

Rampion 2 Wind Farm Category 6: Environmental Statement Volume 2, Chapter 17: Socio-economics (tracked) Date: August 2024 Revision B

Document Reference: 6.2.17 Pursuant to: APFP Regulation 5 (2) (a) Ecodoc number: 004866040-02

### **Document revisions**

Revision	Date	Status/reason for issue	Author	Checked by	Approved by
Α	04/08/2023	Final for DCO Application	Hatch	RED	RED
В	01/08/2024	Deadline 6 updates including commitments	Hatch	RED	RED

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## **Executive Summary**

This chapter of the Rampion 2 Environmental Statement (ES) examines the likely significant effects on socio-economics that may be experienced as a result of Rampion 2.

A review of literature and existing datasets has been undertaken to establish the socioeconomic baseline. Information has been gathered in more detail through use of site walkover-surveys of public rights of way (PRoW) and publicly accessible land within the DCO limits and consultation with a range of local organisations.

The socio-economic baseline assessment found that Sussex has a total population of around 1.71 million people, of whom 60% are of core working age (i.e. aged 16-64). Data from the Office for National Statistics (ONS) indicates that Sussex contributed over £40 billion gross value added (GVA) to the UK economy per annum. In relation to GVA per head of population, data shows a significant gap between Sussex and the UK. The employment rate in Sussex is approximately 79% when compared with the national average of 76%; while the average unemployment rate is 3.9%, slightly higher than the average for the UK as a whole (3.7%).

Onshore recreational receptors considered in the assessment include numerous cycle routes, PRoW and promoted walking routes (England Coast Path, Monarch's Way, the Downs Link and the South Downs Way National Trail), which are used for a variety of activities including walking, running cycling and horse riding.

The Sussex coast is also home to numerous visitor attractions, the most popular of which is Brighton Pier which consistently brings in between 4 and 5 million visitors per year.

The assessment focuses on the construction, operational and decommissioning phases of Rampion 2. The assessment considers the likely significant effects at a national, regional (Sussex) and local level on jobs, economic output, the visitor economy, in addition to both onshore and offshore recreation during the construction, operation and decommissioning phases of Rampion 2.

A range of environmental measures which relate to socio-economic impacts are embedded as part of the Rampion 2 design to remove or reduce significant negative environmental effects as far as possible. Examples of these measures include the following:

- RED will work with local partners and seek to maximise the ability of local people to access employment opportunities associated with the construction and operation of Rampion 2.
- An outline Code of Construction Practice (COCP) will be adopted to minimise temporary disturbance to residential properties, recreational users and existing land users. It will provide details of measures to protect environmental receptors.
- Preparation and implementation of an Outline Public Rights of Way Management Plan (Document Reference: 7.8) that includes measures to manage and mitigate effects on the PRoW network.



Rampion 2 is predicted to have a number of likely significant effects on onshore recreational activities. No direct significant effects were identified for volume and value of the Sussex tourism economy.

## 17. Socio-economics

## 17.1 Introduction

- 17.1.1 This chapter of the Environmental Statement (ES) presents the results of the assessment of the likely significant effects of Rampion 2 with respect to socioeconomics, including jobs, economic output, the visitor economy, as well as onshore recreation. The likely significant effects of Rampion 2 in relation to offshore recreation are assessed in **Chapter 7: Other marine users, Volume 2** of the ES (Document Reference: 6.2.7). It should be read in conjunction with the project description provided in **Chapter 4: The Proposed Development, Volume 2** (Document Reference: 6.2.4) and the relevant parts of the following chapters:
  - Chapter 7: Other marine users, Volume 2 for possible effects relating to recreation and the visitor economy;
  - Chapter 15: Seascape, landscape and visual impact assessment, Volume 2 of the ES (Document Reference: 6.2.15) for possible effects to offshore viewpoints to recreation and the visitor economy;
  - Chapter 18: Landscape and visual impact, Volume 2 of the ES (Document Reference: 6.2.18) for possible effect from onshore viewpoints to recreation and the visitor economy, and tourism industry;
  - Chapter 21: Noise and vibration, Volume 2 of the ES (Document Reference: 6.2.21) (for possible effects to onshore noise interacting with onshore recreation and the visitor economy); and and
  - Chapter 23: Transport, Volume 2 of the ES (Document Reference: 6.2.23) and Chapter 32: ES Addendum, Volume 2 (Document Reference 6.2.32) [REP5-038] (for possible effects to onshore traffic interacting with recreation and the visitor economy).; and
- 17.1.2 The chapter should also be read in conjunction with the Outline Skills and Employment Strategy. This provides an outline strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by Rampion Extension Development Limited (RED).
- 17.1.3 The socio-economics chapter of the ES has been produced by Hatch Associates on behalf of RED.
- 17.1.4 This technical chapter describes:
  - the legislation, planning policy and other documentation that has informed the assessment (Section 17.2: Relevant legislation, planning policy, and other documentation);
  - the outcome of consultation and engagement that has been undertaken, including how matters relating to socio-economics within the Statutory

Consultation, have been addressed (Section 17.3: Consultation and engagement);

- the scope of the assessment for socio-economics (Section 17.4: Scope of the assessment);
- the methods used for the socio-economic baseline data gathering (Section 17.5: Methodology for baseline data gathering);
- the overall socio-economic baseline (Section 17.6: Baseline conditions);
- embedded environmental measures relevant to socio-economics and the relevant maximum design scenario (Section 17.7: Basis for ES assessment);
- the assessment methods used for the ES (Section 17.8: Methodology for ES assessment);
- the assessment of socio-economics effects (Section 17.9 17.11: Assessment of effects and Section 17.12: Assessment of cumulative effects);
- consideration of transboundary effects (Section 17.13: Transboundary effects);
- inter-related effects (Section 17.14: Inter-related effects);
- a summary of residual effects for socio-economics (Section 17.14.1: Summary of residual effects);
- a glossary of terms and abbreviations is provided in **Section 17.16: Glossary** of terms and abbreviations; and
- a references list is provided in **Section 17.17: References**.
- 17.1.5 The chapter is also supported by the following appendices:
  - Appendix 17.1: Socio-economics method statement, Volume 4 of the ES: (Document Reference 6.4.17.1);
  - Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES: (Document Reference 6.4.17.2);
  - Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES: (Document Reference 6.4.17.3); and
  - Appendix 17.4: Assessment of sensitivity of Public Rights of Way, Volume 4 of the ES: (Document Reference 6.4.17.4).

# 17.2 Relevant legislation, planning policy and other documentation

### Introduction

17.2.1 This section identifies the legislation, policy and other documentation that has informed the assessment of effects with respect to socio-economics. Further information on policies relevant to the EIA and their status is provided in **Chapter** 

**2: Policy and legislative context, Volume 2** of the ES (Document Reference: 6.2.2) of this ES.

## Legislation and national planning policy

17.2.2 **Table 17-1** lists the legislation relevant to the assessment of the effects on socioeconomics receptors.

Table 17-1	Legislation relevant to socio-economics	
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Legislation description	Relevance to assessment
National Parks & Access to the Countrys	ide Act 1949 (as amended) (NPACA49)
Part IV, section 51 provided the mechanism for the creation of long- distance routes, now more commonly known as 'National Trails'.	Part IV of the Act provides the legal basis for designation of both the South Downs Way National Trail and as amended by MACA09 (see below), the England Coast Path (ECP). The status of these routes as afforded by the legislation, requires appropriate importance to be given to these resources when assessing their sensitivity and the significance of effects upon them. Please refer to <b>Table 17-29</b> and <b>Table 17-31</b> .
Highways Act 1980 (HA80)	
Section 130 of the Act places a duty on the local highway authority (LHA) to assert and protect PRoW.	This section empowers and places a duty on the LHA to take action if the public's rights to enjoyment of a PRoW are unlawfully impeded. Any proposed disturbance to PRoW must be legal and have the approval of the LHA.
Countryside & Rights of Way Act 2000 (C	ROW)
The Act required the drawing up by local highways authority of Rights of Way Improvement Plans (ROWIP). The Act also established certain	The ROWIP is an important policy document that sets the context for any mitigation or remediation works that may be necessary.
categories of land as Access Land to which the public has certain rights of access.	A number of areas of Access Land may be temporarily impacted by the Proposed Development. These have been considered in <b>Table 17-30</b> , and are shown in <b>Figure 17.4</b> , <b>Volume 3</b> of the ES (Document Reference: 6.3.17).

## Marine & Coastal Access Act 2009 (MACA09)

Legislation description	Relevance to assessment
Part 9 of the Act provides the legislative basis for the creation of the ECP, including by amending the NPACA49.	The path of the ECP will be crossed by the offshore export cables at or near landfall. The crossing will be via horizontal directional drilling (HDD).

- 17.2.3 This assessment is also undertaken with specific reference to the relevant National Policy Statements (NPS). These are the principal decision-making documents for Nationally Significant Infrastructure Projects (NSIPs), which include:
  - Overarching NPS for Energy (EN-1) (Department of Energy and Climate Change ((DECC, 2011c));
  - NPS for Renewable Energy Infrastructure (EN-3) (DECC, 2011b); and
  - NPS for Electricity Networks Infrastructure (EN-5) (DECC, 2011a).
- 17.2.4 For socio-economics there is limited guidance on the methods to be used when assessing the effects of major infrastructure projects (such as Rampion 2) on national and local economies. **Table 17-2** lists the national planning policy relevant to the assessment of the effects on socio-economic receptors considered in the assessment.

#### Table 17-2 National planning policy relevant to socio-economics

**Policy description** 

Relevance to assessment

EN-5 NPS for Electricity Networks Infrastructure (EN-5) (DECC, 2011a)

EN-5 contains relevant policy in relation to providing a fit for purpose and robust electricity network, however there is no information specific to this socio-economic chapter.

EN-3 NPS for Renewable Energy Infrastructure (EN-3) (DECC, 2011b)

EN-3 contains relevant policy in relation to the transmission of infrastructure for renewable energy installations, however there is no information specific to this socio-economic chapter.

EN-1 NPS for Energy (DECC, 2011c)

EN-1 includes guidance on the socioeconomic and tourism matters that need to be considered, which include;

- The creation of jobs and training opportunities;
- The effects on tourism;

Rampion 2 is likely to have the following socio-economic effects:

 Jobs and the economy – the construction, operation and maintenance, and decommissioning of Rampion 2 will support employment through project expenditure with supply chain businesses located within Sussex area (defined in Section 17.4 as the

- The effects of the proposed project on maintaining coastal recreation sites and features;
- Cumulative effects.
- In addition, EN-1 indicates that the assessment should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the proposal's socio-economic impacts correlate with local planning policies.

Finally, EN-1 states that the interrelationships of socio-economic impacts with other impacts should also be considered.

#### **Relevance to assessment**

contiguous area covered by East Sussex, West Sussex counties and the Brighton and Hove Unitary Authority) and nationally. This is considered in **Sections 17.9**, **17.10** and **17.11** of this ES chapter.

- Tourism Tourism plays a major role within the local economy of the primary study area (i.e. Sussex). As such, the assessment considers the effects of Rampion 2 on the visitor economy in Sections 17.9, 17.10 and 17.11 of this ES chapter respectively.
- Coastal recreation sites The construction and decommissioning (and much less so operation and maintenance phase) have potential to impact on certain offshore, inshore and onshore recreation activities. As such, the effect of construction, operation and maintenance and decommissioning on offshore, inshore and onshore recreation activities is considered in Sections 17.9, 17.10 and 17.11 of this ES chapter respectively.
- Cumulative effects Alongside other developments, the construction, operation and maintenance, and decommissioning of Rampion 2 is likely to generate cumulative effects on the various receptors considered in the socio-economic assessment of Rampion 2. As such, the cumulative effects of Rampion 2 are considered in Section 17.12.
- Baseline conditions The current socio-economic baseline conditions against which the effects of Rampion 2 are considered are presented in Section 17.6 of this ES chapter.
- Inter-relationships The interrelationship of socio-economics with

#### **Relevance to assessment**

other effects are considered in **Section 17.14** of this ES chapter.

#### UK Industrial Strategy: Tourism Sector Deal (HM Government, 2019b)

The Tourism Sector Deal builds on the UK Industrial Strategy by creating a framework that positions the tourism industry to take advantage of new markets whilst also leveraging initiatives designed to deliver on the Industrial Strategy's grand challenges relating to the data driven economy (i.e. artificial intelligence (AI)), clean growth and ageing society.

The Tourism Sector Deal set out an ambitious agenda that will deliver increases in productivity and investment that will benefit local economies across the country. By 2025, The Tourism Sector deal aimed to:

- More than double the size of the industry nationally to £268 billion;
- Grow employment in the sector to 3.8 million;
- Deliver a 1% increase in productivity worth £12 billion to the national economy.

National Planning Policy Framework (NPPF) (MHCLG, 2021)

Whilst NPPF does not contain specific policy statements for nationally significant infrastructure projects it does outline three overarching dimensions (i.e. economic, social and environmental) which are a relevant consideration for the socio-economic assessment. Specifically the following paragraphs are particularly relevant to the assessment of socio-economics:

 Paragraph 81 of the NPPF states that planning policies and decisions should help create the conditions in which businesses Rampion 2 will help businesses, especially those forming part of the Proposed Development's supply chain (as well as other businesses with potential to contribute to the supply chain), to seize upon the business opportunities associated with the development of Rampion 2. The assessment has considered the extent to which local and national businesses will be included in the supply chain in **Appendix 17.2: Socio**economics cost and sourcing report, **Volume 4** of the ES (Document Reference 6.4.17.2) and the subsequent economic

Tourism is a key sector in the study area, particularly the area around Brighton and Hove. The construction, operation and decommissioning of Rampion 2 may have an impact on the volume and value of the tourism economy. The assessment considers this qualitatively in **Sections 17.9**, **17.10** and **17.11** respectively.

can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. The NPPF notes that this is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential.

 Paragraph 92 of the NPPF states that planning policies and decisions should aim to achieve healthy, inclusive and safe places which includes enabling and supporting healthy lifestyles, especially where this would address identified local health and well-being needs.

#### **Relevance to assessment**

benefits considered in **Sections 17.9**, **17.10** and **17.11** respectively.

#### Build Back Better: Our Plan for Growth (HM Treasury, 2021)

This policy paper sets out the UK Government's plan 'to deliver growth that creates high-quality jobs across the UK' by building on the three core pillars of infrastructure, skills and innovation.

The plan supports advancing the development of the offshore wind sector, with the objective being to quadruple capacity (up to 40GW) by 2030, supporting the creation of up to 60,000 jobs along the way. It should be noted that the 40GW objective has more recently been increased to 50GW.

Rampion 2 will generate opportunities to create jobs in the offshore wind sector, as the UK builds its offshore wind capacity. Since this plan has been released the planned capacity for 2030 has increased to 50 GW (as set out in the British Energy Security Strategy). The contribution of the project to job creation (and economic impact) is considered in **Sections 17.9**, **17.10** and **17.11** respectively.

Net Zero Strategy: Build Back Greener (HM Government, 2021)

Over the last decade the UK's commitments to reducing UK GHG emissions levels have strengthened. This has made more apparent the need to shift towards a greener energy mix in order to deliver on the UK's targets. In June 2019 the UK became the first major economy in the world to pass a national net zero emissions law. The new 2020 Nationally Determined Contributions (NDCs) committed the UK to reducing economy-wide greenhouse gas emissions by at least 68% by 2030 (compared to 1990 levels). In June 2021 the UK Government went further on its commitments by setting a new target to cut emissions by 78% by 2035 compared to 1990 levels.

In October 2021, the UK government published its Net Zero Strategy: Build Back Greener (HM Government, 2021). The strategy sets out how the UK will deliver on its commitment to reach net zero emissions by 2050. To fully decarbonise the power system by 2035, the strategy looks to deliver 40GW of offshore wind, including 1GW of innovative floating offshore wind by 2030, among others. It should be noted that the 40GW objective has more recently been increased to 50GW.

#### **Relevance to assessment**

Rampion 2 will generate a source of renewable energy which is in line with the objectives of the UK's Net Zero Strategy and will contribute towards the target to build up the UK's offshore wind capacity. Since this strategy has been released the planned capacity for 2030 has increased to 50 GW (as set out in the British Energy Security Strategy).

#### British Energy Security Strategy (HM Government, 2022a)

The ambition is to deliver up to 50GW by 2030, including up to 5GW of innovative floating wind. This will equate to over half of the UKs renewable generation capacity will be wind both onshore and offshore. Rampion 2 will contribute to the UK Government's overall vision for energy security, especially by supporting growth in low carbon, contributing towards clean growth aspirations and further support growth both locally and nationally within the offshore wind sector. The Government's policy objectives to

grow the sector may stimulate the growth of UK offshore wind supply chains and therefore present opportunity to capture greater quantities of the types of economic

#### **Relevance to assessment**

benefits that are set out in **Sections 17.9**, **17.10** and **17.11** respectively.

