

# Hornsea Project Four: Preliminary Environmental Information Report (PEIR)

# Volume 1, Chapter 2: Planning and Policy Context

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### Glossary

Term	Definition
Commitment	A term used interchangeably with mitigation. Commitments are Embedded Mitigation Measures. Commitments are either Primary (Design) or Tertiary (Inherent) and embedded within the assessment at the relevant point in the EIA (e.g. at Scoping or PEIR). The purpose of Commitments is to reduce and/or eliminate Likely Significant Effects (LSE's), in EIA terms.
Design Envelope	A description of the range of possible elements that make up the Hornsea Project Four design options under consideration, as set out in detail in the project description. This envelope is used to define Hornsea Project Four for Environmental Impact Assessment (EIA) purposes when the exact engineering parameters are not yet known. This is also often referred to as the "Rochdale Envelope" approach.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Projects (NSIP).
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
EIA Directive	European Union Directive 85/337/EEC, as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC and then codified by <u>Directive 2011/92/EU</u> of 13 December 2011 (as amended in 2014 by <u>Directive 2014/52/EU)</u> .
EIA Regulations	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive and EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
Export cable corridor (ECC)	The specific corridor of seabed (seaward of Mean High Water Springs (MHWS)) and land (landward of MHWS) from the Hornsea Project Four array area to the Creyke Beck National Grid substation, within which the export cables will be located. The final ECR corridor will be located within the ECR corridor search area and will be defined via a site selection process considering technical, physical and environmental constraints.
Habitats Regulations Assessment (HRA)	A process which helps determine likely significant effects and (where appropriate) assesses adverse impacts on the integrity of European conservation sites and Ramsar sites. The process consists of up to four stages of assessment: screening, appropriate assessment, assessment of alternative solutions and assessment of imperative reasons of over-riding public interest (IROPI).
Mitigation	A term used interchangeably with Commitment(s) by Hornsea Four.



Term	Definition
	Mitigation measures (Commitments) are embedded within the assessment at
	the relevant point in the EIA (e.g. at Scoping or PEIR).
Ørsted Hornsea Project Four	The Applicant for the proposed Hornsea Project Four offshore wind farm.
Ltd.	



#### **Acronyms**

Acronym	Definition
cSACs	Candidate Special Areas of Conservation
CCC	Committee on Climate Change
CfD	Contracts for Difference
COP	Conference of the Parties
CBD	Convention on Biological Diversity
DBEIS	Department for Business, Energy and Industrial Strategy
DCO	Development Consent Order
DECC	Department for Energy and Climate Change
DML	Deemed Marine Licences
DPD	Development Plan Documents
EBI	Energy Balancing infrastructure
EEA	European Economic Area
EIA	Environmental Impact Assessment
ES	Environmental Statement
EPS	European protected Species
EC	European Commission
EQI	Environmental Quality Indicators
ERBAP	East Riding Biodiversity Action Plan
ERYC	East Riding of Yorkshire Council
EU	European Union
ExA	Examining Authority
GHG	Greenhouse Gas
GES	Good Environmental Status
HRA	Habitats regulations Assessment
IPCC	Intergovernmental Panel on Climate Change
LEC	Low Level Energy Cost
LDF	Local Development Frameworks
LDS	Local Development Scheme
MCAA	Marine and Coastal Access Act
MCZ	Marine Conservation Zone
MMO	Marine Management Organisation
MPA	Marine Protected Areas'
MPS	Marine Policy Statement
MSFD	Marine Strategy Framework Directive
NDC	Nationally Determined Contribution
NNR	National Nature Reserves
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
nm	Nautical miles
PEIR	Preliminary Environmental Information Report



Acronym	Definition
PINS	Planning Inspectorate
PPS	Policy Planning Statements
PPGN	Planning Policy Guidance Notes
PRoW	Public Rights of Way
pSPAs	Potential Special Protection Areas
RED	Renewable Energy Directive
REZ	Renewable Energy Zone
RSS	Regional Spatial Strategy
SAC	Special Areas of Conservation
SCI	Site of Community Importance
SEA	Strategic Environmental Assessment
SEP	Strategic Economic Plan
SoS	Secretary of State
SMP	Shoreline Management Plan
SPA	Special Protection Areas
SPD	Supplementary Planning Documents
SSSI	Sites of Special Scientific Interest
TEU	Treaty on European Union
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change
WTD	Water Framework Directive

#### **Units**

Unit	Definition
MW	Megawatt (power)
nm	nautical miles
GW	Gigawatt (power)



#### 2.1 Introduction

2.1.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the international, national, regional and local planning policy context which is of relevance to the development of offshore wind farms and their associated offshore and onshore infrastructure, with specific relevance to Hornsea Project Four Offshore Wind Farm (hereafter Hornsea Four). Specific identification of supporting planning, policy and underpinning documentation for Energy Balancing Infrastructure (EBI) is made in Section 2.6. Policies specific to each Environmental Impact Assessment (EIA) topic are outlined in Volume 3, Chapters 1 – 10.

#### 2.1.2 Requirement for Environmental Impact Assessment (EIA)

- 2.1.2.1 EIA provides a systematic tool for examining and assessing potentially significant impacts of a development on the physical, biological, and human environment. The EIA enables management and mitigation measures to be identified to ensure the development is sustainable and allows for opportunities for beneficial impact to be identified.
- 2.1.2.2 An EIA is required under the terms of European Union (EU) Directive 2011/92/EU (as amended by Directive 2014/52/EU)) on the assessment of the effects of certain public and private projects on the environment (EIA Directive). The EIA Directive is transposed into English law for Nationally Significant Infrastructure Projects (NSIPs) by The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
- 2.1.2.3 These Regulations set out the statutory process and minimum requirements for the provision of adequate environmental information to enable the EIA process. The EIA, activities, surveys and studies will be reported in the Hornsea Four Environmental Statement (ES).
- 2.1.2.4 In compliance with the EIA Directive, the Planning Act 2008 requires an EIA to be undertaken and provided in support of a Development Consent Order for certain types of projects under the Planning Act 2008 (the 2008 Act) (see Section 2.3.1).
- 2.1.2.5 Offshore wind farms are listed in Annex II of the Directive, as "installations for the harnessing of wind power for energy production (wind farms)". The Planning Act 2008 as primary legislation identifies offshore electricity generating stations as Nationally Significant Infrastructure Projects in Part 3 section 15 of the Act. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 implement the requirements of the EU EIA Directive 2014/52/EU.



