Energy National Policy Statements

Appraisal of Sustainability - Appendices Supporting Evidence Volume I

March 2023

The following sets out the organisations who made consultation responses via the Public Consultation that were considered relevant to the AoS and which were addressed within Appendix B of the AoS Report (Draft Final AoS Appendices Vol. I v6.0).

Organisation Number	Organisation
1	DEFRA
2	The East Beach Residents Assoc. & Littlehampton Society
3	Dept. Agriculture Environment and Rural Affairs (DAERA NI)
4	Forestry Commission
5	Federal Maritime and Hydrographic Agency (Germany)
6	Environment Agency
7	Historic England
8	CPRE, the countryside charity
9	Isle of Anglesey County Council
10	Natural England
11	Natural Resources Wales
12	RSPB
13	RWE (RWE Generation UK plc, RWE Renewables UK Ltd and related UK Group companies)
14	The Crown Estate
15	Wildlife and Countryside Link
16	Scottish Power Renewables
17	National Federation of Fishermen's Organisations
18	United Kingdom Without Incineration Network (UKWIN)

Response made via Public Consultation

The following sets out responses received to a series of questions posed during consultation in relation to the AoS. For responses made in respect of the NPS, please see the NPS response document.

Q23a. Do you have any comments on the AoS findings for the draft Overarching NPS for Energy (EN-1)?

Organisation No.	Comment	Response
1.	Table 4-1 Ref. to English PPP's e.g. Strategy for England's Trees, Woods and Forests (2007) is out of date - should reference England trees action plan and nature for climate programme, 30x30 etc and net zero strategy as well as national planning policy framework	List of PPPs in Table 4-1 and Appendix C updated to include Net Zero Strategy, revised NPPF, Environment Act, England Trees Action Plan, Nature for Climate Programme and 30x30 Government commitment and these recent commitments reflected in the revised AoS Framework. Strategy for England's Trees, Woods and Forests (2007) removed from PPPs.
	Table 4-4 Biodiversity and Cultural Heritage sections – additional text relating to irreplaceable habitats such as Ancient Woodlands and Veteran Trees added. For example, "The NPS should not allow development on irreplaceable habitats, such as ancient woodland and ancient and veteran trees except in exceptional circumstances and with appropriate compensation measures". Note is also made that there are substantial numbers of NNR and LNR across England and Wales.	Reference to irreplaceable habitats such as Ancient Woodlands and Veteran Trees as per DEFRA comments has been added to Table 4-4 under Biodiversity and reflected in the revised AoS framework in a new guide question for the Biodiversity objective.
2	Concerns over energy security particularly during transition to wind and solar – suggest that ref. in AoS re. this issue is vague (Para. 1.7.4)	Landscape and visual impacts are covered in Section 5.10 of EN-1. Section 2.35 in EN3 specifically addresses seascapes and visual effects relating to offshore wind. The NPS has also been updated to reflect the latest Offshore Energy SEA.

	Concerns that NPS does not reflect pillars of sustainability particularly in respect of offshore windfarms – ref. OESEA advice on visual buffers. Suggestions in relation to rewording certain elements made	
3	Issue of Transboundary effects Reference to draft Marine Plan for Northern Ireland	List of PPPs revised to include draft Marine Plan for Northern Ireland and clarification in relation to Transboundary effects in the four nations within the United Kingdom has been added to section 11.3 of the AoS Report.
4	Development consent should not be granted for development that results in the loss or deterioration of irreplaceable habitats, including ancient woodland, and ancient and veteran trees, unless there are wholly exceptional reasons, and a suitable compensation strategy exists. Direct and indirect effects across all phases of development should be addressed. SoS should ensure appropriate weight is attached to Ancient Woodlands etc. AoS should also include ref. to Ancient and Veteran trees and other non-ancient woodlands that cannot easily be replaced. Note that baseline datasets are incomplete. Need to reference England Tree Action Plan and Nature for Climate Fund.	List of PPPs in Table 4-1 and Appendix C updated to include England Trees Action Plan and Nature for Climate Fund and these recent commitments reflected in the revised AoS Framework. Reference to irreplaceable habitats such as Ancient Woodlands and Veteran Trees as per Forestry comments has been added to Table 4-4 under Biodiversity and reflected in the revised AoS framework in a new guide question for the Biodiversity objective.
5	Potential for Transboundary effects from deployment of renewable energy in the form of offshore wind energy and related infrastructure in the North Sea. Consideration to be given to involve German authorities should it potentially cause significant adverse effects on a protected site in the German EEZ, in particular if compensation measures are being considered instead of prevention or mitigation measures. This also applies to potential adverse effects on human activities in the German EEZ area beyond fisheries, e.g. on navigation, wind energy, grid connection and other.	Transboundary effects from offshore wind farms already addressed in the AoS and Germany is one of countries that should be consulted on the potential for significant environmental effect from implementation of the NPS. The AoS now clearly recognises that there are other potential effects on human activities alongside effects on marine biodiversity.

6	The draft Overarching NPS for Energy (EN-1)? Comments on AoS Objective 2: Maximise adaptation and resilience to climate change • The adaptation requirements in section 4.9 of EN-1 are too loosely defined and discretionary: o There is a need to ensure adaptation is focused on how today's extreme weather events will change as a result of climate change, rather than general changes in climate (such as 'warmer, wetter winters'). Otherwise there is a danger adaptation measures will not be robust. o There is also a need to be clearer on built in resilience vs. future adaptation. Future adaptation measures are only reasonable for long term and very extreme scenarios, and where implementing them now could be problematic (due to wider impacts and/or extreme impact on viability or feasibility). Guidance is also needed to show there is a clear plan for future adaptation – e.g. secured with DCO requirements (DCO version of planning conditions). If this is unclear there is a danger short to medium term adaptation will be left for later implementation, which may not be delivered or be deliverable, risking future resilience. o While EN1 climate change adaptation section with the flood risk and coastal change sections and supporting EA guidance provide a robust approach to adapting to flood risk and coastal change, wider climate risks are less well supported. In particular there is a lack of reference to managing risks related to periods of limited water availability. It is possible limitations of abstraction could mean energy infrastructure may have to cease to operate for periods of time and abstraction could cause environmental damage, including for sites with legal habitats and water protections (e.g. SSSIs, SACs, Water Framework Directive etc.).	Noted - The AoS Framework was adjusted to better reflect the issues raised and assessment results in relation to Objective 2, adaptation to climate change, are set out in AoS Section 2.