17.2.5 **Table 17-3** lists the emerging national planning policy considerations relevant to the assessment of the effects on socio-economics receptors.

#### Table 17-3Emerging national planning policy relevant to socio-economics

Policy description	Relevance to assessment
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Draft EN-1 NPS for Energy (EN-1), (Department for Energy Security and Net Zero (DESNZ), 2023a)

The emerging draft EN-1 NPS makes the following (additional to the 2011 EN-1) points:

- In regard to the creation of jobs and training opportunities applicants may wish to provide information on the sustainability of the jobs created, including where they will help to develop the skills needed for the UK's transition to Net Zero.
- Socio-economic impacts may include the contribution to the development of low-carbon industries at the local and regional level as well as nationally.
- indirect beneficial socio-economic impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains should be considered.
- accommodation strategies should be developed where appropriate, especially during construction and decommissioning phases, that would include for the need to provide temporary accommodation for construction workers if required.
- the provision of additional local services and improvements to local infrastructure, including the

The direct operational jobs quantified in involve jobs that will help to develop the skills needed for the UK's transition to Net Zero.

Low carbon industries are involved in the development and operation of Rampion 2; however this is not quantified in the assessment due to the difficulty in defining the sector.

Indirect impacts are quantified in the assessment of economic benefits in **Sections 17.9** and **17.10** of the assessment.

RED have submitted an Outline Skills and Employment Strategy as part of the DCO application. The purpose of the Outline Skills and Employment Strategy document is to provide an outline strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED.

#### **Relevance to assessment**

provision of educational and visitor facilities.

#### Draft EN-3 NPS for Renewable Energy Infrastructure (EN-3), (DESNZ, 2023b)

The Draft National Policy Statement for Renewable Energy Infrastructure (EN-3) (BEIS, 2021) provides guidance on how seascapes should be assessed and in particular the need for the assessment to cover how people perceive and interact with the coast and seascape. EN3 identifies seascape as an important environmental and cultural asset. The construction and decommissioning (and to a lesser extent, the operation and maintenance phase) have the potential to affect how people perceive and interact with the coast and seascape. As such, the effect of construction, operation and maintenance and decommissioning on how people perceive and interact with the coast and seascape from a visitor perspective is assessed in **Sections 17.9**, **17.10** and **17.11** of this ES chapter respectively.

### Local planning policy

17.2.6 **Table 17-4** lists the local planning policy relevant to the assessment of the potential effects on socio-economic receptors.

#### Table 17-4 Local planning policy relevant to socio-economics

Policy description	Relevance to assessment
West Sussex Rights of Way Management	Plan, 2018-2028 (WSCC, 2018b)
<ul> <li>The Plan is the West Sussex Rights of Way Improvement Plan (RoWIP), as required by CROW, and makes the following relevant statements:</li> <li>WSCC has a policy to provide the least restrictive access, preferring gaps over gates and gates over stiles.</li> </ul>	Rights of way management proposals are set out in detail in the Outline Public Rights of Way Management Plan (Document Reference: 7.8). Reinstatement of paths will be designed to be to at least as good a standard as before their disturbance.
• WSCC has a commitment to work closely with the South Downs National Park Authority (SDNPA) to achieve a high-quality PRoW and access network.	Plans will be developed to minimise any short-term impact on path users and to ensure their rights and convenience are fully reinstated following disturbance.

**Relevance to assessment** 

WSCC seeks to protect path users' rights and their convenience and will look to propose improvements and enhancements for all non-motorised users, whether this is to an existing route, such as creating structure free access, or the creation of a new route (including upgrades such as a footpath to a bridleway).

Horsham District Planning Framework (Horsham District Council, 2015)

The Horsham District Plan seeks to ensure that future development within the district is based on sustainable development principles that strike the correct balance between economic, social and environmental priorities (as reflected in Sustainable Development Policy 1 of the plan), whilst also supporting employment that fosters economic growth and regeneration. Local job creation and the development of a low carbon economy is among the benefits recognised with respect to Appropriate Energy Use – Policy 36. The Proposed Development will support Horsham District Plan in its ambition to ensure that new development promotes the supply of renewable, low carbon and decentralised energy. In addition, the Proposed Development has potential to general supply chain expenditure and support the growth of the district's economy.

South Downs Local Plan (SDNPA, 2019)

Strategic Policy SD 20 Walking, Cycling and Equestrian Routes: 6. Development proposals will be permitted provided that they:

a) Maintain existing PRoW; and

b) Conserve and enhance the amenity value and tranquillity

The SDLP states that "Developments affecting PRoW must refer to the *Rights of Way Improvement Plan* for the local area...".

Strategic Policy SD45 Green Infrastructure (GI):

3. Development proposals that will harm the GI network must incorporate

The onshore cable route by necessity crosses many PRoW. The iterative design process has sought to minimise crossings, to avoid medium or long-term disruption and minimise short-term impact. Details for minimising disruption are included in the **Outline Public Rights of Way Management Plan** (Document Reference: 7.8).

The West Sussex ROWIP has been used to guide project design.

Embedded environmental measures are presented in **Section 17.7**.

**Relevance to assessment** 

measures that sufficiently mitigate or offset their effects.

Arun Local Plan (Arun District, 2018)

The Arun Local Plan identifies economic growth for job creation as the district's number one priority, which is to be achieved by encouraging employment growth in sectors such as manufacturing and marine-based activities. Policy ECC DM1 Renewable Energy in the *Arun Local Plan* states that renewable energy projects will be expected to contribute to the social, economic and environmental development, and overall regeneration of the district. The Proposed Development has potential

to support this whilst also encouraging and growing a low carbon economy.

#### Mid Sussex District Plan (Mid Sussex District Council, 2018)

The Mid Sussex District Plan is underpinned by four priority themes that promote the development of sustainable communities. In particular. the Mid Sussex District Plan aims to provide opportunities for people to live and work within the communities, reducing the need for commuting. Specifically, Policy DP1: Sustainable Economic Development aims to promote job creation by encouraging high quality development, supporting existing businesses, encouraging inward investment and seeking the provision of appropriate infrastructure. Policy DP40: Renewable Energy Schemes states that wind energy development involving one or more turbines will be granted if the development site is an area identified as suitable for wind energy development in a Neighbourhood Plan and, following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed, and therefore the proposal has their backing.

The Proposed Development has potential to generate and support local employment as a result of increased expenditure locally as a result of both construction and operation activities.

## Other relevant strategies, policies and guidance

- 17.2.7 A summary of other relevant information and guidance relevant to the assessment of socio-economics was undertaken and is provided below:
  - West Sussex Economic Growth Plan (WSCC, 2018a) Designed to support the achievement of the ambitions set out within the West Sussex Plan. It identifies four priority themes which are relevant to the proposed development:
    - Strengthening the vibrancy of coastal towns;
    - Embedding the green energy sector, proving a platform for innovation and a new economic identity for West Sussex;
    - Promote West Sussex as a great place to visit, work and live; and
    - Support the development of a high-quality and enterprising workforce that meets both current and future needs.

The Growth Plan argues that Rampion 1 and Your Energy Sussex Partnership, 'are evidence that the county is one where new and innovative approaches to energy efficiency and generation can be successfully implemented. Expanding this opportunity sector could therefore place West Sussex as a national renewable energy lab, and further support specialist manufacturing activity, ultimately driving income generation and growth'. The Proposed Development potentially contributes to all four priorities outlined, in addition to the Plan's ambition to embed the green energy sector within the local economy. The policy priority placed on the themes is considered in the assessment of sensitivity of economic receptors detailed within **Sections 17.9**, **17.10** and **17.11** respectively.

- West Sussex Economy Reset Plan (WSCC, 2020) The economy reset plan was produced as an initial response to the economic impacts of COVID-19. The plan focusses on where WSCC is well placed to respond to the challenges that faced and continue to face the broader economy, and on where there are opportunities to work collaboratively in response to the challenges. The most relevant themes of the economy reset plan include protecting and reviving the coastal towns and rural economy, enabling business start ups, survival and adaptability, enabling employment and skills recovery and resilience, protecting and reviving tourism and the visitor economy and embedding climate change and the environment into the reset.
- East Sussex Growth Strategy (ESCC, 2014b) The East Sussex Growth Strategy is built around the three pillars of business, place and people. The Proposed Development has potential to support employment in East Sussex, especially during its operation and maintenance phase (assuming that Newhaven harbour is chosen as the wind farm's operation and maintenance base) and will contribute to local economic growth as measured in increased GVA.
- East Sussex Cultural Strategy (ESCC, 2014a) The East Sussex Cultural Strategy prioritises tourism and aims to develop and promote the cultural tourism offer, raise its profile and attract more visitors and businesses. East Sussex aims to have a high value visitor economy and have a distinctive offer

by being renowned for its natural assets, heritage, culture, market and coastal towns. Offshore wind farm projects often raise concerns about the potential impact they could have on local tourism economies. The assessment considers the potential impact of construction, operation and decommissioning on the volume and value of tourism economy in **Sections 17.9**, **17.10** and **17.11** respectively.

- Brighton and Hove City Plan Part 1 (Brighton and Hove City Council, 2016) The Brighton and Hove City Plan provides the overall strategic and spatial vision for the future of Brighton and Hove through to 2030. This plan sets out a number of strategic objectives which are of relevance to the proposed development, including:
  - SO1 ensure that all major new development in the city supports the regeneration of the city.
  - SO3 develop Brighton and Hove as a major centre on the south coast for sustainable business growth and innovation.
  - SO7 contribute to a reduction in the ecological footprint of Brighton and Hove and champion the efficient use of natural resources and environmental sustainability.
  - The Proposed Development has potential to generate employment within the Brighton and Hove city area (and across Sussex more widely), through its construction, O&M and decommissioning phases.
  - Policy CP2 Planning for Sustainable Economic Development states the council will support proposals that drive the city's transition to a low carbon economy and to secure the benefits this will bring. It recognises the potential for local job creation through a move towards decentralised and renewable energy provision in the city, including the Rampion offshore wind farm (among others).

Rampion 2 will also support the City Plan's ambitions to support city regeneration efforts, foster innovation and business growth, and reduce the city's overall carbon footprint.

 Coast to Capital Local Enterprise Partnership (LEP) Strategic Economic Plan (Coast to Capital LEP, 2018) – The Coast to Capital LEP's (covering the areas of Brighton and Hove, West Sussex, Lewes, districts in Surrey, the Gatwick Diamond and the London Borough of Croydon) including Strategic Economic Plan (SEP) identifies eight economic priorities for the area, including: Priority 3 – Invest in sustainable growth, Priority 5 – Pioneer innovation in core strengths; and Priority 8 – Build a strong national and international profile. The Strategic Economic Plan identifies that energy generation is critical to the economy but argues that emission reduction targets should be achieved without sacrificing economic growth. The Strategic Economic Plan highlights some of the LEP area's projects supporting a reduction in carbon emissions, including the existing Rampion 1 project and also highlights the LEP's *Energy Strategy* (published with the South East and Enterprise M3 LEPs) which prioritises renewable energy generation as one of the five themes in the strategy.

- South East LEP Economic Recovery and Renewal Strategy (South East LEP, 2021) The South East LEP's Economic Recovery and Renewal Strategy (covering the areas of East Sussex, Essex, Kent, Medway, Southend and Thurrock) sets out four priorities and seven objectives that aim to ensure the stability of the economy in the short-term and drive sustainable growth in the medium to long term. Among the Strategy's objectives is putting clean growth at the heart of what the LEP does. 'Strategic Priority 4: Coastal Catalyst' looks to maximise the economic and social benefits generated from infrastructure projects as well as increase understanding of the area's natural resources and assets and how they can act as a driver for net zero initiatives and productivity improvements. The Strategy recognises the area's existing strength in offshore wind and engagement with the ongoing sector deals. It also notes offshore wind energy as one of the long-term, sustainable focuses for growth of Freeport East.
- HM Treasury (2022b) The Green Book The assessment draws on the methods and principles set out within the latest iteration of The Green Book (last updated in March 2022). The Green Book provides HM Treasury guidance on how to appraise and evaluate policies, projects and programmes and therefore provides a useful framework for implementing methods and principles to assess the economic benefits of Rampion 2.
- HM Government (2022) Levelling Up White Paper The Levelling Up White Paper published in 2022 sets out how the UK Government intends to spread opportunity more equally across the UK. This includes a commitment to £26bn of public capital investment for the green industrial revolution and the UK transition to Net Zero. A key mission of the Levelling Up agenda is to increase the number of people successfully completing high-quality skills training. The Levelling Up White Paper states an aim to have 200,000 more people successfully completing high-quality skills training annually, driven by 80,000 more people completing courses in the lowest skilled areas. Rampion 2 provides an opportunity to help achieve the potential objectives that will be set out in the Levelling Up White Paper. It will improve living standards by creating high quality jobs and supporting the growth of the offshore wind sector. The economic benefits of Rampion 2 are set out in Sections 17.9, 17.10 and 17.11 respectively.
- West Sussex Transport Plan 2011-26 The plan includes the following goals that are relevant to outdoor recreation:
  - maintaining PRoW to a good standard (pg.21);
  - developing opportunities to improve access to, and within the National Park particularly for walking and cycling (pg.26); and
  - maintaining Equestrian Facilities maintaining multi-use routes such as bridleways to a good standard (pg.32).
- West Sussex Walking and Cycling Strategy 2016-2026 The West Sussex Walking and Cycling strategy includes the following two objectives that are relevant to the outdoor recreation element:
  - to help people to access rural areas and enjoy walking and cycling; and

- build on its recent 'West Sussex Weekends' campaign, and work alongside the SDNPA to promote walking and cycling in the country as enjoyable leisure activities and encourage walking and cycle tourism.
- SDNPA Partnership Management Plan 2020-2025 Policy 28 of the SDNPA Partnership Management Plan sets out an ambition to improve and maintain PRoWs and access land, provide a better-connected and accessible network for a range of abilities and users, and reduce conflict where this occurs.
- South Downs Cycling and Walking Strategy 2017-2024 Priority Action AN4.2 in the strategy seeks to deliver added value to the SDNPA's RoWIPs through a Miles Without Stiles/Access for All programme, including the removal of stiles and other barriers, in addition to surface improvements.
- Environmental Impact Assessment: Appraising Access (2020) The Institute of Public Rights of Way & Access Management (IPROW) published its guide on how PRoW and wider outdoor access resources should be assessed for the purposes of an EIA. This document has guided the assessment of the impact of Rampion 2 on (onshore) outdoor access.
- British Standard for Gaps, Gates and Stiles (BS709:2006) The standard is about ensuring the least restrictive access infrastructure is used in any given situation and ensuring that the access provided is adequately maintained. The standard sets out minimum dimensions for structures and a hierarchy for their use (i.e. Gaps>Gates>Kissing Gates>Stiles), and notes that stiles should only be used in exceptional circumstances.
- Outdoor Accessibility Guidance (2023) First published as the 'BT Countryside for All Good Practice Guide' in 1997, the original guide was maintained by the Fieldfare Trust until 2018, and then by Paths for All. In 2021, Paths for All commissioned the Sensory Trust to develop the latest version of the guide, Outdoor Accessibility Guidance, and this was published in April 2023. The latest guide presents a benchmark of best practice for countryside access for disabled people, helping to ensure compliance with the requirements of the Equality Act 2010.
- Best Value Performance Indicator 178 (BVPI178) BVPI178 was developed by the Audit Commission as part of a suite of performance indicators for local government known as the Comprehensive Performance Assessment. BVPI178 is now redundant for its original purpose but is still used by some local highway authorities as the only national comparator for management of PRoW networks. Although no longer carrying official weight, the 'easy to use' standard is a useful way of determining that a path is of an adequate standard for public use. Individual paths were assessed for ease of use by the public. Paths identified as 'easy to use' are typically:
  - free from unlawful obstructions;
  - the surface and lawful barriers are in good repair and to a satisfactory standard; and
  - paths are signed where they leave a metalled road.

## 17.3 Consultation and engagement

## Overview

- 17.3.1 This section describes the stakeholder engagement undertaken for Rampion 2. This consists of early engagement, the outcome of, and response to, the Scoping Opinion (Planning Inspectorate, 2020) in relation to the water environment assessment, the Evidence Plan Process (EPP), non-statutory consultation and Rampion 2's statutory consultation. An overview of consultation and engagement undertaken for Rampion 2 relevant to the EIA is outlined in **Chapter 5: Approach to the EIA, Volume 2** of the ES (Document Reference: 6.2.5).
- 17.3.2 Given the social distancing restrictions that have been in place due to the COVID-19 pandemic from 2020 to 2022, during this period technical consultation relating to water environment has taken place online, primarily in the form of conference calls using Microsoft Team.