- 2.1.2.6 Following the implementation of Directive 2014/52/EU, some key features of the EIA Regulations are:
  - The requirement to provide an assessment of how human health, climate change and natural resources will be affected by the development;
  - An enhanced screening and scoping process to ensure EIAs are focused on developments that are likely to cause significant effects and that the EIA is targeted on those potentially significant effects;
  - Ensuring EIA quality by requiring that those who undertake the work have competent expertise to do so;
  - Demonstration of the consideration of alternatives to the proposed development;
  - The consideration of a scenario where the development is not implemented;
  - Further consideration of how to avoid, prevent, reduce and/or off-set significant adverse effects where possible and develop monitoring strategies;
  - Coordination between the EIA and Habitats Regulations Assessment (HRA); and
  - Ensuring consideration of interrelationships between impacts.

#### 2.2 International Policy and Context

#### 2.2.1 International Climate Change and Renewable Energy Policy and Legislation

- 2.2.1.1 In 2017, the UK government triggered article 50 of the Treaty on European Union (TEU) and is currently seeking to withdraw as a Member State from the EU (herein termed Brexit). The Brexit negotiations are ongoing at the time of writing with no clear outcome or timetable. If the withdrawal agreement is ratified, all EU environmental laws and associated policies will continue to be implemented by the UK until at least 31 December 2020.
- 2.2.1.2 In the event of a 'no deal Brexit' the UK Government, through its White Paper on the future relationship on the UK and EU (¹) has committed to implement international environmental obligations in accordance with the European Union (*Withdrawal*) Act 2018 and maintain environmental commitments and legislation already made following the departure of the UK.
- 2.2.1.3 The UK legislation relating to Climate Change and Renewable Energy Policy is underpinned by a number of international (e.g. EU and United Nations (UN)) agreements which are outlined in this chapter.

 $<sup>^{</sup>m 1}$  The future Relationship Between The United Kingdom And The European Union, cm9593, (July, 2018)



#### 2.2.2 United Nations Framework Convention on Climate Change

- 2.2.2.1 United Nations Framework Convention on Climate Change (UNFCCC), commits its parties to setting internationally binding greenhouse gas emission reduction targets as well as monitoring and reporting emissions. The UK is a signatory to the Kyoto Protocol, is an international agreement linked to the development and implementation of the UNFCCC. The protocol came into effect in 2005 and its commitments were transposed into UK law by the Climate Change Act 2008.
- 2.2.2.2 The Climate Change Act 2008 places a duty on the UK government to ensure their net carbon account and greenhouse gas (GHG) emission is reduced by 80% relative to 1990 levels by 2050 (theccc.org.), as underpinned by international agreements and commitments. To achieve this ambitious goal, the UK government is committed to implement five-yearly carbon budgets that will run until 2032 to restrict the amount of emissions they legally emit within each five-year period. This legislation will remain in place in the UK following their withdrawal from the EU, more detail is given in Chapter 1: Introduction.
- 2.2.2.3 A series of regular international meetings of the UNFCCC have taken place since 1997 resulting in several important and binding agreements including the:
  - Copenhagen Accord (2009);
  - Doha Amendment (2012); and
  - Paris Agreement (2015).
- 2.2.2.4 The Doha Amendment (2012) included a commitment by parties to reduce greenhouse gas emissions by at least 18% below 1990 levels in the eight-year period from 2013 to 2020. Under this second commitment period of the Kyoto protocol the EU committed to reduce emissions by 20% on 1990 levels by 2020, with the option to increase this to 30%. The UK Climate Change Act 2008 has an interim 34% reduction target for 2020 which if achieved will allow the UK to meet and exceed its Kyoto agreement target.
- 2.2.2.5 During the United Nations Climate Change Conference in Paris in 2015 (known as 'COP21') the following were key areas of agreement (UNFCCC, 2016):
  - Limit global temperature increase to below 2 °C, while pursuing efforts to limit the increase to 1.5 °C above the pre-industrial average temperature;
  - Parties aim to reach global peaking of greenhouse gas emissions as soon as possible in order to achieve the temperature goal;
  - Commitments by all Parties to prepare, communicate and maintain a Nationally Determined Contribution (NDC);
  - In 2023 and every 5 years thereafter, a global stocktake will assess collective progress toward meeting the purpose of the Agreement.



- 2.2.2.6 The UK ratified the 2015 Paris Agreement during the 22nd climate change Conference of the Parties (COP22) in November 2016. The UK is currently covered by the EU pledge to reduce emissions by at least 40% across all Member States by 2030. It is not yet clear whether the UK will submit its own pledge after it leaves the EU.
- 2.2.2.7 During the United Nations climate talks in Bonn, Germany in 2017 (known as 'COP23'), finer details were discussed on how the Paris Agreement will work from 2020 onwards. Key agreements included:
  - Overseeing and accelerating the completion of the work programme under the Paris Agreement by its twenty-forth session (December 2018; and
  - To convene a facilitative dialogue among Parties in 2018 to take stock of the
    collective efforts of the Parties (Talanoa dialogue). This dialogue will be structured
    around three general topics: where are we, where do we want to go, and how do we
    get there?
- 2.2.2.8 In 2018 the COP24 annual UN climate conference in Katowice, Poland had the follow key outcomes (Carbon Brief, 2018):
  - Before the conference in October 2018, the Paris rulebook was agreed, which is the operating manual needed for the Paris Agreement to enter force in 2020, and
  - Intergovernmental Panel on Climate Change (IPCC)\_ 1.5°C report (the special report on the impacts of 1.5°C global warming) was published by the IPCC.

#### 2.2.3 European Union Renewables Directive / Renewable Energy Directive

- 2.2.3.1 The Renewable Energy Directive (RED) (2001/77/EC) on the promotion of the use of energy from renewable sources was implemented by the EU in September 2001.
- 2.2.3.2 Directive 2009/28/EC preceded this, with targets sought to achieve including:
  - A reduction of 20% in greenhouse gases by 2020 (below 1990 levels); and
  - 20% of the total EU energy (electricity, heat and fuel) consumption to come from renewable sources by 2020.
- 2.2.3.3 In 2007, the European Commission (EC) proposed an 'Energy Policy for Europe' (EC 2007) as a first step towards becoming a low carbon economy. This policy recognises that the use of renewable energy contributes significantly to limiting climate change and plays a part in securing energy supply and creating employment in Europe.
- 2.2.3.4 In October 2014, the EC proposed new climate and energy targets up to 2030. These targets build on the experience of, and lessons learnt from, the 2020 climate and energy framework (EC 2015). These targets include:



