottish Government (2025) Marine Protected Areas (MPAs) - Marine environment. Available at: <https://www.gov.scot/policies/marine-environment/marine-protected-areas/>

¹⁷⁷ Cadw (2024) *Marine historic environment*. Available: [Marine historic environment | Cadw](#)

¹⁷⁸ Department for Communities (2021) Shipwrecks. Available: <https://www.communities-ni.gov.uk/articles/shipwrecks-0>

Historic Environment:	HERs are information services that provide access to comprehensive and dynamic resources relating to the archaeology and historic built environment of a defined geographic area. They contain details on local archaeological sites and finds, historic buildings and historic landscapes and are regularly updated ¹⁷⁹ .			
Historic Environment Records (HERs)	Whilst not currently a statutory duty Section 230 of the Levelling Up and Regeneration Act makes provision for HERs to be given a statutory status and requiring local authorities to maintain HERs.			
	Sections 194 and 195 of the Historic Environment (Wales) Act 2023 require the Welsh Ministers to compile and keep up to date a publicly accessible historic environment record for each local authority area in Wales.			
	In England, there are over 83 HERs which are maintained and managed by local authorities as the essential core of historic environment services. These are mainly county council or unitary authority based, but may also be held by joint services (i.e. more than one authority working together), district councils, and national parks. Similar records are maintained by major landowners, such as the National Trust.	The National record of the Historic Environment contains a vast range of buildings, archaeological monuments and industrial and maritime sites, to give an unparalleled view of Scotland's past. It holds more than 5 million items and continues to record all aspects of the historic environment. For further detail, the following link can be accessed: https://www.historicenvironment.scot/archives-and-research/archives-and-research	Historic environment records in Wales include information on tens of thousands of historic sites, thousands of records relating to investigative work across Wales, and records of hundreds of thousands of historic place names. Further detail can be accessed at the following link: https://cadw.gov.wales/advice-support/placemaking/historic-environment-records	The Historic Environment Record of Northern Ireland consists of written records, photographs, maps, drawings, and artefacts, together with an extensive library of books and journals specialising in heritage-related subjects. For detailed information on these records and for interactive maps and databases, visit the following link: https://www.communities-ni.gov.uk/topics/historic-environment

¹⁷⁹ Historic England (2015) *Historic Environment Records (HERs)*. Available: <https://historicengland.org.uk/advice/technical-advice/information-management/hers/>

More information on these records can be found here: [collections/national-record-of-the-historic-environment/](#)

[environment-record-northern-ireland-heroni](#)

[Historic Environment Records Boundaries GIS Data - data.gov.uk](#)

Supporting trend data is not available.

Historic Environment: The Heritage at Risk Register includes buildings, places of worship, monuments, parks and gardens, conservation areas, battlefields and wreck sites that are listed and have been assessed and found to be at risk in England¹⁸⁰.

Heritage at Risk

Historic Environment: There are a large number of heritage assets located across England and Wales, covering the full range of human activity and timeframes. Non-designated heritage assets are locally-identified 'buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of heritage significance meriting consideration in planning decisions but which do not meet the criteria for designated heritage assets'. While these assets may not have been formally designated, this should not necessarily be taken as an indication of their merit – consideration of such assets and their setting should be made during any scheme design. Lists of non-designated heritage assets, as well as advice on how these should be considered in the local context, can be obtained from Local Authorities.

Historic Environment: To recognise the value of historic landscapes and to raise awareness of their importance, Cadw has compiled a register of landscapes of historic interest in Wales. Cadw have identified 58 landscapes of outstanding or special historic interest, considered to be the best examples of different types of historic landscapes in Wales¹⁸¹.

¹⁸⁰ Historic England (2024) *Search the List – Find listed buildings, monuments, battlefields and more*. Available: [Search the List - Find listed buildings, monuments, battlefields and more | Historic England](#)

¹⁸¹ Cadw (2024) *Registered Historic Landscapes*. Available: [Registered historic landscapes | Cadw](#)

Registered
Historic
Landscapes

Landscape: In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them.

National Parks

The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales. In addition, the Environment Act 1995 requires relevant authorities to have regard for nature conservation. Special Acts of Parliament may be used to establish statutory authorities for their management (e.g. the Broads Authority was set up through the Norfolk and Suffolk Broads Act 1988).

The National Parks (Scotland) Act 2000 enabled the establishment of National Parks in Scotland. In addition to the two purposes described above, National Parks in Scotland are designated to promote the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. These purposes have equal weight and are to be pursued collectively unless conservation interests are threatened. Where these aims conflict, the relevant National Park authority must prioritise the first of these aims¹⁸².

Note that every National Park is required to prepare and publish a National Park Management Plan which formulates its policy for the management of the relevant National Park and for the carrying out of its functions in relation to that National Park and note needs to be made of these in relation to any National Park that may be affected.

Locations of National Parks within England, Scotland and Wales are shown in **Figures 6A and 6B**.¹⁸³

¹⁸² NatureScot (2021) National Park. Available: <https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/national-designations/national-park>

¹⁸³ National Parks UK (2021) Your National Parks. Available: <https://www.nationalparks.uk/parks/>

	As of January 2025, there are 10 National Parks in England: • Broads • Dartmoor • Exmoor • Lake District • New Forest • Northumberland • North York Moors • Peak District • South Downs • Yorkshire Dales	As of January 2025, there are two National Parks in Scotland: • Cairngorms • Loch Lomond and the Trossachs	As of January 2025, there are three National Parks in WalesError! Bookmark not defined.: • Brecon Beacons • Pembrokeshire Coast • Snowdonia	There are currently no National Parks within Northern Ireland.
	Supporting Trend Data: The designation of National Parks is an ongoing process with two being added in England since 2008 (South Downs and Broads). Within Northern Ireland there are proposals to create a National Park within the Mourne Mountains¹⁸⁴.			
Landscape: National Landscapes / AONBs and	There are 46 National Landscapes / AONBs in the UK covering 14% of England, Wales and Northern Ireland including moorland, farmland, coast, forests, including UNESCO World Heritage Sites, Biosphere Reserves, a Geopark and International Dark Sky Reserves. These are places with national importance, protected for the nation's benefit: cherished by their communities and celebrated by the nation. The legal designation is 'Area of Outstanding Natural Beauty' ¹⁸⁵ .			

¹⁸⁴ Northern Ireland Assembly (2008) Potential Impacts of National Parks Designation with Particular Reference to The Proposed Mournes National Park. Available: [http://archive.niassembly.gov.uk/environment/2007mandate/Research/0801National%20Parks%20 Mournes _.pdf](http://archive.niassembly.gov.uk/environment/2007mandate/Research/0801National%20Parks%20Mournes_.pdf)

¹⁸⁵ National Landscapes Association (2024) *National Landscapes*. Available: [National Landscapes - National Landscapes](#)

National Scenic Areas	National Landscapes are designated under the National Parks and Access to the Countryside Act 1949, amended in the Environment Act 1995. The Countryside and Rights of Way Act 2000 clarifies the procedure and purpose of designating National Landscapes.
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The Glover Review did not extend to Northern Ireland and the AONBs were not renamed as National Landscapes. Originally designated in Northern Ireland under the Amenity Lands Act (Northern Ireland) 1965, AONBs are now designated under the Nature Conservation and Amenity Lands Order (Northern Ireland) 1985¹⁸⁶.

National Scenic Areas (NSAs) are designated by Scottish Ministers as the best of Scotland's landscapes, deserving special protection in the nation's interest. Scottish Ministers in 2010 confirmed 40 NSAs under the provisions of The Town and Country Planning (Scotland) Act 1997 (as amended in 2006) (s.263)¹⁸⁷. NSAs are broadly equivalent to the National Landscapes found in England, Wales and Northern Ireland.

Locations of National Landscapes and NSAs are in **Figures 6A and 6B**.