	• The supporting sustainability analysis for AoS Objective 2: 'Maximise adaptation and resilience to climate change' is very narrowly focussed on flood risk and direct impacts, to the exclusion of other risks and indirect risks to the development, and knock-on risks to the adaptation of other parties/habitats. There is a lack of reference to managing risks related to periods of limited water availability in EN1 and this issue is not recognised in AoS objective 2.	Table 4-4 has been revised to include direct and indirect climate risks to energy infrastructure: river surface and groundwater flooding; coastal flooding and erosion damage; heatwaves, wildfires, reduced water availability and soil desiccation. AoS Objective 2 on Adaptation and Resilience has been clarified to apply to new energy development- and questions expanded to require: • energy infrastructure that is resilient and adapted to the risks of climate change over its lifetime: increased river, surface and groundwater flooding due to extreme winter rainfall events and increase in winter mean rainfall and increased coastal flooding and erosion damage due to sea level rise and storms •risks associated with flooding over the energy infrastructure's lifetime to be managed without increasing the flood risk elsewhere and identifying opportunities to reduce the risk overall, including through working with nature based solutions? • avoidance of development in areas likely to be affected by coastal erosion or where this is not possible ensure that coastal change can be managed throughout the lifetime of the energy infrastructure •management of the risks associated to periods of limited water availability over the lifetime of the energy infrastructure •management of the risks associated with heatwaves and wildfires over the lifetime of the energy infrastructure
	• Without changes to EN1 to address the above (using the advice we have provided in response to consultation question 2 under comments on section 4.9 'Climate change adaptation' and question 3 under comments on section 5.16 'Water quality and resources'), we disagree with the assessment that EN1 has a significant positive medium to long term impact when assessed under AoS objective 2, and would consider the assessment score for this objective to be a 'likely negative effect'.	Noted - The AoS Framework was adjusted to better reflect the issues raised and assessment results in relation to Objective 2, adaptation to climate change, are set out in AoS Section 2.

7	1. There is repeated reference in the AoS to the 'built and natural environment', and 'the Built Environment' and 'the Natural Environment' are two of the six sustainable development themes included in the AoS for assessing alternatives. We view as unhelpful the approach used in the AoS to compartmentalise heritage as only a subset of the Built Environment, and for Landscapes and Townscapes to be considered only with reference to the Natural Environment. This is unfortunate and results in assessment that is insufficiently comprehensive.	The six sustainable development themes included in the AoS for assessing alternatives were informed by the themes used in the AoS of the current NPSs to ensure an element of consistency in the approach to assessment of alternatives. This clarification has been added to Section 2.5. However, in the same way that Adaptation and Resilience (AoS 2) has been included to span Built and Natural Environment, it is recognised that elements of Heritage (AoS5) and Landscapes and Townscapes (AoS6) also span the two types of environment. Heritage (AoS5) and Landscapes and Townscapes (AoS6) have been included in both and a revision of the assessments undertaken to check and note any material changes that arise from the revised sustainable development themes.
	2. Paragraph 1.7.4 of EN1, which summarises point from the AoS of EN-1, omits the historic environment. Lack of specific reference to culture and the historic environment suggests that the conclusions from the AoS of EN-1 are insufficiently clear.	AoS of EN-1 summary now includes reference to cultural heritage. Detailed assessment is made in respect of Objective 5 Protect and enhance cultural heritage assets and their setting, and the wider historic environment.
	3. Paragraph 5.6.3 in the AoS for EN-1 concludes that there is the potential for "minor negative effects (including cumulative effects) on heritage assets in the short, medium and long term as a result of the potential impacts on heritage assets and their settings". It goes on to acknowledge that a lot is site specific. There is scope for significant negative effects in some locations and minor effects in others, and this should be acknowledged in the headline conclusions made, both in the AoS and in EN-1.	The AoS notes that there is a degree of uncertainty around extent and significance of effect as this is dependent on the nature and precise location of the infrastructure.
	4. The proposed indicator for monitoring the historic environment "no of assets impacted by new energy schemes" is not meaningful as a measure to indicate how heritage assets have been lost, protected or conserved. Historic England suggests an indicator that measures change to heritage assets compared to a baseline assessment. An indicator that measures the number of heritage assets that are placed on or	Included the two indicators that Historic England suggests in the Monitoring Framework.

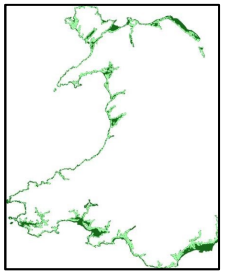
	removed from the Heritage at Risk register as a result of development is also recommended.	
	5. Note that the information source should be Historic England, not English Heritage.	Corrected in Table 12-1
	6. The key findings from the AoS for EN-1 on page 8 focus on the inevitability of harm to heritage and the limited ability for landscape/townscape/seascape mitigation. While a balanced approach to decision making is always required, this lowers the bar for assessing heritage. The AoS, again on page 8, does go on to state that the significance of such effects and potential mitigation possibilities is largely uncertain at the strategic and non-site-specific stages of EN1-5 which is a helpful caveat. However, an overarching vision which sees harm as inevitable and sees mitigation as being limited does, to an extent, prejudice the ability of important heritage considerations to be dealt with at a more detailed, locational stage. The wording of EN1 and AoS could be changed to shift the tone of the text to talk about a balanced approach rather than one that implies built in harm from the outset. This aligns with the concept of sustainable development being that which also seeks to conserve the historic environment.	The NPS sets out that any harm or loss of significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justification. It also states that substantial harm to or loss of significance of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional. Substantial harm to or loss of significance of assets of the highest significance, including Scheduled Monuments; Protected Wreck Sites; Registered Battlefields; grade I and II* Listed Buildings; grade I and II* Registered Parks and Gardens; and World Heritage Sites, should be wholly exceptional. It is therefore anticipated that harm will only occur in exceptional circumstances and the AoS assessment reflects this approach.
	7. Reference is made on pages 43 and 44 of the AoS, and indeed elsewhere in the AoS, to Historic Battlefields and Parks and Gardens. To avoid confusion and align with the NPPF, Historic England suggests these entries are amended to 'Registered Battlefields' and 'Registered Parks and Gardens'.	Corrections made throughout report.
	8. On page 94 of the AoS, reference is made to negative cumulative effects on the setting of heritage assets. As stated in the Historic England Advice Note on commercial renewable energy development: "Cumulative heritage impacts are frequently linked	Text amended to reflect that there is potential for negative cumulative effects on the setting of heritage assets as well as physical impacts that ultimately may result in a change to the significance of heritage assets.