- A 40% cut in greenhouse gas emissions compared to 1990 levels;
- At least a 27% share of renewable energy consumption within the EU; and
- A 27% improvement in energy efficiency (compared to projections, to be reviewed by 2020, having in mind an EU level of 30%).
- 2.2.3.5 On November 30, 2016 (with amendments in February 2017), the EC published a Proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources (EC 2017) with the aim of making the EU a global leader in renewable energy and to ensure that the target of the 2030 EU Climate and Energy Framework of a 27% share of renewable energy consumption in the EU by 2030 is met.
- 2.2.3.6 In December 2018, through Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018, the 2014 EU target was revised to ensure the following:
  - At least a 32% share of renewable energy consumption within the EU; and
  - Member states of the EU to review their contribution to this target as part of their national energy and climate plans under Regulation (EU) 2018/1999 of the European parliament and of the Council.
- 2.2.3.7 Both 2020 and 2030 frameworks underpin the environmental and energy policy objectives of the EU. If the most recent proposed energy target is not met at a Union level, the Commission may take measures to ensure target is achieved under Regulation (EU) 2018/1999.
- 2.2.3.8 Given the UK is seeking to withdraw as a Member State from the EU, there are uncertainties on EU legislation being transposed into UK law due to the many uncertainties surrounding the Brexit process. Following the Referendum, Lord Bourne (then Parliamentary Under-Secretary of State for Energy and Climate Change) clarified "as a Department and as a Government, we are still working to the 2020 targets as something that we are seeking to honour" (House of Commons, 2016). In addition, the UK's fifth carbon budget was approved by the UK Government in July 2016. This provides a commitment to reducing emissions by 57% by 2030 and to work towards achieving the 80% target by 2050, as detailed in the Climate Change Act (2008). More recently, Prime Minister Theresa May announced that Britain would enshrine in to law a commitment to reach net zero carbon emissions by 2050. A statutory instrument amending the Climate Change Act (2008) to implement this was laid in Parliament on 12 June 2019 (the Climate Change Act 2008 (2050 Target Amendment) Order 2019).

#### 2.2.4 International Environmental and Nature Conservation Legislation and Treaties

2.2.4.1 Relevant international Directives and frameworks implemented for the conservation of the EU environment is given in Table 2.1.



Table 2.1: Relevant International Environmental and Nature Conservation Legislations and Treaties

Legislation	Objective of Legislation
Marine Strategy	The MSFD (European Council Directive 2008/56/EC) aims to establish a framework within which Member States will take measures to
Framework Directive	maintain or achieve 'good environmental status' (GES) in the marine environment by 2020.
(MSFD)	The MSFD aims to be complementary to and provide the overarching framework for a number of other key Directives and legislation at
	the European level, such as the Habitats Directive, the Birds Directive, the Water Framework Directive (WFD) and the Common
	Fisheries.
Water Framework	The WFD (2000/60/EEC) addresses the quality of inland, estuarine and groundwater bodies including coastal surface waters up to an
Directive (WFD)	offshore limit of one nautical mile. Monitoring of the aquatic environment in relation to physical, chemical and biological parameters
	started in 2006 in the UK with a view to ensuring a 'good ecological status' of all surface water bodies (Noges et al., 2009). Within the
	Directive, chemical and biological Environmental Quality Indicators (EQI) are used, and a programme of measures is implemented, in
	order to improve surface waters that do not meet the required status.
	EC Directive 92/43/EEC implements the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern
Habitats and Birds	Convention) and The Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention) and is known as the
Directive	Habitats Directive. The directive aims to conserve natural habitats of wild fauna and flora and is intended to protect biodiversity by
	requiring Member States to take measures to maintain or restore natural habitats and wild species, including protection for specific
	habitats listed in Annex I and species listed in Annex II of the Directive.
	The Habitats Directive provides robust protection for those habitats and species of European importance. A key element of this
	protection is the establishment, under Article 3 of the Directive, of a European-wide network of protected sites, known as Special Areas
	of Conservation (SAC).
	EC Directive 2009/147/EC on the conservation of wild birds (known as the Birds Directive) provides a framework for the conservation
	and management of wild birds in Europe. It sets broad objectives for a wide range of activities. The Directive also resulted in the
	establishment, under Article 4, of a network of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex I and for all
	regularly occurring migratory species. It also establishes a general scheme of protection for all wild birds (required by Article 5). The
	Directive requires national Governments to establish SPAs and to have in place mechanisms to protect and manage these Areas. The
	SPA protection procedures originally set out in Article 4 of the Birds Directive have been replaced by the Article 6 provisions of the
	Habitats Directive.
	'Natura 2000' is an overarching name for the network of protected sites that include SPA and SAC designated across the EU. These
	important high-quality conservation sites are intended to significantly contribute to the conservation of habitats and species listed in
	the Birds and Habitats Directives.
	Annexes II and IV of the Habitats Directive lists all European Protected Species (EPS), of which include both marine and terrestrial
	animals and plants.



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#### 2.3 National Planning and Legislative Context

#### 2.3.1 The Planning Act (2008)

- 2.3.1.1 The Planning Act 2008 is the primary legislation that established the legal framework for applying for, examining and determining applications for NSIPs. It sets out the consenting system for all NSIPs, including those in the energy sector. Part 2 of the Act specifies the provisions in relation to National Policy Statements (NPSs), which set the framework for decisions by the Sectary of State (SoS), further details are given in Section 2.3.2.
- 2.3.1.2 Amendments have been made to the planning system that are applicable to the Planning Act 2008, through the Localism Act 2011. Under the Localism Act 2011, PINS became the executive agency responsible for the NSIP planning process. Any developer wishing to construct a project that is classified as an NSIP must apply for Development Consent and the Planning Inspectorate (PINS) appoints an Examining Authority (ExA) to examine the application and make a recommendation to the relevant Secretary of State (SoS), who will make the decision on whether to grant the Development Consent Order (DCO).
- 2.3.1.3 Section 31 of the Planning Act 2008 states that as NSIPs, they require development consent in the form of a DCO. The 2008 Act sets out thresholds above which certain types of infrastructure development are nationally significant and require a DCO. For offshore energy developments in England the threshold is a generating capacity of over 100MW. The proposed Hornsea Four project will have a generating capacity which in excess of 100 MW and is therefore classified as a NSIP.
- 2.3.1.4 As part of its application for a DCO, the Applicant is likely to seek other relevant permissions, consents and licences, including but not limited to:
  - Powers to compulsorily acquire land or rights over land, either permanently or temporarily;
  - Power to undertake marine works under Deemed Marine Licences (DMLs); and
  - Powers to divert or stop up public rights of way (PRoW).
- 2.3.1.5 Insofar as a project benefits from a DCO, the following is not required separately:
  - planning permission under the Town and Country Planning Act 1990;
  - consent under section 36 or 37 of the Electricity Act 1989;
  - listed building and conservation area consent under the Planning (Listed Buildings and Conservation Areas) Act 1990; and
  - Scheduled Monument consent under the Ancient Monuments and Archaeological Areas Act 1979.