As of July 2024, there are 34 AONBs located within England ¹⁸⁸ .	As of November 2024, there are 40 National Scenic Areas within Scotland ¹⁸⁹ :	As of November 2022, there are five AONBs within Wales ¹⁹⁰ :	As of August 2020, there are eight AONBs within Northern Ireland ¹⁹¹ :
NB: the Wye Valley is on the England / Wales border.	• East Stewartry Coast • Fleet Valley	• Anglesey • Clwydian Range and Dee Valley • Gower	• Antrim Coast and Glens • Binevenagh • Causeway Coast
• Arnside & Silverdale			

¹⁸⁶ Department of Agriculture, Environment and Rural Affairs Northern Ireland (2020) Council for Nature Conservation and the Countryside. Available: <https://www.daera-ni.gov.uk/articles/council-nature-conservation-and-countryside>

¹⁸⁷ NatureScot (2017) *National Scenic Areas: background, guidance and policy*. Available: [National Scenic Areas: background, guidance and policy | NatureScot](#)

¹⁸⁸ Natural England (2017) Areas of outstanding natural beauty (AONBs): designation and management. Available: [Areas of outstanding natural beauty \(AONBs\): designation and management - GOV.UK](#)

¹⁸⁹ NatureScot (2010) National Scenic Areas of Scotland: maps. Available: <https://www.gov.scot/publications/national-scenic-areas-of-scotland-maps/>

¹⁹⁰ Natural Resources Wales (2022) Area of Outstanding National Beauty. Available: [Area of Outstanding Natural Beauty \(AONB\) | DataMapWales](#)

¹⁹¹ National Landscapes Association (2024) National Landscapes Northern Ireland. Available: [National Landscapes - National Landscapes \(national-landscapes.org.uk\)](#)

- | | | | |
|--|--------------------------------------|--------------|--------------------|
| • Blackdown Hills | • Nith Estuary | • Llŷn | • Lagan Valley |
| • Cannock Chase | • Eildon and Leaderfoot | • Wye Valley | • Mourne |
| • Chichester Harbour | • Upper Tweeddale | | • Ring of Gullion |
| • Chilterns | • North Arran | | • Sperrin |
| • Cornwall | • Jura | | • Strangford Lough |
| • Cotswolds | • Knapdale | | |
| • Cranborne Chase and West Wiltshire Downs | • Kyles of Bute | | |
| • Dedham Vale | • Loch na Keal, Isle of Mull | | |
| • Dorset | • Lynn of Lorn | | |
| • East Devon | • Scarba, Lunga and the Garvellachs | | |
| • Forest of Bowland | • Loch Rannoch & Glen Lyon | | |
| • Howardian Hills | • Loch Tummel | | |
| • High Weald | • River Earn (Comrie to St. Fillans) | | |
| • Isle of Wight | • River Tay (Dunkeld) | | |
| • Isles of Scilly | • Hoy & West Mainland | | |
| • Kent Downs | • Shetland | | |
| • Lincolnshire Wolds | • Assynt-Coigach | | |
| • Malvern Hills | | | |
| • Mendip Hills | | | |
| • Norfolk Coast | | | |
| • North Devon | | | |

- North Pennines
- North Wessex Downs
- Nidderdale
- Northumberland Coast
- Quantock Hills
- Shropshire Hills
- Solway Coast
- South Devon
- Suffolk Coast and Heaths
- Surrey Hills
- Tamar Valley
- Wye Valley (England and Wales)
- Ben Nevis and Glen Coe
- Cuillin Hills
- Dornoch Firth
- Glen Affric
- Glen Strathfarrar
- Kintail
- Knoydart
- Kyle of Tongue
- Loch Shiel
- Morar, Moidart and Ardnamurchan
- North-West Sutherland
- Small Isles
- Trotternish
- Wester Ross
- South Lewis, Harris and North Uist
- South Uist Machair
- St. Kilda
- Loch Lomond
- The Trossachs

- Cairngorm Mountains
- Deeside & Lochnagar

Supporting trend data is not available.

Landscape:	A Heritage Coast is a section of coast exceeding one mile in length that is of exceptionally fine scenic quality, substantially undeveloped and containing features of special significance and interest. The designation is agreed between local authorities and (in England) Natural England or (in Wales) Natural Resources Wales, as an aid to local authorities in planning and managing their coastlines ¹⁹² .			
Heritage Coasts (England and Wales)	As of November 2024, there are 32 Heritage Coasts located around England ¹⁹³ :	There are no areas of Heritage Coast in Scotland.	As of November 2022, there are 14 Heritage Coasts located around Wales ¹⁹⁴ :	There are no areas of Heritage Coast in Northern Ireland.
	• Dover-Folkestone • Durham • East Devon • Exmoor • Flamborough Head • Godrevy – Portreath • Gribbin Head		• Aberffraw Bay • Ceredigion Coast • Dinas Head • Glamorgan Coast • Gower • Great Orme • Holyhead Mountain	

¹⁹² Natural England (2015) *Heritage coasts: definition, purpose and Natural England's role*. Available: <https://www.gov.uk/government/publications/heritage-coasts-protecting-undeveloped-coast/heritage-coasts-definition-purpose-and-natural-englands-role>

¹⁹³ Natural England (2024) *Heritage Coasts (England)*. Available: [Heritage Coasts \(England\) | Natural England Open Data Geoportal](#)

¹⁹⁴ Natural Resources Wales (2022) *Heritage Coasts*. Available: [Heritage Coasts | DataMapWales](#)

- Hamstead
- Hartland (Cornwall)
- Hartland (Devon)
- Isles Of Scilly
- Lundy
- North Devon
- North Norfolk
- North Northumberland
- North Yorkshire & Cleveland Hamstead
- Pentire - Widemouth
- Penwith
- Purbeck
- Rame Head
- South Devon
- South Foreland
- Spurn
- St Agnes
- St Bees Head
- Suffolk
- Sussex
- Llŷn Coast
- Marloes and Dale
- North Anglesey Coast
- South Pembrokeshire
- St Bride's Bay
- St David's Peninsula
- St Dogmaels and Moylgrove

- Tennyson
- The Lizard
- The Roseland
- Trevoze Head
- West Dorset

Supporting trend data is not available.

Landscape:	Landscape Character Areas or Landscape Character Assessments encompass various aspects of landscape, biodiversity, heritage, cultural and geological features. These are non-statutory and used as an aid in the planning process and for decision making.			
Landscape Character Areas	The locations of Landscape Character Areas in Wales are shown in Figure 6B .			
	Natural England has produced National Character Area Profiles (NCAs) ¹⁹⁵ which divide England into 159 distinct natural areas. Each is defined by a unique combination of landscape, biodiversity, geodiversity, history, and cultural and	Scotland has a digital map-based national Landscape Character Assessment which shows Landscape Character Types and produced a series of 30 regional LCA studies which identify, map and describe the landscape character of all of Scotland ¹⁹⁶ .	Natural Resources Wales uses the LANDMAP tool to evaluate landscape characteristics. This includes geological landscape, landscape habitats, visual and sensory, historic landscape and cultural landscape. Although no specific	The Northern Ireland Landscape Character Assessment subdivides the countryside into 130 Landscape Character Areas, each based upon local patterns of geology, landform, land use, cultural and ecological features ¹⁹⁸ .

¹⁹⁵ UK Government (2024) *National Character Area profiles*. Available: [National Character Area profiles: information for local decision making - GOV.UK](#)

¹⁹⁶ NatureScot (2023) *Landscape Character Assessment in Scotland*. Available: [Landscape Character Assessment in Scotland | NatureScot](#)

¹⁹⁸ Department of Agriculture, Environment and Rural Affairs (2017) *Landscape Character of Northern Ireland*. Available: [Landscape Character of Northern Ireland | Department of Agriculture, Environment and Rural Affairs](#)

economic activity. Their boundaries follow natural lines in the landscape rather than administrative boundaries. They can be used for planning and development.	A check of the NatureScot’s summary in January 2025 shows the most recent information available for Landscape Character Assessments in Scotland with the latest update being in January 2023.	defined Landscape Character Areas are identified, LANDMAP is used to inform planning, policy and strategies ¹⁹⁷ . A check of the Natural Resources Wales’ summary in January 2025 shows the most recent information available for LANDMAP in Wales with the latest update being in January 2025	A check of the DAERA’s summary in January 2025 shows the most recent information available for Landscape Character Assessments in Northern Ireland with the latest update being in October 2016. <i>Further detail on the most up to date designated areas can be viewed on the following interactive map:</i> https://daerani.maps.arcgis.com/apps/MapJournal/index.html?appid=3fdf82b3e41e44a1bb86a542dfb67d97
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Supporting trend data is not available.