## **Scoping Opinion**

17.3.3 RED submitted a Scoping Report (RED, 2020) and request for a Scoping Opinion to the Secretary of State (administered by the Planning Inspectorate on 2 July 2020. A Scoping Opinion was received on 11 August 2020. The Scoping Report sets out the proposed socio-economics assessment methodologies, outline of the baseline data collected to date and proposed, and the scope of the assessment. **Table 17-5** sets out the comments received in Section 4 of the Planning Inspectorate Scoping Opinion 'Aspect based scoping tables – Offshore' and how these have been addressed in this ES. A full list of the Planning Inspectorate Scoping Opinion comments and responses is provided in Appendix 5.2: Response to the Scoping Opinion, Volume 4 of the ES (Document Reference 6.4.5.2). Regard has also been given to other stakeholder comments that were received in relation to the Scoping Report.

Planning Inspectorate ID number	Scoping Opinion comment	How this is addressed in this ES
4.14.1	The Inspectorate considers that the impacts of construction, O&M and decommissioning activity on changes to population structure as a result of increased demand for labour and the subsequent demand for housing accommodation are likely to be negligible and any effects will be spread further wider than the immediate area. The Inspectorate agrees that these matters can be scope scoped out	Given the scoping opinion comments made by the Planning Inspectorate the impacts related to changes to population structure as a result of increased demand for labour have been scoped out of the assessment.

#### Table 17-5 Planning Inspectorate Scoping Opinion responses – socio-economics

Planning Inspectorate ID number	Scoping Opinion comment	How this is addressed in this ES
	from the ES as significant effects are unlikely to occur.	
4.14.2	The Inspectorate agrees that significant effects on inshore recreation activity during operation and maintenance are unlikely and that the ES will assess operational effects in terms of offshore recreation. However, reference to zones of influence (ZOI) and study areas are made in [] without reference to spatial extent of 'inshore' and 'offshore' areas. Without fully understanding the extent of the inshore area as defined in the context of socio- economic assessment [] the Inspectorate cannot agree to scope this matter out of the ES.	Figure 15.13, Volume 3 of the ES (Document Reference: 6.3.15) Figure 17.1 and Figure 17.2 Volume 3 of the ES (Document Reference: 6.3.17) provide an overview of the spatial extent of the various ZOIs used in the assessment. Under the maximum design scenario, the cable will pass through the inshore area (defined as the area extending 250m out to sea from landfall) in a duct installed by HDD and there will be no requirement to carry out maintenance in this area. The assessment of the Proposed Development's impact on inshore recreation during the operation and maintenance phase is considered in Chapter 7: Other marine users, Volume 2 of the ES (Document Reference: 6.2.7).
4.14.3	Whilst Table 5.15.1 summarises the ZOIs to be considered for the various receptor groups as part of the socio-economic assessment, figures will assist in understanding their spatial extent and the entirety of the study area (onshore and offshore).	Figure 17.1 and Figure 17.2, Volume 3 of the ES (Document Reference: 6.3.7) provide an overview of the spatial extent of the various ZOIs used in the assessment.
4.14.4	Any key assumptions made in developing estimates on the anticipated construction programme and phasing should be clearly set out and consideration given to a 'worst case' scenario in the duration and definition of 'temporary' effects in considering the overall significance of effect. This includes assumptions on the use of local ports for construction.	More detail on the approach to socio-economic impact assessment is presented in <b>Section 17.8</b> of this chapter. Additional detail on the approach to the economic impact of Rampion 2 is presented in <b>Appendix 17.2</b> : <b>Socio-economics cost and</b> <b>sourcing report, Volume 4</b> of the ES (Document Reference 6.4.17.2). A single realistic worst

Planning Inspectorate ID number	Scoping Opinion comment	How this is addressed in this ES
	[] It is not clear whether the 'two scenarios based on varying assumptions' are intended to represent alternative 'realistic' scenarios, or whether they are 'best case'/'worst case' in terms of local, regional or national impacts. This should be set out clearly in the ES.	case scenario is now considered. That said, when considering jobs and the economy, the overall impact is anticipated to be positive. Overall, there is potential for local expenditure to be higher than that identified in the assessment, generating additional benefits to those assessed in <b>Section 17.9</b> .
4.14.5	A number of sources set out in Table 5.15.3 are stated as 'TBD', including Recreational activity and Ports and harbour infrastructure for which the coverage of the study area is also stated as 'TBD'. It is unclear whether these datasets would be obtained in the course of data collection from other aspect chapters. The ES should clearly set out these data sources and their spatial coverage and how all of these have been derived from the effort made to agree with relevant consultation bodies.	A detailed list of data and information sources used in the assessment is set out in Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3). Furthermore, a list of the stakeholders approached as part of the socio-economics assessment is presented in Section 17.5 of this chapter. This includes references to discussions about and approach to collating key data sources (where relevant).
4.14.6	The ES should take account of the current West Sussex County Council Economic Growth Plan 2018-2023 in considering baseline conditions and assessing significance of socio-economic effects.	Local Policy (including the West Sussex County Council Economic Growth Plan 2018-2023) is considered in detail in Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3) and summarised in Section 17.3 of this chapter and taken into account in the assessment of effects in Sections 17.9, 17.10, 17.11 and 17.12 of this chapter.

Public Health England (PHE) submitted a number of consultation responses as 17.3.4 part of the Scoping Opinion. The ones relevant to socio-economics and responses to where (and/or how) these comments are addressed within the preliminary assessment are outlined in Table 17-6.



Topics raised in Scoping Opinion response	How this is addressed in this ES
a. Employment opportunities including training opportunities.	The assessment considers Rampion 2's impact on the potential to support local employment as a result of construction, operation and maintenance and decommissioning activity in <b>Sections 17.9</b> , <b>17.10</b> and <b>17.11</b> respectively. Whilst the benefits of supporting training opportunities are noted, these are not considered an effect in the socio-economic assessment as there is insufficient information available on the number of training opportunities that could be created at this stage. RED has committed to work with local partners to maximise the ability of local people to access employment opportunities associated with construction and/or operation and maintenance activity, which will include opportunities for training (see <b>Section 17.7</b> C-35). RED have submitted an Outline Skills and Employment Strategy as part of the DCO application. The purpose of the Outline Skills and Employment Strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED.
b. Local business activity	The assessment considers Rampion 2's potential to result in local expenditure being captured by local businesses (thereby supporting the Sussex economy). This is identified in <b>Section 17.4</b> of the assessment and is set out in more detail in <b>Appendix 17.2: Socio-economics cost and sourcing report, Volume 4</b> of the ES (Document Reference 6.4.17.2). RED has committed to identify opportunities for companies based or operating in Sussex to access supply chain for the Proposed Development (C-34). The assessment considers only the direct and indirect benefits associated with Rampion 2 but does not quantify the Proposed Development's induced employment and GVA benefits. The presence of non-local employees working on Rampion 2 has potential to generate additional expenditure with local businesses (such as in the accommodation and food service sectors).
c. Regeneration	The matters outlined within PHE's response to the Scoping Report (RED, 2020) (i.e. rebuilding and housing improvements in deprived neighbourhoods) are not relevant to the socio-economics assessment.

#### Table 17-6 PHE Scoping Opinion responses for socio-economics assessment

Topics raised in Scoping Opinion response	How this is addressed in this ES
d. Tourism and Leisure Industries	The Proposed Development's impact on the volume and value of tourism in Sussex during construction, operation and maintenance and decommissioning of Rampion 2 is considered in <b>Sections 17.9</b> , <b>17.10</b> and <b>17.11</b> respectively.
	The Proposed Development's impact on access to and enjoyment of onshore recreation is assessed in <b>Sections</b> <b>17.9</b> , <b>17.10</b> and <b>17.11</b> for construction, O&M and decommissioning respectively. In undertaking the assessment, consideration has been given to the mental health and wellbeing benefits to users' ongoing access to the various receptors assessed.
	The Proposed Development's impact on access to and enjoyment of inshore and offshore recreation is assessed in <b>Chapter 7: Other marine users, Volume 2</b> of the ES (Document Reference: 6.2.7).
e. Community/ social cohesion and access to social networks	As outlined above (see <b>Table 17-5</b> ) and below (see <b>Table 17-11</b> ) the Proposed Development's impact on population, the need for housing and local communities has been scoped out of the assessment on the basis that impacts are likely to be negligible and any effects spread wider than the immediate area.
f. Community engagement	Whilst the application for Rampion 2 is separate from the operational existing Rampion 1 project, RWE (RWE is involved in the RED joint venture company developing Rampion 2) already has a strong track record supporting public participation and community engagement (through the Rampion Community Benefit Fund).
	Detail of public/community engagement undertaken to date as part of the Rampion 2 DCO process is outlined in <b>Section 17.3</b> of this chapter.

## **Evidence Plan Process (EPP)**

17.3.5 The Evidence Plan Process (EPP) has been set up to provide a formal, non-legally binding, independently chaired forum to agree the scope of the EIA and Habitats Regulations Assessment (HRA), and the evidence required to support the DCO Application. The EPP commenced in January 2020 and has continued throughout the EIA helping to inform the ES.

- 17.3.6 For socio-economics, further engagement has been undertaken via six expert topic groups (ETG). The ETGs provided a wide range of consultees the opportunity to comment on the proposed approach to the assessment and raise any concerns they had that were related to the socio-economic assessment. The purpose of the six ETGs are set out below:
  - October 2020 Introduced the Proposed Development and the proposed approach to scoping the EIA;
  - March 2021 Updated stakeholders on progress of the PEIR. The approach to data collection and PEIR Assessment approach was discussed and agreed with Stakeholders during the first two ETGs;
  - November 2021 Responded to the Section 42 comments raised around the topics of traffic, air quality, noise and socio-economics;
  - November 2022 Responded to the feedback from Section 42 comments and upcoming consultation on the PEIR Supplemental Information Report (SIR);
  - February 2023 Responded to the feedback on the PEIR SIR and discussed upcoming consultation on the PEIR Further Supplemental Information Report (FSIR).
  - June 2023 Provided a review of the most recent consultation and changes since February 2023, and EIA final onshore route considerations.
- 17.3.7 Further information is provided in the **Evidence Plan** (Document Reference: 7.21).
- 17.3.8 Following the ETG meetings, additional meetings were held with:

#### West Sussex County Council

17.3.9 Engagement was undertaken with the Senior Access Officer at West Sussex County Council (WSCC) in the form of emails and a telephone conversation. This was to identify key outdoor recreation assets that may be affected by the construction, operation and maintenance, and decommissioning of Rampion 2, and to flag up any potential issues that may need particular considerations. Possible data sources needed for the assessment were also discussed.

#### South Downs National Park Authority (SDNPA)

17.3.10 Engagement was also undertaken with SDNPA's Access and Recreation Lead via email. The purpose for this engagement was to identify key outdoor recreation assets that may be affected by the construction, operation and maintenance, and decommissioning of Rampion 2, to flag up issues needing particular consideration and to identify possible data sources.

#### South Downs Way

17.3.11 Email contact was also made with the National Trail Officer for the South Downs Way. This was to identify specific issues related to Rampion 2 crossing the South Downs Way.

## Non-statutory consultation

#### Overview

- 17.3.12 Additional one to one based non-statutory consultation was set up to gain additional insights into specific impacts where this was relevant to do so. These were undertaken outside of the formal EPP.
- 17.3.13 Non-statutory consultation captures all consultation and engagement outside of statutory consultation and has been ongoing with a number of prescribed and non-prescribed consultation bodies and local authorities in relation to socio-economics. A summary of the non-statutory consultation undertaken since completion of the Scoping Report is outlined in this section.

#### Brighton and Hove City Council

17.3.14 Engagement with Assistant Director, City Development and Regeneration at Brighton and Hove City Council at the start of December 2020 to discuss the social and economic implications of Rampion 2, in particular on businesses that could form part of the Proposed Development's supply chain, tourism and the economy more widely.

#### Visit Brighton

17.3.15 Engagement with the Head of Sales, Marketing and Partnership at Visit Brighton to discuss the implication of the construction, operation and maintenance, and decommissioning of Rampion 2 on the volume and value of tourism, as well as onshore and offshore recreation within the study area (i.e. Sussex). Requests were made for the supply of any economic impact studies/research relevant to the study area and/or the impact of the existing Rampion 1 project on local tourism, but not yet received. At present there is no specific evidence assessing the economic impact of Rampion 1 on the volume and value of tourism locally.

#### West Sussex County Council

17.3.16 Engagement with officers at WSCC including the Senior Access Officer, the Countryside Team Leader and the Senior Estates Surveyor has been ongoing since mid-November 2020, primarily in the form of email correspondence. Requests were made for the supply of any user-count data that could show volumes and patterns of use of visitors to the Downs Link. The data supplied has been used in the assessment. Data was also requested for any countryside car parks, but none is available. Data refresh requests were made, and updated data was received in December 2022.

#### Natural England

17.3.17 Email contact was established with the Coastal Access Lead Advisor, Sussex and Kent Team at the start of November 2020. This was to request any data available for the use of the ECP near Atherington. However, no data was available, and it was noted that whilst the ECP at this stretch was not yet formally opened, the PRoW that it will use was open.

#### South Downs National Park Authority

- 17.3.18 Requests for visitor survey results and people counter data were sent to the Access and Recreation Lead at SDNPA (via email) in mid-November 2020, along with a request for information about any other data sources that may be relevant for the assessment. Updated PRoW usage data was requested in November 2022, however, no relevant data was available the SDNPA however did provide a visitor survey which has been considered in the assessment.
- 17.3.19 The National Trail Officer was also approached by email in mid-November 2020 to request data from the people counters along the South Downs Way (SDW). It was noted that 2020 was an atypical year for countryside access, and therefore a request for the most recent data pre-2020 was also submitted. Updated data was requested in October 2021 and again in November 2022. However, due to problems with the *in-situ* counters, no new data was available.

#### Sustrans

17.3.20 An email approach was made at the start of November 2020 to the Sustrans South Office, with a request for contact details to the relevant officer to discuss potential implications for National Cycle Network route 2, and regional route 232. Two follow-up emails were sent throughout the rest of November 2020, but no substantive reply was received.

#### West Sussex Local Access Forum

17.3.21 The West Sussex Local Access Forum (WSLAF) was approached by email sent through the WSCC Senior Access Officer in March 2021 with a general request for its opinion of or information about the comprehensiveness of the resources to be assessed; any particular impacts that might be envisaged and potential mitigation; events that take place in the corridor vicinity; and other local groups that should be contacted. An informative response was received from the WSLAF and has been used to inform the assessment.

#### South Downs Local Access Forum

17.3.22 The South Downs Local Access Forum (SDLAF) was approached by email sent through the SDNPA Strategy Lead Access & Recreation in April 2021 with a general request for its opinion of or information about the comprehensiveness of the resources to be assessed; any particular impacts that might be envisaged and potential mitigation; events that take place in the corridor vicinity; and other local groups that should be contacted. No direct response has been received from the SDLAF, however, some information has been received via the SDNPA and has been used to inform the assessment.

#### Non-Statutory Consultation Exercise – January/February 2021

17.3.23 RED carried out a Non-Statutory Consultation Exercise for a period of four weeks from 14 January 2021 to 11 February 2021. This Non-Statutory Consultation Exercise aimed to engage with a range of stakeholders including the prescribed and non-prescribed consultation bodies, local authorities, Parish Councils and general public with a view to introducing the Proposed Development and seeking early feedback on the emerging designs.

- 17.3.24 The key themes emerging from the Non-Statutory Consultation Exercise in January 2021 relating to socio-economics were:
  - Turbines Concerns about the size of the turbines in relation to the existing Rampion project and concerns on the basis of the proximity of the turbines to the coast, particularly on the basis of negative visual impacts;
  - Landfall Concerns about construction impacting the ability to use and enjoy the beach or interrupt PRoW; and
  - Onshore Cable Corridor Concerns about the business and community impacts of route options around Washington Parish, particularly with options B and C which were presented at that time and have since been discounted.
- 17.3.25 Further detail about the results of the Non-Statutory Consultation Exercise can be found in the **Consultation Report** (Document Reference: 5.1).