#### 2.3.2 National Policy Statement (NPS)

2.3.2.1 The Planning Act 2008 makes provision for NPSs (Section 2.3.1). NPSs are designed to set the policy framework for determination of NSIP applications. They integrate the UK



Government's objectives for infrastructure capacity and development with its wider economic, environmental and social policy objectives, including climate change goals and targets, in order to deliver sustainable development.

- 2.3.2.2 NPSs are produced by the UK Government and set out national policy against which proposals for major infrastructure projects will be assessed. Planning decisions will be taken within the clear policy framework set out in the NPSs, thus the decision-making process is transparent. The ExA will have regard to NPSs in its examination of applications for development consent, and Ministers must also have regard to them when making decisions. NPSs include the UK Government's objectives for the development of nationally significant infrastructure in a particular sector and state and set out:
  - How these objectives will contribute to sustainable development;
  - How these objectives have been integrated with other UK Government policies;
  - How actual and projected capacity and demand have been taken into account;
  - Relevant issues in relation to safety or technology;
  - Circumstances where it would be particularly important to address the adverse impacts of development; and
  - A clear framework for investment and planning decisions.
- 2.3.2.3 Twelve NPSs have been published to date, relating to different types of infrastructure projects. There are six energy NPSs produced by the former Department of Energy and Climate Change (DECC), three of which are relevant to Hornsea Four project (Table 2.2), specifically:
  - The Overarching NPS for Energy (NPS EN-1) (DECC 2011a);
  - The NPS for Renewable Energy Infrastructure (NPS EN-3) (DECC 2011b), which covers nationally significant renewable energy infrastructure (including offshore generating stations in excess of 100MW); and
  - The NPS for Electricity Networks Infrastructure (NPS EN-5) (DECC, 2011a; DECC, 2011b; DECC, 2011c), which covers the electrical infrastructure associated with an NSIP.
- 2.3.2.4 In addition, the UK Marine Policy Statement (MPS) (HM Government, 2011) (adopted by all UK devolved administrations in March 2011) provides the policy framework for the preparation of marine plans and establishes how decisions affecting the marine area should be made in order to enable sustainable development.
- 2.3.2.5 The MPS makes a number of statements in relation to offshore wind, including:
  - "The UK is currently the leading country for offshore wind deployment and the potential sites identified for offshore renewables (including offshore wind, wave and tidal) show the huge exploitable renewable energy resource in UK waters which would keep the UK as a global leader in renewable energy production from these technologies. Increasing the generation of energy from low carbon sources will mitigate



- against climate change, lessen the UK's dependence on fossil fuels and improve energy security by increasing the diversity of electricity supply." (Paragraph 3.3.16) and
- "The UK has some of the best wind resources in the world and [that] offshore wind will play an important and growing part in meeting our renewable energy and carbon emission targets and improving energy security by 2020, and afterwards towards 2050. Harnessing and connecting offshore wind is currently more technologically challenging and more expensive than harnessing and connecting onshore wind. However, offshore wind has a larger potential, due to a stronger and more consistent wind source at sea leading to higher power outputs. As the most mature of the offshore renewable energy technologies, it has the potential to have the biggest impact in the medium-term on security of energy supply and carbon emission reductions through its commercial scale output. Expansion of the offshore wind supply is likely to require significant investment in new high-value manufacturing capability with potential to regenerate local and national economies and provide employment" (Paragraph 3.3.19).



Table 2.2: Relevant National Policy Statements to the Hornsea Four project

National Policy Statement	National Policy Statement
Overarching National	Paragraph 3.7.1 of EN-1: much of the new electricity infrastructure that is needed will be located in places where there is no existing
Policy Statement for	network infrastructure. It acknowledges that this is likely to be the case for many wind farms, or where there may be technical
Energy (EN-1)	reasons why existing network infrastructure is not suitable for connecting the new generation infrastructure.
	Paragraph 3.7.10 of EN-1: in the light of the urgent need for new electricity transmission and distribution infrastructure, the
	Infrastructure Planning Commission (now the SoS) should consider that the need for any given proposed new connection has been
	demonstrated to represent an efficient and economical means of connecting new generation to the transmission or distribution
	network.
	Paragraph 2.6.15 of EN-3: recognises the need for 25 GW of new offshore wind-derived generating capacity in the UK Renewable
National Policy Statement	Energy Zone (REZ) and the territorial waters of England and Wales. It also refers to the Offshore Energy Strategic Environmental
for Renewable Energy	Assessment (SEA) which concluded that there are no overriding environmental considerations preventing the plans for 33GW of
Infrastructure (EN-3)	offshore wind capacity, if mitigation measures are implemented.
	Paragraph 2.6.9 of EN-3. It also calls for flexibility in the application process for offshore wind NSIPs to allow for situations where full
	details of the project specification may be unknown at the time of submission (paragraph 2.6.43). EN-3 also highlights the use of the
	'Rochdale Envelope' method in such circumstances, which allows for the maximum adverse case scenario (i.e., worst case) to be
	assessed in the (ES) and a DCO granted on this basis (paragraph 2.6.43).
	Paragraph 2.6.44 explains the need for flexibility with regards to necessary micrositing of elements of the proposed wind farm during
	its construction where requested at the application stage. This allows for unforeseen events such as the discovery of previously
	unknown marine archaeology that it would be preferable to leave in situ.
	NPS EN-3 identifies certain environmental topic-specific policy considerations. Where appropriate, these are outlined within the
	relevant ES chapters.
National Policy Statement	Paragraph 1.8.2 EN-5 explains that subsea cables and underground cables, as well as associated infrastructure may be subject to the
for Electricity Networks	Planning Act 2008. In England this infrastructure can constitute associated development for which consent is sought through a DCO
Infrastructure (EN-5)	along with the main NSIP infrastructure, such as a generating station.
	Paragraph 2.2.1 of EN-5 explains that, with regard to factors which influence site/route selection:
	The choices which energy companies make in selecting sites reflect their assessment of risk that following the principles in 4.1.1 of
	EN-1, consent may not be granted in any given case.
	Guidance in the NPSs specific to each EIA topic are outlined in each relevant ES chapter (Chapters 7 to 30) with information on how
	each item has been addressed in the ES.