	with setting, but they can also apply to physical impacts that ultimately may result in a change to the significance of a heritage asset; for example, a development may have hydrological impacts that cause changes to the groundwater level which in turn affects the preservation of waterlogged archaeological remains."	
8	Yes. We believe that, in relation to the consideration of alternatives, the AoS in general underestimated the scope of energy demand reduction and distributed energy, which in turn has led to a skewed weighting of need for energy supply. We refer in particular to recent research by CREDS* which suggested greatly enhanced scope for reducing overall energy demand (by up to 50%), compared with current Government projections. *Barrett, J., Pye, S., Betts-Davies, S., Eyre, N., Broad, O., Price, J., Norman, J., Anable, J., Bennett, G., Brand, C., Carr-Whitworth, R., Marsden, G., Oreszczyn, T., Giesekam, J., Garvey, A., Ruyssevelt, P. and Scott, K. 2021. The role of energy demand reduction in achieving net-zero in the UK. Centre for Research into Energy Demand Solutions. Oxford, UK. ISBN: 978-1-913299-11-8	We note that EN-1 sets out the Government's policy for delivery of major energy infrastructure. A further five technology specific NPSs for the energy sector cover: natural gas electricity generation (EN-2); renewable electricity generation (both onshore and offshore) (EN3); gas supply infrastructure and gas and oil pipelines (EN-4); the electricity transmission and distribution network (EN-5); and nuclear electricity generation (EN6). The Energy NPSs have effect for the decisions by the Secretary of State on applications for energy developments that are nationally significant under the Planning Act 2008 and covers the following NSIPs: - electricity generating stations, (meeting the thresholds set out in the Planning Act 2008). This includes onshore generating stations (but not onshore wind) generating more than 50 megawatts in England and 350 megawatts in Wales. It also includes offshore generating stations generating more than 100 megawatts offshore in territorial waters adjacent to England and within the English part of the Renewable Energy Zone and those generating more than 350 megawatts in territorial waters adjacent to Wales and the Welsh part of the Renewable Energy Zone (the Welsh Zone as defined by section 158 of the Government of Wales Act 2006). For these types of infrastructure, this Overarching NPS (EN-1) in conjunction with any of the relevant technology-specific NPSs will be the primary policy for Secretary of State decision making - large gas reception and liquefied natural gas (LNG) facilities and underground gas storage facilities (meeting the thresholds set out in the Planning Act 2008). For this infrastructure EN-1 in conjunction with EN-4 (for natural gas only) will be the primary policy for Secretary of State decision making

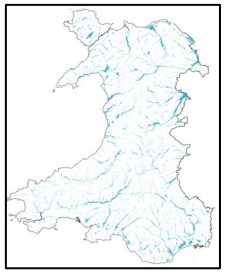
		- cross-country gas and oil pipelines and Gas Transporter pipelines (meeting the thresholds and conditions set out in the Planning Act 2008). For this infrastructure EN-1 in conjunction with EN-4 (for natural gas only) will be the primary policy for Secretary of State decision making - above ground electric lines at or above 132kV (meeting the thresholds set out in the Planning Act 2008). For this infrastructure, EN-1 in conjunction with the Electricity Networks NPS (EN-5) will be the primary basis for Secretary of State decision making2 Where the need for a particular type of energy infrastructure set out above is established by this NPS, but that type of infrastructure is outside the scope of one of the technology specific NPSs, this NPS will have effect alone and will be the primary basis for Secretary of State's decision making. This will be the case for, but is not limited to, hydrogen pipeline and storage infrastructure, Carbon Capture Storage (CCS) pipeline infrastructure and other forms of low carbon generation infrastructure not included in EN-2 or EN-3. As the Energy NPSs are about delivery of major energy supply infrastructure and do not cover energy demand reduction nor distributed energy, these cannot be influenced through the AoS of the Energy NPSs alternatives.
9	The Council considers that the Appraisal of Sustainability does not entirely align with projects being able to demonstrate that they are sustainable development. The AoS states it is intended to "inform consultation on the draft NPSs by providing an analysis of the environmental, social and economic impacts of implementing the energy NPSs" but then goes on to say in relation to the technologies covered by EN-3 that "The non-generic effects have been found to be generally negative across short, medium and long terms, though there are some elements of positivity in respect of the need to promote sustainable use of resources and natural assets". It is unclear how	The AoS recognises that there will be effects from the NSIPs but for the most part these are not significant and reflect the mitigation approach set out in EN-1. It is considered that the application of such mitigation will likely result in minimum residual effects. All such issues would be considered in much greater detail through processes such as Environmental Impact Assessment, the need for which is set out in EN-1.

	an assessment of generally adverse effects demonstrates sustainability.	
10	We are disappointed that the comments we made on the consultation regarding the methodology for the AOS have not been reflected in the AOS. We have not reproduced them in this response and would refer you back to our response dated 30 April 2021. We would note that the National Planning Policy Framework was been updated in July 2021 and the documents contained throughout the whole of this consultation have not been updated in line with the revisions made. 25 Year Environment Plan targets have similarly not been fully integrated and worked through including via the findings of the AoS. For example, the 25YEP target is for all soils to be managed sustainably by 2030. The impacts on BMV agricultural land and soil resource have then subsequently not been picked up in the list of potentially significant effects although EN-3 itself does itself reflect the special considerations needed when considering ground mounted solar PV installations. There will be subsequent Environment Act targets and policy that will need to be considered prior to the designation of the National Policy Statements.	Natural England comments on the Scoping Report have now been considered in full (see separate Scoping Report consultation comments table). The National Planning Policy Framework which sets out the government's planning policies for England was revised on the 20th of July 2021 and the most relevant changes in the context of the Energy NPSs have been set in Appendix and also in the report. Equally, the targets within the 25 Year Environment Plan have been set out and the AoS Framework aligned to reflect these.
11	We submit here our formal response as agreed by 13th December 2021. We welcome that our previous comments have largely been addressed. However, we do have further comments as follows. These comments apply in the context of EN-1, EN-3 and EN-4 as these are the only documents that we have had time and resources to review: 4.1 Review of Plans, Programmes and Policies Table 4.1 – The review of plans, programmes and policies should include: 'Valued and Resilient: The Welsh Government's Priorities for Areas of	PPP reviewed and added to Table 4.1 and Appendix. Reference to National Flood and Coastal Erosion Risk Management Strategy and TAN15 has been introduced under the heading Adaptation to a Changing Climate.

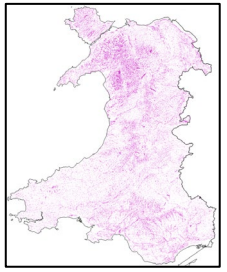
	Outstanding Natural Beauty and National Parks' July 2018Page 39 - Under the heading Adaptation to a Changing Climate and Flooding, we suggest reference is made to supporting the objectives of the National Flood and Coastal Erosion Risk Management Strategy and TAN15.	
	4.2 Summary of baseline information Table 4.2 (Page 43) Cultural Heritage: Please add Registered Historic Landscapes (Wales) Table 4.2 Page 43) Landscape: Add National Landscape Character Areas (Wales), Seascapes (Wales), Tranquillity Maps (Wales) and Dark Sky reserves (Wales)	Added
	Table 4.3- Key designations and land use across the UK Table 4.3 (Page 44) – Only the flood zones for England and Flood Risk Areas for Northern Ireland are shown. We request that the Flood Map for Wales is referenced here too as it is a material consideration given it will show current available information on flood risk in Wales.	Flood zones for Wales already included in table 4.3 along with flood zones for England and Scotland. Flood Mapping for Planning[1] was published in December 2022 mapping has been reproduced below for information.