Landscape:	National Character Areas are areas that share similar landscape characteristics, and which follow natural lines in the landscape rather than administrative boundaries, making them a good decision-making framework for the natural environment. National Character Area profiles are guidance documents which can help communities to inform their decision-making about the places that they live in and care for. The information they contain informs the delivery of nature improvement areas and encourage broader partnership working through local nature partnerships.
National Character Areas	

¹⁹⁷ Natural Resources Wales (2021) *LANDMAP – the Welsh landscape baseline*. Available: <https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/evidence-to-inform-development-planning/landmap-the-welsh-landscape-baseline/?lang=en>

National Seascape Areas	National Seascape Character Areas are also defined to support decision making through the marine planning process. Visual, cultural, historical and archaeological impacts are considered for all coastal areas alongside wider social and economic impacts of development or activity on coastal landscapes and seascapes.
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The locations of National Character Areas in England are shown in **Figure 6A**.

The locations of National Seascape Areas in Wales are shown in **Figure 6B**.

See text for Landscape Character Areas	See text for Landscape Character Areas	Wales defines 48 National Landscape Character Areas (NLCAs) which highlight what distinguishes one landscape from another, with reference to their regionally distinct natural, cultural and perceptual characteristics. ²⁰¹	Northern Ireland provides a strategic overview of the landscape and subdivides the countryside into 26 Regional Landscape Character Areas based upon information on people and place and the combinations of nature, culture and perception which make each part of Northern Ireland unique. ²⁰³
. In England, Seascape Character Assessments have been published for the North East, North West, South East, and South West marine plan areas. Each assessment includes profiles of the marine character areas within its region ¹⁹⁹	Coastal Character Assessment is defined in Scotland as the process of identifying and describing Scotland's diverse coasts. Thirteen National Coastal Character Types have been identified, most recently the Orkney and north Caithness characterisation added in 2016. ²⁰⁰	Wales identifies National Marine Character Areas which highlight the key natural, cultural and perceptual influences that make the character of each seascape distinct and	NI defines 24 different regional seascape character areas around the coast which describe the key features and

¹⁹⁹ UK Government (2018) *Seascape assessments*. Available: [Seascape assessments for North East, North West, South East, South West marine plan areas \(MMO1134\) - GOV.UK](#)

²⁰⁰ NatureScot (2023) *Coastal Character Assessment*. Available: [Coastal Character Assessment | NatureScot](#)

²⁰¹ Natural Resources Wales (2023) *National Landscape Character Areas*. Available: [Natural Resources Wales / National Landscape Character Areas \(NLCA\)](#)

²⁰³ DAERA (2019) *Regional Character Assessment*. Available: [NI Regional Landscape Character Assessment - National Grid | Department of Agriculture, Environment and Rural Affairs](#)

unique. Wales inshore waters are divided into 29 Marine Character Areas.²⁰² characteristics of each seascape character area.²⁰⁴

Tranquillity Defined as the quality of calm experienced in places with mainly natural features and activities, free from disturbance from manmade ones. Mapping designed to show the level of tranquillity across the UK has been generated, mapping places where and helping Councils to develop national tranquillity policies.

In England, The Countryside Charity (CPRE) have derived a national map which identifies most and least tranquil places.²⁰⁵

While no tranquillity mapping has been identified Scottish Natural Heritage has focussed on the concepts of 'wilderness' and 'wildlands' in Scotland with a Policy Statement on Wildness in Scotland's Countryside and the publication of a map of Wild Land Areas in 2014.²⁰⁶

Natural Resources Wales provide map of the land of Wales, graded to show levels of Tranquillity. It results from combining several underlying layers of data, covering different factors that either contribute to tranquillity or detract from tranquillity. Produced to provide a strategic baseline for monitoring change in tranquillity in Wales to inform strategic planning and policy-making.²⁰⁷ Additionally the nationally consistent terrestrial

There does not appear to be any record of tranquillity mapping having been undertaken in Northern Ireland.

²⁰² Natural Resources Wales (2023) *Marine Character Areas*. Available: [Natural Resources Wales / Marine Character Areas](#)

²⁰⁴ DAERA (2014) *Seascape Character Areas*. Available: [Seascape Character Areas | Department of Agriculture, Environment and Rural Affairs](#)

²⁰⁵ CPRE (2007) *Tranquillity Map: England*. Available: [Tranquillity Map: England - CPRE](#)

²⁰⁶ NatureScot (2014) *Wild Land Areas map and descriptions*. Available: [Wild Land Areas map and descriptions 2014 | NatureScot](#)

²⁰⁷ DataMapWales (2017) *Tranquil Areas Wales*. Available: [Tranquil Areas Wales | DataMapWales](#)

Tranquillity & Place resource identifies the strategic and local resource in remote, rural, peri-urban and urban areas²⁰⁸

Dark Sky Reserves

An IDA International Dark Sky Reserve is a public or private land possessing an exceptional or distinguished quality of starry nights and nocturnal environment that is specifically protected for its scientific, natural, educational, cultural, heritage and/or public enjoyment. Reserves consist of a core area meeting minimum criteria for sky quality and natural darkness, and a peripheral area that supports dark sky preservation in the core. Reserves are formed through a partnership of multiple land managers who have recognized the value of the natural night time environment through regulations and long-term planning.

The IDA identify the following Dark Sky Reserves in England²⁰⁹:

- Cranborne Chase
- Exmoor National Park
- Moore’s Reserve
- North York Moors
- Yorkshire Dales National Park

The IDA do not identify any Dark Sky Reserves in Scotland, however Galloway Forest Park is accredited as an International Dark Sky Park. This is located in southern Scotland in the Dumfries and Galloway council area.²¹⁰

The IDA identify the following Dark Sky Reserves in Wales²¹¹:

- Brecon Beacons National Park
- Snowdonia National Park

Dark Skies Map for Wales also shows Wales' light pollution levels and highlights areas with

The IDA do not identify any Dark Sky Reserves in Northern Ireland however OM Dark Sky Park is accredited as an International Dark Sky Park. This covers Davagh Forest in the landscape of the Sperrin’s.²¹³

²⁰⁸ DataMapWales (2023) *Tranquillity & Place Sound Environment Part I*. Available: [Tranquillity & Place Sound Environment Part I | DataMapWales](#)
²⁰⁹ International Dark Sky Association (2025) *Dark Sky Reserves*. Available: [Dark Sky Place finder | DarkSky International](#)
²¹⁰ Forestry and Land Scotland (2023) *Galloway International Dark Sky Park*. Available: [Galloway International Dark Sky Park | Forestry and Land Scotland](#)
²¹¹ International Dark Sky Association (2025) *Dark Sky Reserves*. Available: [Dark Sky Place finder | DarkSky International](#)
²¹³ OM Dark Sky Park & Observatory (2025) *Davagh Sperrin Mountains*. Available: [OM Dark Sky Park and Observatory | International Dark Sky Park](#)

pristine night skies. More than two thirds of Wales falls in to the darkest category.²¹²

Air Quality:	Since December 1997 each local authority in the UK must review and assess air quality in their area to determine performance against national air quality objectives. Where air quality objectives are not likely to be achieved an AQMA must be declared. AQMAs are typically associated with vehicle emissions, principally oxides of nitrogen (NOx), oxides of sulphur (SO2) and particulates (PM10). As such, AQMAs are predominantly associated with urban areas and the road network).
Location of Air Quality Management Areas (AQMAs)	The locations of AQMAs are shown in Figures 1A and 1B .
Air Pollution Information System	The Air Pollution Information System provides a searchable database and information on pollutants and their impacts on habitats and species. The APIS provides pollution impact records for a variety of habitats, ecosystems and species. Each record contains information on key impacts including any critical loads or levels and a full reference list.
Smoke Control Areas	Additionally, under the Air Quality Standards Regulations 2010, the UK undertakes an air quality assessment and reports the findings on an annual basis. The assessment is based on a range of high-quality evidence including measurements from established monitoring networks and supplementary assessment in the form of air quality modelling. ²¹⁴ This can be viewed by Air Quality Zones for a range of pollutant metrics. ²¹⁵ Further data on air pollutants can be found on the National Atmospheric Emissions Inventory (NAEI) which is made up of the Greenhouse Gas Inventory (GHGI) and the Air Quality Pollutant Inventory (AQPI). ²¹⁶

²¹² LUC (2025). *Dark Skies Map for Natural Resources Wales*. Available: [Dark Skies Map for Natural Resources Wales | LUC](#)

²¹⁴ Department for Environment Food and Rural Affairs (2025) *Air quality compliance data*. Available: [Air quality compliance data - Defra, UK](#)

²¹⁵ Department for Environment Food and Rural Affairs (2025) *Compliance Map*. Available: [UK AIR AQ Compliance Map](#)

²¹⁶ National Atmospheric Emissions Inventory (2024) *About the Inventory*. Available: [About the inventory | National Atmospheric Emissions Inventory](#)

A check of the DEFRA's map in January 2025 shows the most recent information available for AQMA's in the UK as of December 2024²¹⁷.

