



Hornsea Project Four: Environmental Statement (ES)

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Glossary

Term	Definition
Commitment	<p>A term used interchangeably with mitigation and enhancement measures. Commitments are Embedded Mitigation Measures. The purpose of Commitments is to reduce and/or eliminate Likely Significant Effects (LSEs), in EIA terms.</p> <p>Primary (Design) or Tertiary (Inherent) are both embedded within the assessment at the relevant point in the EIA (e.g. at Scoping, Preliminary Environmental Information Report (PEIR) or ES).</p> <p>Secondary commitments are incorporated to reduce LSE to environmentally acceptable levels following initial assessment i.e. so that residual effects are acceptable.</p>
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Projects (NSIP).
Direct Employment and Gross Value Added	Employment and Gross Value Added which is associated with the first round of capital expenditure i.e. Hornsea Four's spend directly with prime contractors in each impact area.
Energy balancing infrastructure (EBI)	The onshore substation includes energy balancing Infrastructure. These provide valuable services to the electrical grid, such as storing energy to meet periods of peak demand and improving overall reliability.
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.
Full-Time Equivalent Jobs (FTE Jobs)	The total number of jobs after converting jobs with less than full-time hours and jobs with more than full-time hours into full-time hour jobs. Where full-time hours are assumed to be 37.5 hours per week. (e.g. a job with 18.75 hours per week would be 0.5 Full-Time Equivalent jobs)
Gross Value Added (GVA)	The measure of the value of goods and services produced in an area, industry or sector of an economy. At the level of a firm, it is broadly equivalent to employment costs plus a measure of profit.
High Voltage Alternating Current (HVAC)	High voltage alternating current is the bulk transmission of electricity by alternating current (AC), whereby the flow of electric charge periodically reverses direction.
High Voltage Direct Current (HVDC)	High voltage direct current is the bulk transmission of electricity by direct current (DC), whereby the flow of electric charge is in one direction.
Hornsea Project Four Offshore Wind Farm	The term covers all elements of the project (i.e. both the offshore and onshore). Hornsea Four infrastructure will include offshore generating stations (wind turbines), electrical export cables to landfall, and connection to the electricity transmission network. Hereafter referred to as Hornsea Four.
Indirect Employment and Gross Value Added	Employment and Gros Value Added which is associated with the suppliers of companies that supply goods and services as part of the supply chain of Hornsea Four.

Term	Definition
Landfall	The generic term applied to the entire landfall area between Mean Low Water Spring (MLWS) tide and the Transition Joint Bay (TJB) inclusive of all construction works, including the offshore and onshore ECC, intertidal working area and landfall compound. Where the offshore cables come ashore east of Fraisthorpe.
Local Enterprise Partnership (LEP)	Voluntary partnerships between local authorities and businesses set up in 2011 by the Department for Business, Innovation and Skills to help determine local economic priorities and lead economic growth and job creation within the local area
Location Quotient (LQ)	The proportion of employment in a sector/industry in the local economic development study area divided by that of the national average.
National Grid Electricity Transmission (NGET) substation	The grid connection location for Hornsea Four at Creyke Beck.
Onshore substation (OnSS)	Comprises a compound containing the electrical components for transforming the power supplied from Hornsea Project Four to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid. If a HVDC system is used the OnSS will also house equipment to convert the power from HVDC to HVAC.
Order Limits	The limits within which Hornsea Project Four (the 'authorised project') may be carried out.
Orsted Hornsea Project Four Ltd.	The Applicant for the proposed Hornsea Project Four Offshore Wind Farm Development Consent Order (DCO).
Planning Inspectorate (PINS)	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects (NSIPs).

Acronyms

Acronym	Definition
BEIS	Business, Energy and Industrial Strategy
CfD	Contract for Difference
CORE	Centres for Offshore Renewable Engineering
DCO	Development Consent Order
DBEIS	Department for Business, Energy & Industrial Strategy
DECC	Department of Energy and Climate Change
EBI	Energy Balancing Infrastructure
EIA	Environmental Impact Assessment
ES	Environmental Statement
FTE	Full-Time Equivalent
GVA	Gross Value Added
LEP	Local Enterprise Partnership
LQ	Location Quotient
MPS	Marine Pology Statement
MDS	Maximum Design Scenario

Acronym	Definition
NPPF	National Planning Policy Framework
NSIP	Nationally Significant Infrastructure Project
O&M	Operations and Maintenance
ONS	Office for National Statistics
OnSS	Onshore Substation
ORE	Offshore Renewable Energy
R&D	Research and Development
UK	United Kingdom

Units

Unit	Definition
MW	Megawatt (power)

1 Introduction

1.1 Project background

1.1.1.1 Orsted Hornsea Project Four Limited (the 'Applicant') is proposing to develop Hornsea Project Four Offshore Wind Farm (hereafter 'Hornsea Four'). Hornsea Four will be located approximately 69 km offshore the East Riding of Yorkshire in the Southern North Sea and will be the fourth project to be developed in the former Hornsea Zone. Hornsea Four will include both offshore and onshore infrastructure including an offshore generating station (wind farm), export cables to landfall, and on to an onshore substation (OnSS) with energy balancing infrastructure (EBI), and connection to the electricity transmission network.

1.1.1.2 Hatch Regeneris was commissioned to undertake a socio-economics assessment for Hornsea Four. This involved a desk-based study to establish a baseline and estimate the likely impacts of Hornsea Four on Socio-economics.

2 Methodology

2.1.1.1 This section presents the detailed methodology used for the assessment of socio-economic impacts. The methodology and baseline study feeds into the socio-economics chapter of this Environmental Statement (ES) ([Volume A3, Chapter 10: Socio-economics](#)) submitted as part of the Development Consent Order (DCO) application.

2.2 Scope of Assessment

2.2.1 Study Area

2.2.1.1 There is some uncertainty regarding the location of ports for both the construction and operation and maintenance phases. However, the proximity of the former Humber Local Enterprise Partnership (LEP) area to the Hornsea Four array area and cable corridor, suggests that this is the most likely location for the ports for both phases. Given this uncertainty, a scenario-based approach is taken which enables the modelling of impacts for a non-HEY LEP area port.

2.2.1.2 The local study area is the former Humber LEP area which included Hull, East Riding of Yorkshire, North Lincolnshire and North East Lincolnshire. As of April 2021, the Hull & East Yorkshire (HEY LEP), consisting of the Hull and East Riding of Yorkshire Council (ERYC) areas, replaced the Humber LEP. The North Lincolnshire and North East Lincolnshire councils are now only included in the Greater Lincolnshire LEP area.

2.2.1.3 A national impact area, the United Kingdom (UK), is also considered to assess national effects of Hornsea Four.

2.2.2 Baseline

2.2.2.1 The baseline analysis is wholly desk based, drawing on a range of published datasets and research reports. It describes the socio-economic characteristics of the impact areas by

exploring a range of socio-economic indicators that are particularly relevant to the selected receptors.

2.2.3 Quantification of Economic Impacts

2.2.3.1 The quantification of economic impacts focuses on the Gross Value Added (GVA) and employment impacts of Hornsea Four. Here, the key assumptions for the modelling and the approach that is used are defined.

2.2.4 Modelling Economic Activity and Employment Impacts

2.2.4.1 For the key quantitative measures of economic impact (i.e. employment and GVA) an economic impact model has been developed to estimate the direct and indirect employment and GVA impacts during the construction and operations and maintenance (O&M) phases. Induced impacts (Impacts resulting from expenditure of employees) have been excluded as they are typically affected by greater uncertainty and are more difficult to defend robustly in terms of their scale and additionality. This incorporates Hatch's latest in-house Input-Output tables which are based on National Accounts data (ONS 2016).