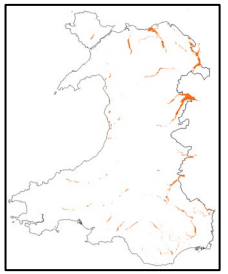
Flood Map for Planning: Sea Flood Zones



Flood Map for Planning: River Flood Zones



Flood Map for Planning: Surface Water and Small Watercourses Flood Zones



Flood Map for Planning: Recorded Flood Extent

[1] https://flood-map-for-planning.naturalresources.wales/

	Table 4.4 Baseline evolution Page 46 – Biodiversity – We consider that reference should be made to the stepwise approach advocated in Planning Policy Wales paragraph 6.4.21 for schemes in Wales or that may affect Wales. We also recommend that opportunities for nature-based solutions are included as part of the implications and opportunities identified for the Energy National Policy Statements. Also, we recommend that reference to Welsh Government's approach to net benefit for biodiversity, as opposed to net gain, as advocated in Planning Policy Wales is included in the implications and opportunities identified for the Energy National Policy Statement for schemes in Wales. Planning Policy Wales paragraph 6.4.5 states that there is a Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty): 'Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity. In doing so planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects: • diversity between and within ecosystems; • the connections between and within ecosystems; • the scale of ecosystems; • the condition of ecosystems including their structure and functioning; and • the adaptability of ecosystems. In fulfilling this duty, planning authorities must have regard to: • the list of habitats and species of principal importance for Wales, published under Section 7 of the Environment (Wales) Act 2016; • the SoNaRR, published by NRW; and	Table 4.4 aligned Planning Policy Wales for schemes in Wales or that may affect Wales. In Wales and for development proposals that may affect Wales, planning authorities must follow a stepwise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible. Finally, where the adverse effect on the environment clearly outweighs other material considerations, the development should be refused. Nature-based solutions added and cross-referenced to adaptation to a changing climate issue Reference to net benefit for biodiversity added and approach set out in Table 4-4 Opportunities with regards to protection and enhancement of Green Infrastructure have clarified in Table 4-6. It is noted that the AoS framework already asks a question about protection and enhancement of Green Infrastructure and this is in accordance with Planning Policy Wales.

	• any Area Statement that covers all or part of the area in which the authority exercises its functions.' Note that the Secretary of State would fall within the definition of a Planning Authority for the purposes of implementing this duty for assessment of schemes in Wales. The AoS document references protecting Green Infrastructure and where possible to enhance it, whereas Planning Policy Wales talks about the need to do both. We recommend that reference to the need to do both here is strengthened and referenced, in accordance with Planning Policy Wales.	
	Page 50 - With reference to the section on 'adaptation to a changing climate', no reference is made to the increased risk on coastal erosion. More severe weather events will impact on this risk and there is data to show that without implementation of shoreline management plans, over 2000 properties (2126) at risk from coastal erosion in Wales (reduces to 145 properties if there is full implementation of shoreline management plans). We therefore advise that the NPS includes a statement that management options that have been selected as part of a relevant Shoreline Management Plan, should be implemented prior to a scheme proceeding in consultation with Shoreline Management Plan Coastal Groups. Also, this section notes that potential risks from rivers and coastal sources have been identified and mapped, but omits to include risk from surface water. We advise this should be rectified in the AoS accordingly. This source should also be referred to as it is mapped in the Flood Map for Planning in Wales. This section on 'Adaptation to a Changing Climate states "The NPS should seek to ensure that new development minimises any negative effects arising from flooding and avoids where possible areas of	Increased risk of coastal erosion has been added to AoS Framework and issues and opportunities in Table 4.4 have been revised to include coastal erosion. Surface water flooding has now been added to the AoS Framework and explicitly referenced in Table 4.4 Issues and Opportunities This is already in the AoS Framework and needs to strengthen in the Sustainability Issues

	highest flood risk" This should reflect national planning policy in Planning Policy Wales that also advises new development shouldn't increase flood risk elsewhere. This is different to 'minimising' negative effects. We advise that the AoS should advocate that the NPS should be clear that there should not be any increase in negative effects arising from flood risk in new development as an aim.	
	Page 55 Cultural Heritage – Please include opportunities to reflect Registered Historic Landscapes in sensitive design.	Added
	Pages 56-58 Landscape and Townscape – This should include opportunities to: • support designated landscapes' special qualities and management plan objectives; • the settings of designated landscapes; • supporting measures to enhance the resilience of ecosystems at a landscape scale and also to maximise benefits including public access and enjoyment of landscapes; • Opportunities to enhance Seascapes, as well as ways to support functional landscapes e.g. those which reduce flood risk, sequester carbon or offer recreational opportunities in peri urban areas.	Added plus AoS Framework adjusted to reflect the opportunities.
	Table 4.5 - AoS Objectives and Guide Questions Page 69 Cultural Heritage - Add 'Registered Historic Landscape' to AoS Objective and Guide questions.	Added to Table 4.5, Table 4.4 and Baseline Appendix.
	Page 70 Landscape - Add 'seascapes' reference to the designated landscapes special qualities. In the last bullet point in the guide questions delete 'where' and replace with 'as' to reflect the imperative of the nature emergency and part of the landscape solution. AoS Framework Section 4.3 (pages 68-71)	Added. Explanations for adaptation and resilience adapted as follows:

	Objective 2 – adaptation isn't just about building walls and flood barriers, it's about understanding current and future risk and combining flood infrastructure with other measures such as better flood warning, better land planning to avoid placing development in risk areas, implementing nature based solutions, policy implementation (e.g. SMPs) etc… the description is too narrow and should include reference to the other measures we advocate here.	*Adaptation is about taking the necessary steps to address the risks of climate change, now and in the future. Resilience is the ability of a system to adsorb and bounce back after an adverse event, now and in the future.*
12	We welcome the use of the sustainability objectives, particularly objectives 1-4 and the reference in objectives 3 and 4 of the need to enhance, not just protect, biodiversity and sites designated for their international importance for nature conservation. We welcome recognition of the potential from construction and operation activities to have significant negative effects on biodiversity in the short, medium and long term. We also welcome the recognition of the possibility of cumulative negative effects on biodiversity and other environmental features. However, there are flaws which undermine the AoS (and the AoS for EN-2-4). Firstly, it is impossible to properly assess cumulative, in-combination and transboundary effects without an overarching spatial plan. The AoS correctly notes that "the lack of clarity relating to location of infrastructure means it is not possible to be precise as to cumulative, synergistic and indirect effects" (p16). It goes on to conclude "that the significance and nature of cumulative effects may vary with the mix of technology projects proposed and the sensitivities of the receiving communities and environment", but this is a statement of the obvious. It is not possible for the NPS to address and manage these issues; delegating them to project-level EIA is	Comment noted. Comment noted. We agree that a spatial approach to energy planning would be extremely helpful, but the Energy NPSs high level policies do not have a spatial dimension and therefore the AoS has been unable to undertake spatially informed assessments.