Smoke control areas are areas where people and businesses must not emit smoke from a chimney or buy or sell unauthorised fuel for use in a smoke control area unless it's used in an 'exempt' fireplace²¹⁸. Smoke control areas are designated across the UK, with varying details available for each nation.

There were 462 AQMAs in England. AQMAs are distributed throughout England, although they are principally located in areas of high population. The largest AQMAs are within major cities, including London, Birmingham, Manchester, Liverpool, Sheffield and Bristol. A significant amount of AQMAs are designated along major trunk roads and are generally associated with areas of high congestion.

There were 29 AQMAs in Scotland**Error! Bookmark not defined..** The majority of these are located in the south of the country and are associated with the larger cities of Glasgow, Edinburgh, Falkirk, Perth and Dundee. Outside of these areas, Aberdeen and Inverness, on the east coast, have designated AQMAs. The north, highlands and west coast do not have any AQMAs.

There were 44 AQMAs in Wales. These are all located in the south of the country. The largest AQMAs are within Swansea and Port Talbot, on the south coast. Smaller AQMAs are within Cardiff, Newport and the smaller towns within the valleys between the M4 corridor and the Brecon Beacons. These small AQMAs are associated with congestion within the town centres.

There were 19 AQMAs in Northern Ireland. These are located in the east, west south and central regions. The urban areas of Belfast in the east, Newry in the south and Strabane in the west have the largest AQMAs. Smaller AQMAs, associated with congestion in town centres, are located throughout east, west and south Northern Ireland.

As the NPS applies to England & Wales only, it is anticipated that there are no implications for the air

²¹⁷ Department for Environment Food and Rural Affairs (2021) *AQMAs interactive map*. Available: [AQMA's interactive map](#)

²¹⁸ DataMapWales (2024) *Wales Smoke Control Areas Map*. Available: [Wales Smoke Control Areas Map | DataMapWales](#)

quality of Northern Ireland in terms of AQMA as these have been declared for the most part in relation to the impact of emissions from road traffic.

Supporting Trend Data:

The quality of our air in the UK has improved considerably over the last decade. Road transport is a key source of many air pollutants, particularly in urban areas. Roadside nitrogen dioxide levels for example, have decreased from 40.6 µg/m³ in 2012 to 23.7 µg/m³ in 2023²¹⁹. There are two main trends in the transport sector working in opposite directions: new vehicles are becoming individually cleaner in response to European emission standards legislation, but total vehicle kilometres are increasing. Overall emissions of key air pollutants from road transport have fallen by about 50% over the last decade, despite increases in traffic, and are expected to reduce by a further 25% over the next decade. This is mainly a result of progressively tighter vehicle emission and fuel standards agreed at European level and set in UK regulations²²⁰.

**Soils,
Geology, and
Land Use:**

Geological SSSIs / ASSIs are included within the SSSI / ASSI information provided in Biodiversity and Ecology.

Location of
Geological
SSSIs / ASSIs

Maps delineating soil types across respective regions have been published and draw from survey work and GIS techniques. In respect of the England and Wales resource the maps include soilscales, developed from the more

²¹⁹ Department for Environment and Rural Affairs (2024) *Northern Ireland Environmental Statistics Report*. Available: <https://www.daera-ni.gov.uk/sites/default/files/publications/daera>

²²⁰ Department for Environment and Rural Affairs (2011) *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland - Volume 1*. Available: <https://www.gov.uk/government/publications/the-air-quality-strategy-for-england-scotland-wales-and-northern-ireland-volume-1>

Soils, Geology, and Land Use:	detailed national soil map and a series of thematic soil properties including carbon, metal binding capacity and native woodland models.			
National Soil Maps	The maps are developed with the purpose of effectively communicating a general understanding of the variations that occur between soil types and how soils affect the environment.			
	Soil Maps are shown in Figures 8A and 8B .			
	NATMAP (National Soil Map) is derived from the National Soil Map for England and Wales and is the product of sixty years of soil survey work in England and Wales. ²²¹	National coverage of the main soil types across Scotland mapped originally at 1:250 000 scale a National Soil Map of Scotland is based on data collected between 1947 and 1981. ²²²	NATMAP (National Soil Map) is derived from the National Soil Map for England and Wales and is the product of sixty years of soil survey work in England and Wales.	The World Reference Base map shows the locations of the nine reference soil groups recognised in Northern Ireland. It is derived from the general soil map of Northern Ireland at 1:250 000 scale, held by the Agri-Food and Biosciences Institute (AFBI). ²²³ .
Soils, Geology, and Land Use:	Of particular note across England and Wales are the numerous contaminated sites that are a legacy of current or past industrial activities. Typically, contaminated land would be found in urban areas and along major transport links, though many sites are also found in rural or coastal areas. While many sites are known, it is the case that many contaminated sites (their location and the nature of contamination) remain unknown. In England, arsenic, lead and benzo(a)pyrene are the most common substances causing contamination of land identified under Part 2A of the Environmental Protection Act 1990 ²²⁴ .			
Contaminated Land				

²²¹ LandIS (2005) National Soil Map of England and Wales. Available: [LandIS - Land Information System - National Soil Map - NATMAP Soils](#)

²²² Scotland's Soils (1982) National Soil Map of Scotland. Available: [National soil map of Scotland | Scotland's soils](#)

²²³ AFBI (n.d.) Soil maps and soil surveys. Available: [Soil maps and soil survey | Agri-Food and Biosciences Institute](#)

²²⁴ Environment Agency (2016) Dealing with contaminated land in England. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/513158/State_of_contaminated_land_report.pdf

Across the United Kingdom, land is legally defined as ‘contaminated land’ where substances are causing or could cause²²⁵:

- Significant harm to people, property or protected species
- Significant pollution of surface waters or groundwater
- Harm to people as a result of radioactivity

Some types of contaminated land are classed as ‘special sites’. This includes land that:

- seriously affects drinking waters, surface waters or important groundwater sources
- has been, or is being, used for certain industrial activities, such as oil refining or making explosives
- is being or has been regulated using a permit issued under the integrated pollution control or pollution prevention and control regimes
- has been used to get rid of waste acid tars
- is owned or occupied by the Ministry of Defence
- is contaminated by radioactivity
- is a nuclear site

Determination of contaminated land is made in the UK by a local council or the relevant environment agency and is best identified on a local or regional basis. It is however important to note that there will be lots of brownfield sites which are contaminated and require remediation but have not been formally designated. They will have not been assessed for designation or don’t meet the threshold for designation but still pose a risk of pollution and harm.

Local authorities maintain the Public Registers for the ordinary contaminated land in their area.