2.2.4.2 The absolute scale of the economic impacts during the construction phase is measured using the following methods:

- **Direct Construction Employment and GVA:** This relates to the economic impacts wholly related to capital spend on design and construction. That is the employment and GVA which is associated with the first round of capital expenditure i.e. Hornsea Four's spend directly with prime contractors in each impact area. The assessment would be driven by the level of expenditure on goods and services retained in each impact area, for each scenario. The additional output in each sector is converted to jobs and GVA using sector-based benchmarks (from Office for National Statistics (ONS), Annual Business Survey and ONS, Business Register and Employment Survey) appropriate to each impact area; and
- **Indirect Construction Employment and GVA:** These impacts take place in the supply chains of companies that supply goods and services as part of the supply chains during the construction phase. UK and Regional Input-Output tables supplemented by National Accounts data (ONS 2016) are used to estimate the amount of output generated across various sectors as a result of input into (or spend in) a particular sector of the economy. The model will estimate how direct spend in first tier suppliers leads to indirect output further down the supply chain. Again, the output from the model will be converted to jobs and GVA using sector benchmarks.

2.2.4.3 The absolute scale of the economic impacts during the O&M phase would be measured using the same indicators (employment and GVA) although the methodology would differ slightly:

- **Direct Operation and Maintenance employment and GVA:** Jobs and wealth creation directly associated with O&M activity is defined as the employees directly engaged in

activities relating to the management, operation, monitoring and maintenance of the wind farm. The assessment will be driven by the number of employees and their salaries analysed by type of employment. The assessment will consider carefully whether to include contractors who are directly engaged in maintenance activity as part of the direct employment, or to treat this as part of the supply chain (and hence the category below).

- **Indirect Operation and Maintenance employment and GVA:** Jobs and GVA associated with supply chain spend during the O&M phase. This includes first and second round supply chain impacts. These will be measured using UK and regional Input-Output tables, supplemented by National Accounts data (ONS 2016) to estimate the amount of output generated across various sectors as a result of input into (or spend in) a particular sector of the economy. As for the construction phase, the model estimates how direct spend in first tier suppliers leads to indirect output further down the supply chain. The output is converted to jobs and GVA using sector benchmarks.

2.2.4.4 The output from this quantitative assessment underpins the assessment of the magnitude of impacts on each receptor. The magnitude of which is determined by the scale and nature of the impact in the context of the baseline position.

2.2.5 Estimated Construction and Operation and Maintenance Costs

2.2.5.1 The model which estimates the economic impacts draws on the construction and O&M costs as an input. These costs are then matched to sectors of production within the economy to track the likely sectoral patterns of expenditure.

2.2.5.2 These estimated costs are developed from the Crown Estate's Guide to an Offshore Wind Farm (2019) which provides costs for each element of the wind farm per MW of capacity which are applied to an indicative estimate of capacity for Hornsea Four.

2.2.5.3 Although the number of turbines is set out in [Volume A1, Chapter 4: Project Description](#) (180), the potential future capacity of Hornsea Four will depend upon turbine technology and other factors at the point of construction. As such, for the purposes of this assessment only, a nominal capacity has been selected based on industry averages of 10 MW per turbine from the 2019 Crown Estate Guide to an Offshore Wind Farm. In the absence of a precise figure, this provides a worst-case estimate of turbine capacity and enables an appropriate estimate of impacts to be provided.

2.2.5.4 It is noted that should fewer turbines be developed than the 180 Maximum Design Scenario (MDS), any impacts and associated effects would be reduced in significance. The effects would not however be reduced to 'adverse' and would either remain 'beneficial' or at worst,

'not significant'. Furthermore, if wind turbine MW capacity is increased (e.g. 11 MW turbine), the effect significance would not be reduced.

2.2.6 Sourcing Scenarios

2.2.6.1 Whilst there is some uncertainty relating to the development and O&M costs (due to the unknown capacity of Hornsea Four), this is modest compared to the degree to which this expenditure will be retained within the geographical impact areas. Consequently, scenarios are used to test this uncertainty.

2.2.6.2 There are three possible sourcing scenarios which are assessed. The sourcing scenarios vary assumptions in the amounts of goods and services sourced from the local economic development study area or the UK as a whole. The sourcing assumptions are informed by the following:

- Ørsted's track record in delivering wind farms in the UK and their experiences of expenditure in local supply chains;
- Evidence of local and national supply chain strengths; and
- Ex-post assessments for other offshore wind farms of the retention of offshore wind farm expenditure in the UK.

2.2.6.3 The following spatial sourcing scenarios are used for the construction phase:

- HEY LEP Port: the port is located within the former Humber LEP area;
- Non-HEY LEP UK Port: the port is located within the UK but outside the former Humber LEP area; and
- Non-UK Port: the port is located outside of the UK.

2.2.6.4 As there is slightly more certainty around the location of the O&M port, only the first two scenarios are used for the O&M phase:

- HEY LEP Port: the port is located within the former Humber LEP area; and
- Non-HEY LEP UK Port: the port is located within the UK but outside the former Humber LEP area.

2.2.6.5 The sourcing scenarios are underpinned by assumptions regarding the degree of retention of expenditure in each impact area (the retention percentages will need to be confirmed in due course). Note the high/low used in [Table 1](#) does not denote a high and low range, it is provided to indicate the relative proportions of sourcing in each study impact area, compared to other scenarios.

Table 1: Sourcing Scenarios – Expenditure Retention.

	Local Sourcing	UK Sourcing
HEY LEP Port	High	High
Non-HEY LEP UK Port	Low	High
Non-UK Port	Low	Low

Source: Hatch Regeneris.

2.2.6.6 Further variant sourcing scenarios have been excluded as they would be difficult to evidence robustly.

2.2.7 Access to Employment Impacts

2.2.7.1 The impacts on local skills and labour force are driven by three elements:

- The scale and nature of employment estimated under each sourcing scenario (quantitative assessment);
- The capability and capacity for the local labour force to access the employment opportunities (mix of qualitative and quantitative assessment); and
- The extent to which the local jobs are filled by the workforce of contractors from outside the local area (mix of qualitative and quantitative assessment).

2.2.7.2 The nature of employment opportunities presented by Hornsea Four is based on past evidence from similar developments and information provided by the Applicant. The types of jobs centre around the following themes:

- Lower tier manufacturing contracts (for example the supply of components);
- Specialist construction activities;
- Land and water-based transport; and
- Accommodation and food services.

2.2.7.3 The ability and capacity within the local labour force to access employment opportunities is informed by the baseline assessment, which draws on data on the proportion of residents available to work and their qualification, skills and current industry profile.

3 Policy Context

3.1 UK Economic Development Policy

3.1.1.1 Renewable energy and offshore wind in particular have become increasingly important nationally over the past two decades and even more so with plans for a green economic recovery from the COVID-19 pandemic. Growth in the renewable energy sector was traditionally driven by environmental benefits, however it now presents a significant opportunity in terms of economic development and is becoming a key driver of economic growth.

3.1.2 Our Plan for Growth

3.1.2.1 The *“Build Back Better: our plan for growth”* policy paper (HM Treasury, 2021) sets out the government’s plans to support growth that aligns with three key priorities through investment in infrastructure, skills and innovation:

- Level up the whole of the UK – responding to long-standing regional economic disparities in the UK the Levelling Up agenda seeks to address the roots of economic under-performance in ‘left behind’ areas, including poor productivity, low skill base and

poor health. Among other measures, the UK Shared Prosperity Fund and the UK-wide Levelling Up Fund will channel investment to regenerate struggling towns.