#### 2.3.3 National Planning Policy Framework

- 2.3.3.1 The National Planning Policy Framework (NPPF) was originally implemented with the intent of making the planning system less complex and more accessible (Ministry of Housing, Communities and Local Government, 2019). The NPPF replaces the suite of Planning Policy Guidance Notes (PPGN) and Planning Policy Statements (PPS) which formerly provided national planning guidance to local planning authorities. A revised NPPF was published in February 2019 and sets out the UK Government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in March 2012.
- 2.3.3.2 The NPPF does not contain specific policies for NSIPs (for which particular considerations apply, determined in accordance with the decision-making framework set out in the Planning Act 2008 and relevant NPSs) but may be considered as a relevant matter.
- 2.3.3.3 The NPPF outlines a few core principles that cover protection and conservation of the natural and built environment, and the promotion of sustainable growth and development.
- 2.3.3.4 Principles relevant to the proposed Hornsea Four project are listed in Table 2.3.

Table 2.3: National Planning Policy Framework Principles relevant to Hornsea Four

Principle	NPPF Advice
Promoting Sustainable	Transport Statements and/or Transport Assessments should be used to support
Transport	proposals for developments that will generate significant vehicle movements
	(paragraph 111).
Making Effective Use of	Planning decisions and policies should promote effective use of land while
Land	safeguarding and improving the environment. Such relevant policy includes taking
	opportunities to achieve net gains (i.e. improve public access to the countryside, or
	development that enable new habitat creations) (paragraph 117/118).
Achieving Well-Designed	Planning decisions should aim to ensure that developments: optimise the potential of
Places	the site to accommodate development; respond to local character and history, and
	reflect the identity of local surroundings and materials, while not preventing or
	discouraging appropriate innovation; and are visually attractive through good
	architecture and appropriate landscaping (paragraph 127).
Meeting the Challenge of	Local authorities should plan for new development in locations and ways that reduce
Climate Change, Flooding	greenhouse gas emissions and should adopt strategies to mitigate and adapt to
and Coastal Change	climate change, flood risk, and coastal change. Authorities should adopt a positive
	strategy to promote energy from renewable and low carbon sources and should
	direct development away from areas at highest risk of flooding. Inappropriate
	development in vulnerable areas and Coastal Change Management Areas should also
	be avoided (paragraph 150/151).
Conserving and Enhancing	The planning system should contribute to and enhance the natural and local
the Natural Environment	environment by: protecting and enhancing valued landscapes, geological
	conservation interests and soils; and preventing new and existing development from
	contributing to or being at unacceptable risk from, or being adversely affected by



Principle	NPPF Advice
	unacceptable levels of soil, air, water or noise pollution or land instability. In relation
	to the development of agricultural land, consideration should be given in planning
	terms to the economic and other benefits of best and most versatile agricultural land,
	and where significant development is necessary, this should be directed to areas of
	poorer quality land. Further guidance is provided in respect of: protecting and
	enhancing areas of landscape, ecological and geological importance; and avoiding /
	mitigating noise impacts associated with new developments (paragraph 170).
Conserving and Enhancing	Local planning authorities should identify and assess the particular significance of any
the Historic Environment	heritage asset that may be affected by a proposal (including by development
	affecting the setting of a heritage asset. This should be taken into account when
	considering the impact of a proposed development on a heritage asset to avoid or
	minimise any conflict between the heritage asset's conservation and any aspect of
	the proposed development. Where a site on which development is proposed includes,
	or has the potential to include, heritage assets with archaeological interest, local
	planning authorities should require developers to submit an appropriate desk-based
	assessment and, where necessary, a field evaluation (paragraph 189).
Built Environment	Applicants should describe the significance of any designated and non-designated
	heritage assets affected by their development proposals, including any contribution
	made by their setting. In addition, weight should be given to conserving and enhancing
	landscape and scenic beauty in Areas of Outstanding Natural Beauty (AONB), which
	have the highest status of protection in relation to these issues.

#### 2.3.4 National Infrastructure Advice Notes

2.3.4.1 The EIA process will take account of guidance provided by the Planning Inspectorate in the form of the non-statutory National Infrastructure Advice Notes. These notes are published to provide advice and information on a range of issues arising throughout the whole life of the application process. These have been acknowledged and considered by the Hornsea Four project.

#### 2.4 UK and English Policy and Legislative Context

- 2.4.1.1 For information regarding planning legislation in the UK please see Section 2.3.
- 2.4.1.2 The Renewable Energy Directive and associated targets (EN-3) have primarily been transposed into UK law through The Promotion of the Use of Energy from Renewable Sources Regulations 2011 (Table 2.2).
- 2.4.1.3 There are a number of overarching UK environmental targets/goals, which set the national framework for tackling climate change and renewable energy production. The most relevant of these is the legally binding target (implemented through the Climate Change Act 2008) to cut carbon and greenhouse gas emissions by 80% by 2050, compared to 1990 levels, as laid down in the Carbon Budget Order (HM Government, 2011).



- 2.4.1.4 In order for the UK to achieve the reduction in emissions required by the EU (Section 2.2.2) the UK Government set a target to produce 15% of UK energy from renewable sources by 2020 (Department for Energy and Climate Change (DECC)<sup>2,</sup> 2011). This includes a subtarget of 30% of electricity from renewable sources. For offshore wind, the UK is world leading with almost 9GW of generating capacity online at the time of writing (autumn 2018) and projected generating capacity growing to between 18GW (under the low capacity scenario) and 30GW (under the high capacity scenario) by 2030 (Wind Europe, 2017).
- 2.4.1.5 The Overarching National Policy Statement for Energy (EN-1) suggests that technologies such as electricity storage could be used to compensate for intermittency of renewable generation. Therefore, this technology can decouple energy production from supply and can provide a contribution to meeting peak demand.
- 2.4.1.6 Table 2.4 covers all of the relevant UK Marine Legislation, Climate Change and Renewable Energy Policies and UK Environmental and Conservation Legislation.