## **Statutory Consultation**

First statutory consultation exercise - July to September 2021

- 17.3.26 The PEIR (RED, 2021) was published as part of Rampion 2's first Statutory Consultation exercise which provided preliminary information on socio-economics within Chapter 18: Socio-economics (RED, 2021). This exercise ran from 14 July to 16 September 2021, a period of nine weeks.
- 17.3.27 Following feedback to the first Statutory Consultation exercise in 2021 it was identified that some coastal residents did not receive consultation leaflets as intended. Therefore, the first Statutory Consultation exercise was reopened between 7 February 2022 to 11 April 2022 for a further nine weeks. The original PEIR published as part of the first Statutory Consultation exercise in 2021 was unchanged and re-provided alongside the reopened first Statutory Consultation exercise in early 2022.
- 17.3.28 The following Statutory Consultation exercises (second, third, fourth) focussed on changes made to the onshore cable route, onshore substation, and National Grid interface point and did not consider offshore aspects of the Proposed Development.

Second Statutory Consultation exercise – October to November 2022

17.3.29 The PEIR Supplementary Information Report (PEIR SIR) (RED, 2022) was published as part of Rampion 2's second Statutory Consultation exercise. The second Statutory Consultation exercise was undertaken from 18 October 2022 to 29 November 2022. This was a targeted consultation which focused on updates to the onshore cable route proposals which were being considered following feedback from consultation and further engineering and environmental works. As part of this second Statutory Consultation exercise, RED sought feedback on the potential changes to the onshore cable route proposals to inform the onshore design taken forward to DCO application.

#### Third Statutory Consultation exercise – February to March 2023

17.3.30 The PEIR Further Supplementary Information Report (PEIR SIR) (RED, 2023a) was prepared to inform a third Statutory Consultation exercise (focused on a further single onshore cable route alternative), which was held from 24 February 2023 to 27 March 2023, for a period of four weeks. The PEIR FSIR provided supplementary environmental information associated with the new proposed alternative to the Rampion 2 onshore part of the original PEIR Assessment Boundary. The proposed new alternative was identified in response to consultation feedback received following the publication of the PEIR SIR in October 2022 (RED, 2022).

#### Fourth Statutory Consultation exercise – April to May 2023

- 17.3.31 The Preliminary Environmental Information (PEI) Bolney Substation Extension Works (RED, 2023b) was published as part of Rampion 2's fourth Statutory Consultation exercise. The fourth Statutory Consultation exercise was undertaken from 28 April 2023 to 30 May 2023. This was a targeted consultation which focused on the proposed extension works to the existing National Grid Bolney substation to facilitate the connection of the Rampion 2 onshore cable route into the national grid electricity infrastructure. As part of this fourth Statutory Consultation exercise, RED sought feedback on the proposed substation extension works to inform the onshore design taken forward to the DCO Application. There were no key themes emerging from statutory consultation exercise in April 2023 specifically relating to ground conditions.
- 17.3.32 **Table 17-7** provides a summary of the key themes of the feedback received in relation to socio-economics and outlines how the feedback has been considered in this ES chapter. A list of comments received during the statutory consultation period and the response to comments is provided in the **Consultation Report** (Document Reference: 5.1).

#### Table 17-7 Statutory Consultation feedback

Stakeholder	Theme	How this is addressed in this ES and DCO Application
First Statutory	y Consultation exercise (PEIR) (14 Ju	uly to 16 September 2021)
Arun District Council	Arun District Council recognises that the views to the sea are one of the prime attractions for residents and visitors to the district. They state that the potential impact on economy and tourism is unknown and believe more information and assessment is required. Arun District Council would like to understand what the impact of such large proposals has been on the economy of other coastal towns as a result of similar proposals.	The ES assessment provides a comprehensive and detailed review of the available evidence on the impact of offshore wind farms on tourism. Although this identified some gaps in the literature, the weight of available evidence suggests there will be no significant adverse effects on tourism in the study area. Within Appendix 17.3: Socio-economics technical baseline,

Stakeholder	Theme	How this is addressed in this ES and DCO Application
	·	Volume 4 of the ES: (Document Reference 6.4.17.3) the ES assessment supplements the assessment in the PEIR with an update to the evidence base as well as an additional assessment on more sensitive visitor destinations along the coast.
		The ES assessment also considers the interrelationships with tourism and seascape and landscape views by cross referring to the findings of <b>Chapter 15: Seascape</b> , <b>landscape and visual impact</b> <b>assessment, Volume 2</b> of the ES (Document Reference: 6.2.15).
Arun District Council	The council noted that the economic benefits during the construction period are forecast to be exceptionally low within West Sussex as a whole and that the economic benefits of the proposals appear to be very limited. The Council wishes to secure training programmes for locals as part of the construction and maintenance of a wind farm. It would also wish to secure much greater economic benefits and mitigation through things such as development funds and tourism funds.	RED have submitted an Outline Skills and Employment Strategy as part of the DCO application. The purpose of the Outline Skills and Employment Strategy document is to provide an outline strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED. In addition, a Supply Chain Plan will be produced as part of the CfD process. Any additional development and tourism funding would sit outside of the assessment and the Supply Chain Plan is not considered as embedded mitigation and therefore not included in the commitments stated in <b>Table</b> <b>17-19</b> .

Stakeholder	Theme	How this is addressed in this ES and DCO Application
Brighton and Hove Council	Brighton and Hove Council stated that the assessment of impacts on tourism needs to consider the cumulative impact of Rampion 2 alongside the existing windfarm, notably to incorporate larger wind turbines over an extended area.	Rampion 1 is considered part of the baseline environment presented in Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3) as this is already constructed and operational. Activities associated with Rampion 1 are therefore not included within cumulative effects assessment (CEA) offshore as Rampion 1 is already operational and included as part of the socio- economic baseline.
Brighton and Hove Council	The council stated that the socio- economic chapter does not consider the potential positive and negative impacts of the project on education. This should be included, and educational benefits and/or mitigation identified. The project has a stated four year build, and a thirty year lifespan, so we would expect that educational benefits to the local community (such as apprenticeships or otherwise working with local educational establishments) are built in from an early stage, especially given the lead time between consent potentially being granted, and work on the ground beginning. "	RED have submitted an Outline Skills and Employment Strategy as part of the DCO application. The purpose of the Outline Skills and Employment Strategy document is to provide an outline strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED. In addition, a Supply Chain Plan will be produced as part of the CfD process.
Brighton and Hove Council	The council states that the data sources used to inform the socio- economic assessment should also include surveys of local people and visitors, specifically in relation to the existing and proposed windfarm, particularly noting the lack of research that exists regarding the impact of windfarms on tourism.	Recent attitudinal/perceptions surveys have been used alongside other studies to assess the relationship between offshore wind farm development and tourism as is presented in <b>Appendix 17.3: Socio-</b> economics technical baseline, Volume 4 of the ES: (Document Reference 6.4.17.3). There is not a lack of research, but a lack of ex-post evidence (studies undertaken after a wind farm has

Stakeholder	Theme	How this is addressed in this ES and DCO Application
		been developed which assess the impact this has had on visitor volume and value). These types of studies are more robust than ex-ante studies (undertaken before a wind farm has developed) which are based on how visitors say their behaviour would change as a result of the offshore wind farm. There are significant weaknesses in ex-ante survey methods as the responses are subject to bias, depending on people's feelings about wind farms. Because of these weaknesses and the large existing ex-ante evidence base available, it is considered that an additional ex-ante visitor survey is not required. This would be subject to the same risk of bias and would not add value to the assessment. As such, no such additional surveys have been undertaken to inform the ES.
Brighton and Hove Council	While the council support reference to research assessing the impact of windfarms, surveys of locals, visitors, tourism operators of all scales and other relevant stakeholders should have been undertaken to feed into conclusions about the impact of the existing and proposed scheme on the tourism economy of Brighton and Hove, but also the wider Sussex coast.	As above, there is already a substantial evidence base showing offshore wind farms have a limited impact on tourism, a number of which draw upon visitor surveys. The evidence base is presented in Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3). It is considered unlikely that further surveys would provide additional evidence that would justify the considerable costs involved.
Brighton and Hove Council	The same applies to offshore recreational activity – it is unclear why surveys could not be undertaken, particularly given the	Surveying recreational users would be a complex and resource intensive exercise given the wide range of different users. It is highly unlikely that surveys would

Stakeholder	Theme	How this is addressed in this ES and DCO Application
	various recreation groups that exist in the area.	provide additional insight that justifies the costs involved. However, there is merit in engaging with recreational groups where there are concerns over negative effects. This additional engagement was undertaken for the ES and was used to inform the update to the <b>Chapter 7:</b> <b>Other marine users, Volume 2</b> of the ES (Document Reference: 6.2.7).
Brighton and Hove Council	"The impact of the scheme on this sector therefore needs to be robustly assessed, and mitigation identified – such as educational programmes/facilities for residents, visitors, and schools; training of local people in the renewable industry; and creating better linkages between the wind farm and the local community and economy. Economic and social mitigation measures need to be identified and timelines set out, to clarify how Rampion will ensure that the local economy and community benefits from the project. Rather than noting that the supply chain largely misses Sussex and that local skills are absent, Rampion should be examining how to change this, maximising local procurement and local employment, particularly through an early focus on education."	As the assessment presented in Section 17.9, Section 17.10 and Section 17.11 does not anticipate significant negative impacts on the tourism economy in general, it is not anticipated that there is the need for specific mitigation. RED have submitted an Outline Skills and Employment Strategy as part of the DCO application. The purpose of the Outline Skills and Employment Strategy document is to provide an outline strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED. In addition, a Supply Chain Plan will be produced as part of the CfD process.
Mid Sussex District Council	The principle social effect of the proposals relates to the closure/permanent diversion of Footpath 1T that runs across part of the Wineham Lane North site which has been identified as a moderate/major residual effect. It is apparent that this footpath, which	There will be no direct impact on footpath 1T as a result of the selection of Oakendene as the substation location.

Stakeholder	Theme	How this is addressed in this ES and DCO Application	
	runs for a length of approximately 380 metres from Wineham Lane to the northern boundary of the Wineham Lane North substation site, may need to be permanently diverted. Clearly however the impact is dependent on whether or not this site is selected as the substation location.		
Clymping Parish Council	The potential impact on coastal tourism given the size of the turbines.	The size of turbines is a common area of concern for a number of consultees. The assessment presented in Section 17.9, Section 17.10 and Section 17.11 considers the maximum design scenario in which the maximum sized turbines are used. The evidence base presented in Appendix 17.3: Socio- economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3) shows offshore wind farms have a limited impact on tourism.	
Lyminster & Crossbush Parish Council	<b>bush</b> be a significant detrimental effect on highlights assets that a tourism in the area, with potential 500m from the onshore		
Middleton- on-Sea Parish Council	The council stated that it is difficult to quantify the level of reduction in tourism that Rampion 2 could bring to the parish, but it will have a negative effect on shops, pubs and other establishments. This is especially likely if, as expected, both Bognor Regis and Littlehampton show a much more significant	Section 17.9, Section 17.10 and Section 17.11 of the ES assesses the potential effects on tourism in more detail than the PEIR assessment to look at particular areas where the tourism economy is more sensitive or vulnerable to negative impacts. These areas	

Stakeholder	Theme	How this is addressed in this ES and DCO Application	
	degree of reduction in tourism which will cause a number of businesses to close. The Parish Council therefore OBJECT to Rampion 2 on the basis that this will be detrimental to the parish and larger towns.	are presented in Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3). In addition, the assessment has supplemented the review of empirical evidence and the use of specific additional research looking at the ex-post relationship between offshore wind farm development and tourism economy performance.	
West Sussex County Council	West Sussex County Council expects the ES to take account of the Economy Reset Plan 2020-2024 and would expect further consideration of visitor economy data that is available, beyond that for Brighton and Hove. The council highlighted that a new report on the Sussex wide tourism data will be published soon. Elements of the data are out of date and do not reflect the significant impact the pandemic has had on jobs and employment. The council would like to see further acknowledgement of this. Similarly, there are currently labour supply pressures in construction, which may or may not settle by the proposed construction dates. Reference to a plan to help overcome this should be discussed further with the council. A key issue is the low economic impact for the County through the construction phase. Further assurance work is being progressed to seek to have some impact on this is needed, as per the commitment at the scoping stage. Again further meetings with	The reset plan is incorporated into Section 17.2 and Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3) presents the Sussex wide visitor volume and value data. This evidence is taken account of in the assessment. RED have submitted an Outline Skills and Employment Strategy as part of the DCO application. The purpose of the Outline Skills and Employment Strategy document is to provide an outline strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED. In addition, a Supply Chain Plan will be produced as part of the CfD process.	
	stage. Again, further meetings with the council will be required to development these commitments.	issue of limited economic impact locally given the current uncertainty concerning the selection of a construction port	

selection of a construction port.

Stakeholder	Theme	How this is addressed in this ES and DCO Application	
West Sussex County Council	"It is estimated that around 40% of the Proposed Development's £2.87 billion (in 2019-pricing) construction cost, or the equivalent of £1.14 billion (in 2019-pricing) will be retained by businesses in the Proposed Development's supply chain nationally. At the Sussex- level, the overall level of supply chain expenditure retained by local businesses is anticipated to be minimal (around 1.0% of total construction costs), adding up to £30.1 million (in 2019-pricing)." Whilst supply chain issues are recognised, during the scoping stage it was stated scenarios considering the use of local ports and project expenditure captured by local businesses would be developed. Information on this work and what it intends to achieve will be expected, with a view towards the percentage figure for Sussex increasing from the current low base. WSCC would expect further discussions on this post formal consultation.	Appendix 17.2: Socio- economics cost and sourcing report, Volume 4 of the ES (Document Reference 6.4.17.2) considers the level of expenditure that could be captured in the national and Sussex supply chain. There may be opportunities to achieve higher retained local spend in practice; however, within the ES it is appropriate to be conservative in the assumptions and modelling of local economic impact. The assessment is based on the use of a realistic worst case scenario to capture the realistic worst case for both negative and positive effects.	
West Sussex County Council	It is disappointing that `despite the efforts on the existing Rampion 1 project there is not yet an established supply chain cluster in Sussex`. Is there a plan to seek to address this further through the proposed project?	RED have submitted an Outline Skills and Employment Strategy as part of the DCO application. The purpose of the Outline Skills and Employment Strategy document is to provide an outline strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED. In addition, a Supply Chain Plan will be produced as part of the CfD process.	

Stakeholder	Theme	How this is addressed in this ES and DCO Application	
West Sussex County Council	The council welcomes the PEIR recognising the aims and aspirations of the council through maintaining multi use routes to a good standard and developing opportunities to improve access to rural areas and the South Downs national Park.	and aspirations also recognised throughout the maintaining ES. lood standard tunities to al areas and	
West Sussex County Council	Reference to 136 PROW being affected by proposal but only 77 referenced in OPRoWS. Clarity is required on this.	136 was the number of PRoW falling within the nominal 500m ZOI of the originally proposed cable corridor. 77 was the number of paths actually crossed by this corridor, access routes or set-down areas. The numbers resulting from the final corridor route selection are 154 paths wholly or partially within the ZOI and 55 actually crossed. This is clarified in this chapter.	
West Sussex County Council	The Downs Link is a shared-used path accessible to pedestrians, horse-riders and cyclists and uses a Public Bridleway. It is not a cycle route, and reference to this should be corrected.	chapter.	
Horsham District Council	While not a registered common and therefore not Access Land, there is one other block of public green space that falls within the onshore cable corridor. This is the Washington Recreation Ground and Allotments (TQ122132) which has one football pitch, one cricket pitch and parking for 12 vehicles. The land lies directly on the cable route and but will be crossed using HDD. Two abutting parcels of land are also recognised as public green space, these are Jockey's Meadow and The Triangle, shown in [sic] The Council notes the sensitivity impacts to these receptors is noted as Low and Medium with negligible	Washington Parish Council has been asked to provide information about potentially affected groups but has not provided any.	

Stakeholder	Theme	How this is addressed in this ES and DCO Application		
	and minor significance. The Council further notes a number of embedded environmental measures have been identified and committed at reducing (and mitigating) the impact of constriction activity on these receptors. The Council would expect commitments at Environmental Statement stage to demonstrate the applicant has engaged with those communities affected on the effects to reduce disruption to these recreation assets.			
South Downs National Park Authority	Use of the Strava Global Heatmap is therefore acceptable, but the findings should be caveated as Strava is known to be used mainly by cyclists and would not capture a large portion of ramblers or local walkers/dog walkers that may be using both the heavily trafficked routes such as the SDW and also some of the paths that appear to have very low usage.	It is acknowledged that Strava data does need to be used with care. However, it is only being used as a relative measure of traffic volumes, rather than for absolute numbers, to give an understanding of which are the more heavily trafficked paths. The Strava data can be selected to broadly differentiate between cyclists and pedestrian users.		
	Second Statutory Consultation exercise (PEIR SIR: October to November 2022 and third Statutory Consultation exercise (PEIR FSIR: February – March 2023)			
East Sussex County Council	East Sussex County Council recognise the economic benefits that Rampion 2 would bring and support the proposed Rampion 2 development. As the proposed onshore cable route options are all located in West Sussex, quite some distance from the boundary with East Sussex, the impacts of these proposals on East	This point is noted.		