²²⁵ UK Government (2024) *Land Contamination: technical guidance*. Available: <https://www.gov.uk/contaminated-land>

Soils, Geology, and Land Use:	Geoparks are endorsed by UNESCO and are not designated under legislation. They are locally led partnerships within areas of internationally significant geology that work to support sustainable economic development of the area, primarily through geological and eco-tourism ²²⁶ .			
Geoparks	<i>NB: No mapping data on Geoparks is available.</i>			
	A check of the UNESCO's list in January 2025 shows the most recent information available for Geoparks in the UK.			
	There are currently three Geoparks in England, the English Riviera, located in the south of Devon in the south west, the North Pennines, between Cumbria and Northumberland in the north, and the Black Country located in the Midlands.	There are currently two Geoparks in Scotland, the North West Highlands, located in the north, and Geopark Shetland, within the Shetland Islands.	There are currently two Geoparks in Wales, Fforest Fawr, located in the Brecon Beacons in the south, and GeoMôn, which encompasses the island of Anglesey in the north west.	There is currently one Geopark in Northern Ireland, the Cuilcagh Lakelands Geopark, straddling the border between Co. Fermanagh in Northern Ireland and Co. Cavan in the Republic of Ireland.
	<i>Supporting trend data is not available.</i>			
Soils, Geology, and Land Use:	The Agricultural Land Classification system is used to assess the quality of land for agricultural use, particularly in England and Wales ²²⁷ . It classifies land into five grades, with Grade 3 subdivided into Sub-grades 3a and 3b. The best and most versatile agricultural land is defined as Grades 1, 2 and 3a of the Agricultural Land Classification (ALC) system ²²⁸ . There are also maps available that show the likelihood of 'best and most versatile agricultural land' at the following link:			

²²⁶ United Kingdom National Commission for UNESCO (2021) Global Geoparks. Available: <http://www.unesco.org.uk/designation/geoparks/>

²²⁷ DataMapWales (2019) Predictive Agricultural Land Classification (ALC) Map 2. Available: https://datamap.gov.wales/layers/inspire-wg:wg_predictive_alc2

²²⁸ Natural England (2024) Provisional Agricultural Land Classification (ALC) England. Available: https://naturalengland-defra.opendata.arcgis.com/datasets/5d2477d8d04b41d4bbc9a8742f858f4d_0/explore?location=52.528521%2C-1.477739%2C8.61

Agricultural Land Classification	https://publications.naturalengland.org.uk/category/5208993007403008
Main Peatlands	In Scotland, the ‘land capability for agriculture’ is a national method used to provide information on the on the types of crops that may be grown in different areas dependent on environmental and soil characteristics. It classifies land into 14 different categories, ranging from classes 1-7 and urban. Classes 1 to 3.1 are known as prime agricultural land²²⁹. There is currently no classification system in place in Northern Ireland, however information on farmlands and grasslands can be found at the following link: https://www.daera-ni.gov.uk/articles/farmlands-and-grasslands Peatlands cover approximately 10% of the UK land area, which constitutes nearly three million hectares of land. The location of the main areas and further information on the types, condition and policy regarding peatlands for the UK can be found at the following link: About Peatlands IUCN UK Peatland Programme <i>Supporting trend data is not available.</i>
Water Quality and Resources:	The EU WFD is transposed into UK law through the following regulations: The Water Environment (WFD) (England and Wales) Regulations 2017 for England and Wales; the Water Environment and Water Services (Scotland) Act 2003 (WEWS Act); and The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017 and The Water (Amendment) (Northern Ireland) (EU Exit) Regulations 2019 for Northern Ireland.
Water Framework Directive (WFD)	The purpose of the Directive is to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. Groundwater is an important natural resource that supports river flows as well as ecological diversity in rivers, lakes and wetlands. It is also available for use, across the United Kingdom, for water supply by abstraction from boreholes, wells and springs.

²²⁹ Scotland’s soils (2024) National Scale Land Capability for Agriculture. Available: <https://soils.environment.gov.scot/maps/capability-maps/national-scale-land-capability-for-agriculture/>

All EU member states aim to ensure that all aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands reach ‘good’ chemical and ecological status by 2027.

The WFD specifies the quality elements that can be used to assess the surface water status of a water body. Quality elements can be biological (e.g. fish, invertebrates, plants), chemical (e.g. heavy metals, pesticides, nutrients) or indicators of the condition of the habitats and water flows and levels (e.g. presence of barriers to fish migration, modelled lake level data) (JNCC 2010).

Note will also be made in the AoS of each site of the terms of the Environmental Permitting Regulations (England and Wales) 2018.²³⁰

A check of the JNCC’s list in January 2025 shows the most recent information available for quality of water bodies assessed under the Water Framework Directive in the UK.

As of 2022, in England, the quality status of water bodies assessed under the WFD were:	As of 2022, in Scotland, the quality status of water bodies assessed under the WFD were:	As of 2022, in Wales, the quality status of water bodies assessed under the WFD were:	As of 2022, in Northern Ireland, the quality status of water bodies assessed under the WFD were:
Lakes:	Lakes:	Lakes:	Lakes:
• High – 0% • Good – 14% • Moderate – 74% • Poor – 11% • Bad – 1%	• High – 31% • Good – 39% • Moderate – 20% • Poor – 10% • Bad – 0%	• High – 1% • Good – 18% • Moderate – 65% • Poor – 15% • Bad – 2%	• High – 0% • Good – 14% • Moderate – 38% • Poor – 29% • Bad – 19%
Rivers and Canals:	Rivers and Canals:	Rivers and Canals:	Rivers and Canals:

²³⁰ Joint Nature Conservation Committee (2024) B7. Surface Water Status. Available: <http://jncc.defra.gov.uk/page-4250>

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• High – 0% • Good – 16% • Moderate – 62% • Poor – 19% • Bad – 3%	• High – 8% • Good – 48% • Moderate – 27% • Poor – 14% • Bad – 3%	• High – 0% • Good – 44% • Moderate – 47% • Poor – 8% • Bad – 1%	• High – 0% • Good – 31% • Moderate – 57% • Poor – 11% • Bad – 1%
Estuaries and Coastal:	Estuaries and Coastal:	Estuaries and Coastal:	Estuaries and Coastal:
• High – 0% • Good – 29% • Moderate – 65% • Poor – 3% • Bad – 3%	• High – 30% • Good – 68% • Moderate – 1% • Poor – 0% • Bad – 0%	• High – 2% • Good – 20% • Moderate – 75% • Poor – 4% • Bad – 0%	• High – 0% • Good – 40% • Moderate – 56% • Poor – 4% • Bad – 0%
As of 2019, in England, the quality status of groundwater bodies assessed under the WFD were ²³¹ :	As of 2023, in Scotland, the quality status of groundwater bodies assessed under the WFD were ²³² :	As of 2021, in Wales, the quality status of groundwater bodies assessed under the WFD were ²³³ :	As of 2020, in Northern Ireland, the quality status of groundwater bodies assessed under the WFD were ²³⁴ :
Quantitative Status:	Overall Status:	Quantitative Status:	Overall Status:

²³¹ Environment Agency (2023) *Classifications data for England*. Available: [Classifications data for England | Catchment Data Explorer](#)

²³² SEPA (n.d.) *Water Classification Hub*. Available: [Water Classification Hub](#)

²³³ Natural Resources Wales (2024) *The state of our groundwater in Wales – why we monitor it and what it is telling us about groundwater levels*. Available: [Natural Resources Wales / The state of our groundwater in Wales – why we monitor it and what it is telling us about groundwater levels](#)

²³⁴ DAERA (2021) Northern Ireland Water Framework Directive Groundwater Status Update 2020. Available: [Northern Ireland Water Framework Directive Groundwater Update 2020.pdf](#)

- | | | | |
|--------------|--------------|---------------|--------------|
| • Good - 73% | • Good - 90% | • Good - 100% | • Good - 84% |
| • Poor – 27% | • Poor – 10% | • Poor – 0% | • Poor – 16% |

Chemical Status:

- Good – 45%
- Poor – 55%
-
-

Chemical Status:

- Good – 56%
- Poor – 44%

Supporting Trend Data:

There has been little change in the overall number of surface water bodies in the UK that achieved high or good ecological status since the indicator was first prepared in 2009, and similarly, there has been little change in the short term, between 2017 and 2022. In 2022, 36% of surface water bodies were assessed under the Water Framework Directive (WFD) as being in high or good status, the same as in 2009 and one percentage point higher than the figure of 35% reported in 2017²³⁵.

Water Quality and Resources

River Basin Management Plans

River basin management plans (RBMPs) set out how organisations, stakeholders and communities will work together to improve the water environment. A RBD covers an entire river system, including river, lake, groundwater, estuarine and coastal water bodies. RBD RBMPs are designed to protect and improve the quality of the water environment. Good quality water is essential for wildlife, agriculture and businesses to thrive. It boosts regeneration (both structural and economic), recreation and tourism.