	likely to result in poor environmental outcomes and is an inefficient process even solely from a planning perspective. This is a fundamental problem, particularly in the marine environment where there is no effective spatial planning to fill the gap between the high-level policies of the NPS and individual NSIPs (see also our comments under Q2 and Q9).	In terms of energy planning, wider planning processes at regional level conducted to fill in the gap between the high level policies and the individual NSIPs are advisable from an AoS perspective. However, it is not the role of the NPS to address that gap.
	Secondly, the assessment of reasonable alternatives is crude. We acknowledge that it is a significant improvement on the consideration of alternatives in the AoS of the original NPS. However, simply subtracting different technology types is unlikely to give very informative results. EN-1 is based on the fundamental premise that a combination of technologies is required, but rather than asking which technologies are 'in' or 'out', a scenario-based approach would have been much more informative. The key question is really what is an appropriate balance between technologies, and their spatial distribution, and what is the environmental impact of different balances and distributions. Alternative 4 assumes that offshore renewables cannot deploy to their fullest extent due to even stricter protection of the marine environment, which will mean increased reliance on fewer low carbon electricity generating technologies. This is assessed as a large negative effect for net zero, compared to EN-1. This conclusion depends on a number of questionable assumptions; offshore wind deployment is not necessarily incompatible with stricter protection of the marine environment, nor does stricter protection necessarily imply lower energy output overall. An alternative which could have been explored is one where plan-level Habitats Regulations Assessments	We thank the recognition that the consideration of alternatives has significantly improved in comparison to the AoS of the original NPS. We note that an alternative consisting wholly of renewables, hydrogen, natural gas with CCS, BECCS and Carbon Capture Utilisation and Storage (CCUS) to deliver Net Zero by 2050 has been analysed in Future Energy Scenarios July 2020 by the National Grid under a range of scenarios. https://www.nationalgrideso.com/document/173821/download The Future Energy Scenarios indicate that certain technologies (ie. nuclear and unabated natural gas) may not be necessary to supply energy in the UK therefore the NPS alternatives were constructed taking this key finding into consideration. However, given that the NPSs don't have a spatial dimension this resulted in an AoS unable to undertake assessment of alternatives based on spatial distribution of technologies and corresponding environmental impacts. In view of latest offshore renewable energy policy as stated in the British Energy Security Strategy, alternative 4 is no longer considered to be a realistic alternative and has been removed from the AoS.

	for offshore renewables identify the least ecologically-sensitive locations and direct development there. All the alternatives are deemed to be negative for security of energy supply, but this has the effect of weighting the conclusions away from alternatives with lower environmental impacts. Ultimately the choices between alternatives are political choices and should not be left buried in a technical report. In our view, the climate and nature emergency is of such urgency that the purpose of the AoS should be to expose and thoroughly explore all alternatives with lower environmental impacts, without giving pre-eminence to security of supply. We note that the potential for minor positive impacts on biodiversity in the medium to longer term due to environmental enhancements and biodiversity net gain is highly uncertain and should not be relied upon as a mitigating factor.	
	Finally, EN-1 will have effect alone for energy infrastructure that is established by this NPS but is outside the scope of technology specific NPS, such as hydrogen and Carbon Capture and Storage pipeline or storage infrastructure. The technology specific NPS include a range of mitigation measures which act to bolster the approaches outlined in EN-1 to reduce any adverse effects. The use of EN-1 alone means that there is no specific Appraisal of Sustainability for these newer technologies or corresponding specific mitigation measures, so BEIS needs to give further consideration to what further mitigation measures may be necessary.	Commented noted and confirmed that the AoS does not specifically apply to these newer technologies as there are no equivalent technology NPS.
13	Appraisal of Sustainability: this is not helpful. It is intended to “inform consultation on the draft NPSs by providing an analysis of the environmental, social and economic impacts of implementing the energy NPSs” but then goes on to say in relation to the technologies covered by EN-3 that “The non-generic effects have	The AoS recognises that there will be effects from the NSIPs but for the most part these are not significant and reflect the mitigation approach set out in EN-1. It is considered that the application of such mitigation will likely result in minimum residual effects. All such issues would be considered in much greater detail through processes such as

	been found to be generally negative across short, medium and long terms, though there are some elements of positivity in respect of the need to promote sustainable use of resources and natural assets." (para 1.7.4). How does this fit with projects being able to demonstrate that they are sustainable development? (paragraph 2.5 EN-1).	Environmental Impact Assessment, the need for which is set out in EN-1.
14	We have not reviewed the AoS in detail but have undertaken a high level review and believe there are a number of opportunities to improve clarity and consistency between sections. It would be helpful to combine the assessment of the 14 Sustainability Objectives in Tables 5-1 to 5-14 into a single summary table, for example in the Non-Technical Summary (NTS). There also appears to be a mis-match between the tone of the AoS for EN-1 and the summary of it in the Non Technical Summary (NTS). For example, regarding AoS Objective 1 (Consistency with the national target of reducing carbon emissions to Net Zero by 2050) paragraph 5.2.3 of the main document concludes that "Minor positive effects are predicted in the short term as unabated combustion technologies are potentially permitted alongside renewables and nuclear technologies. In the medium to long term, the effects become significant positive as earlier unabated combustion technologies get retrofitted with CCS, any new combustion technology is with CCS and renewables make a very significant proportion of the energy mix. Residual emissions from unabated natural gas plants used for peaking could still occur but they will be balanced by Greenhouse Gas Removal technologies.". However, both the Non-Technical Summary and the AoS for EN-2 to EN-5 concentrate on the negative sustainability impacts, which means that the huge positive contributions of energy	Summary table prepared and presented both in the main report and in the NTS. Note that appropriate summaries are provided in the AoS report.