Mid Sussex<br/>District<br/>CouncilThe economic benefits of the<br/>proposal are supported given the<br/>potential for expenditure on the<br/>construction of Rampion 2 and the<br/>likelihood of Sussex based<br/>companies being involved in theRED have submitted an Outline<br/>Skills and Employment Strategy<br/>and Employment Strategy<br/>document is to provide an outline

Sussex would be negligible.

Stakeholder	Theme	How this is addressed in this ES and DCO Application	
	supply chain. It is encouraging to note that you are committing to work with local partners and will seek to maximise the ability of local people to access employment opportunities associated with the construction and operation of Rampion 2. It is expected that such a commitment would be secured through a legal agreement.	strategy that can be developed further with the relevant key consultees into a Skills and Employment Strategy that will facilitate positive and meaningful commitments and activities within the Sussex region by RED. In addition, a Supply Chain Plan will be produced as part of the CfD process.	
Horsham District Council	LACR-01c introduces additional socio-economic receptors including users of Public Rights of Ways including footpaths, bridleways and restricted byways. LACR-01c will lead to moderate/major adverse effect (Significant) on user of restricted byway 2092. For the users of all the other Public Rights Of Way impacted by LACR-01c, even accounting for the implementation of embedded environmental measures (Appendix F) this will lead to additional significant residual effects. The Council accepts AA-26 in princip notes, the access follows the same re public rights of way.		
SDNPA	Little consideration appears to have been given in respect of the impact on recreational activities and the importance of these in respect of the second Purpose of the National Park (as well as Special Quality 5). The proposals would result in the temporary closure of key routes at Upper Barpham, Angmering Park and Michelgrove (amongst others). This represents a gap in the assessment through loss of the recreational experience. In future, we would suggest that Public Rights of Way are highlighted	It has been noted in the ES that a number of routes within the South Downs National Park will be subject to temporary closure and other potential impacts upon their recreational users. These potential impacts have been considered and assessed on a path by path basis, along with assessments of areas of access land, commons and other publicly accessible open space. Particular weight has been given to promoted routes such as the South Downs Way and the	

Stakeholder	Theme	How this is addressed in this ES and DCO Application	
	clearly as tourist routes within the SDNP.	Monarch's Way.	
AECOM – Norfolk Estate Farms	LACR-01c Similarly, it is also acknowledged that LACR-01c impacts additional socio-economic receptors (users of Public Rights of Way (PRoWs) including footpaths and bridleways), however, through the implementation of mitigation measures the majority would not result in any additional significant effects. The exception, as noted in the PEIR SIR, are users of the Restricted Byway 2092 which results in an additional potential moderate / major adverse effect (significant) on users.	The respondent notes that we have identified different paths as being potentially impacted by different routes and appears to ask for a comparative assessment. However, for the ES, there is only one route under consideration and therefore it would be inappropriate to make comparisons against routes that are no longer under consideration.	
	major adverse significant effect on Restricted Byway 2092 is noted, it is worth making it clear that the all the other options presented, including the original route presented within the original PEIR concluded that there would be a number of significant residual effects for PRoW users, which include moderate residual effects on PRoW users of 829, 197, 2697 and 2298 and moderate / major residual effects on PRoW users of 36Bo and 1T. It is therefore pertinent to note that the new significant effect identified for the Restricted Byway 2092 is not in isolation and should not be a reason for not selecting this route as an option to take forward given that the Developer is confident that these impacts to do stack against the progression of the OCR given no further mitigation or alternatives have been identified to avoid or		



Stakeholder	Theme	How this is addressed in this ES and DCO Application
	reduce these impacts in the PEIR SIR. It is also worth highlighting that the information presented in the PEIR SIR does not appear to clearly compare the non-significant effects to users of PRoWs between the different alternative route options against the OCR presented in the original PEIR for specific sections. The only way of comparing this is through referring to the original PEIR which lists the effects for PROW / sensitive receptors for the whole route. It is therefore difficult to develop a clear comparison on the impact to receptors that are presenting not-significant effects between the section of the original route and the particular section of one of the options.	
West Sussex CC	<ol> <li>A significant number of PRoWs will be impacted along the onshore cable route, whichever route is taken forward from those proposed through this consultation. WSCC request this is kept to a minimum through the design evolution process when refining to a single cable route option. Reference is made in the consultation materials to a Public Rights of Way Management Plan (PRoWMP) but no detail on which meaningful commentary can be made at this stage.</li> <li>Various references are made throughout the PEIR SIR of interruption to users as a</li> </ol>	The responses made by WSCC have been used to inform the Socio-economics chapter of the ES. However, the specific comments fall under the remit of Chapter 23, Transport and have not been addressed directly in the Socio-economics chapter.



Stakeholder	Theme	How this is addressed in this ES and DCO Application	
	traffic management, including temporary and permanent access to the cable route. In some instances, alternative routes put users on roads. This may be acceptable in the short term but for those longer-term closures/diversions, it is expected that more user- friendly options are provided, where possible. It is understood this will not always be possible, but this needs to be seriously considered particularly in cases of roadway diversions with no footway. Alternative diversions should be considered, even if requiring the creation of new temporary routes. Concern is also raised that a number of accesses seemingly propose a shared use with PRoW users.		
	3. Consideration of the phasing of these closures also needs to be undertaken in consultation with WSCC, for example, Bridleways 2208 and 2174/1. It seems that these offer an alternative to one another if closed, so consideration of the timing of these works is needed to not close both routes at same time, and therefore minimising negative impact on users.		
	The principles of how these routes will be managed and the required mitigation to interrupt public access as little as possible will require detailed engagement with WSCC abead of the DCO submission		

ahead of the DCO submission.



# 17.4 Scope of the assessment

### Overview

17.4.1 This section sets out the scope of the ES assessment for socio-economics. This scope has been developed as Rampion 2 design has evolved and responds to feedback received to-date as set out in **Section 17.3**.

### Spatial scope and Study Area

- 17.4.2 **Table 17-8** below sets out the spatial scope used in the socio-economics assessment. It shows that the effect of Rampion 2 on economic receptors (i.e. jobs and GVA) is assessed at the national (i.e. UK) and Sussex levels. Tourism impacts linked to offshore infrastructure are assessed at the Sussex level. In comparison, the tourism and recreation effects related to onshore infrastructure and offshore/inshore based recreational activities potentially impacted by offshore infrastructure are assessed at a much more local level.
- 17.4.3 Given Rampion 2's location relative to the south coast, in addition to the topography of the Study Area (i.e. Sussex), the effect of Rampion 2 on the tourism economy considers the area from which its wind turbine generators (WTG) may, in theory, be visible (henceforth referred to as the Zone of Theoretical Visibility (ZTV)). This roughly aligns with this assessment's definition of the Sussex impact area and includes the onshore part of the proposed DCO Order Limits (which includes the onshore cable corridor from landfall to the onshore substation and the connection to the existing National Grid Bolney). The assessment of Rampion 2's impact on the visitor economy takes into consideration the impact on specific locations on the coast that are known as locations for their coastal tourism offer (such as Bognor Regis, Worthing, Brighton and Littlehampton).
- 17.4.4 Likewise, the assessment of the effect of Rampion 2 on recreation takes into consideration the offshore part of the Proposed DCO Order Limits which includes the offshore cable corridor (including both offshore and inshore zones) and array area, in addition to the onshore cable corridor from landfall to onshore substation.
- 17.4.5 An overview of the spatial areas referenced in the socio-economics assessment is presented in Figure 17.1, Volume 3 and Figure 17.2, Volume 3 of the ES (Document Reference: 6.3.17).

### Table 17-8 Summary of receptor groups and ZOI used

Receptor group	UK	Sussex	Onshore
Economy (jobs & GVA)	✓	✓	×
Impact on volume and value of tourism economy (related to offshore infrastructure)	×	✓	×
Onshore tourism receptors (related to onshore infrastructure)	×	×	✓
Recreation (onshore)	×	×	Proposed DCO Order Limits plus 500m buffer

### **Temporal scope**

- 17.4.6 The temporal scope of the assessment of socio-economics is consistent with the period over which Rampion 2 will be delivered and covers the construction, operation and maintenance, and decommissioning phases.
- 17.4.7 For the socio-economic assessment it is assumed that the development and construction phase of Rampion 2 will take up to a maximum of four years, commencing in 2026. Please note that this includes development activity, offshore construction activity and onshore construction activity. The operational lifespan of Rampion 2 is assumed to be around 30 years. At this stage, the proposed approach to the decommissioning of Rampion 2 is uncertain. As such, the assessment of the decommissioning phase assumes that this will be in reverse of the construction phase, therefore taking up to a maximum of four years.

### Receptors

17.4.8 The spatial and temporal scope of the assessment enables the identification of receptors which may experience a change because of Rampion 2. The receptors identified that may experience likely significant effects for socio-economics are outlined in **Table 17-9**.

Receptor group	Receptors included within group		
Economy	Jobs and GVA		
Tourism economy	<ul> <li>Volume and value of tourism activity</li> <li>Onshore infrastructure tourism receptors (tourism assert located in close proximity (500m) to onshore infrastructure)</li> <li>Tourism volume and value related to offshore infrastructure</li> </ul>		
Onshore Recreation	<ul> <li>Onshore recreation receptors (including users of PRoW, access land and cycling routes)</li> </ul>		

### Table 17-9 Receptors requiring assessment for socio-economics

### **Potential effects**

17.4.9 Potential effects on socio-economic receptors that have been scoped in for assessment are summarised in **Table 17-10**.

Table 17-10	Potential effects on socio-economics receptors scoped in for further
	assessment

Receptor	Activity or impact	Potential effect
Economy	Impact on employment due to construction of the wind farm.	Potential for expenditure on the construction of Rampion 2 to support UK and Sussex-based companies that are directly engaged in its construction supply chain. This includes indirect employment supported through these businesses' supply chains.
Economy	Impact on GVA due to construction of Rampion 2.	Potential for expenditure on the construction of Rampion 2 to support GVA output in UK and Sussex-based companies that are directly engaged in its construction supply chain. This includes indirect GVA created through the wider supply chain.
Tourism economy	Impact on volume and value of the tourism economy because of construction activity.	Changes to the number and overall expenditure by visitors (both day and overnight) to the local area during the construction phase. This

Receptor	Activity or impact	Potential effect
		includes an assessment of the impacts arising because of any visual impacts from the construction of offshore infrastructure, in addition to the impacts generated by onshore construction activity.
Onshore recreation	Impact on onshore recreational assets (including PRoW, Access lands, Rivers and event participants) as a result of trench excavation, duct laying, the need for lay- down areas and haul roads.	Direct effects on onshore recreational and utility users because of temporary obstruction to public access routes and/or diversion of PRoW, the temporary exclusion from areas of access land, temporary disturbance and reduced amenity, as well as interruption to public events (e.g. sponsored walks, cross country running competitions, mountain bike rides. Not all event organisers engage with WSCC or the SDNPA about their event; however, a combination of advance information about planned works, both on-site and on-line will enable organisers to avoid clashes).
Onshore recreation	Impact on onshore recreational users because of substation construction.	Direct effects on users of PRoW because of the temporary (or permanent) closure and/or diversion of PRoW.
Operation and mai	ntenance	
Economy	Impact on employment because of operation and maintenance activity and supply chain expenditure.	Potential for expenditure on goods and services to support employment in UK (and Sussex-based) companies that are directly engaged in the Proposed Development's operation and maintenance supply chain. Rampion 2 could also go on to support employment indirectly within the wider supply chain.

Receptor	Activity or impact	Potential effect
Economy	Impact on GVA supported because of operation and maintenance activity.	Potential for expenditure to support GVA output in UK and Sussex- based companies that are directly engaged in its operation and maintenance supply chain. The Proposed Development could also go to support GVA creation indirectly within the wider supply chain.
Tourism economy	Impact on volume and value of the tourism economy because of operation and maintenance activity.	Changes to the number and overall expenditure by visitors (both day and overnight) to the local area because of operation and maintenance activity. This considers the visual impact of Rampion 2's offshore infrastructure, in addition to the impacts generated by onshore infrastructure.
Onshore recreation	Impact on access to onshore recreation assets because of operation and maintenance activity.	It is very unlikely that there will be any significant disturbance of recreation assets during the operation and maintenance phase. If repairs are needed, these will be implemented from the joint pits, or other infrastructure, without the need for trenches to be re-opened.

### Decommissioning

It is assumed that the decommissioning phase of Rampion 2 will be similar in nature, but no worse than the impacts identified during the construction phase.

### Activities or impacts scoped out of assessment

17.4.10 Several potential effects have been scoped out from further assessment, resulting from a conclusion of no likely significant effect. These conclusions have been made based on the knowledge of the baseline environment, the nature of planned works and the wealth of evidence on the potential for impact from such projects more widely. The conclusions follow (in a site-based context) existing best practice. Each scoped out activity or impact is considered in turn in **Table 17-11**.

Activity or impact	Rationale for scoping out
Impacts of construction, operation and maintenance, and decommissioning activity on changes to population structure because of increased demand for labour.	The effects generated during the construction and decommissioning phases of Rampion 2 will be temporary and over a relatively short period. Whilst the investment will support employment in construction and manufacturing activity, most of these jobs are likely to be located outside Sussex, particularly given that the development is not assumed to use a local port for the majority of construction activity (although a local construction management port will be used). Therefore, it is not expected that there would be a large influx of labour into the area during the construction phase.
Demand for local accommodation and local services to support changes to local labour market during construction, operation and maintenance, and decommissioning activity of Rampion 2.	port. However, the effects generated during the operational phase will be longer- term and the magnitude of impact will be of a smaller scale than for either the construction or decommissioning phases. Whilst this will depend on direct employment at the Rampion 2 operation and maintenance base (assumed to be in Sussex), and the level of expenditure with local businesses, the number of jobs supported will represent only a small proportion of the current Sussex population. In addition, operation and maintenance jobs are likely to be taken up by local workers and therefore in migration for employment at the operation and maintenance base is likely to be minimal. On this basis, it is assumed that Rampion 2 will have a negligible impact on the population structure and demand for housing and local services during its operation and maintenance phase.

### Table 17-11 Activities or impacts scoped out of assessment

# 17.5 Methodology for baseline data gathering

### Overview

17.5.1 Baseline data collection has been undertaken to obtain information over the study areas described in **Section 17.4: Scope of the assessment**. The current baseline conditions presented in **Section 17.6: Baseline conditions** sets out data currently available information from the study area/s.

### Desk study

17.5.2 The data sources that have been collected and used to inform this socioeconomics assessment are summarised in **Table 17-12**.

Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
GVA	Sub-national GVA	1998 to 2020	Current position and trends in the following for relevant study areas:	Local authority boundaries (including full coverage of Sussex).
			<ol> <li>total GVA;</li> <li>GVA in sectors of interest;</li> <li>GVA per head; and</li> <li>GVA per worker.</li> </ol>	
Employment & Industry breakdown	Business Register and Employment Survey (BRES)	2009 to 2015 and 2015 to 2021	Current position and long- term trends in: 1) total employment (including full-time equivalent (FTE) employees); 2) sectoral mix; and 3) employment in relevant sectors: (i) energy sector, (ii) construction and manufacturing sectors relevant to offshore wind, (iii) tourism, (iv) ports and maritime	Local authority boundaries (including full coverage of Sussex).



Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
			activity, and (v) recreation activity.	
Population	Population Estimates	2020	Tracks population position at a national to local authority level and compares population growth to ten years ago.	Local authority boundaries (including full coverage of Sussex).
Population	Sub-National Population Projections	2018 to 2041	Projected total and working age population.	Local authority boundaries (including full coverage of Sussex).
Economic activity, Employment rate & unemployment	Annual Population Survey	2004 to 2022	Current position and long- term trends in: 1) the local labour market including: (i) economic activity, (ii) employment, and (iii) unemployment; 2) qualifications; and 3) occupations.	Local authority boundaries (including full coverage of Sussex).
Tourist visitor numbers	Local / regional tourism surveys	Latest available (referenced in ES – Brighton visitor surveys, 2014-2019 and Sussex	Annual estimates of volume and value of tourism activity (day visitors and staying	Brighton and Hove and Sussex

Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
		visitor economy baseline, 2021)	visitors); accommodation occupancy surveys.	
Economic activity – Tourism	Economic Impact of Tourism	Latest available (referenced in ES – Brighton economic impact of the visitor economy studies, 2014- 2019 and Sussex visitor economy baseline, 2021)	Volume and value of tourism economy and the impact of visitor expenditure on the local economy.	Brighton and Hove and Sussex
Onshore Recreational Assets	Ordnance Survey (OS) Explorer maps OL10 and OL11	May 2020	Identifies recreational assets onshore.	Proposed Onshore DCO Order Limits
Onshore Recreational Assets	MAGIC – Multi-agency Geographic Information for the Countryside	May 2020	Used to identify the full suite of formally defined access and recreation assets, ranging from Access Land to Millennium Greens.	Proposed Onshore DCO Order Limits
Onshore Recreational Assets	Google Earth	May 2020	A basic understanding of the recreation geography and identify any assets not recorded on the OS	Proposed Onshore DCO Order Limits plus 500m buffer



Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
			sheets, Natural England's Green Infrastructure mapping, or MAGIC <sup>1</sup> .	
Onshore Recreational Assets involving rivers	On-line searches onshore	May 2020	Used to identify recreational pursuits involving the Rivers Arun and Adur. Both rivers are used for swimming events and angling. Both are tidal into the study area and small boats, especially canoes, kayaks and SUP use both rivers.	River Arun from Littlehampton to Arundel. River Adur from Steyning to Henfield.
Tourism assets	Desk based assessment – google maps	Latest available	Tourism assets near the onshore infrastructure of Rampion 2.	Proposed Onshore DCO Order Limits and 500m buffer from this area
Onshore recreation	WSCC	May 2020	Indication of the significant recreational assets that may be affected.	Proposed Onshore DCO Order Limits

<sup>1</sup> MAGIC is Defra's multi-agency geographical information centre: <u>https://magic.defra.gov.uk/home.htm</u> (Date accessed: 3 August 2023)

Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
Onshore recreation	SDNPA	May 2020	Indication of the significant recreational assets that may be affected, plus list of third-party events known to take place on countryside assets.	Proposed Onshore DCO Order Limits area through the South Downs National Park (SDNP) – approximately 33% of total route.
Onshore recreation	WSCC	November 2020	User data for Downs Link.	Proposed Onshore DCO Order Limits study area.
Onshore recreation	SDNPA	November 2020	User data for South Downs Way.	Proposed Onshore DCO Order Limits study area.
Onshore recreation	Natural England	November 2020	No data available for the proposed England Coast Path at Climping but data supplied for other coast path sections which was used to infer usage of the path at the landfall area.	Landfall DCO boundary area only.
Onshore recreation	BEKS Kitesurfing School	November 2020	Data about numbers and frequency of use of Climping Beach.	Landfall DCO boundary area only.

Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
Onshore recreation	Aspire	November 2020	Route of annual River Arun swim.	River Arun crossing point only.
Onshore recreation	West Sussex Interactive Map	November 2020	Online digital version of the definitive map of PRoW used to identify PRoW in the study area.	Proposed Onshore DCO Order Limits study area plus 500m buffer.
Onshore recreation	MAGIC	November 2020	Used to identify the full suite of formally defined access and recreation assets, ranging from Access Land to Millennium Greens	Proposed Onshore DCO Order Limits study area plus 500m buffer.
Onshore recreation	Google Earth	May 2020	A basic understanding of the recreation geography and identify any assets not recorded on the OS sheets or MAGIC.	Proposed Onshore DCO Order Limits study area plus 500m buffer.
Onshore recreation	Natural England Green Infrastructure Mapping	June 2023	Used to check for recreation assets.	Proposed Onshore DCO Order Limits study area plus 500m buffer.

Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
Onshore recreation	On-line searches onshore	November 2020	Used to identify recreational pursuits involving the Rivers Arun and Adur. Both rivers are used for swimming events and angling. Both are tidal into the study area and small boats, especially canoes, kayaks and paddleboards use both rivers.	River Arun from Littlehampton to Arundel.
				River Adur from Steyning to Henfield.
Onshore recreation	On-line searches onshore	November 2020	Used to identify public events taking place on assets within the cable corridor and its zone of influence.	Proposed Onshore DCO Order Limits study area plus 500m buffer.
Onshore recreation	On-line searches inshore	November 2020	Used to identify recreational pursuits in the vicinity of Climping Beach. While the beach is recognised to be quieter than most on this stretch of coast, it is used regularly by windsurfers and kite surfers. At least one kite surfing school	Inshore at Climping Beach plus 500m buffer.



Indicator	Source	Timeframe coverage of data	Summary	Coverage of Study Area
			uses the beach for lessons.	
Onshore recreation	Recreational activity	Latest available	Data on use of offshore and related onshore recreational resources close to offshore wind farm infrastructure and the export and onshore cable corridor route.	Proposed Onshore DCO Order Limits study area.

### Site surveys

17.5.3 **Table 17-13** sets out an overview of the survey work that was undertaken as part of the socio-economics assessment.

Survey type	Scope of survey	Coverage of study area
Cable Corridor 'Walkover' Survey (August 2020)	Two days spent walking key recreational assets around the expected landfall point, onshore cable corridor and substation search areas. Survey was to understand the nature and context of the assets; indicate usage levels; 'ground-truth' information from desk studies; and look for otherwise unrecorded assets.	The whole onshore cable corridor was sampled, as was the substation search areas.
Revised Cable Corridor 'Walkover' Survey (April 2023)	A further two days spent walking key recreational assets along the revised route. As before, the survey was to: understand the nature and context of the assets; indicate usage levels; 'ground-truth' information from desk studies; and look for otherwise unrecorded assets. At the time the survey was undertaken the revised route referred to key assets with respect to alternatives and modifications as presented in the PEIR SIR and PEIR FSIR.	The revised onshore cable corridor including: from the A27 north to Sullington Hill; Washington village; and Oakendene industrial estate.

### **Data limitations**

17.5.4 As far as is reasonable, the most up-to-date information available has been used in the preparation of the baseline for the existing socio-economics and tourism environments. However, the baseline assessment was conducted prior to the submission of the DCO and there is often a lag in the publishing of national datasets, meaning there is the possibility that some information may not be up to date. For example, employment data published by the ONS usually has a one to two-year lag but is still the best data for employment and more recent data on unemployment is at the time of publication will be available due to the frequency of releases. These data limitations will not have a material effect on the predictability or accuracy of the impact assessment in this instance.

- 17.5.5 Since January 2013, the number of people claiming Job Seekers' Allowance and Universal Credit have been combined. The new dataset combining the two means that it is no longer possible to get an accurate indication of the number of people seeking work in occupations related to construction, operation and maintenance, and decommissioning phases of offshore wind farm developments. This has implications for the level of quantitative analysis which can be undertaken in the baseline section and subsequent assessment.
- 17.5.6 There are challenges with disaggregating GVA data by sector of the renewable energy or tourism sectors. The data is only available at broad UK Standard industrial Classification (UK SIC) code level, which does not lend itself to defining a renewable energy sector, especially below national geographical level.
- 17.5.7 The DCO Application does not include development activities at potential construction ports (for example, this could include delivery of a port masterplan / development of deep water harbour infrastructure). Where necessary, these will be subject to separate consent(s) such as planning permission and/or a Harbour Revision Order. RED has considered ports suitable for the construction base for the offshore elements of the Proposed Development (including ports in Sussex, but also elsewhere in the UK). Although not the main construction port, Shoreham Port has been selected as the construction management port for Rampion 2. The use of Shoreham Port will be dependent upon receipt of a consent, a CfD award and on the findings of further technical studies and commercial negotiations.
- 17.5.8 For the socio-economic assessment, it is assumed that the operation and maintenance port will be in Sussex. The existing facilities at Newhaven Port will be used (and expanded if necessary) as the base for operation and maintenance of Rampion 2, as this will yield synergies and enable effective coordination with the existing operations team on Rampion 1. There is, however, the possibility of a supplementary satellite facility further west in Sussex.
- 17.5.9 At this stage, the total generation capacity of Rampion 2 is yet to be formally determined. This will depend on the number of turbines installed, their generation capacity as well as potential future improvements to WTG efficiency. However, the working assumption is that Rampion 2 will have an overall generation capacity of 1,200MW. The assessment is therefore based on this assumption to estimate the cost of the wind farm (which alongside the level of sourcing is used to calculate the level of retained expenditure in the UK and Sussex and consequent economic benefits). The cost is based on the cost per MW benchmarks found in the Crown Estate Guide to and Offshore Wind Farm report (Crown Estate 2019). It is noted that should the generation capacity of Rampion 2 be less, any impacts and associated effects could be reduced in magnitude.
- 17.5.10 The assessment considers a UK study area to enable the national significance of the socio-economic effects to be assessed. It should be noted that the effects of Rampion 2 within the context of the UK study area appear low. However, these have been included to demonstrate the absolute scale of the potential effects for the UK. Where data is not available at the UK level (such as employment data from BRES), Great Britain (GB) is used as an alternative measure.
- 17.5.11 It is assumed that the construction phase will last up to four years. At this stage, it is not possible to robustly model the impacts at different stages of the construction period, and as such the assessment assumes a uniform level of annual

employment and GVA generation across all four years. Although there are likely to be peaks and troughs throughout the period, this provides a reasonable estimate of impacts and enables a robust assessment of effects to be undertaken.

- 17.5.12 The tourism employment figures calculated in this report are based on the UK SIC codes defined by the United Nations World Tourism Organization (UNWTO) for tourism industries. This definition is broader than the definition of the accommodation and food services sector (as set out in BRES). Such data faces the same issues as the employment data mentioned above but is the best data available for the assessment of tourism employment within the Sussex study area.
- 17.5.13 It is methodologically challenging to identify the impact of energy infrastructure on the tourism economy, as there are several other factors which can be more significant in influencing both long and short-term visitor patterns. This includes weather, the availability of cheap flights to overseas destinations, changes in preferences and changes to the local offer.
- 17.5.14 This point is especially relevant for 2020 and beyond, where it is recognised that there have been changes in the patterns and quantities of outdoor recreation undertaken during the COVID-19 pandemic due to the restrictions placed on citizens. However, it is not currently clear whether this has had lasting effects on patterns and volume of use. Other factors such as the cost-of-living crisis may be more significant.
- 17.5.15 The quantitative data on PRoW usage is somewhat limited. However, data was requested from key stakeholders and anecdotal evidence of changes during and following the COVID-19 pandemic was also considered. The data supplied by WSCC for the Downs Link covering the period November 2021 to December 2022 shows usage levels approximately half those during February to October 2020, at the height of the COVID-19 pandemic. This suggests that levels of use have fallen back from the peaks that were reported during the main lockdown periods. However, the maximum parameters approach has been adopted, and the increased levels of use seen throughout 2020 have been used to inform this assessment.
- 17.5.16 The literature examining the impact of energy infrastructure projects tends to be dominated by ex-ante assessment (based on forecasts rather than actual results). The evidence is dominated by opinion poll evidence, which is often general, rather than scheme-specific. There is limited detailed ex-post evidence (i.e., based on actual results rather than forecasts) on the impact of onshore and offshore energy (and related infrastructure) on tourism economies. Furthermore, there is no comparison of ex-ante, and ex-post evidence for specific wind farms.
- 17.5.17 To counter this, the assessment has also considered tourism data for other areas from across the UK where one or more offshore wind farms are visible from the coast (such as the North Wales and North Norfolk coasts). In the case of offshore wind farm experience along the south coast, data comparing the volume and value of tourism activity before, during and after the construction of the existing Rampion 1 project has also been considered.

# 17.6 Baseline conditions

## Current baseline

### Introduction

17.6.1 This section provides an overview of the current socio-economic context and highlights the key indicators (for instance of jobs, GVA, tourism, as well as onshore recreation) against which the impact of Rampion 2 is assessed. A detailed description of the current baseline environment is presented in Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3). It should be noted that the baseline often reflects the impacts of the COVID-19 pandemic in several the data sets. This section provides an explanation of the changes brought about by the COVID-19 pandemic and changes that have occurred since the PEIR baseline assessment.

### Economy

### Employment

- 17.6.2 Data from the ONS indicates that, in 2021, there were approximately 704,000 jobs (total employment) in Sussex. Taking in to account the relative share of full and part-time jobs (as provided in the ONS data), it is estimated that there are around 581,000 full-time equivalent employee (FTE) jobs. From 2010 to 2021, the Sussex economy grew by around 57,000 FTE jobs (+11%) with the annual change in job numbers largely following the national trend (+15% growth nationally since 2010). Within Sussex, Brighton and Hove has experienced the highest growth rate between 2010-21 (of +22%). In GB there were approximately 24.5 million FTE jobs in 2023.
- 17.6.3 An analysis of employment sectors within Sussex highlights the importance of wholesale & retail, health & social work, and education. These sectors are all more concentrated locally than is the case nationally, and together represent 40% of all FTE jobs in Sussex.
- 17.6.4 In the context of offshore windfarms, construction, manufacturing, professional services and hospitality sectors are particularly important. The accommodation and food sector is more concentrated in Sussex than nationally (Location quotient (LQ) of 1.3).
- 17.6.5 It should be noted that the latest ONS data shows lower levels of employment in the study area than in PEIR (based on 2019 data). This is largely due to the impacts of the COVID-19 pandemic.

### Offshore wind supply chain capacity and capability

17.6.6 Compared to other areas of the country, such as off the coast of East Anglia and the north-east coast of England, Sussex has been home to limited offshore wind development over the past decade, with current offshore wind development limited to the existing Rampion 1 project.

- 17.6.7 As a result, the number of businesses involved in the offshore wind supply chain to date has been limited. However, this number is likely to increase over time as new offshore wind farms nationally are extended and/or new ones are built-out. The supply chain is anticipated to grow as offshore wind generation capacity nationally builds up to 50GW of generation capacity by 2030.
- 17.6.8 Given the recent development of the offshore wind industry in Sussex, there may be opportunities for businesses across several sectors to benefit from the construction and operation and maintenance activities related to Rampion 2. Employment data (see **Table 17-14**) shows Sussex currently has a low share of employment in several key sectors associated with the offshore wind supply chain. It should be noted that employment in a number of these key sectors is lower than in 2019 levels because of the COVID-19 pandemic.

Sector	GB employment (FTEs)		Sussex Employment (FTEs)		
	Number (000s)	%	Number	%	Sussex LQ
Manufacturing	2,185	8.6%	37,250	6.4%	0.75
Construction	1,361	5.3%	33,000	5.6%	1.07
Land based transport	525	2.1%	9,500	1.6%	0.80
Civil Engineering	180	0.7%	4,150	0.7%	1.02
Energy Generation	128	0.5%	2,375	0.4%	0.82
Marine Transport	14	0.05%	110	0.02%	0.35

### Table 17-14 Employment in Key Strategic Sectors, 2021

Source: ONS, (2021a)

#### Gross value added

- 17.6.9 ONS data indicates that Sussex contributed just over £41.0 billion GVA to the UK economy in 2020. GVA per head of population data shows a significant gap between Sussex and the UK, with GVA per head in Sussex being 18% below the national average (or approximately £23,900 per head compared with £29,100 per head nationally).
- 17.6.10 Within Sussex, West Sussex, with a GVA per head of £26,300, sits below the national average, however when London is excluded it sits above the national average. East Sussex sits far below the national average, with a GVA per head of £16,700. This reflects several factors, including the fact that East Sussex is a mainly residential district with high levels of out-commuting, and has a lower

concentration of high skilled jobs in the area. As the centre of economic activity in Sussex, Brighton and Hove is the only area where GVA per head is above the national average (£30,200). Brighton and Hove is the reverse to East Sussex. The high level of GVA per head is mainly due to its high ratio of jobs to residents, particularly highly skilled and high value jobs.

- 17.6.11 This data reflects a more up to date picture than was presented at PEIR (which was based on data for 2018). GVA increased in 2019 but fell in 2020 due to the COVID-19 pandemic. As a result, the 2020 GVA figures are only marginally higher than 2018 figures presented in the PEIR.
- 17.6.12 GVA per FTE job data (which is an indicator of productivity) shows that Sussex has a GVA per FTE job of £71,400. This is below the national average of £78,700 but is very similar to the national average when London is excluded (£72,700). Within Sussex, Brighton is the most productive area with a higher level GVA per FTE job than both West Sussex and East Sussex. This is due to the sectoral composition of employment in Brighton which is skewed more towards high skilled and high value jobs.

Area	Total GVA (£ million)	GVA per head	GVA per FTE
West Sussex	£22,844	£26,300	£72,500
East Sussex	£9,350	£16,700	£63,600
Brighton and Hove	£8,800	£30,200	£78,200
Sussex	£40,994	£23,900	£71,400
South-east	£287,359	£31,200	£83,600
UK	£1,949,605	£29,100	£78,700
UK excl. London	£1,479,320	£25,500	£72,700

### Table 17-15 GVA and GVA per head, Sussex, 2020

Source: ONS, (2022c). Please Note: GVA estimates are rounded to the nearest million £. GVA per head and GVA per FTE are rounded to the nearest £100.