- Support the transition to Net Zero – in 2019 Parliament amended the 2008 Climate Change Act, thus committing the UK to net zero emissions by 2050. Though investment in net zero, new opportunities for green economic growth and jobs will be created, including supporting up to 60,000 jobs in the offshore wind sector. Working with industry, the government aim to grow existing net zero industries, as well as encourage new ones.
- Support our vision for Global Britain – envisions cooperating with partnership to drive international action on the UK's domestic priorities, including through COP26, among others.

3.1.3 The Prime Minister's Ten Point Plan

3.1.3.1 *"The Ten Point Plan for a Green Industrial Revolution"* aims to aid a green recovery post-pandemic by mobilising £12 billion of government investment, and potentially three times as much in private sector investment, to create and support up to 250,000 green jobs (Department for Business, Energy & Industrial Strategy et al, 2020).

3.1.3.2 Point 1: Advancing Offshore Wind recognises the UK's leading role in this sector internationally and aims to quadruple offshore wind capacity to 40GW by 2030, including 1GW of innovative floating offshore wind, which could attract around £20bn of private investment.

3.1.3.3 To support this growing industry, £160m of government investment will be directed into modern ports and manufacturing infrastructure. More stringent requirements for supply chains in the Contract for Difference auctions will enable the delivery of 60% UK content in offshore wind projects.

3.1.4 Energy White Paper

3.1.4.1 Building on the PM's Ten Point Plan, the *"Energy white paper: Powering our net zero future"* (Department for Business, Energy and Industrial Strategy, 2020) sets out a strategy for the wider energy system that transforms energy, supports a green recover and creates a fair deal for consumers.

3.1.5 National Infrastructure Strategy

3.1.5.1 The National Infrastructure Strategy (HM Treasury, 2020) sets out the government's plan to transform the country's infrastructure network to achieve the objectives of economic recovery, levelling up and strengthening the Union as well as meeting the net zero emissions target by 2050.

3.1.5.2 Through this strategy, as well as the Energy White Paper, the government aims to provide clear support for private investment. It also looks to comprehensively reform the way

infrastructure is delivered by speeding up the planning system, improving how projects are chosen, procured and delivered and using cutting-edge construction technology.

3.1.6 Offshore Wind Sector Deal

3.1.6.1 The UK Government and the Offshore Wind Industry have committed to a sector deal to help the industry drive forward the aims of the UK Industrial Strategy. Key commitments include:

- increasing UK content to 60% of value associated with offshore wind farm activity by 2030; and
- £250m industry investment in building a stronger UK supply chain to support productivity and increase competitiveness.

3.1.7 UK Industrial Strategy

3.1.7.1 The 2017 White Paper titled "*Industrial Strategy: building a Britain fit for the future*" sets the Government's vision for the UK economy (Department for Business, Energy & Industrial Strategy (DBEIS) 2017a). The underlying motivation of the strategy is to "*create an economy that boosts the productivity and earning power throughout the UK.*"

3.1.7.2 The Government identifies five foundations of productivity that align to the economic vision. The foundations will support the creation of high value jobs and skills (People); investment and sector growth through Sector Deals (Business Environment); innovation and research and development (R&D) investment (Ideas); investment in digital, transport, housing, low carbon and other infrastructure (Infrastructure); and developing Local Industrial Strategies which focus on local strengths (Places).

3.1.7.3 In addition, four Grand Challenges have been set for the UK Government and the economy as a response to global opportunities: artificial intelligence (AI), clean growth, future of mobility, and ageing society. Clean Growth has been identified as one of the main opportunities for the UK economy to take advantage of, through the "*development, manufacture and use of low carbon technologies, systems and services*". Offshore wind is one of the areas where the UK has been identified as having world-leading capabilities, and the Strategy aims to maximise the share of the global markets taken up by UK businesses in the sector. In support of this, the UK Government has committed to increasing support for innovation to reduce the costs of clean technologies, systems and services.

3.1.7.4 In light of changing economic and business environment, the UK Industrial Strategy was superseded by "*Build Back Better: our plan for growth*" in March 2021.

3.1.8 Clean Growth Strategy

3.1.8.1 Connected to the UK Industrial Strategy, the UK Government has developed a clear growth strategy to ensure economic growth goes hand in hand with greater protection for the natural environment (DBEIS 2017b). Within this is a commitment to help British businesses

and entrepreneurs seize the opportunities of the low carbon economy, and specifically offshore wind. This is driven by policies and processes to improve the route to market for renewable technologies such as offshore wind. Examples include up to £557 million for further Pot 2 Contract for Difference (CfD) auctions and working with industry to develop an ambitious sector deal for offshore wind.

3.1.9 COREs

3.1.9.1 The importance of renewable energy and specifically offshore technologies, to the UK's economic policy is illustrated by the commitments made by the Department of Energy and Climate Change (DECC) and the Department for Business, Innovation and Skills (which have now been combined into the Department for Business, Energy and Industrial Strategy (BEIS)) to maximising the economic benefit of renewable energy, especially offshore wind farm developments.

3.1.9.2 As part of this, six Centres for Offshore Renewable Engineering (COREs) have been established across the UK (two of which cover Hull and the Humber Estuary, and Great Yarmouth and Lowestoft). The intervention is driven by the need to meet the legally binding renewables target by 2020 as set out in the Renewable Energy Roadmap and there is a need to support the offshore wind manufacturing capacity to achieve the targets (DECC 2011). CORE's aim is subsequently to maximise the ability of areas to benefit from opportunities in offshore engineering. Support structures that are in place include the establishment of Enterprise Zones with simplified planning regimes and enhanced capital allowances, among other incentives.

3.1.9.3 The Offshore Wind Industrial Strategy (HM Government 2013) highlights that it is a government goal to strengthen the UK offshore wind supply chain and support the development of the sector. The action plan outlined in the document sets out a requirement to submit a supply chain plan as part of the bidding process for CfD to encourage a high proportion of local content.

3.1.10 Offshore Renewable Energy Catapult

3.1.10.1 The Offshore Renewable Energy (ORE) catapult was set up in 2013 to accelerate the creation and growth of UK companies in offshore renewable energy and provides facilities and research and engineering capabilities to bring together industry and academia to drive innovation.

3.2 Other relevant policies

3.2.1.1 A number of other policies are relevant to socio-economics including:

- National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government 2019); and
- The UK wide Marine Policy Statement (MPS). (HM Government 2011).

- 3.2.1.2 The NPPF emphasises that one of the overarching objectives of the planning system is environmental which includes supporting the transition to a low carbon future by supporting renewable and low carbon energy and associated infrastructure. It explains how local planning authorities must support the delivery of low carbon energy and associated infrastructure to increase the use of renewable and low carbon energy and help to move toward a low carbon economy.
- 3.2.1.3 The MPS states that properly planned developments in the marine area can provide environmental and social benefits as well as drive economic development, provide opportunities for investment and generate export and tax revenues. There are obvious social and economic benefits from such an increase in network capacity, most notably the facilitation of offshore renewable energy. There are also social and economic risks associated with such an increase in underwater cabling, which may affect activities such as dredging and the use of certain fishing gear, and impact on other sea users, including existing cable and pipeline operators. The marine plan authority should ensure, through integration with terrestrial planning, and engagement with coastal communities, that marine planning contributes to securing sustainable economic growth both in regeneration areas and areas that already benefit from strong local economies.