As of January 2024, the Environment Agency manages the seven RBDs in England covering the Anglian,	The Scottish Environment Protection Agency manage the Scotland RBD. Scottish Environment Protection Agency and the	Natural Resources Wales manage the Western Wales RBD. Natural Resources Wales and the Environment Agency jointly	In 2015 the second set of River Basin Management Plans (RBMP) as required by the regulations were published for each River
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²³⁵ JNCC (2023) B7. Surface water status. Available: [UKBI - B7. Surface water status | JNCC - Adviser to Government on Nature Conservation](#)

Humber, Northumbria, North West, South East, South West and Thames river basin districts and jointly manages the Solway Tweed RBD and the Dee and Severn RBDs. The Environment Agency must review and update RBMPs every 6 years, with the most recent update in 2022 ²³⁶ . Implementation of these plans is purported to enhance nature and the natural water assets of the river basin districts that are the foundation of everyone's wealth, health and wellbeing, and the things people value, including culture and wildlife.	Environment Agency jointly manage the Solway Tweed RBD. In December 2021 SEPA published the River Basin Management Plan for Scotland 2021-2027 ²³⁷ . The plan sets out a range of actions to address significant problems affecting water quality, physical condition, water resources and the migration of wild fish. It focuses on reducing resource use, eliminating waste and restoration of natural capital.	manage the Dee and Severn RBDs. In Wales RBMPs are updated on a six yearly cycle and are prepared in consultation with a wide range of organisations and individuals. The Western Wales and River Dee RBMPs 2021-2027 summaries were published in July 2022 ²³⁸ after a check in January 2025.	Basin District within Northern Ireland for 2015 - 2021. These cover the North Eastern, North Western and Neagh Bann River basin districts. ²³⁹ The Plans identified where the water environment is in good or excellent condition and set out objectives for improvement or prevention of deterioration. Consultation on the Draft third cycle River Basin Management Plan for Northern Ireland 2021 – 2027 took place in 2021 ²⁴⁰ and was published in 2025 ²⁴¹ .
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²³⁶ Environment Agency (2024) *River basin management plans: updated 2022*. Available: [River basin management plans: updated 2022 - GOV.UK](#)

²³⁷ SEPA (2021) *The River Basin Management Plan for Scotland 2021 – 2027*. Available: [211222-final-rbmp3-scotland.pdf](#)

²³⁸ Natural Resources Wales (2024) *Dee and Western Wales river basin management plans 2021-2027*. Available: [Natural Resources Wales / Dee and Western Wales river basin management plans 2021-2027](#)

²³⁹ DAERA (2015) *River Basin Management*. Available: [River Basin Management | Department of Agriculture, Environment and Rural Affairs](#)

²⁴⁰ DAERA (2019) *River Basin Planning 3rd Cycle Timeline Consultation*. Available: [River Basin Planning 3rd Cycle Timeline Consultation | Department of Agriculture, Environment and Rural Affairs](#)

²⁴¹ DAERA (2025). Third Cycle River Basin Management Plan for Northern Ireland 2021–2027. Department of Agriculture, Environment and Rural Affairs. Published 13 June 2025. Available at: <https://www.daera-ni.gov.uk/sites/default/files/2025-06/NIEA%20-%20WMU%20-%20ICP%20%20Third%20cycle%20River%20Basin%20Management%20Plan%202021%20-%202027.PDF>

**Water Quality
and
Resources**

Eutrophication
of marine
waters

The majority of UK waters do not experience significant eutrophication – the eutrophication problems are restricted to a small number of areas in coastal waters, primarily estuaries and embayments with restricted water circulation. In a limited number of areas on the north east and southern coasts of the UK and on the south-west coasts of England and Wales and in Northern Ireland, inputs of nutrients of anthropogenic origin (notably nitrate and phosphate from agriculture and urban waste water sources) have resulted in nutrient enrichment in some small estuaries and bays. In general, changes in nitrogen and phosphorus inputs, concentrations of contaminants, chlorophyll concentrations and oxygen levels show improvements. Where measures have been taken to reduce nutrient inputs, it may take a long time to result in the desired outcome due to time lags between taking measures and change in the large reservoirs of nitrogen that have built up in soils and ground-waters in previous decades. However the existing programmes for assessing the eutrophication status for coastal and marine waters developed under the WFD and the OSPAR Convention have to a large extent already been applied successfully with the UK largely achieving GES in the latest assessment²⁴².

**Water Quality
and
Resources**

Hazardous
substances

The UK has not achieved Good Environmental Status (GES) for contaminants under Descriptor 8 in the 2025 Marine Strategy assessment. Hazardous substances such as mercury, lead, and persistent organic pollutants exceed environmental thresholds in several regions, including the Celtic Seas and Greater North Sea. The shift to more ecologically relevant thresholds has revealed that contaminant levels may still pose risks to marine life, despite previous improvements. Continued monitoring and targeted mitigation are required to address these pressures²⁴³.

Highly persistent legacy chemicals such as mercury, cadmium, lead, PCBs, PBDEs, PAHs, and organotins continue to be the main cause of failures in achieving Good Environmental Status, particularly in coastal and estuarine areas, but increasingly in some offshore regions. These substances are routinely monitored under OSPAR's CEMP programme, focusing on sediments and biota due to their tendency to accumulate and biomagnify. While many contaminant concentrations remain below levels likely to harm marine species, they have not yet

²⁴² UKMMAS (2018) *Eutrophication*. Available: [Eutrophication - Marine online assessment tool](#)

²⁴³ Defra (2025). Marine Strategy Part One: UK Updated Assessment and Good Environmental Status. Department for Environment, Food & Rural Affairs. Published June 2025. Available at: https://consult.defra.gov.uk/uk-marine-strategy-1/uk-marine-strategy-part-one-update-2025/supporting_documents/UK%20Marine%20Strategy%20Part%20One%20Update%20consultation%20June%202025.pdf

returned to background levels. Trends are mixed, with some contaminants showing improvement and others—such as mercury, cadmium, and PAHs—showing increasing concentrations in certain regions. Additionally, PFAS have emerged as a new concern, with all measured concentrations in biota exceeding proposed thresholds²⁴⁴.

**Water Quality
and
Resources:**

**Bathing Water
Quality**

The Bathing Water Directive (76/160/EEC) is to protect public health and the environment. The Directive sets a number of microbiological and physico-chemical standards that bathing waters must either comply with ('mandatory' standards) or endeavour to meet ('guideline' standards). The Bathing Water Directive is transposed into law in all of the United Kingdom's devolved nations and is administered in England by the Department of Environment, Food and Rural Affairs, in Scotland by the Scottish Government, in Wales by Natural Resources Wales and in Northern Ireland by the Department of Agriculture, Environment and Rural Affairs.

Water quality at designated bathing water sites in England is assessed by the Environment Agency. From May to September, weekly assessments measure current water quality, and at a number of sites daily pollution risk forecasts are issued. Annual ratings classify each site as excellent, good, sufficient or poor based on measurements taken over a period of up to four years.

As of January 2025, in England, the quality status of bathing water areas assessed under the Bathing Waters Directive were ²⁴⁵ :	As of November 2024, there were 89 designated bathing waters in Scotland. The quality status of bathing water areas assessed under the Bathing Waters Directive were ²⁴⁶ :	As of December 2024, in Wales, 109 designated bathing waters were sampled and classified during the 2023 bathing season. The quality status of bathing water areas assessed under the	As of October 2025, in Northern Ireland, all 26 monitored coastal bathing waters were classified overall as reaching minimum standards during the 2025 annual classification. The quality status of bathing water areas assessed under the
• Excellent – 289 • Good – 95 • Sufficient – 29	• Excellent – 50		

²⁴⁴ Defra (2025). OSPAR EMS Report 2025. Department for Environment, Food & Rural Affairs. Published 30 June 2025. Available at: https://assets.publishing.service.gov.uk/media/68b9b45c11b4ded2da19fe7c/Exceed_-OSPAR_EMS_Report_2025_Rev0-_signed.pdf. [assets.pub...ice.gov.uk]

²⁴⁵ Environment Agency (2024) *Bathing Water Data*. Available: [Bathing waters data](#)

²⁴⁶ Scottish Environment Protection Agency (2024) *Record number of Excellent Bathing Waters in Scotland for 2025*. Available: [Record number of Excellent Bathing Waters in Scotland for 2025 | Beta | SEPA | Scottish Environment Protection Agency](#)

	• Poor – 37 • Closed - 1	• Good – 27 • Sufficient – 9 • Poor – 3	Bathing Waters Directive were ²⁴⁷ :	Bathing Waters Directive were ²⁴⁸ :
			• Excellent – 80 • Good – 20 • Sufficient – 7 • Poor – 2	• Excellent – 22 • Good – 2 • Sufficient – 2 • Poor – 0
All of the designated bathing waters met the minimum water quality standards and there were no non-compliant bathing waters during the 2023 season.				