<sup>&</sup>lt;sup>2</sup> DECC became part of Department for Business, Energy & Industrial Strategy (DBEIS) in 2016



#### Table 2.4: UK Legislation

UK Legislation	Summary	
UK Marine Legislation		
Marine and Coastal Access Act 2009	The Marine and Coastal Access Act (MCAA) 2009 sets out a spatial planning system for improved management and protection of the marine and coastal environment. The MCAA established the Marine Management Organisation (MMO), the authority tasked with ensuring the delivery of sustainable development in the marine area. The MMO remains the monitoring and enforcement body in respect of the conditions and restrictions set out in the deemed Marine Licences.	
	The MCAA enables the designation of Marine Conservation Zones (MCZs) in England and Wales as well as UK offshore areas. MCZs are intended to conserve a functioning marine ecosystem without a specific bias towards any particular species or habitat.	
	The MCAA included Section 149A to the Planning Act 2008 enabling a DCO applicant to apply for a DML as part of the DCO process.	
	The Act includes provisions for the coastal environment, including improving access to the coast and undertaking Integrated Coastal Zone Management, which brings policy makers, decision makers and stakeholders together to manage coastal and estuarine areas.	
	Through the MCAA, the UK Government introduced a marine planning system. The MPS adopted by all UK administrations in March 2011 provides the policy framework for the preparation of Marine Plans, establishing how decisions affecting the marine area should be made in order to enable sustainable development.	
	• The East Inshore and Offshore Marine Plans encompass the Hornsea Four offshore project area. The Energy Policy 'WIND2' states "Proposals for Offshore Wind Farms inside Round 3 zones, including relevant supporting projects and infrastructure, should be supported" (HM Government, 2014).	
UK Climate Change and Renewa	able Energy Policy	
The Climate Change Act (2008)	The Climate Change Act sets the framework for the UK to transition to a low-carbon economy and exceeds the targets set out in the EU Renewables Directives with the target to reduce greenhouse gas emissions by at least 80% of the 1990 levels by 2050.	
	• The Climate Change Act requires the government to set legally-binding 'carbon budgets' in order to reach the 2050 target. The UK's fifth carbon budget was approved by the UK Government in July 2016. This provides a commitment to reducing emissions by 57% by	

2030 and to work towards achieving the 80% target by 2050, as detailed in the Climate Change Act (2008).



UK Legislation	Summary	
	<ul> <li>In its Clean Growth Strategy (DBEIS 2017), the Department for Business Energy Industrial Strategy (DBEIS) outlined the UK Government's plans for investment in low carbon innovations, energy transmission and smart systems in order to supply the UK with secure, affordable clean power.</li> </ul>	
	The Clean Growth Strategy gives a strong commitment from UK Government to achieving the UK's already agreed climate change goals as detailed in the Climate Change Act (2008). Such pathways to promote renewable technologies for offshore wind include the following:	
	<ul> <li>Committed to fund £557million of Contracts for difference (CfD) support with an auction scheduled for spring 2019 (DBEIS 2017); and</li> </ul>	
	<ul> <li>Innovative fund of £177 million to further reduce the cost of renewables, focussed on improved offshore turbine blade technology and foundations.</li> </ul>	
	• The DBEIS have confirmed the next CfD allocation round (AR3) for less established technologies (such as offshore wind) will commence 29 May 2019, with another allocation round expected to be held in 2021 and auctions expected every two years thereafter. The DBEIS is set to allocate 6 GW of capacity through 2023-2024 and 2024-2025.	
	This show the UK Government's ongoing support for offshore wind development. Furthermore, the Clean Growth strategy also commits to a Sector Deal for offshore wind aimed at encouraging the development and deployment of a further 10GW of offshore wind development in UK waters in the 2020's (DBEIS 2017).	
Energy Act (2004)	<ul> <li>The Energy Act 2004 includes provisions for the decommissioning of offshore installations (including offshore wind). Chapter 3 of the Act details these provisions which includes the requirement to prepare a decommissioning programme, the approval process of said programme, what happens in the event of failure to submit or rejection of a decommissioning programme, the review and revision process, how to carry out a decommissioning programme and the regulations concerning decommissioning programmes.</li> </ul>	
The UK Energy Act (2013)	<ul> <li>The Electricity Market Reform policy and Energy Act 2013 introduced the CfD auction framework with the aim of providing long term revenue stabilisation for new low carbon energy initiatives, replacing the previous Renewable Obligation system. The auction framework drives developers to deliver competitive projects at a low level Energy Cost (LEC), thereby reducing the subsidy required with the aim of ultimately lowering the cost to the consumer.</li> </ul>	
	<ul> <li>The Committee on Climate Change (CCC) has advised the UK Government that offshore wind should be limited to 13 GW by 2020, unless there is evidence of cost reduction (DECC 2016).</li> </ul>	



**UK Legislation** 

Summary

#### **UK Environmental and Conservation Legislation**

The Conservation of Habitats and Species Regulations 2017 and Conservation of Offshore Marine Habitats and Species Regulations 2017

- In England and Wales, the Habitats Directive and elemens of the EU Wild Birds Directive (see Table 2.1) are implemented under (i) the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations') onshore and up to 12 nautical miles (nm) offshore and (ii) the Conservation of Offshore Marine Habitats and Species Regulations 2017 between 12 and 200 nm offshore.
- The Habitats Regulations require the assessment of any significant effects on qualifying features of internationally important nature conservation sites (Natura 2000) that are likely to arise as a result of a proposed project. These internationally important sites include SACs, or candidate SACs (cSACs), SPAs or potential SPAs (pSPAs), Sites of Community Importance (SCIs) and Ramsar sites. These are often referred to as European Conservation Sites. This assessment is to be undertaken by the 'competent authority', which in the case of Hornsea Four is the SoS for BEIS.
- Both the Habitats Regulations and the Offshore Marine Regulations state it is an offence to kill, injure, capture or disturb a European Protected Species (EPS). Where appropriate, licences can be obtained to allow persons to carry out activities that would otherwise be prohibited, without committing an offence. In England, licences for actions which may affect marine EPS are issued by the MMO beyond 12 nm and for action up to 12 nm licences can be obtained from Natural England.
  - Further details on the HRA process and assessment can be found on the Offshore and Onshore HRA screening report (Document 5, RIAA Annex 1).

Wildlife and Countryside Act 1981

- The Wildlife and Countryside Act enables the designation of SSSIs to provide statutory protection of the best examples of flora, fauna, geological and physio-geological features. SSSI legislation applies to areas of the terrestrial and intertidal environment only and does not extend offshore. Improved provisions for the protection and management of SSSIs were also introduced by the Countryside and Rights of Way Act 2000. SSSIs are often designated for very specific areas, and the presence of several SSSIs in one region has, in many cases, formed the basis of SPA and SAC boundary classification. Natural England has overall responsibility for the management of the SSSI network in England.
- The Wildlife and Countryside Act also enables Statutory Nature Conservation Bodies to declare sites which are considered to be of national importance as National Nature Reserves (NNRs). NNRs also provide additional statutory protection to the finest SSSIs in England and Wales. Natural England is the body responsible for the designation of NNRs in England under the legislation as described for SSSIs. All NNRs must be within a designated SSSI. Natural England manages the majority of English NNRs, with the remaining sites managed by other approved organisations such as the National Trust, the Forestry Commission, the RSPB, local Wildlife Trusts, and Local Authorities.