3.2.2 Local Economic Development Policy

- 3.2.2.1 National aspirations in relation to private sector-led economic growth and employment creation are echoed in the strategic aims of key organisations in Hornsea Four local economic development study areas (the former Humber LEP). Here, the focus of economic policy is to close the gap between local and national economic performance.
- 3.2.2.2 The former Humber LEP covers four local authorities including Hull, ERYC, North Lincolnshire and North East Lincolnshire. As of April 2021, the Hull & East Yorkshire (HEY LEP), consisting of the Hull and East Riding of Yorkshire areas, replaced the Humber LEP. The North Lincolnshire and North East Lincolnshire councils are now only members of the Greater Lincolnshire LEP.
- 3.2.2.3 The HEY LEP overarching priorities include a skilled and productive workforce, an infrastructure that supports growth and thriving and successful businesses. It is currently developing its Economic Strategy Plan, which will be submitted to the HEY LEP Board for review in July 2021. Subsequently, a seven-week consultation will be held, closing on September 12th, with a view for the Board to review the strategy at a meeting in September 2021. Following confirmation of the Economic Strategy, a new Delivery Plan will be produced.
- 3.2.2.4 The Greater Lincolnshire Strategic Economic Plan 2014-30, which was refreshed in 2016, identifies among its priorities and drivers of success the need to drive the growth of the area's defining and strongest sectors offering the most competitive advantage, including the low carbon economy with a particular focus on renewable energy. It also looks to grow specific opportunities identified as future defining features of the area, including ports and logistics. To drive this growth, expansion into new markets, modern telecommunication,

infrastructure improvements and the skills of individuals and business owners will be prioritised.

- 3.2.2.5 Low-carbon, renewables and offshore economy sector specific priorities include increasing the supply of young and adult workers with low-carbon skills and delivering short course training for employers, including investment in training infrastructure and provision. Delivering an integrated supply chain development program and a Great Lincolnshire wide energy efficiency/waste management programme is also among these priorities, along with Enterprise Zone infrastructure improvements and site assembly.
- 3.2.2.6 The Greater Lincolnshire Plan for Growth, published in 2021 in response to the Covid-19 pandemic. The energy sector is identified among its drivers of revival, with a vision for Greater Lincolnshire to 'pioneer industrial decarbonisation' and 'be a test bed for technologies in clean energy generation, storage and distribution'. With regards to the ports and logistics sector, it aims to 'maximise the strategic advantage of its ports by leading their transformation into one of the most smart, clean and efficient port clusters in the world'.
- 3.2.2.7 The importance of the renewable energy sector to economic development objectives is reflected in the economic development strategies of some of the local authorities within the local economic development study area:
- Hull Local Plan 2016 to 2032 (Hull City Council 2017): The local plan acknowledges the firmly established renewable energy sector locally and in particular the production of offshore wind blades and related assembly at Green Port Hull. Under Policy 18, the Plan also states that the Council is keen to promote renewable and low carbon energy developments as it helps reinforce Hull as a green energy city;
 - East Riding Local Plan: Strategy Document (East Riding of Yorkshire Council 2016): The importance of offshore wind energy to East Riding's wider strategic aims is reflected strongly in the plan. Policy EC1 points to supporting the growth of the East Riding economy through development of sectors such as renewable energy. Policy EC5 indicates that proposals for the development of the energy sector (including wind farm developments) will be supported where any significant adverse impacts are avoided (or where adverse impacts have been minimized or are outweighed by the benefits of the proposal). Under Policy S6 of the strategy, is a recommendation to support necessary employment land developments required to deliver offshore renewable energy projects;
 - North Lincolnshire Core Strategy 2006 to 2026 adopted June 2011 (North Lincolnshire District Council 2011): The core strategy for North Lincolnshire identifies the south bank of the River Humber as a strategic employment site within Policy CS12 and underlines the importance of attracting and developing port-related employment. In addition to the clear aspiration that the offshore wind sector will make a major contribution to economic development across the local economic development study area, local and Humber LEP wide strategies emphasise the importance of, and aspirations for, a number of other sectors. Many of these overlap with the renewables sector, for example the engineering and manufacturing sector is highlighted as strategically

important across the Humber. In addition, the ports and logistics sector are recognised within the Humber LEP as a key area of opportunity and strategic importance; and

- North East Lincolnshire Economic Strategy (North Lincolnshire District Council 2016): Identifies port and renewable energy as key priority sectors for growing the local economy. The sector presents an opportunity, building on the presence of major investments located in the area, including Morrisons, Siemens, Orsted and Centrica. The ambition is to establish the borough as a UK centre for renewable energy, working with the rest of the Humber to realise the potential of the Energy Estuary.

3.2.3 Greater Lincolnshire LEP Local Industrial Strategy

3.2.3.1 Greater Lincolnshire LEP produced an Evolving Opportunities framework, and issued a call for evidence to further develop the focus of its Local Industrial Strategy, intending to set out economic priorities through to 2030.

3.2.3.2 Amongst others, Lincolnshire's evolving opportunities included:

- a rural innovation test-bed for energy & water; and
- an adaptive ports & logistics industry driving greater connectivity.

3.2.3.3 Skills transition into a changing work environment was identified as a cross-cutting theme, as was maximising the housing contribution to the economy.

3.2.3.4 The Draft Greater Lincolnshire Local Industrial Strategy (Greater Lincolnshire LEP, 2021) indicated support for the offshore wind sector off Greater Lincolnshire's coast, building on the success of the Humber Energy Estuary.

4 Detailed Socio-economic Baseline

4.1.1 Approach to socioeconomic baseline assessment

4.1.1.1 The baseline analysis is wholly desk based, drawing on a range of published datasets and research reports. It describes the socio-economic characteristics of the impact areas by exploring a range of socio-economic indicators that are particularly relevant to the selected receptors.

4.1.1.2 The key sources of data used to assess the baseline environment include relevant national datasets from the ONS providing data on population, labour market and employment base conditions at the national and local levels. Where data is not available at the UK level (for example, ONS employment data is available for Great Britain rather than the UK), this is clearly stated.

4.1.1.3 The indicators selected, exclude those for social and community infrastructure (SCI) and tourism as these have been scoped out of the assessment. These impacts are outlined,

together with a justification for scoping them out in [Volume A4, Annex 5.1: Impacts Register](#).

- 4.1.1.4 Baseline information for the study areas is collected through a detailed desk-based review of existing studies and datasets. The analysis draws on the most up to date sources of data available at July 2021 for all key socio-economic indicators, although the year that the data relates to varies according to the release calendar for each dataset. The baseline year for all socio-economic indicators is referenced throughout the chapter and stated in [Table 2](#).

Table 2: Data Sources for Baseline Indicators.

Receptor	Indicator	Baseline Data Source and Year of Publication
Economic Activity	GVA	ONS, Gross Value Added (balanced approach), 2021
Employment	Employment	ONS, Business Register & Employment Survey, 2020
	Industry Breakdown	ONS, Business Register & Employment Survey, 2020
Access to Employment	Working Age Population	ONS, Mid-Year Population Estimates, 2021
	Economic Activity	ONS, Annual Population Survey, 2021
	Unemployment Rate	ONS, Annual Population Survey, 2021
	Claimant Count	ONS, Claimant Count, 2021
	Occupational Breakdown	ONS, Annual Population Survey, 2021
	Skills	ONS, Annual Population Survey, 2021

Source: Hatch

- 4.1.1.5 The baseline conditions are assessed for the local economic development study area – the former Humber LEP. This is benchmarked against UK data as this forms the national study impact area. For some indicators it is not possible to obtain like for like data for the whole of the UK and as such Great Britain is used as a substitute.
- 4.1.1.6 The local economic development study area is characterised by different socio-economic characteristics, which form the context for the potential impact of Hornsea Four on the local economies. The uncertainties associated with Hornsea Four at this stage (e.g. the choice of port for construction and O&M activities) mean that it cannot be concluded where the socio-economic impacts will occur.
- 4.1.1.7 The selection of ports will be determined during a procurement exercise, and there are several factors which may influence the decision. This includes available capacity, facilities, access to the port from land and sea, local supply chains, and further commercial considerations.