Supporting Trend Data:

2015 was the first year of implementing the new classification system for bathing water quality. The results of these are not directly comparable to years prior to this. In general, there has been improvements in bathing water quality since recording began in 1988.

Water Quality and Resources:

Groundwater Source

Source Protection Zones²⁴⁹ show the level of risk to a drinking water supply from pollution. Sources include wells, boreholes and springs. In England, the Environment Agency must protect groundwater sources used to supply drinking water from pollution. Groundwater in a SPZ1 is most vulnerable to pollution given the close proximity of the abstraction point and the water’s intended use for human consumption.

²⁴⁷ Natural Resources Wales (2024) *Wales bathing water report 2023*. Available: [Wales bathing water report 2023](#)
²⁴⁸ NI Direct (2024) *Bathing water quality*. Available: [Bathing water quality | nidirect](#)
²⁴⁹ Environment Agency (2024) *Groundwater source protection zones (SPZs)*. Available: [Groundwater source protection zones \(SPZs\) - GOV.UK](#)

Protection
Zones

**Water Quality
and
Resources:**

Drinking Water
Protected
Areas
(DWPA's)

All groundwater bodies in England are designated as drinking water protected areas (DrWPAs). This aims to protect groundwater from over-abstraction and to prevent deterioration in groundwater quality that could increase the treatment of drinking water. The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 Article 8 requires Drinking Water Protected Areas to be identified (or including those that could have such use in the future) and have measures in place that aim to reduce treatment of drinking water within DrWPA.

**Flood Risk
and Coastal
Change:**

In England²⁵⁰ and Wales^{251 252}, the flood risk (river and tidal) is categorised into three zones for planning purposes (noting that the NPPF further subdivides flood zone 3 into 3a and Functional Floodplain 3b (land where water has to flow or be stored in times of flood)):

Location of
Fluvial and
Tidal
Floodplains

- Flood Zone 1 – Locations in flood zone 1 have a low probability of flooding. This means, in any year, land has a less than 0.1% chance of flooding from rivers or the sea.
- Flood Zone 2 – Locations in flood zone 2 have a medium probability of flooding. This means, in any year, land has between a 1% and 0.1% chance of flooding from rivers and between a 0.5% and 0.1% chance of flooding from the sea.
- Flood Zone 3 – Locations in flood zone 3 have a high probability of flooding. This means, in any year, land has a 1% or more chance of flooding from rivers, or a 0.5% or more chance of flooding from the sea.

The risk of surface water flooding also needs to be considered²⁵³:

- High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

²⁵⁰ Environment Agency (2021) *Flood zones and what they mean*. Available: [Your results explained - Flood map for planning - GOV.UK](#)

²⁵¹ Natural Resources Wales (2021) *Flood zones*. Available: [Natural Resources Wales / Flood zones](#)

²⁵² Natural Resources Wales (2025) *Flood map for planning / development advice map*. Available: [Natural Resources Wales / Flood map for planning / development advice map](#)

²⁵³ Environment Agency (2013) *Flood risk maps for surface water: how to use the map*. Available: [Flood risk maps for surface water: how to use the map - GOV.UK](#)

- Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%)
- Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)
- Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)

The TAN15 Defended Zone in Wales are defined as areas that benefit from Risk Management Authority flood defences with the following minimum Standard of Protection:

- 1 in 100 years (present day) for rivers
- 1 in 200 years (present day) for the sea

For flood defences built from 2016 onwards there must be an allowance for climate change and design freeboard.

For planning purposes, surface water and small watercourses are categorised differently in Wales:

- Surface Water and Small Watercourses – Flood Zone 2 Areas with 0.1% to 1% (1 in 1000 to 1 in 100) chance of flooding from surface water and/or small watercourses in a given year, including the effects of climate change
- Surface Water and Small Watercourses – Flood Zone 3 Areas with more than 1% (1 in 100) chance of flooding from surface water and/or small watercourses in a given year, including the effects of climate change

In Scotland, the flood risk (river, tidal and surface water) is categorised into three areas²⁵⁴:

- Little or no risk area (less than 0.1% (1:1000)) chance of flooding.
- Low to medium risk area (0.1% to 0.5% (1:1000 – 1:200)) chance of flooding.
- Medium to high risk area (0.5% (1:200)) or greater chance of flooding.

²⁵⁴ Scottish Government (2020) *Scottish Planning Policy, A Natural, Resilient Place*. Available: <https://www.gov.scot/publications/scottish-planning-policy/pages/7/>

) The Northern Ireland Flood Risk Assessment Plan identifies 12 Areas of Potential Significant Flood Risk (APSFR), which are the focus of the current Flood Risk Management Plan 2021–2027. The previous designation of Transitional Areas of Potential Significant Flood Risk (TAPSFR) is no longer used in the second cycle plan.²⁵⁵

Estimates of flood risk from different sources across the UK vary, but the level of risk remains substantial. In Wales, over 105,000 properties are at risk of flooding from rivers and over 90,000 from the sea, with approximately 143,000 properties at risk of surface water flooding²⁵⁶. In Scotland, over 284,000 properties are currently estimated to be at risk of flooding²⁵⁷. England has approximately 6.3 million properties in areas at risk of flooding, including 4.6 million from surface water flooding²⁵⁸. The Northern Ireland Flood Risk Assessment (NIFRA) estimates that 45,000 properties are at risk of flooding (238). These figures highlight the widespread nature of flood risk across the UK and the importance of continued investment in flood resilience and management strategies.

Shoreline Management Plans have been developed across England and Wales by Coastal Groups made up of members from local councils and the Environment Agency. The purpose of these plans is to identify the most sustainable approach to managing the flood and coastal erosion risks to the coastline in the:

- Short term (0 to 20 years)
- Medium term (20 to 50 years)
- Long term (50 to 100 years)

²⁵⁵ Department of Agriculture, Environment and Rural Affairs (DAERA), 2025. Third Cycle River Basin Management Plan 2021–2027. [pdf] DAERA. Available at: <<https://www.daera-ni.gov.uk/sites/default/files/2025-06/NIEA%20-%20WMU%20-%20ICP%20%20Third%20cycle%20River%20Basin%20Management%20Plan%202021%20-%202027.PDF>>

²⁵⁶ StatsWales. (2024). Properties at risk of flooding. [online] Available at: <https://statswales.gov.wales/Catalogue/Environment-and-Countryside/Flooding/propertiesatriskofflooding2024>

²⁵⁷ The Scottish Government (2024). Improving Scotland's flood resilience. [online] Gov.scot. Available at: <https://www.gov.scot/news/improving-scotlands-flood-resilience/>.

²⁵⁸ Environment Agency (2024). National assessment of flood and coastal erosion risk in England 2024. [online] GOV.UK. Available at: <https://www.gov.uk/government/publications/national-assessment-of-flood-and-coastal-erosion-risk-in-england-2024/national-assessment-of-flood-and-coastal-erosion-risk-in-england-2024>.

A total of 22 plans have been developed for England and Wales as follows²⁵⁹:

- SMP 1 – Scottish Border to River Tyne
- SMP 2 – The Tyne to Flamborough Head
- SMP 3 – Flamborough Head to Gibraltar Point
- SMP 4 – Gibraltar Point to Hunstanton
- SMP 5 – Hunstanton to Kelling hard
- SMP 6 – Kelling Hard to Lowestoft
- SMP 7 – Lowestoft to Felixstowe
- SMP 8 – Essex and South Suffolk
- SMP 9 – River Medway and Swale Estuary
- SMP 10 – Isle of Grain to South Foreland
- SMP 11 – South Foreland to Beachy Head
- SMP 12 – Beachy Head to Selsey Bill
- SMP 13 – Selsey Bill to Hurst Spit
- SMP 14 – Isle of Wight
- SMP 15 – Hurst Spit to Durlston Head
- SMP 16 – Durlston Head to Rame Head
- SMP 17 – Rame Head to Hartland Point
- SMP 18 – Hartland Point to Anchor Head
- SMP 19 – Anchor Head to Lavernock Point

²⁵⁹ Environment Agency (2009) *Shoreline Management Plans (SMPs)*. Available: <https://www.gov.uk/government/publications/shoreline-management-plans-smps>

- SMP 20 – Lavernock Head to Saint Ann’s Head
- SMP 21 – St. Ann’s Head to Great Ormes Head
- SMP 22 – Great Ormes Head to Scotland

The Shoreline Management Plans propose four different management policies:

- No active intervention
- Hold the (existing defence) line
- Managed realignment
- Advance the line

There is not the same comprehensive approach to Shoreline Management in Scotland, with only a small number (four) of local authorities publishing Shoreline Management Plans, though there is a growing recognition of the need for a more joined up approach to this issue, particularly in light of a changing climate and recent work has informed this process²⁶⁰. Northern Ireland also does not have a strategic approach to shoreline management²⁶¹.