### Population

- 17.6.13 Sussex has a total population of around 1.72 million people, of whom 1.03 million (or 60%) are of core working age (i.e., aged 16-64). Overall, around 22% of the total population in Sussex is aged 65 and over (23% in West Sussex, 26% in East Sussex and 13% in Brighton and Hove). This is higher than the national average (of 19%) in 2020.
- 17.6.14 From 2010 to 2020 Sussex has experienced a high level of net in-migration, with 213,000 migrants moving to the area over this period. This is significantly higher than the overall population increase experienced over the same period (+122,000), indicating natural change (births minus deaths) has been negative. Roughly a

quarter (56,500) of Sussex's net additional migrants are international migrants and three quarters are UK migrants (156,500).

17.6.15 Brighton and Hove attracted almost half of the additional net international migrants (26,500) to Sussex, but experienced lower in-migration from other parts of the UK than other areas. In contrast, East Sussex and West Sussex mostly attracted migrants from other parts of the UK.

#### Labour market indicators

17.6.16 The average unemployment rate in Sussex (3.4 percent) is lower than the average for the UK as a whole (3.9 percent). There is a small degree of variation across the county areas within Sussex (1 percentage point difference between West Sussex and East Sussex).

### Claimant rate

17.6.17 The claimant rate measures the number of people claiming Jobseekers Allowance or Universal Credit who are unemployed and seeking work as a percentage of the working age population. This was below 2.5% in Sussex for much of the late 2010s, and consistently lower than the UK trend (between January 2017 to December 2019, the average claimant rate was 1.7% in Sussex compared to 2.3% in the UK), indicating a tight labour market with limited capacity. This increased sharply in 2020 because of the COVID-19 pandemic reaching 6% in May 2020. Although the claimant rate has fallen since then, it is still well above its long-term average (3.2%).

### Tourism economy

### Tourism in Sussex

- Tourism (as defined<sup>2</sup> by the United Nations World Tourism Organisation (UNWTO, 2019)) is estimated to support 69,500 FTE jobs across Sussex (13% of total FTE jobs). Of these, 38,500 jobs are in West Sussex, 16,500 are in East Sussex and 16,000 FTE jobs are in Brighton and Hove. The tourism sector supports 13% of all employment locally, which is higher than the national average (9%).
- 17.6.19 From 2015 to 2019 the number of FTE tourism jobs within Sussex grew steadily. However, 2020 saw a decline in tourism across many areas of the country due to the COVID-19 pandemic. Although this has recovered slightly since 2020, Sussex has seen a decline of 7% from 2016 to 2021, significantly more than the national average (-1%). Brighton and Hove saw the greatest increase in tourism employment over this period (3%) whereas tourism employment in West Sussex and East Sussex fell (by 7% and 6% respectively).

<sup>&</sup>lt;sup>2</sup> UNWTO (2019) defines the tourism sector based on the following Standard Industrial Classification (SIC) codes: 55100; 55201; 55202; 55209; 55300; 55900; 56101; 56102; 56103; 56210; 56290; 56301; 56302; 49100; 49320; 49390; 50100; 50300; 51101; 51102; 79110; 79120; 79901; 79909; 90010; 90020; 90030; 90040; 91020; 91030; 91040; 92000; 93110; 93199; 93210; 93290; 77110; 77210; 77341; 77351; 82301; 82302; 68202.

- 17.6.20 As the central location for tourism within Sussex, Brighton and Hove attracted 10.7 million day and 1.6 million overnight visitors in 2019 (ESCC, 2021). This generated an overall contribution of £1,303 million to the economy through visitor expenditure and supported (directly and indirectly) 17,984 jobs. In comparison the smaller town of Hastings attracted 3.8 million day and 0.5 million overnight visitors. This generated £358 million of expenditure in the economy and supported (directly and indirectly) 7,030 jobs. Total visitor expenditure is worth around £5.2 billion to Sussex's economy, supporting 74,000 jobs.
- 17.6.21 In 2019 there were 25.5 million visits to East Sussex. The economic impact of tourism in East Sussex was reported to be £1,186 million in 2019. Eastbourne accounts for 28% of this impact, Hastings 21%, Rother 19%, Wealden 19% and Lewes 12%. In West Sussex there were 24.6 million visits in 2019. The economic impact of tourism in West Sussex was estimated to be £2,035 billion in 2019. Chichester accounts for 24% of this impact, Crawley 16%, Adur & Worthing 15%, Mid Sussex 14% and Horsham 12% (East Sussex County Council, 2021).

#### Visit Brighton visitor survey insights

- 17.6.22 Visit Brighton (Tourism South East, 2014-2020) have conducted a number of visitor surveys, the latest survey was conducted in 2020. These surveys provide useful insights for the assessment of the tourism baseline.
- 17.6.23 The highest proportion of visitor survey respondents indicated that the main purpose of their visit to Brighton and Hove was for 'leisure/holiday' purposes (79%). Twelve percent were in Brighton and Hove primarily for the purpose of visiting friends or relatives. 2% were language students, 3% were on a special shopping trip and 1% were visiting for business purposes.
- 17.6.24 Thirty percent of staying visitors were on a short break of 2-3 nights, 19% for 1 night, 30% for 4-7 nights, 12% for 8-14 nights and 9% for more than 14 nights. Of the visitor groups staying overnight in Brighton and Hove, 64% were using serviced accommodation.
- 17.6.25 When asked what the main trigger had been for initiating their visit to Brighton and Hove, 26% said it was to visit the sea/beach and 18% said it had been to visit friends and/or relatives. Eleven percent had visited previously, 11% just wanted a day out and 7% had been triggered by the good summer weather.
- 17.6.26 The most popular activity undertaken by visitors was just walking around (81%), followed by going out for something to eat (76%), visiting the beach/seafront (75%), shopping (51%) and visiting a tourist attraction (46%). The main attractions visited were the pier (59%), the Royal Pavilion (29%) and the British Airways i360 (23%).
- 17.6.27 The average overall spend on eating out, shopping, entertainment and travel/transport among visitors staying overnight in Brighton and Hove in 2018 was £71.65 (per person per 24 hours). Expenditure on commercial accommodation was £105.47 (£94.94 in 2016). When added together the average total spend for staying visitors, was estimated to be £177.12 per person per night.
- 17.6.28 Day visitors on holiday visiting Brighton and Hove spent an average of £96.63 per person per day during 2018 Eating out accounted for the highest proportion of

their spend. Day visitors from home to Brighton and Hove spent an average of £45.46 per person per day during 2018.

#### Nature of tourism offer in Sussex

- 17.6.29 Sussex is home to several attractions attracting over 100,000 visits per year. The most popular of these is Brighton Pier which consistently brings in between 4 and 5 million visitors per year. In 2019 Brighton Pier hosted 4.9 million visitors and has seen increasing levels of visitor numbers from 2012 to 2019. According to Visit England data, the pier is the most visited attraction in England.
- 17.6.30 On the whole the data on visits to visitor attractions is reflective of the impact of COVID-19 pandemic restrictions. Except for Wakehurst (which features a Grade I listed mansion and Grade II\* listed gardens) visitor numbers declined at all Sussex's main visitor attractions between 2019 and 2020<sup>3</sup>. The data also shows that there was a reasonably strong bounce back in 2021 as COVID-19 pandemic restrictions were eased with all but two major visitor attraction in Sussex (for which data is available) seeing an increase in visitor numbers compared to 2020. However, it should be noted that visitor numbers did not return to 2019 levels.

Attraction	No. of Visitors (2019)	No. of Visitors (2020)	No. of Visitors (2021)	District
Brighton Pier	4,901,221	4,110,005	4,260,485	Brighton and Hove
Nymans*	382,948	243,364	307,085	Mid Sussex
Wakehurst*	312,813	342,545	296,195	Mid Sussex
Royal Pavilion	301,675	56,298	73,159	Brighton and Hove
Chichester Cathedral	334,351	196,070	151,250	Chichester
Sheffield Park Garden	295,384	255,868	296,195	Wealden
Petworth House & Park	186,316	107,037	127,458	Chichester
Fishers Adventure Farm Park	176,932	106,168	N/A	Horsham

# Table 17-16Visitor attractions in Sussex which attracted over 100,000 visitors in<br/>2019 and visitor numbers to those attractions during 2020

<sup>3</sup> Based on all visitor attractions with over 100,000 visits per annum where data is available

Attraction	No. of Visitors (2019)	No. of Visitors (2020)	No. of Visitors (2021)	District
Southwater Country Park	170,000	N/A	N/A	Horsham
Standen*	166,337	98,084	113,139	Mid Sussex
Bodiam Castle	165,785	72,847	123,604	Rother
Tulleys Farm	140,000	60,000	N/A	Crawley
Batemans*	124,788	54,007	83,431	Rother
Horsham Museum & Art Gallery & Visitor Information Centre	109,255	N/A	N/A	Horsham

Source: Visit England (2020, 2021 and 2022). \* Listed houses surrounded by gardens owned by the National Trust.

- 17.6.31 The Sussex tourism baseline notes that visitor markets across Sussex are broadly similar (mature empty nesters), except in Brighton where they are generally younger. Families are not a significant market for Sussex except in one or two specific areas. Much of what Sussex has to offer is thematically indistinct from other competing destinations (heritage towns and attractions, coast, countryside, gardens, events & festivals and activities).
- 17.6.32 The coast of Sussex forms the heart of the tourism sector and is the most at risk of any potential impacts resulting from offshore wind development. **Table 17-17** below sets out several key locations for coastal tourism and the nature of the tourism offer at these locations. This is based on desk based research due to the lack of visitor surveys for most of these areas.

Location	Nature of tourism offer
Worthing	This is a popular seaside destination with good retail, entertainment and leisure facilities. There are notable historic buildings, as well as nearby pre-historic sites, and it provides visitors with a base from which to explore the South Downs. Tourism is an important industry for the town and Worthing, together with Adur saw 4.76 million tourism visits in 2019. Worthing has 5 miles of promenade, including Splash Point and Lido which attracts families for seaside activities. Worthing's seafront is based around its Historic Arc Deco Pier, which was

### Table 17-17 Nature of tourism offer at key coastal tourism locations

Location	Nature of tourism offer
	<ul> <li>opened in 1862 and remains open. In 2019, Worthing Pier was named the best in Britain. Other attractions include:</li> <li>Worthing observation wheel;</li> <li>Worthing Museum &amp; Art Gallery;</li> <li>walks along the beach;</li> <li>cycling;</li> <li>High Salvington Windmill;</li> <li>museums;</li> <li>Bramber Castle;</li> <li>gardens;</li> <li>parks; and</li> <li>the Cissbury Ring.</li> <li>Worthing has a partly sandy, mostly gravel, and pebbles beach (Worthing Beach).</li> </ul>
Littlehampton and Climping	Littlehampton is home to sandy beaches, a bustling marina and harbour and contemporary architecture. The seaside town's attractions includes the East Bench Café and the UK's longest picnic bench, as well as West Beach Local Nature reserve – a site of Special Scientific interest. The River Arun hosts several activities including sailing, diving and fishing. In addition to this, Littlehampton has an amusement park, miniature railway making the destination popular to families and couples. Climping lies 3 miles west of Littlehampton and predominately attracts families. The area is well known for its quiet beach. Along the coast towards the River Arun and Littlehampton are the Climping sand dunes, a Site of Special Scientific Interest.
Brighton and Hove	<ul> <li>Brighton and Hove attract a range of tourists including families, teens and adults due to the wide variety of attractions.</li> <li>According to a survey conducted by Visit Brighton, 79% of tourists visit the area for leisure/ holiday purposes. The most popular activities undertaken by visitors included walking (81%), going out to eat (76%), visiting the beach/seafront (75%), shopping (51%) and visiting tourist attractions (46%).</li> <li>60% of overnight staying visitors go for a short break of 2 to 7 nights with 12% staying for 8-14 days. When survey respondents were asked what the main reason for their visit to Brighton &amp; Hove was, 26% said the sea/beach, 18% states it had been to visit friends and/ or relatives and 11% were returned after a previous trip. The main attractions visited were the pier (59%), they Royal Pavilion (29%) and the British Airways 1360 (23%). Other popular attractions include:</li> </ul>



Location	Nature of tourism offer
	<ul> <li>the Viewing Tower;</li> <li>Sea Life Brighton; and</li> <li>Brighton Fishing Museum.</li> </ul>
	Brighton has a vibrant city centre, day and evening, plus a good rail service from London and road network, making Brighton an easy day trip out of the capital. Day visitors tend to come at weekends, in the summer months and for big festivals and events.
	There is a vibrant arts scene enjoyed by local people and tourists and a local focus on sustainable tourism in Brighton encourages more visitors to the area.
Bognor Regis / Middleton on Sea	Bognor Regis is attractive to families looking for a day out, a seaside holiday or short break. The beaches are particularly attractive having received the European Blue Flag and the Seaside Award for being clean, safe and with good facilities <sup>4</sup> .
	<ul> <li>Bognor Regis provides a range of attractions including: <ul> <li>the Land Train - offering rides up and down the promenade;</li> <li>Bognor Regis Museum - contains information and pictures of the history of the seaside town;</li> <li>the pier;</li> <li>parks;</li> <li>the South Downs planetarium;</li> <li>the Picturedrome cinema;</li> <li>Seafront crazy golf; and</li> <li>Fly Fortress Theme Park<sup>5</sup>.</li> </ul> </li> <li>The Bognor Regis Pier first opened in 1865 and is one of the oldest piers in Britain. The pier hosts one of the biggest and busiest nightclubs in West Sussex along with an amusements arcade and sea views of Bognor Regis beach.</li> <li>The village of Middleton-on-Sea is located along the coast to the east of Bognor Regis. The small village is frequented by families and has a varied offer for children and adults.</li> <li>The village has a main through road with shops on either side and is a great place for walking due to the footpaths and firm</li> </ul>

<sup>&</sup>lt;sup>4</sup> Bognor Regis Town Council <u>Visitor Information - Bognor Regis Town Council</u> <sup>5</sup> Bognor Regis Beach

Location	Nature of tourism offer		
	<ul> <li>sunniest spots in the UK and hosts a wide range of water activities. Tourists can walk along the promenade from Bognor Regis to Felpham. Additional attractions include:</li> <li>The promenade allows for walks from Bognor Regis to Felpham;</li> <li>Parks;</li> <li>Gardens;</li> <li>Museums;</li> <li>Castle; and</li> <li>Cathedrals.</li> </ul>		

#### Tourism assets within a 500m buffer of the proposed onshore DCO Order Limits

- 17.6.33 The landfall, onshore cable corridor and onshore substation will potentially impact tourism assets located close to the onshore cable corridor. Appendix 17.3: Socioeconomics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3) highlights tourism assets within 500m of the onshore cable corridor. These assets have been identified using a desk based assessment. This includes businesses that are highly intertwined with the tourism economy such as visitor attractions, caravan parks, hotels, pubs and cafes. Due to the cable corridor being in a mainly rural setting the visitor offer in this area is reflective of the rural character and setting of the area. This rural nature somewhat reduces the number of assets due to the relative lack of development. Overall, the following types and number of assets have been identified:
  - 1 beach
  - 5 cafes and pubs
  - 8 caravan parks / campsites
  - 11 other visitor accommodation
  - 3 other assets including workshops, wedding venue equestrian venue.
- 17.6.34 A large section of the onshore cable will be in the SDNP. The SDNP is home to several long standing tourist destinations, however comparatively the National Park is still very young, having only been designated in 2010. Four tourism assets identified in **Appendix 17.3: Socio-economics technical baseline, Volume 4** of the ES (Document Reference 6.4.17.3) are in SDPN and within 500m of the onshore cable, none of which are major tourism attractions. These assets are Norfolk House, Holt House, The Frankland Arms and Washington Caravan & Camping Park.
- 17.6.35 Of relevance to understanding the nature and offer of tourism in the SDNP is information collected from visitor surveys conducted in the area. SDNPA conducted a visitor survey in 2019 (SDNPA, 2019). This was a refresh of a previous survey conducted in 2015. 1,193 10 minute face to face interviews were completed with visitors at 16 sites across the national park between July and

September 2018. Key findings relevant to the baseline assessment of tourism conditions include the following points:

- Eight in ten respondents (82%) noted that they were aware of being inside the South Downs National Park;
- 28% respondents indicated that the National Park had been a factor in their decision to visit the area. Although this rose to 60% for Overnight visitors staying in the park;
- The overall average length of stay of overnight visitors has dropped from 5.28 nights in 2015 to 4.66 in 2018;
- Median expenditure on non-accommodation costs remained static at £6.67. Although increased maximum expenditure meant the mean rose to £12.31 from £9.97 (in 2015);
- 39% of respondents were day visitors, 35% of survey respondents were local residents, 20% were overnight visitors staying outside the SDNP and 6% were overnight visitors staying within the SDNP;
- Of the respondents who were aware of the National Park designation (866 people), only 28% indicated that the National Park had been a factor in their decision to visit the area. It is noted in the survey report that the development of the SDNP as an experiential tourism destination through initiatives such as the English National Park Collection with Visit England will likely lead to a positive movement in this indicator.;
- Of the 1,193 respondents, 75% were repeat visitors. Local residents visit the most regularly with 43% of respondents visiting either once a week or more than once a week;
- 81% of the 73 overnight visitors staying within the National Park stayed in paid accommodation;
- Scenic landscape &/or breath-taking views was the factor most likely to contribute to visitors' enjoyment, with over three quarters of respondents (77%) choosing this option. Nature/wildlife saw 57% of respondents choose this as a factor whilst tranquil/unspoilt places saw 52% choose this as a factor;
- Traffic issues were a key issue for 13 visitors to Alfriston where improvements would have made the day more enjoyable;
- The most popular activities undertaken were going for a walk (73% of respondents undertook this activity) and visiting a café/pub/tea room (50% of respondents undertook this activity);
- The main mode of transport for visitors was private car/van/other motor vehicle with almost 80% using this method;
- Visitors over the age of 45 made up 55% of visitors this had grown from 45% in 2015; and
- Overseas visitors made up almost 10% of the respondents to the survey.