4.1.2 Local Economic Development Study Area

- 4.1.2.1 The local economic development study area consists of a built-up area with an industrial heritage and rural hinterlands. Historically, it suffers from socio-economic challenges, such as pockets of unemployment and deprivation affecting areas which have experienced

industrial decline. Despite these challenges, it has a strong and growing renewable energy sector. As outlined in the policy section, this is a focal point for economic development activity. The area has seen significant investments in recent years to develop its offshore wind sector and enhanced its potential to benefit from the Hornsea Projects. The socio-economic position of the study area is examined in more detail below.

4.1.3 Population

4.1.3.1 As detailed in **Table 3**, the local economic development study area has a population of around 934,000 people, of whom 563,000 are working age (60%, just under the national average of 62%). HEY LEP features a similar share (60%) of working age residents, whilst that for Greater Lincolnshire is slightly lower (50%). The proportion of working age residents varies between the local authorities of interest ranges from 57% in the East Riding of Yorkshire to 65% in the City of Kingston upon Hull.

Table 3: Population, total and working age, 2020.

Area	Population (00s)	Working Age Population (000s)	Working Age Population as % of Total
East Riding of Yorkshire	343	197	57%
Kingston upon Hull, City of	259	168	65%
North East Lincolnshire	159	95	60%
North Lincolnshire	173	104	60%
Local Study Area	934	563	60%
Hull & East Yorkshire LEP	602	364	60%
Greater Lincolnshire LEP	1,139	674	59%
United Kingdom	67,081	41,845	62%

Source: ONS, Population Estimates 2021, Numbers are rounded to nearest 1,000.

4.1.4 Labour Market Indicators

4.1.4.1 The local study area's labour market performance is marginally lower than national indicators: its economic activity rate is 78% (vs 79% nationally) and its employment rate is 74% (vs 75% nationally). The HEY LEP performance is comparable to that of the study area, while Great Lincolnshire exhibits lower economic activity (76%) and employment (72%) rates.

4.1.4.2 Spatially, East Riding of Yorkshire shows the strongest labour market performance across the area, with economic activity rate of 78% and an employment rate of 75%. Employment rates for the other three local authorities are below the UK average.

4.1.4.3 The levels of economic inactivity follow the same spatial pattern, with the UK average at 21% and the local study area at 22%. North East Lincolnshire has the highest inactivity levels, 24% of working age residents being inactive. Further details are provided in [Table 4](#).

Table 4: Labour market performance, Jan 2020-Dec 2020.

Area	Economically active		In Employment		Economically inactive	
	Number (000s)	% Working Age Population	Number (000s)	% Working Age Population	Number (000s)	% Working Age Population
East Riding of Yorkshire	151	78%	145	75%	42	22%
Kingston upon Hull, City of	130	78%	124	74%	38	23%
North East Lincolnshire	72	76%	69	72%	22	24%
North Lincolnshire	80	78%	75	73%	23	23%
Local Study Area	433	78%	412	74%	125	22%
Hull & East Yorkshire LEP	281	78%	268	74%	80	22%
Greater Lincolnshire LEP	503	76%	474	72%	157	24%
United Kingdom	32,693	79%	31,178	75%	8,735	21%

Source: ONS, Annual Population Survey 2021. Numbers are rounded to nearest 1,000.

4.1.4.4 The unemployment rate (5%) is in line with the average for the UK with 21,000 unemployed residents across the local study area. The unemployment rate of HEY LEP is comparable to the study area, but it is slightly higher in Greater Lincolnshire (6%). As shown in [Table 5](#) there is a variation within study area, North Lincolnshire highest at 6% and East Riding of Yorkshire with the lowest unemployment rate of 4%.

Table 5: Unemployment, Jan 2020 – Dec 2020.

Area	Number unemployed (000s)	Unemployment rate (% econ. active population)
East Riding of Yorkshire	6	4%
Kingston upon Hull, City of	7	5%
North East Lincolnshire	4	5%
North Lincolnshire	5	6%
Local Study Area	21	5%

Area	Number unemployed (000s)	Unemployment rate (% econ. active population)
Hull & East Yorkshire LEP	13	5%
Greater Lincolnshire LEP	29	6%
United Kingdom	1,515	5%

Source: ONS, Annual Population Survey 2021. Numbers are rounded to nearest 1,000.

4.1.4.5 Claimant Count data (Figure 1) highlights the falling number of claimants relative to working age population across the UK and the study area as the UK economy and its regions emerged from recession in 2011. As shown in the latest data, there has been a significant upswing since the start of the COVID-19 pandemic with claimant numbers reaching above the peak seen in the previous recession. The number of claimants in the study area, as well as HEY LEP, as a proportion of the working age population is consistently higher than the national average. Although the claimant count rate in Greater Lincolnshire has been historically slightly higher than the national average, it has been consistently below that for the UK since the pandemic onset. In June 2021, there were 32,770 claimants in the study area, representing 5.8% of the working age population – this compares to 5.6% nationally.

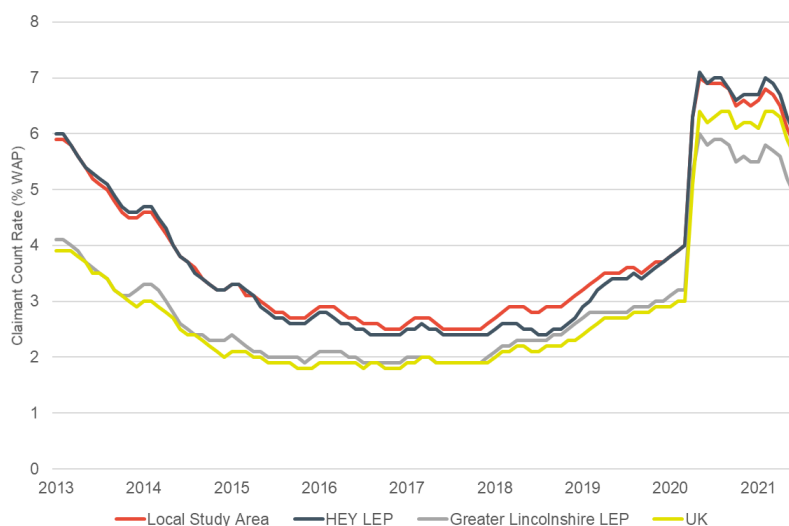


Figure 1: Claimant Count Rate, Jan 2013-June 2021.

4.1.4.6 It is no longer possible using published data sources to quantitatively estimate how many unemployed residents are seeking work in sectors which are relevant to the construction of Hornsea Four. This is due to a change in the availability of a sectoral breakdown of ONS Claimant Count data. Analysis of labour market capacity in the years before Universal Credit was rolled out, when a sectoral breakdown of claimant data was possible, indicates that residents seeking employment occupations relevant to wind farm construction accounted for between 30% and 40% of claimants. This is likely to be the upper limit, as since 2013 demand for construction related employment has been high.

4.1.4.7 Table 6 summarises the skills profile of working age residents across the study area. It shows significant underperformance in higher level skills compared to the position at the UK level:

32% of working age residents in the local study area have higher level skills (i.e. Level 4+ which is equivalent to a degree and above) compared to 43% across the UK. The underperformance is consistent across all local authorities within the local study area, although the East Riding of Yorkshire has the highest representation of higher-level skills at 42%. In all other skill levels, the same or a larger share than the UK is observed.

Table 6: Qualifications of working-age residents, Jan – Dec 2020.