	technologies such as renewables to AoS Objective 1 are overlooked in these sections of the document.	
15	TEXT REMOVED AS IT IDENTIFIES ORGANISATIONS This is both a climate and nature emergency. The energy National Policy Statements (NPSs) need to give greater weight to the need to transition away from fossil fuels, including unabated gas. Nationally Significant Infrastructure Projects (NSIPs) that are decided under the framework of NPSs need to protect, enhance and restore biodiversity and landscapes, as well as contribute to zero carbon objectives. Link has identified several overarching concerns with the draft energy NPS and associated Assessment of Sustainability and Habitat Regulations Assessment, including: Lack of strategic, spatial vision and lack of coherence in draft energy NPSs. The lack of an overarching spatial plan makes it impossible to properly assess the environmental impacts of NSIPs. This is particularly the case in the marine environment, where there is no effective strategic spatial planning. Robust Strategic Environmental Assessment is needed at a scale greater than the project level, which must assess cumulative and transboundary effects. On land, it is unclear how draft energy NPSs relate to Local Nature Recovery Strategies, now mandatory through the Environment Act 2021.	We agree that a spatial approach to energy planning would be helpful, but the Energy NPSs high level policies do not have a spatial dimension and therefore the AoS is unable to undertake spatially informed assessments.
	Lack of consideration of carbon emissions. Decision-makers cannot take carbon emissions into account, which will hinder the achievement of zero carbon objectives, other than renewables. Although the Assessment of Sustainability (AoS) considers net zero	EN-1 to EN-5 consider carbon emissions in numerous aspects. EN-1 requires applicants to undertake a Greenhouse Gas Assessment, with a view to driving down emissions at every stage of the proposed development and ensure that emissions are minimised as far as possible for the type of technology, taking into account the overall objectives of ensuring our supply of energy always remains secure,

	and other environmental objectives, they are trumped by the security of supply objective.	reliable and affordable, as we transition to net zero. The AoS has been revisited to consider revisions made to EN-1 with respect to carbon emissions.
	There is a weak consideration of alternatives in the Assessment of Sustainability. Similarly, the AoS concludes that there are no better alternatives to the draft NPS, as concerns about the security of supply override all other issues. Greater weight should be given to reasonable alternatives with lower environmental impacts, and these should not be hidden in a technical report. A scenario-based approach (including due consideration to the existing pipeline of projects) would be more informative than the crude approach to alternatives used in the AoS, and should consider the timescales and mechanics of a just transition.	We note that an alternative consisting wholly of renewables, hydrogen, natural gas with CCS, BECCS and Carbon Capture Utilisation and Storage (CCUS) to deliver Net Zero by 2050 has been analysed in Future Energy Scenarios July 2020 by the National Grid under a range of scenarios. https://www.nationalgrideso.com/document/173821/download The Future Energy Scenarios indicate that certain technologies (ie. nuclear and unabated natural gas) may not be necessary to supply energy in the UK therefore the NPS alternatives were constructed taking this key finding into consideration. However, given that the NPSs don't have a spatial dimension this resulted in an AoS unable to undertake assessment of alternatives based on spatial distribution of technologies and corresponding environmental impacts.
16	We are slightly surprised at the approach adopted, which appears to focus primarily on potential generic impacts from the deployment of different technologies (albeit without spatial definition), rather than testing the implications of policy provisions and seeking to demonstrate that these provisions are likely to be effective at firstly achieving stated policy objectives and secondly ensuring the avoidance of likely significant adverse effects. Section 4 of the AoS Report identifies a reasonably comprehensive list of high-level environmental issues, but it is not clear how these have been carried forward into the AoS or informed NPS development. The assessment findings in Sections 5 to 9 are also limited as these sections merely summarise and in some cases quote, sections of the draft EN-1 – EN-5, rather than analysing these provisions. We would expect the AoS to explain how identified key environmental	The approach adopted for the AoS is justified by the fact that the draft revised ENs were first revised in light of relevant recent policy requirements and stated EN policy objectives; then those revisions were the subject of the AoS. The AoS initially focussed on demonstrating that the AoS Framework's objectives and associated questions had been answered through the EN drafted text and where omissions or inconsistencies were found recommendations were made to address these. It is noted that in many instances the EN text already provide analysis of the issues, drivers, opportunities etc. The recommendations made as the ENs where drafted can be found in the AoS Appendices. The assessments reported in the AoS Report are of the draft revised ENs as published for consultation already incorporating the recommendations made by the AoS hence quotation of text from the ENs in the AoS.

	issues, drivers, implications and opportunities have been addressed in proposed policy provisions and how any reasonable alternatives to these provisions have been considered. The approach also mistakenly considers mitigation as including all policy content related to the environmental topics embodied within individual AoS objectives, rather than explaining in more nuanced terms of key issues have been addressed and potential adverse environmental effects avoided or reduced through the NPS development process to date. Given the need for deployment of offshore wind at scale and pace and the attention given to offshore wind within EN-3, it is particularly disappointing that Section 7.2.1 does not provide a specific assessment of the proposed offshore wind provisions to demonstrate their effectiveness, including examining the extent to which the proposed provisions will support or impede offshore wind deployment at the scale and pace required to achieve the Government's sectoral 40GW target for 2030 and the UK's binding net zero target for 2050. To address this gap, we suggest updated SEA reporting to accompany the finalised suite of energy NPS should present a proportionate assessment of the likely effectiveness and implications of policy provisions within the NPS, including specifically in relation to the proposed offshore wind design, technical, assessment and decision making provisions. Updated AoS reporting should also more clearly demonstrate how the AoS process has informed and improved the development of the revised NPS.	Further short introductory text to highlight particular key issues and potential adverse effects to be added to section 'Antecipated effects' for each AoS objective in AoS-1. Also, the assessments have now been undertaken against each of the revised guide questions to form a more comprehensive view as to how each AoS objective has been addressed. The approach adopted for the AoS is justified by the fact that the draft ENs were first revised in light of relevant recent policy requirements and stated EN policy objectives; then those revisions were the subject of the AoS. The AoS initially focussed on demonstrating that the AoS Framework's objectives and associated questions had been answered through the EN drafted text and where omissions or inconsistencies were found recommendations were made to address these. It is noted that in many instances the EN text already provide analysis of the issues, drivers, opportunities etc. The recommendations can be found in the AoS Appendices. The assessments reported in the AoS Report are of the draft revised ENs as published for consultation already incorporating the recommendations made by the AoS hence quotation of text from the ENs in the AoS.
Unknown	The Treasury Green Book was, I understood, the recognised method of assessing public policy. This	The AoS has been informed by the requirements of the Strategic Environmental Assessment (SEA) Regulations 2004 and associated guidance as set out in the AoS report. The approach to the AoS