UK Legislation	Summary	
	The Wildlife and Countryside Act defines a series of offences which are intended to provide protection to wild birds, including their eggs and nests, certain animal and plant species, and to prohibit the intentional introduction and spread of invasive non-native species.	
Countryside and Rights of Way Act 2000	<ul> <li>Under the Countryside and Rights of Way Act 2000, Natural England has the power to designate AONBs in England for areas that are outside national parks and that are considered to have significant landscape value. The Act amends the law relating to PRoW including making provision for public access on foot to certain types of land. Amendments are made in relation to SSSIs to improve their management and protection, as well as to the Wildlife and Countryside Act 1981, to strengthen the legal protection for threatened species. Provision is also made for AONBs to improve their management.</li> </ul>	
The Protection of Badgers Act 1992	• The Act makes it an offence to wilfully kill, injure or take, or attempt to kill, injure or take a badger; and to cruelly ill-treat a badger. The Act also makes it an offence to intentionally or recklessly damage, destroy or obstruct a badger sett, or to disturb a badger whilst in a set. A licence may be granted for the purpose of development which will interfere with a badger sett within an area specified in the licence.	
Natural Environment and Rural Communities Act 2006 (NERC)	• Section 41 of the Act requires the relevant SoS to compile a list of habitats and species of principal importance for the conservation biodiversity in England. Decision makers of public bodies, in the execution of their duties, must have regard for the conservation biodiversity in England, and the list is intended to guide them.	
The Hedgerow Regulations 1997	The Regulations make it an offence to remove or destroy certain hedgerows without permission from the local planning authority and the local planning authority is the enforcement body for such offences.	
The Commons Act 2006	The Act aims to protect areas of common land, in a sustainable manner delivering benefits for farming, public access and biodiversity.	



#### 2.5 Regional and Local Context

- 2.5.1.1 The East of England Plan (Government Office for the East of England, 2008) provides a regional spatial strategy (RSS) for the East of England. It contains targets that 44% of total electricity produced in the East of England shall be from renewable energy by 2020. Of this, 27% should be from offshore wind with a resultant target capacity of 2630 MW. The RSS was revoked in January 2013. However, the evidence base with respect to the need for renewable power generation may be important or relevant for the SoS.
- 2.5.1.2 Local authorities are required to prepare and maintain up to date Local Development Plans which set out their objectives for the use and land development within their jurisdiction, and general policies for implementation.
- 2.5.1.3 Prior to the Planning and Compulsory Purchase Act 2004, local planning policy was set out in a single document, the Local Plan. Local plans are now being replaced by Local Development Frameworks (LDFs) which comprise a suite of Development Plan Documents (DPD) including a Core Strategy DPD, Site Allocation DPD, Area Action Plans and a Proposals Map. For the majority of local planning authorities these documents are still in development but where drafts are available, these have been considered by the project.
- 2.5.1.4 The onshore development area falls under the jurisdiction of East Riding of Yorkshire Council (ERYC). The local plans for ERYC have been considered in this PEIR. A number of neighbouring local authorities have been consulted since the Statement of Community Consultation (SoCC) and their comments will be considered and incorporated within the PEIR, these include:
  - Hull City Council;
  - Scarborough Borough Council;
  - Rydale District Council;
  - North Yorkshire County;
  - York City County;
  - Selby District Council;
  - Doncaster Metropolitan Brough Council; and
  - North Lincolnshire Council.
- 2.5.1.5 Relevant Development Plans have been considered during the onshore site selection for the proposed Hornsea 4 project.

#### 2.5.2 East Riding of Yorkshire County Council

2.5.2.1 The ERYC Economic Strategy and Plan (2018-2022), sets out their economic vision "to be a competitive and resilient low carbon economy that supports sustainable and inclusive growth". The fourth priority set out to achieve this is through a 'Sustainable Economy' that



- aims to integrate both natural and economic assets in order to drive a more sustainable, low carbon economy.
- 2.5.2.2 Regional and local policies relevant to Hornsea Four in driving economic development are presented in **Table 2.5**.
- 2.5.2.3 Of relevance to the Hornsea Four project, a key focus area in the ERYC draft revenue budget (2019 2020) and Financial Plan (2022 2023), (ERYC, 2018) is 'Valuing the Environment' of which confirms the proposed review of the East Riding Local Plan (paragraph 2.5.2.5).
- 2.5.2.4 The East Riding of Yorkshire Local Development Scheme (LDS), (ERYC, 2016) is essentially a 'Project Plan' that outlines the documents that will be submitted as part of the Local Plan over a three-year period (2016 2019). The Local Plan in itself seeks to outline the spatial vision and objectives of East Riding up until 2029. The Strategy Document for the Local Plan was adopted in 2016 and the Local Plan itself is expected to be available in 2022, following Review. Once complete, the new Local Plan will replace all Local Plans and Polices and will ultimately establish the level of developments required that fall both in line with infrastructure requirements while maintaining and protecting the natural and built environment.
- 2.5.2.5 The current East Riding Local Plan includes several Development Plan Documents, Supplementary Planning Documents (SPDs) will also be included to provide further guidance on policies outlined in the Local Plan. The Development Plan Documents currently residing in the Local Plan (2016) include the following:
  - East Riding Local Plan Strategy Document (April 2016);
  - East Riding Local Plan Allocations Document (July 2016);
  - Bridlington Town Centre Area Action Plan (January 2013);
  - Joint Minerals Plan; and
  - Joint Waste Plan.
- 2.5.2.6 There have been a number of significant investments and initiatives based along the Humber estuary over the last 10 years which are aimed at establishing Hull and the Humber as an important hub for the UK's offshore wind industry.



- 2.5.2.7 Green Port Hull was established with the vision of establishing Hull and the East Riding of Yorkshire as a world class centre for renewable energy, creating wealth and employment for the region. The establishment of Siemens Blade Factory in Hull and the creation of offshore wind farm load out facilities.
- 2.5.2.8 The UK Government supported Offshore Renewable Catapult are investing £2M in developing an offshore wind operation and maintenance (O&M) centre of excellence in the Humber region. This initiative is being progressed in collaboration with the University of Hull.
- 2.5.2.9 In addition to these initiatives and a significant supply chain has been established around the Humber and is actively represented by the East of England Energy Group EEERG (https://www.eeegr.com/) and Team Humber Marine Alliance (http://www.thma.co.uk/).