Area	Level 4+		Level 3		Apprenticeships		Level 1 and 2		No Qualifications	
	No.	%	No.	%	No.	%	No.	%	No.	%
East Riding of Yorkshire	80	42%	34	18%	6	3%	55	29%	9	5%
Kingston upon Hull, City of	39	23%	32	19%	7	4%	59	35%	19	11%
North East Lincolnshire	24	25%	15	16%	4	4%	32	34%	11	12%
North Lincolnshire	33	32%	19	18%	4	4%	31	30%	8	8%
Local Study Area	177	32%	101	18%	21	4%	178	32%	47	8%
Hull & East Yorkshire LEP	120	33%	67	19%	13	4%	115	32%	28	8%
Greater Lincolnshire LEP	199	30%	132	20%	21	3%	210	32%	52	8%
United Kingdom	17,772	43%	6,965	17%	1,156	3%	10,413	25%	2,712	7%

Source: ONS, Annual Population Survey, 2021. Numbers are rounded to nearest 1,000. Percentages may not sum to 100% due to rounding.

4.1.4.8 The occupational profile of residents ([Table 7](#)) mirrors the representation of skills: 26% of the local study area's residents are in high skill occupations, eight percentage points below the national average (34%). Compared to the study area, Hull & East Yorkshire features a marginally higher (27%) proportion of residents in high skill occupations, whilst the equivalent rate for Greater Lincolnshire is only 25%. The study area, as well as Greater Lincolnshire, features a notably higher share of residents in low-skilled occupations than nationally (37% vs 31%). At 39%, HEY LEP residents have the highest engagement in middle-skilled occupations.

Table 7: Occupations of working age residents, Jan 2020-Dec 2020.

Area	High-skill occupations		Medium-skill occupations		Low-skill occupations	
	No.	%	No.	%	No.	%
East Riding of Yorkshire	52	35%	58	39%	41	27%
Kingston upon Hull, City of	23	18%	49	38%	55	43%
North East Lincolnshire	16	22%	21	29%	34	49%
North Lincolnshire	21	27%	28	36%	29	38%
Local Study Area	112	26%	155	36%	160	37%
Hull & East Yorkshire LEP	76	27%	107	39%	96	34%
Greater Lincolnshire LEP	123	25%	187	38%	185	37%
United Kingdom	11,086	34%	11,353	35%	9,926	31%

Source: ONS, Annual Population Survey, 2021. Numbers are rounded to nearest 1,000. Percentages may not sum to 100% due to rounding.

4.1.4.9 Within the study area, East Riding of Yorkshire has got the highest proportion of residents in high level occupation equivalent to 35%, marginally exceeding the national average. Kingston Upon Hull stands out as having the least residents in high skilled occupations (18%) with North East Lincolnshire standing out as the area with the highest number of residents in low skilled occupations (49%).

4.1.5 Employment by Sector

4.1.5.1 As shown in [Table 8](#) there are 390,000 people employed across the local study area, with East Riding of Yorkshire and Kingston upon Hull accounting for almost two thirds of employees within it. This equates to around 325,000 Full-time Equivalent (FTE) jobs. Employment density in the local study area is around 692 jobs for every 1,000 working age residents, which is below the national average by 29 jobs for every 1,000 residents, yet higher than both HEY and Greater Lincolnshire LEPs.

4.1.5.2 East Riding of Yorkshire has the lowest employment density of the local authorities in the local study area despite accounting for almost a third of the Local Study Area's employment with 648 jobs per 1,000 residents. Kingston upon Hull on the other hand is above the national average, with 728 jobs for every 1,000 working age residents.

Table 8: Employment and employment density 2019.

Area	Total Number of Employees (000s)	% of Employees in the Local Study Area	Employment Density (Jobs per 1,000 working age residents)	FTE Number of employees (000s)
East Riding of Yorkshire	127	33%	648	105
Kingston upon Hull, City of	123	31%	728	102
North East Lincolnshire	66	17%	690	55
North Lincolnshire	75	19%	718	63
Local Study Area	390	100%	692	325
Hull & East Yorkshire LEP	250		687	207
Greater Lincolnshire LEP	448		666	375
Great Britain	30,079		721	25,234

Source: ONS, Business Register Employment Survey 2020, Numbers are rounded to nearest 1,000.

4.1.5.3 Annual changes in FTE employment are much more pronounced in the local study area compared to the national picture as shown in [Figure 2](#). It took longer to recover from the economic recession, with positive growth in employment starting in 2013 and continuing every year until 2018 where there has been a slight sustained drop that has continued into 2019. In the last five years, employment has grown by around 14,100, an annual average of 2,800 or 0.9% compared to 1.1% nationally. While past changes have broadly followed the national trend, the most recent growth rates of -0.6% in 2018 and -0.5% in 2019 in the local study area appear to be diverting from the national trend at 0.7% and 1.2% which could be further exacerbated by the COVID-19 pandemic.

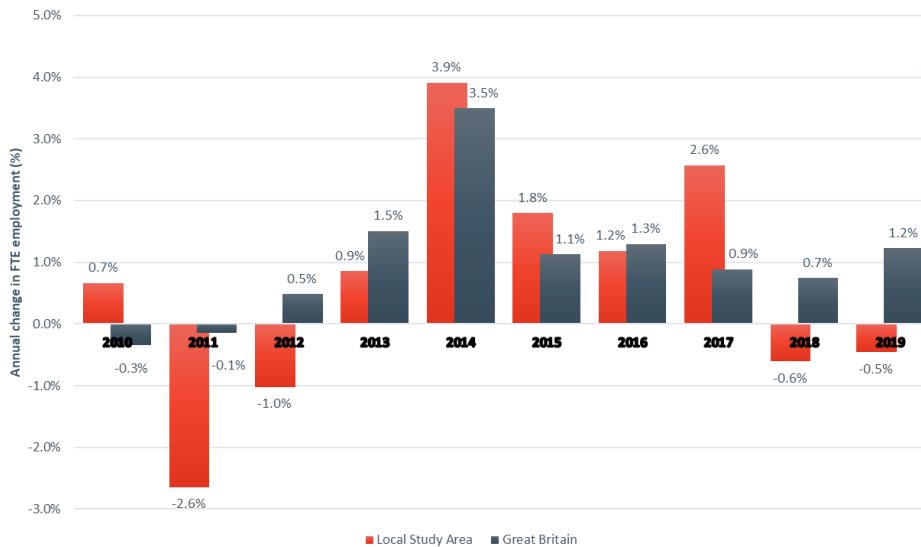


Figure 2: ONS, Business Register and Employment Survey 2010-2019.

4.1.5.4 Analysis of employment by sector highlights the importance of manufacturing across the local study area: it is the largest sector in the area, accounting for 19% of FTE employment (see [Figure 3](#)). Location Quotient (LQ) analysis shows the manufacturing sector locally is more than twice the concentration than is seen nationally, reflecting the specialisation of the area. This is driven by the presence of large petrochemicals and chemical manufacturers, pharmaceutical manufacturers, renewable energy supply chain, and high value steel manufacturers. There is also a relatively high concentration in the construction and transport and storage sectors which support the manufacturing industry. Aside from manufacturing, however, employment in the local study area is mainly concentrated in lower value sectors, with wholesale and retail, health and education together accounting for 35% of the FTE employment base.