England has approximately 2.8 million properties in areas at risk of flooding from rivers and the sea and 3.4 million properties in areas at risk of flooding from surface water²⁶². Flood Zones 2 and 3 are

In Scotland, over 280,000 properties are currently estimated to be at risk of flooding²⁶⁴.

Just below 3.6% of all data zones classified as having an extremely high or acute vulnerability to flooding,

Flood zones 2 and 3 are located across the whole of Wales. The largest and most extensive of these areas exist in lowland and estuarine regions, such as the River Dee and Severn estuary. Mid Wales and the

There are Significant Flood Risk Areas throughout Northern Ireland, for which detailed mapping is available. The largest of these are located around centres of population, such

²⁶⁰ Dynamic Coasts (2017) *National Coastal Change Assessment*. Available: <http://www.dynamiccoast.com/outputs.html>

²⁶¹ Northern Ireland Assembly (2015) *Shoreline management planning in Northern Ireland*. Available: http://www.niassembly.gov.uk/globalassets/documents/raise/knowledge_exchange/briefing_papers/series4/2015-04-15-kess-shoreline-management-planning-in-northern-ireland1.pdf

²⁶² Environment Agency (2024) *Flood and coastal erosion risk management report: 1 April 2022 to 31 March 2023*. Available: [Flood and coastal erosion risk management report: 1 April 2022 to 31 March 2023 - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/123456/flood-and-coastal-erosion-risk-management-report-1-april-2022-to-31-march-2023.pdf)

²⁶⁴ Scottish Government (2019) *Living with flooding: action plan*. Available: [Living with flooding: action plan - gov.scot](https://www.gov.scot/publications/living-with-flooding-action-plan/pages/1-1-introduction.aspx)

located across the whole of England associated with river and coastal areas. Lowland areas are of particular risk as a consequence of floodplains being associated with the lower reaches of rivers ²⁶³ .	affecting an estimated 100,000 people ²⁶⁵ . Over 60,000 people may be extremely or acutely disadvantaged in relation to river (fluvial) flooding, over 28,000 people may be extremely or acutely disadvantaged in relation to coastal flooding, and 14,000 people in regard to surface water flooding.	highland regions, such as Snowdonia and the Brecon Beacons, have less risk of flooding ²⁶⁶ .	as Belfast in the east and Londonderry in the west. NB: Other areas of Northern Ireland are likely to be at risk of flooding, although these are not as extensively mapped/assessed due to Significant Flood Risk Areas being allocated on the basis of population density ²⁶⁷
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Supporting Trend Data:

As a consequence of climate change (which could lead to increased rainfall, river flows, and higher coastal storm surges), and development pressures, it is likely that flood risk will increase in the future, with potentially the most significant changes likely to happen in the latter half of the century. In England it is estimated that Without any further investment in flood defences, the number of properties at medium or high risk could rise from 0.75 million to 1.29 million in 50 years²⁶⁸. Similar increase are likely to occur within Scotland, Wales and Northern Ireland.

Marine Spatial Plans Marine planning in the UK has been taking place across different timescales. The first marine plans to be adopted in the UK were the East Inshore and Offshore Marine Plans in 2014 and the Scottish National Marine Plan in 2015, followed by the South Inshore and Offshore Marine Plans in 2018 and the Welsh National Marine Plan (WNMP) in 2019. The Marine Management Organisation (MMO) and Department of Agriculture, Environment and Rural Affairs

²⁶³ Environment Agency (2017) *Flood Map for Planning (Rivers and Sea)*. Available: <http://apps.environment-agency.gov.uk/wiyby/37837.aspx>

²⁶⁵ Scottish Government (2015) *Mapping flood disadvantage in Scotland 2015: report*. Available: [https://www.gov.scot/publications/mapping-flood-disadvantage-scotland-2015-main-report/pages/10/#:~:text=The%20investigation%20into%20the%20flood,change\)%2C%20with%20a%20minor%20number](https://www.gov.scot/publications/mapping-flood-disadvantage-scotland-2015-main-report/pages/10/#:~:text=The%20investigation%20into%20the%20flood,change)%2C%20with%20a%20minor%20number)

²⁶⁶ Natural Resources Wales (2020) *Flood risk map*. Available: [Natural Resources Wales / Check your flood risk by postcode](https://naturalresources.wales/check-your-flood-risk-by-postcode)

²⁶⁷ Department for Infrastructure (2024) *Flood Maps NI*. Available: [Flood Maps NI | Department for Infrastructure](https://www.dfi.gov.uk/flood-maps-ni)

²⁶⁸ HM Government (2018) *A Green Future: Our 25 Year Plan to Improve the Environment*. Available: [25-year-environment-plan.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/682222/25-year-environment-plan.pdf)

(DAERA) continue to develop the remaining plans for areas of English waters and the waters of Northern Ireland respectively. In England, all Marine Plans have been adopted. The consultation on the Marine Plan for Northern Ireland took place in 2018, but a final plan is yet to be adopted. DAERA published a revised Statement of Public Participation in October 2022, which sets out how and when stakeholders can be involved in the Marine Plan process. The remaining plans, like those already adopted, are consistent with the Marine Policy Statement, and have taken a similar approach, presentation (comprising a vision, objectives and general and sectoral policies) and in the approach to policy wording. Marine plans in the UK have, to date, been written at a strategic level which largely consolidates and clarifies existing legal and policy arrangements, albeit with a regional focus, and in most instances do not attempt to be spatially explicit, for example by indicating defined zones for development or where development would be precluded. The plans rather identify potential resource and constraint (including through mapping), with policies that seek to balance environment, economic and social considerations in decision making and consent application. This includes the promotion of certain activities such as offshore wind, or the safeguarding of strategic resources. As these are the first iteration of marine plans, subsequent revisions may be expected to be more explicit²⁶⁹.

Resources and Waste

The UK generated 191.2 million tonnes of total waste in 2020, and it is estimated that 40.4 million tonnes of this was commercial and industrial (C&I) waste²⁷⁰.

In 2022, 25,691,000 tonnes of Waste from Households (WfH) were generated in the UK with an overall recycling rate of 44.1%. In England, the recycling rate was 44.0%, in Northern Ireland it was 50.2%, in Wales it was 57.0% and in Scotland it was 42.1%. Around 5.3 million tonnes of the UK's municipal waste went to landfill in 2023.

Total UK commercial and industrial waste, comprising inert, non-hazardous arising which result from trade or businesses, was 40.4 million tonnes in 2020. Around 32.6 million tonnes (81%) of this total was generated in England. This was split between the commercial and industrial sectors by 23.5 and 9.1 million tonnes respectively.

Construction, demolition and excavation (CD&E; including dredging) generated around three fifths (61%) of total UK waste in 2020. 59.4 million tonnes of non-hazardous construction and demolition waste was produced in the UK in

²⁶⁹ Department for Business, Energy & Industrial Strategy (2021) UK Offshore Energy Strategic Environmental Assessment. Available: [UK Offshore Energy Strategic Environmental Assessment - scoping](#)

²⁷⁰ Department for Environment, Food and Rural Affairs (2024) UK Statistics on Waste. Available: [UK statistics on waste - GOV.UK](#)

2020, 93% (55.0 million tonnes) of which was recovered. This recovery rate is broadly similar over the period 2010 – 2014. The Waste Framework Directive targets a 70% recovery rate for non-hazardous construction and demolition waste by 2020, which the UK is expected to achieve at these given rates²⁷¹.

²⁷¹ European Commission (2023). Waste Framework Directive. European Commission. Available at: [Waste Framework Directive - Environment - European Commission](#)

Appendix F. Baseline Maps

Please note that a series of maps have been developed to help inform the understanding of baseline information. Due to file size, this Appendix is provided as a separate Volume.

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