	include the valuation of natural capital. I see no evidence this has been included in the AoS	followed that used for SEA which is normally to conduct high level and qualitative assessments which result in the provision of recommendations and their incorporation into the strategic level document and a better control over interactions or cumulative effects. AoS including SEA can be informed by other type of assessments, for example Habitats Regulations Assessment (HRA), Carbon Assessments or Natural Capital Valuation if these are undertaken concurrently. The AoS of the NPSs was informed by one single parallel assessment – HRA. The Treasury Green Book provides guidance concerning the provision of objective advice by public servants to decision makers. The guidance sets out a process of assessing the costs, benefits and risks of alternative ways to meet government objectives to help decision makers to understand the potential effects, trade-offs and overall impact of options by providing an objective evidence base for decision making. Such guidance has not been used as part of development of the EN's to consider costs, benefits and risks of NPS alternatives and therefore such results have not been made available to inform the AoS.
1	The response to the adaptation and resilience objective of the appraisal of sustainability looks very weak. There is no mention of climate change impacts, climate risk, resilience, long-term risks and opportunities, etc. No mention of the government's green book guidance on accounting for the effects of climate change, or the statutory national adaptation programme and climate change risk assessment. Concerns raised by some of our external stakeholders regarding the government's consultation on the new Energy NPS. As they stand, stakeholders feel that the adaptation sections are inadequate (because they don't make reference to the government's Climate Change Risk Assessment (CCRA), confuse mitigation and adaptation measures, overstate the current powers of the (voluntary) Adaptation Reporting Power (ARP) process, and it don't give guidance on the level	This has been addressed through changes being made to the AoS Framework and issues and opportunities for the NPS, informed by the recent CCRA3. Statutory national adaptation programme was already a consideration. Green Book guidance has now been reviewed and the remit of the AoS expanded to cover social cost of GHG, effects on natural environment and use of Climate Change Risk Assessment (CCRA) to consider current and potential future climate risks and vulnerability to energy infrastructure schemes. The AoS has been updated to reflect latest policy developments mentioned and others and the NPS further tested for conflicts with recent or new obligations.

	of risk that schemes should be planning for (which was included in previous versions of the NPS). There may also be other outstanding Defra concerns, as highlighted in Defra's original WR response as issues for continued engagement. These include impacts on biodiversity and conflicts with wider government policy (including 30 by 30 and the governments new obligations under the Environment Act 2021).	

Q23b. Do you have any comments on the AoS findings for the draft NPS for Natural Gas Generating Infrastructure (EN-2)?

Organisation No.	Comment	
7	Assessment in the AoS focuses its consideration on effects on carbon emissions; air pollution; water quality and resources; and biodiversity. AoS objective 5 (Protect and enhance cultural heritage assets and their setting, and the wider historic environment) should be refenced in subsequent assessment, as should consideration of impacts on the historic environment.	The AoS considers that heritage issues in relation to Natural Gas Generating Infrastructure had been addressed via EN-1 and are reported as such.
9	The Council considers that the Appraisal of Sustainability does not entirely align with projects being able to demonstrate that they are sustainable development. The AoS states it is intended to “inform consultation on the draft NPSs by providing an analysis of the environmental, social and economic impacts of implementing the energy NPSs” but then goes on to say in relation to the technologies covered by EN-3 that “The non-generic effects have been found to be generally negative across short, medium and long terms, though there are some elements of positivity in respect of the need to promote sustainable use of resources and natural assets”. It is unclear how an assessment of generally adverse effects demonstrates sustainability.	This question has been addressed (see above).
12	See our comments on the AoS findings for EN-1. The AoS considers that both alternatives are adverse on security of supply as they are reliant on unproven technologies such as hydrogen and energy storage at scale. The Government must rapidly bring forward its requirements for CCR in order to made alternative (b) (low carbon-ready gas plant) a more feasible proposition.	Comment noted,

Unknown	The Treasury Green Book was, I understood, the recognised method of assessing public policy. This include the valuation if natural capital. I see no evidence this has been included in the AoS	This comment has been addressed (see above).

Q23c. Do you have any comments on the AoS findings for the draft NPS for Renewable Energy Infrastructure (EN-3)?

Organisation No.	Comment	
7	Assessment in the AoS focuses its consideration on effects on carbon emissions; biodiversity; landscape and seascape; air quality; health and wellbeing; economy; and resources. AoS objective 5 (Protect and enhance cultural heritage assets and their setting, and the wider historic environment) should be referenced in subsequent assessment, as should consideration of impacts on the historic environment.	This comment already addressed above
9	The Council considers that the Appraisal of Sustainability does not entirely align with projects being able to demonstrate that they are sustainable development. The AoS states it is intended to "inform consultation on the draft NPSs by providing an analysis of the environmental, social and economic impacts of implementing the energy NPSs" but then goes on to say in relation to the technologies covered by EN-3 that "The non-generic effects have been found to be generally negative across short, medium and long terms, though there are some elements of positivity in respect of the need to promote sustainable use of resources and natural assets". It is unclear how an assessment of generally adverse effects demonstrates sustainability.	This comment already addressed above
17	-7.2.6.1 refers to the effects form offshore wind farms on commercial fisheries and fishing. Reference to trawling and lining is confused with other types of fishing where it is stated that other types of fishing may be able to take place without being unduly disrupted. We have provided further detailed comments about the compatibility of fishing in answer to question 9. - 7.2.6.2 P163 - mitigation is likely to reduce the negative impacts on fishing rather than induce potential medium and long-term positive benefits as is claimed. - 7.4 / 10.2 - Reference to positive effects on fishing (p167, 226) should be explained in the context of having negative effects on other types of fishing due to the hindrance of infrastructure that may provide opportunities for other types. This is not usually a	Regarding offshore wind farms, EN-3 states that the Secretary of State should be satisfied that the site selection process has been undertaken in a way that reasonably minimises adverse effects on fish stocks. Where the Secretary of State considers the wind farm would significantly impede the protection of sustainable fisheries or fishing activity at recognised important fishing grounds, this should be attributed a correspondingly significant weight. The Secretary of State should also consider adverse or beneficial impacts on different types of commercial fishing on a case by case basis. The Secretary of State should be satisfied that the applicant has sought to design the proposal with relevant consultees, and tried to minimise the loss of any fishing

	net positive outcome for fishing, rather a change affecting different fishing constituencies and will be case-specific.	activities. The Secretary of State will need to consider the extent to which disruption to the fishing industry has been mitigated where reasonably possible. Mitigation proposals should result from detailed consultation with relevant consultees, and mitigation should be designed to enhance where reasonably possible any potential medium and long-term positive benefits to the fishing industry.
14	In line with our comments on the AoS findings for EN-1, we are concerned that the text within the Summary Sections for EN-3 focuses excessively on the negative sustainability impacts, and these statements are then repeated within the Non-Technical Summary where the wider context is lost. Examples including the following statements: • "Renewable energy infrastructure development has similar effects to other types of energy infrastructure." • "The non-generic effects [Carbon Emissions, Biodiversity, Water Environment, Landscape / Seascape, Air Quality, Health, Economy and Resources] have been found to be generally negative across short, medium and long terms, though there are some elements of positivity in respect of the need to promote sustainable use of resources and natural assets." • "Consistency with the national target of reducing carbon emissions to Net Zero by 2050 is considered significantly negative over the short, medium and long." We note that the text does then go on to say this is particularly about unabated waste combustion plants, but overall the inclusion of this phrase in the Key Points for EN-3 is misleading.	Noted - please see revised summary of AoS findings in AoS Report.
	We recommend that the summary Section 7.4 and the NTS should be reviewed to ensure that the overarching positive impacts, which are described in the AoS for EN-1 are adequately reflected in these other locations.	Noted - please see revised summary of AoS findings in AoS Report.
18	With respect to the Appraisal of Sustainability (AoS) findings for EN-3, UKWIN would like to express our agreement with the AoS that EfW (incineration) has a significant negative impact on reducing carbon emissions to Net Zero by 2050 in the short, medium and long-term.	Comment noted.