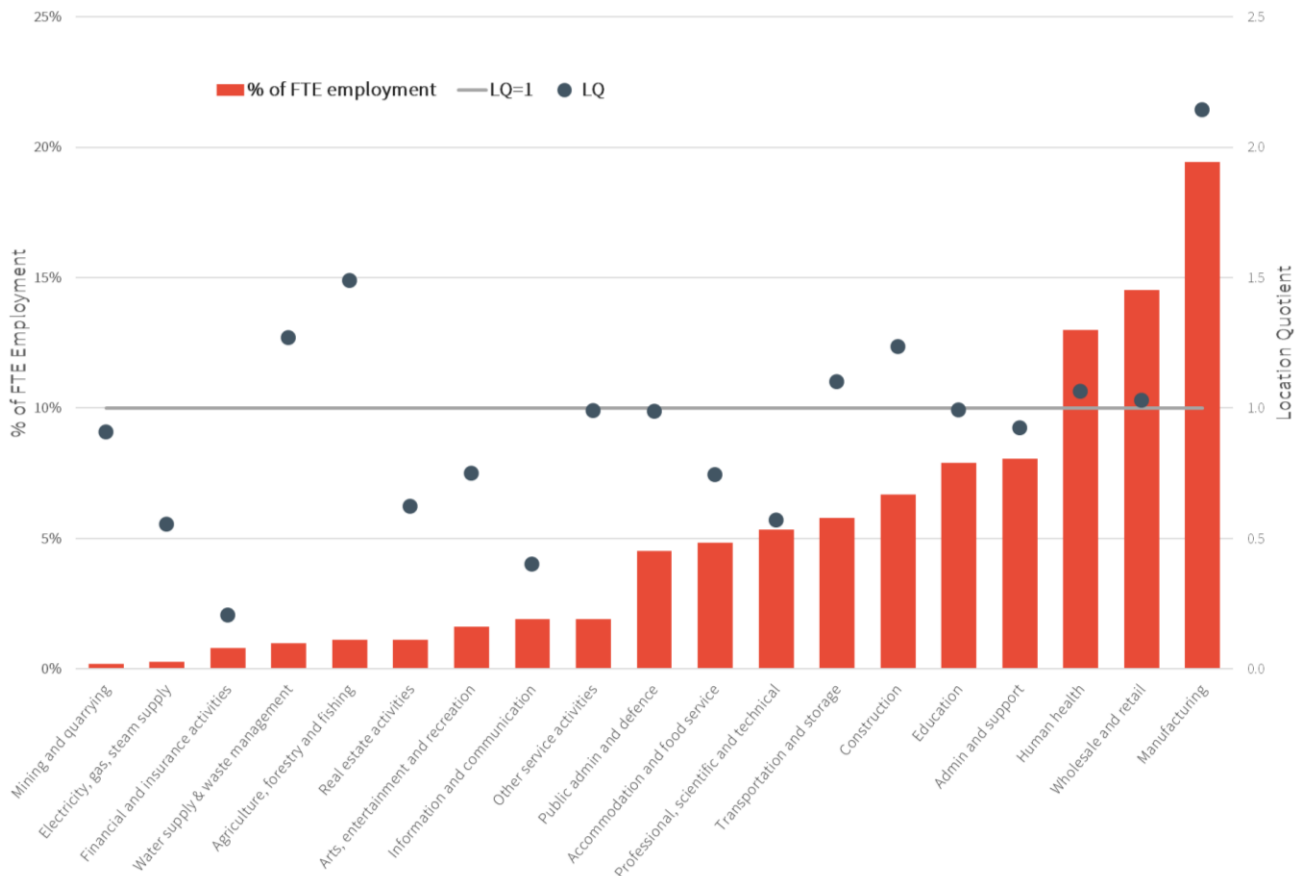


Figure 3: Sectoral distribution of employment, 2019.

4.1.6 Gross Value Added & Earnings

4.1.6.1 The local study area contributed £21 billion GVA to the UK economy in 2019 as shown in [Table 9](#). A more detailed geographical breakdown is available by Nomenclature of Territorial Units for Statistics (NUTS) 3 area:

- North and North East Lincolnshire together account for 36% of the study area’s GVA; and
- The East Riding of Yorkshire accounted for the largest share of the study area’s GVA out of the single local authorities (34%), followed by Kingston upon Hull (29%).

4.1.6.2 The GVA per head of population shows a significant gap between the local study area and the UK. GVA per head is 24% below the national average (approximately £22,500 compared to £29,600), which is a smaller productivity compared to HEY LEP (25% below average) and Great Lincolnshire (29% below average). This is due to the area having a larger share of residents employed in low skill occupations compared to the UK and given the sectoral composition of the employment in low value sectors and a high incidence of unemployment

and inactivity. The earnings paint a similar picture, where study area is below the rest of the UK in earnings and therefore, wealth generation.

Table 9: GVA and GVA per head 2019.

Area	Total GVA (£millions)	GVA per head
East Riding of Yorkshire	7,176	21,032
Kingston upon Hull, City of	6,179	23,786
North and North East Lincolnshire	7,647	23,042
Local Study Area	21,002	22,514
Hull & East Yorkshire LEP	13,355	22,221*
Greater Lincolnshire LEP	23,935	21,125*
United Kingdom	1,977,096	29,599

Source: ONS Nominal regional gross value added (balanced) 2021. *Estimated figures.

4.1.6.3 Data on median annual earnings for full-time employees shows the local study area's residents earn £2,700 less on average than the national indicator ([Table 10](#)). There is very little difference between resident and workplace earnings: residents earn £100 less on average than those who work in the local study area (Residence-based earnings provide data for employees who are living in the area; workplace earnings provide earnings for employees who are working in the area).

4.1.6.4 North Lincolnshire shows the highest workplace wages out of the local authorities in the local study area, although still below the national average (workplace earnings of £30,400 are below the average earnings for the UK of £31,500).

Table 10: Resident and Workplace Based Earnings 2020.

Area	Residence based earnings (£)	Workplace based earnings (£)
East Riding of Yorkshire	31,600	29,400
Kingston upon Hull, City of	25,500	28,200
North East Lincolnshire	28,800	26,200
North Lincolnshire	29,000	30,400
Local Study Area	28,800	28,900
United Kingdom	31,500	31,500

Source: ONS Annual Survey of Hours and Earnings 2020. Median earnings figures are not available for the Hull & East Yorkshire and Great Lincolnshire LEPs for 2020.

4.1.7 Deprivation

4.1.7.1 The Index of Multiple Deprivation map ([Figure 4](#)) shows that there are a number of areas in the local study area with some of the highest levels of deprivation seen across England. This is particularly true in Hull where almost half of its Lower Super Output Areas (LSOAs) are in the highest 10% of deprivation. Further detail is provided in [Table 11](#).

Table 11: Neighbourhoods in the Highest Decile of Deprivation, 2019.

	LSOAs in Highest Decile	Proportion of all LSOAs
Kingston upon Hull, City of	75	45%
North East Lincolnshire	32	30%
East Riding of Yorkshire	13	6%
North Lincolnshire	11	11%
Local Study Area Total	131	22%

Source: ONS, Index of Multiple Deprivation, 2019.