Table 2.5: Relevant policies from the East Riding of Yorkshire Economic Strategy (2018-2012)

Policy	Summary	
Regional		
Humber Strategic Economic	Part of 'The Hull and Humber City Deal' aims to maximise opportunities lined to the growth in the offshore wind and green energy sectors be	
Plan (SEP)	equipping local people and businesses to take advantage of these opportunities.	
The Yorkshire Cost Growth Plan	Identifies significant projects that will support local economic growth, including offshore wind.	
2016		
Local		
The East Riding of Yorkshire	Relevant to this strategy is the ambition to protect the natural environmental through sustainable development and economic growth.	
Community Plan 2016 – 20121		
East Riding Local Plan (2012 –	Formally adopted in 2016 and sets out a long-term strategy to help guide new development across the East Riding until 2019. This includes	
2029)	the allocation of sites that will provide new housing and employment opportunities, alongside the delivery of supporting infrastructure.	
The Local Transport Plan (2015-	Assesses East Riding's transport needs and challenges and sets out its transport aspirations over the 2015 – 2019 period. To improve	
2029)	maintenance of existing transport networks, support sustainable economic growth and regeneration; reduce carbon emissions.	
The Local Flood Risk	Aims to manage the risk of flooding in the East Riding of Yorkshire up to 2027 and beyond.	
Management Strategy		
The Shoreline Management Plan	Sets out the policy for managing the coastline and responding to coastal erosion and flood risks over the next 100 years	
(SMP)		
The East Riding Biodiversity	Establishes what is special about the biodiversity of the East Riding and sets out what actions will be taken to conserve Priority Species and	
Action Plan (ERYBAP) Strategy	conserve, enhance and re-create priority habitats.	
Environmental Policy	Outlines objectives for managing and improving environmental performance including commitments to reducing the impacts of operations	
	and service delivery upon the natural environment. By encouraging and supporting other organisations to do the same, the aim is to improve	
	the environment for the benefit of residents, employees, businesses and visitors.	
East Riding Rural Strategy 2016-	Aims to support sustainable rural development by tackling the problems faced by rural businesses, the farming sector and rural communities	
2020	in respect of accessing services. It seeks to develop and promote opportunities presented by the East Riding's landscape, heritage and local	
	food, especially in the tourism sector.	



#### 2.5.3 Regional Marine Plans

- 2.5.3.1 The MCAA (2009) introduced a system of marine planning in England with the MPS as the framework (paragraph 2.3.2.4). The MMO is currently developing the regional marine plans that will form the system in English waters. Hornsea Four will be located in the following marine plan areas:
  - East Offshore (Adopted): The whole of the array area, a large proportion of the offshore ECC, and a large part of the area identified for the HVAC;
  - East Inshore (Adopted): part of the offshore ECC area; and
  - North East Offshore (public consultation due summer 2019 with adoption by 2021): A very small proportion of the offshore ECC and HVAC area.
- 2.5.3.2 The East Inshore and Offshore marine plans are published jointly (HM Government, 2014) and include a specific section on 'Offshore Wind Renewable Energy Infrastructure'. The document notes that significant wind projects (notably those in Round 3) will be located in the plan areas due to the, "availability of wind resource and suitable water depth in the East Offshore Marine Plan Area."
- 2.5.3.3 Two specific wind related policies are set out, with the first (WIND 1) identifying that projects should not be authorised that are in or could affect sites held under a lease or an agreement for lease that has been granted by The Crown Estate for development of an offshore wind farm, unless certain conditions are met.
- 2.5.3.4 The second policy (WIND 2) sets out a policy, "to be applied by public authorities to ensure that the large potential for Offshore Wind Farms in the East marine plan areas and the ambitions of government for renewable energy are realised", as set out below:
  - WIND 2: Proposals for Offshore Wind Farms inside Round 3 zones, including relevant supporting projects and infrastructure, should be supported.

#### 2.6 Energy Balancing Infrastructure

- 2.6.1.1 Hornsea Four will include Energy Balancing Infrastructure (EBI) which will be located at the onshore substation. Such EBI infrastructure will help the energy grid to transition to a higher proportion of intermittent energy generation from renewable sources, contributing to a smarter and more flexible network. Recognising some of the challenges, The Overarching National Policy Statement for Energy (EN-1) talks about technologies such as electricity storage, that could be used to compensate for intermittency of renewable generation. Government recognise that these technologies will play an important role.
- 2.6.1.2 Further, the National Policy Statement for Electricity Networks (EN-5), in the context of the need for new electricity network infrastructure states, "Lack of sufficiently robust electricity networks can cause, or contribute to, large scale interruptions" and notes that, "Existing transmission and distribution networks will have to evolve and adapt in various ways to handle increases in demand...It is important to note that new electricity network



infrastructure projects, which will add to the reliability of the national energy supply, provide crucial national benefits, which are shared by all users of the systems."

2.6.1.3 A number of documents underpin the need for smarter, more flexible transmission systems able to cope with intermittent energy generation, seek to remove barriers to them and plan for their inclusion in the network operation and these are summarised in Table 2.6. There is a clear effort from Government, Ofgem and National Grid to pave the way for such FBI.

Table 2.6: Energy Balancing Infrastructure – Relevant Documents

Document	Summary
Future Energy Scenarios (National Grid, 2017)	This yearly report by National Grid outlines an increasing pressure on the electrical distribution system and a requirement to increase energy storage systems to act as a solution.
System Needs and Product Strategy – UK Electricity Transmission (National Grid, 2017)	Sets out National Grid's system needs over a five year period to cope with the transition to a smart, flexible system able to deal with a move away from large thermal power generation. Includes an associated product strategy to simplify and evolve balancing services to address such needs.
Upgrading Our Energy System - Smart Systems and Flexibility Plan (Ofgem and Department for Business, Energy and Industrial Strategy (BEIS), 2017)	The Plan set out 29 actions for the Government, Ofgem and Industry to take forward to support the transition to a smarter and more flexible system. The Plan is split into three main areas: removing barriers to smart technologies such as electricity storage; enabling smarter homes and businesses; and making markets work for flexibility.
	A Progress Update to the Plan (Ofgem and BEIS, 2018) which confirmed that additional consult on the planning treatment of storage would be undertaken in response to issues faced by storage under the current planning system.
Consultation on Proposals Regarding the Planning System for Electricity Storage (BEIS, 2019)	This consultation closed on 25 March 2019 and seeks comments on analysis (inter alia) that efforts should be focussed on ensuring that the planning system is fit-for-purpose now, and in the future, by addressing uncertainties over the treatment of composite projects consisting of storage and another forms of generation. In particular views are sought over:
	<ul> <li>retaining the 50 MW NSIP capacity threshold that applies to standalone storage projects; and</li> <li>amending the Planning Act 2008 to establish a new capacity threshold for composite projects including storage and another form of generation.</li> </ul>



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