	However, even with a requirement for carbon capture, allowing new waste incineration capacity would adversely affect Net Zero due to the opportunity costs associated with recycling, waste minimisation, and the circular economy. The adverse climate change impacts of incineration go beyond direct emissions and opportunity costs to include impacts associated with the 'embedded carbon' in the feedstock as well as the environmental cost of replacing products and materials lost through incineration. UKWIN is disappointed that these wider adverse impacts, which would not be addressed through carbon capture, are not adequately recognised within the AoS. For more about the shortcomings of carbon capture when applied to waste incinerators see 'CCS for incinerators? An expensive distraction to a circular economy Report' (Zero Waste Europe, October 2021) [available from: https://zerowasteeurope.eu/wp-content/uploads/2021/10/ZWE_Oct2021_CSS_Report.pdf], which concludes that: "…analysis shows that CCS is not a suitable approach to be applied to incinerators, not least because CO2 emissions from municipal waste incinerators are avoidable through the diversion of material away from incineration; and because the benefits of such diversion contrast with the many shortcomings associated with CCS for MWIs. Diverting material from incineration would deliver lower carbon outcomes for much less money, and with much less risk, than through the use of carbon capture technology. CCS for municipal waste incinerators would come with significant opportunity costs, undermining more systemic change to resource and waste management, as well as creating perverse incentives to incinerate material that should otherwise be reduced, reused or recycled. Investing in CCS for incinerators would create an additional barrier to the achievement of a low-carbon circular economy, for example by exacerbating the lock-in effect of incinerators, and would come at the expense of the significant environmental, economic and social benefits that such a transition would deliver". It is not acceptable for the AoS to have failed to consider the alternative option of not allowing any new large-scale waste	The Government's view is that waste incineration should not compete with greater waste prevention, re-use or recycling, however, it does play an important role in diverting waste from landfill. As set out in the government response, EN-3 2.17.2 states that an assessment of the proposed waste combustion generating station should be undertaken that examines the conformity of the scheme with the waste hierarchy. We have not revised this further. According to our best estimates, energy from waste (even in electricity-mode only) is a better option for processing municipal waste than landfill in terms of carbon dioxide emissions. If heat from the energy from waste process is utilised, EfW is an even better option. For additional background, in October 2020 as part of the Circular Economy Package we legislated to include a permit condition for landfill and incineration operators meaning they cannot accept separately collected paper, metal, glass or plastic for landfill or incineration unless it has gone through some form of treatment process first and is the best environmental outcome. This is in addition to existing permit measures that already prevent acceptance of recyclable material. Waste policy is devolved and all governments across the UK have policies in place to reduce the amount of waste produced, increase recycling, and reduce the amount of residual waste sent for treatment.

	incinerators, given that just such an alternative approach was adopted by the Welsh Government as a key part of their drive towards Net Zero [Source: https://gov.wales/wales-takes-action-circular-economy-funding-upcoming-reforms-plastic-and-moratorium-large-scale]. Given that incinerators rely on burning plastic to generate energy, and given that in such circumstances plastic is used as a fossil fuel, a moratorium on new large-scale incineration capacity would support the realisation of the Government's Energy White Paper which states that: "Our energy system is dominated by the use of fossil fuels and will need to change dramatically by 2050 if we are to achieve net zero emissions…Decarbonising the energy system over the next thirty years means replacing - as far as it is possible to do so - fossil fuels with clean energy technologies such as renewables, nuclear and hydrogen".	Not allowing large scale waste incinerators is not a Policy option within the NPS and as such has not been considered within the AoS.
12	See our comments on the AoS findings for EN-1. The AoS consider that the alternative of only consenting biomass or waste combustion plant with CCS is highly uncertain, but could be a more sustainable alternative. The Government must to rapidly bring forward its requirements for CCR in order to make this a more feasible proposition. We welcome the recognition of the potential for significant transboundary effects, particularly through the development of offshore wind farms, and the need to consult neighbouring EU states as well as Norway, the Isle of Man and the Channel Islands. As noted in our answer to Q23a, the lack of effective spatial planning in the marine environment makes it impossible to properly assess transboundary effects, and leaving this issue to project-level EIA is likely to result in poor environmental outcomes.	Comment noted.

Q23d. Do you have any comments on the AoS findings for the draft NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)?

Organisation No.	Comment	Response
7	Assessment in the AoS focuses on carbon emissions (methane); biodiversity; landscape and visual; water quality and resources; air quality; soil resources and contamination; and noise and vibration. AoS objective 5 (Protect and enhance cultural heritage assets and their setting, and the wider historic environment) should be referenced in subsequent assessment, as should consideration of impacts on the historic environment.	Comment already addressed (see above)
12	See our comments on the AoS findings for EN-1. The AoS considers that the alternative of only consenting gas infrastructure which can convert to low carbon alternatives in the future may compromise security of supply and affordability. It is assessed as having a large negative effect on security of supply, but a positive effect on net zero and the natural environment. EN-4 is preferred because it is more likely to give confidence to developers to come forward with planning applications which if approved will contribute to security of supply and affordability. This is a good example about how fears about security of supply, which may or may not be justified, trump considerations about environmental impacts, to the extent that a reasonable alternative which would allow a quicker transition to net zero is discounted.	Section 2.5 of EN-1 sets out Governments view on the importance of security of supply and notes, for example, that as global energy costs rise due to demand soaring as the economy reopened after COVID-19 and the Russian invasion of Ukraine, security of supply requires a greater focus on domestic energy production. The AoS reflects the Policy content and approach of the EN's as set out by Government.

Q23e. Do you have any comments on the AoS findings for the draft NPS for Electricity Networks Infrastructure (EN-5)?

Organisation No.	Comment	Response
7	Assessment in the AoS focuses on reducing carbon to net zero (with regard SF6); biodiversity and geological conservation; landscape and visual; noise and vibration; and health and well being and safety of all citizens (including electro-magnetic fields). AoS objective 5 (Protect and enhance cultural heritage assets and their setting, and the wider historic environment) should be referenced in subsequent assessment, as should consideration of impacts on the historic environment.	This comment has already been addressed above
12	We agree that the undergrounding of all electricity lines may have other impacts, including on sensitive habitats, and is best decided on a case-by-case basis.	Comment noted.