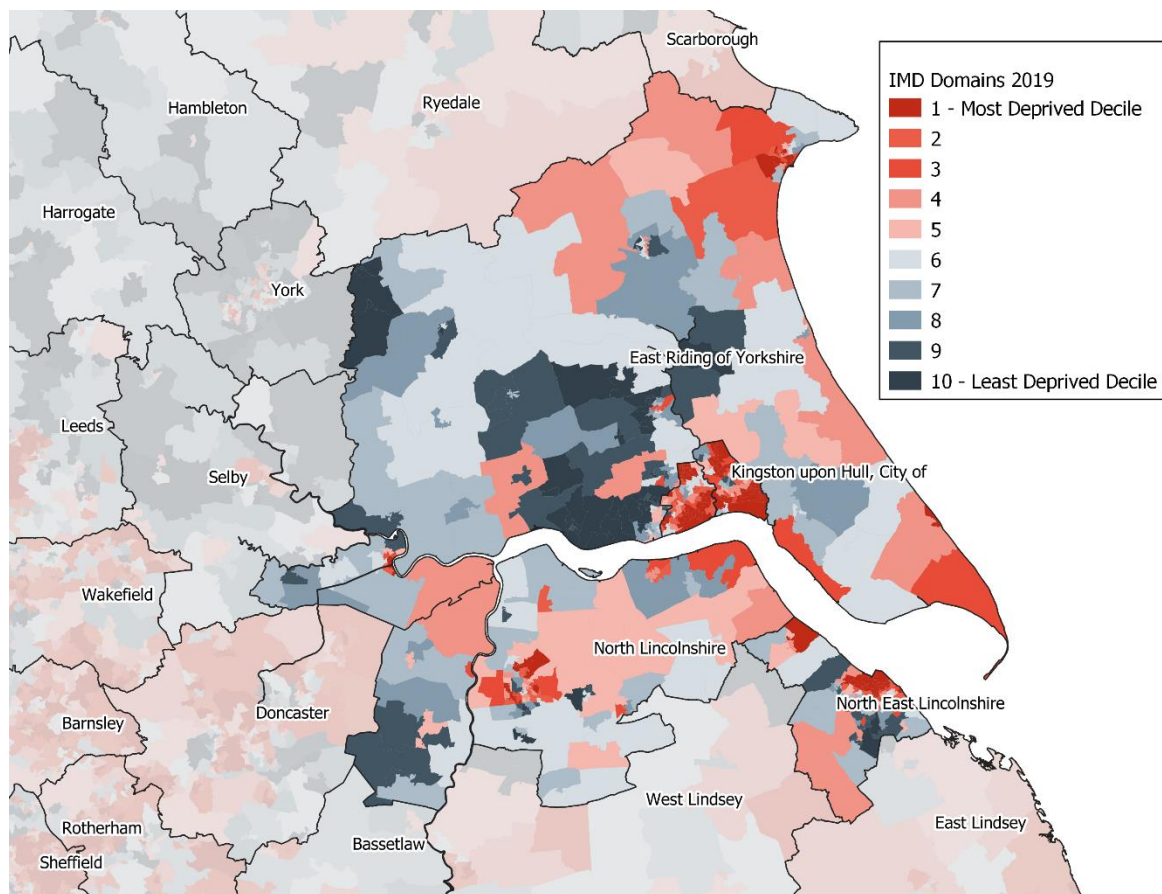


Figure 4: Map of Deprivation by Decile in the Local Study Area, 2019.

4.1.8 Supply Chain Capacity and Capability

4.1.8.1 The local economic development study area has been able to benefit from several offshore wind developments in recent years, building on its existing industry strengths and further capabilities. There are a number of major businesses established in the local study area that are involved in offshore wind developments. These include Siemens and its blade manufacturing facility in Hull; REDS Maritime providing cable remediation and support

services; GEV Wind Power – a turbine maintenance company, and other key energy players such as Centrica, Total and BP (Renewable UK 2016).

- 4.1.8.2 The £310m investment by Siemens Gamesa and ABP at Green Port Hull presents a significant opportunity for the sector locally, with the wind turbine installation and production plant currently employing around 1,000 people. This presents a significant opportunity to retain supply chain expenditure that is often sourced for UK wind farms from outside of the UK (Siemens 2017).
- 4.1.8.3 The local study area has also gained recognition nationally within the sector with The Offshore Renewable Energy Catapult and Offshore Wind Industry Council's Prospectus referencing the former Humber LEP as a successful example of creating long-term highly skilled jobs locally and establishing a supply chain (Offshore Renewable Energy Catapult & Offshore Wind Industry Council 2018).
- 4.1.8.4 A report for Energy & Utility Skills on the skills and labour requirements of the offshore wind industry estimates that direct employment in the sector could increase from 10,000 in 2017 to 36,000 in 2032, nationally (Energy & Utility Skills 2018). An increase of 26,000 jobs, 5,750 of which are expected to be in the Yorkshire & Humber region.
- 4.1.8.5 Ørsted has an established presence in the local economic development study area. Its operational offshore wind hub in Grimsby was established to support Westernmost Rough, Race Bank and Hornsea Project One offshore wind farms. Ørsted is also in advanced stages of developing the concept of an "East Coast Hub" as an extension of its offshore wind operations centre at the Royal Docks in Grimsby which will serve Westernmost Rough, Lincs, Race Bank, Hornsea Project One and Project Two offshore wind farms.
- 4.1.8.6 Although at an early stage in terms of policy development, the green economic recovery from the COVID-19 pandemic is likely to present significant opportunities for the renewables sector nationally and locally.

4.1.9 Key Supply Chain Sectors

- 4.1.9.1 Given the history of offshore wind supply chains in the local economic development study area and the prominence of the manufacturing sector, there may be opportunities for businesses across several sectors to benefit from the construction and O&M activities from Hornsea Four.
- 4.1.9.2 Several sectors have the potential to be impacted by construction and O&M including construction and engineering sectors (detailed in [Table 12](#)). It is likely that a share of this employment is already engaged in offshore wind supply chain activities given the presence of major industry players.

Table 12: Employment in key strategic sectors in Great Britain and the Local Study Area 2019.

Sector	Great Britain Employment (000s)	Great Britain % of total	Local Study Area Employment (000s)	% of total in Local Study Area	Local Study Area LQ
Manufacturing (non-engineer)	1,473	5%	45	11%	2.3
Construction	1,564	5%	25	6%	1.2
Land based transport	1,160	4%	19	5%	1.3
Engineering	952	3%	22	5%	1.7
Energy Generation	329	1%	4	1%	0.9
Marine Transport	12	0%	0.2	0%	1.3

Source: ONS, Business Register and Employment Survey, 2020. Numbers are rounded to nearest 1,000.

4.1.9.3 There are several specialisms within the local study area's employment base which position the area well to benefit from Hornsea Four. The area shows specialisms within several manufacturing subsectors, including fabricated metal production and manufacturing of wires and devices, both of which have a LQ value of 1.4.

4.1.9.4 The transportation sector also shows some local specialism, with FTE employment concentrations in freight transport by road and support activities for transportation at 1.7 times that of Great Britain.

Table 13: Employment in sectors with supply chain opportunities for construction and operation and maintenance, 2019.

Sector	Great Britain FTEs (000s)	Local Study Area FTEs (000s)	Local Study Area LQ vs Great Britain
<i>Manufacturing:</i>			
Fabricated metal products	44	0.7	1.4
Motors, generators, transformers etc.	23	0.2	0.6
Wiring and wiring devices	11	0.3	2.1
General purpose machinery	48	0.7	1.2
<i>Construction sectors:</i>			
Building of ships and boats	30	0.2	0.4
Other civil engineering projects	120	1.7	1.2

Sector	Great Britain FTEs (000s)	Local Study Area FTEs (000s)	Local Study Area LQ vs Great Britain
<i>Transport sectors:</i>			
Freight transport by road	258	5.4	1.7
Sea and coastal freight water transport	5	0.0	0.7
Support activities for transportation	229	4.8	1.7
<i>Professional services:</i>			
Management consultancies	443	2.7	0.5
Architectural, engineering consultancy	449	5.2	1.0
Other professional, scientific and technical	105	0.6	0.5
<i>Accommodation and food services:</i>			
Accommodation	361	2.9	0.7
Food and beverage services	1272	12.8	0.8
<i>Other sectors:</i>			
Electric generation, transmission, distribution	98	0.7	0.6
TOTAL	3,495	38.7	n/a

Source: ONS, Business Register and Employment Survey, 2020. Numbers are rounded to nearest 1,000.

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