#### **Onshore recreation**

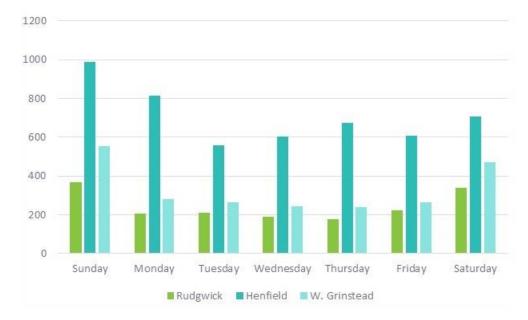
#### PRoW and promoted routes

- 17.6.36 The landfall, onshore cable corridor and onshore substation will potentially impact up to 154 ProW, as recorded on the WSCC Interactive Map (WSCC, 2012), and including those within a 500m ZOI each side of the onshore temporary cable corridor. All the paths surveyed (which were those that were considered most likely to be severely affected and/ or carry significant volumes of traffic) were open and in acceptable condition. All paths were assessed for relative levels of use, compared to other paths in the local network, using Strava Global Heatmap traces and corroborated, where possible, by Google Earth imagery. The results have been fully tabulated in Annex A of Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES: (Document Reference 6.4.17.3).
- 17.6.37 Each of the paths within the temporary cable corridor and the ZOI have also been assessed for sensitivity based on its apparent level of use; its position/ function within the local network; and its importance in published policies. Those paths assessed as being of medium, high or very high sensitivity have been listed in **Table 17-28**.
- 17.6.38 The named routes crossed by the onshore temporary cable corridor (listed in **Table 17-28**) consist of the ECP, Monarch's Way, the Downs Link and the South Downs Way National Trail.
- 17.6.39 The ECP along Climping Beach has been approved by the Secretary of State but is not yet formally opened as a national trail. Therefore, its future status as a national trail is unlikely to be having much impact upon current (or pre-COVID-19) levels of use. Most users of the path are probably beach users or local walkers/dog-walkers. Once officially opened, it is expected that path use will increase because of its elevated status and increased profile. An indication of the levels that can be expected can tentatively be drawn from data from opened sections of the ECP in southern England.
- 17.6.40 Data from Natural England (unpublished report, D. Pearce, 2020. pers. comm.) record that the ECP at Pegwell Bay in Kent received about 46,500 visits per annum for 2017 and 2018. This figure is higher than is expected at Climping Beach as Pegwell Bay is closer to large centres of population. However, the seasonal and weekly patterns of use give a guide to the patterns of use that can be expected. At Pegwell Bay it has been found that there is a large seasonal change, with the colder months (i.e., October to March) recording half or less of the visits recorded between April and September. The peak months of July and August (212 visits/day and 210 visits/day respectively) are approximately four times as busy as the quietest months of December and January (of 54 visits/day). The weekly distribution of visits shows an average of 115.8 counts on weekdays and a weekend average of 172. Therefore, weekend days generally have around 1.5-times the number of visits. Sunday visits are slightly higher than Saturday (176 Sunday, 168 Saturday).
- 17.6.41 No figures have been found for use of Monarch's Way. The Strava Heatmap suggests that it is only moderately trafficked but with some sections more heavily used where these are also important segments in the local network.

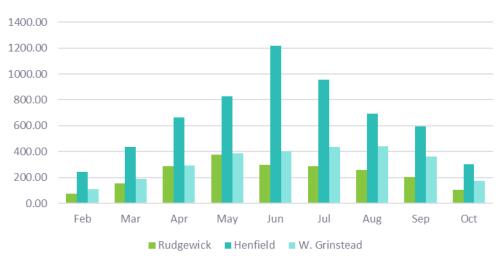
- 17.6.42 The South Downs Way shows up on Strava Heatmap as a heavily trafficked route. The South Downs National Park Authority maintains several people counters along the route, including one at Kithurst Hill – approximately 1km from the expected cable crossing. Data have been supplied for 1/4/2015 to 31/3/2016, as this is the most recent year for which reliable data is available due to on-going problems with data collection (pers. comm. National Trail Officer South Downs Way, 23/11/20, and Principal Planning Officer, SDNPA, 21/2/23).
- 17.6.43 The total number of users has been recorded by mode of use; 31,929 walkers, 12,173 cyclists and 179 horse riders. The year-round average daily traffic is 33 cyclists and 87 walkers per day. However, there is a seasonal variation, with July being the busiest month. A total of 5344 walkers used this part of the South Downs Way during July, or approximately 1,200 per week. Of these, on average about 130 used the SDW each weekday, 290 on a Saturday and 257 on a Sunday.
- <sup>17.6.44</sup> For cyclists on the South Downs Way, visits peaked at 1895 for July 2015, with an average 39 cyclists per weekday, 133 on Saturdays and 109 on Sundays.
- 17.6.45 January was the quietest month with a combined average of only 56 users per day, compared to a combined average of 224 users per day in July.
- 17.6.46 Horse riding on this part of the South Downs Way is negligible, with less than 1% of traffic being equestrian. This equates to a peak of around 50 journeys per week by horse compared to about 2100 walks and nearly 700 cycle trips over the same period. (However, it is noted that there is a number of equestrian facilities in the vicinity of the cable corridor and equestrian use was noted on most bridleways and restricted byways subject to a walkover survey.) From the data available, the peak week for all user types occurred in June 2015.
- 17.6.47 The Downs Link is a 37-mile bridleway route connecting the North and South Downs Way National Trails to the coast at Shoreham. The Downs Link is also promoted by Sustrans as its regional route 223.
- 17.6.48 The cable route will cross the Downs Link between Partridge Green and Henfield. The route shows up on Strava Heatmap as being heavily used. A walkover survey (20/8/20) showed a high level of use, particularly with groups of young cyclists and families. Walkers were also in abundance. A sole horse rider was seen near to Partridge Green.
- 17.6.49 Data has been obtained for traffic counters (including walkers, riders, cyclists or private vehicle users) at three locations on the Downs Link at Henfield, West Grinstead and Rudgwick. The initial data set covered the period 9 February 2020 to 8 October 2020. This period was predominantly within that covered by various levels of COVID-19 pandemic restrictions and so the data cannot be taken to be strictly representative of pre-COVID-19 pandemic use rates. Updated data has been supplied covering November 2021 to December 2022. These data show that overall levels of usage have fallen by approximately half since November 2021 but that the general pattern of user traffic by day of the week has remained similar, though with a less pronounced monthly variation.
- 17.6.50 The total recorded users for the data 2020 period are: Henfield 171,968; West Grinstead 80,418; and Rudgwick 59,441. The data give the weekly and monthly patterns of use shown in **Graphic 17-1** to **Graphic 17-4** below. The full



data are shown in Annex B of Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES: (Document Reference 6.4.17.3).



Graphic 17-1 Average number of users per day of the week (2020)



#### Graphic 17-2 Average daily users by month (2020)

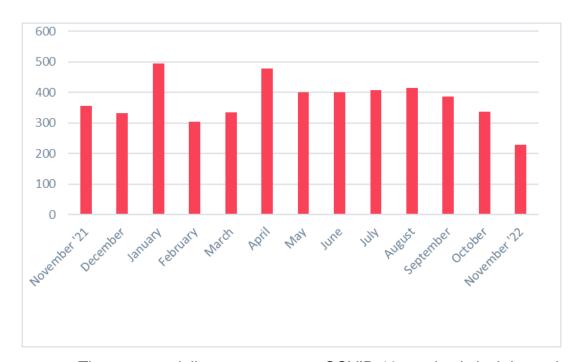
Note: data is not available for winter months (Nov, Dec, Jan)

- 17.6.51 From the data presented above it is apparent that there was a considerable increase in use during the warmer months at all sites but especially as recorded by the Henfield counter. It is also apparent that numbers of users were generally higher on a Sunday, though the mid-week fall in numbers was less notable for Henfield than for the other sites.
- <sup>17.6.52</sup> Updated data were sought to try to gauge the changes post COVID-19 pandemic lockdowns. The data supplied (pers. comm. Principal Planning Officer, SDNPA, 21 February 2023) has been plotted in graphics 17-3 and 17-4 below:



#### Graphic 17-3 Average number of users per day of the week (2021-2) Henfield only

# 17.6.47 The daily pattern of use has remained broadly similar post COVID-19 lockdowns.



Graphic 17-4 Average daily users by month (2021-22) Henfield only

17.6.53 The average daily user count post COVID-19 pandemic lockdowns is generally lower than during the height of the pandemic, with the summer monthly user counts during 2021-2022 generally being considerably lower. It is also particularly noticeable how the distribution curve for monthly users is much flatter for 2021-2022 than during 2020. While they probably represent an overstatement of the normal usage, the data for 2020 has been used to represent the potential traffic going forwards.

17.6.54 The Downs Link is on a low embankment, an old railway base, in the area of the expected cable crossing point.

#### Cycling routes

- 17.6.55 There are two promoted cycling routes to be crossed: National Cycle Network route 2, and regional route 223. Route 223 runs over the Downs Link, as discussed above.
- 17.6.56 National Cycle Network route 2 is a long-distance route which, when fully complete, will link Dover to St. Austell. The route will be crossed approximately 1km north of Climping Beach. At this location, National Cycle Network route 2 runs on the minor road known as Ferry Road. No quantitative user data is available, but Strava Heatmap suggests frequent use by cyclists.

#### Horse riding

17.6.57 There are no regionally or nationally promoted horse riding routes except for the SDW and the Downs Link. No evidence has been found of significant equestrian traffic on either of these routes. However, the walkover surveys showed some evidence of horse riding on the majority of bridleway and restricted byways visited, in particular north of the A27 across the SDNP, with a local concentration of livery yards, stables and studs near to the cable corridor. It is therefore considered that horse riding is a regular use of most bridleways across the SDNP in the vicinity of the cable corridor.

#### Rivers Arun & Adur

- 17.6.58 Both rivers are important recreation assets, and both will be crossed by the onshore cable corridor using HDD. The River Arun will be crossed about 2km from the coast at Littlehampton. The western fork of the River Adur will be crossed about 2km south of Partridge Green, west of Henfield.
- 17.6.59 Both rivers host annual swimming events attracting more than 350 participants each. The rivers are both also recognised as kayaking/canoeing rivers, though they are both heavily tidal – restricting canoeing opportunities. Angling also takes place along both rivers. Both rivers have public footpaths following one or both banks.

#### Access Land

- 17.6.60 Access Land is land designated under the CROW Act, giving the public a right of access for the purposes of open-air recreation. The study area includes land that is registered common land and land that qualifies as 'open country' under CROW.
- 17.6.61 There is a small number of commons that are in the vicinity of the onshore cable corridor, but none are directly crossed. The commons within the zone of interest are: The commons within the zone of interest are:
  - unnamed common adjoining Spur Road, Climping (CL48, TQ005008);

- Horsebridge Common (CL22, TQ180151);
- Washington Common (CL258, TQ115140) located over 300m from the Order Limits (access point from A283). Please note that Washington Common is not considered in any further detail in the assessment as it over 500m from the cable infrastructure.
- OAL2 Bines Green, West Sussex, located on Horsham Road (as shown in the Outline Public Rights of Way Management Plan (Document Reference: 7.8)) - Bines Green (CL21, TQ184169); and
- Washington Common (CL258, TQ115140).
- 17.6.62 Two parcels of other Access Land are within 500m of the onshore cable corridor. OAL1 – East of Chantry Lane on the South Downs, Sullington Hill will be crossed near the northern border of the South Downs National Park . There is a concentration of 'open country' access land along the northern border of the Downs, providing a large public access resource over approximately four miles of the National Park boundary.
- 17.6.63 The potentially affected Access Land parcels are at:
  - OAL1 East of Chantry Lane on the South Downs (as shown in the Outline Public Rights of Way Management Plan (Document Reference: 7.8)); and
  - Unnamed parcel on the South Downs centred on TQ086113.

#### Other public open space

- 17.6.64 While not a registered common and therefore not Access Land, there is one other block of public green space that falls within the onshore cable corridor. This is the Washington Recreation Ground and Allotments (TQ122132) which has one football pitch, one cricket pitch and parking for 12 vehicles. The land lies directly on the cable route and will be crossed using HDD. Jockey's Meadow also has recreational value (and is also crossed using HDD). This is illustrated in Figure 17.4, Volume 3 of the ES (Document Reference: 6.3.17). It should be noted that these open spaces are not officially recognised as formal public green space. They are however listed in the SDNPA evaluation of Local Green Spaces proposed for the Storrington, Sullington and Washington Neighbourhood Plan (SDNPA, 2018) and are included in the onshore recreation baseline environment due to their recreational value.
- 17.6.65 Climping Beach is also publicly accessible either along the shore, via PRoW or from the ticketed, privately owned car park at Atherington. The beach will be crossed by HDD and so there will be no direct interruption to access during the works. However, there will be some impact on amenity during construction.

#### Tourism perception of wind farms

17.6.66 There is a limited body of evidence relating to the extent to which offshore wind farms (and their onshore infrastructure) impact upon tourism activity. The primary research base can be divided into three broad groups focussing on ex-ante research, ex-post research and wider research.

- 17.6.67 Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference 6.4.17.3) presents a review of various research papers and studies that have analysed the impact of offshore wind farms on tourism and visitors to areas from which said wind farms are visible. The evidence suggests that offshore wind farm developments generate very limited or no lasting negative impacts on tourism and recreational users during both construction and operational phases. In fact, construction activity has potential to generate positive benefits in the short-terms through the additional demand for accommodation, food and drink services, and wider induced benefits.
- 17.6.68 A recent study prepared as part of the East Anglia ONE North and East Anglia TWO offshore wind farms inquiry (Scottish Power Renewables, 2020) considered the impact construction activity for the existing Rampion 1 project had on tourism activity along the south coast. This study uses a very narrow definition of the tourism economy (focussing primarily on the accommodation and food services sector) and focusses on specific local authority areas within Sussex (including Lewes, Adur, Horsham and Worthing Districts).
- 17.6.69 Overall, the analysis presented in this study did not suggest any relationship between the construction of offshore wind farms and any reduction (or increase) in tourism activity, visitor spending or tourism-related employment. Whilst it notes that Lewes District saw a small decline in employment within the accommodation and food services sector during construction of Rampion 1, it fails to mention that this occurred within a wider decline across East Sussex. On the other hand, the study mentions that whilst the number of people employed in accommodation and food services sector in Adur, Horsham and Worthing (i.e., the three districts through which the onshore temporary cable corridor passes) increased, there is no relationship between construction of both offshore and onshore infrastructure for Rampion 1 and the tourism sector.

# **Future baseline**

- 17.6.70 In the absence of the proposed Rampion 2, the national baseline would not be anticipated to be significantly different. The shortfall in offshore wind investment left by the absence of Rampion 2 would most likely occur elsewhere, and the offshore wind sector would continue on its anticipated growth trajectory (i.e., towards having up to 50GW of generation capacity by 2030), as set out in the British Energy Security Strategy (HM Treasury, 2022a).
- 17.6.71 At the Sussex level, the future baseline in the absence of Rampion 2 would be anticipated to differ slightly from what would occur should the proposed development be delivered. Overall, the total size and scale of the economy would not be expected to differ significantly from ambitions set out within the various local plans and strategies that cover the study area (including the *WSCC Economic Growth Plan, 2018-2023* (WSCC, 2018a), the *ESCC Growth Strategy* (ESCC, 2014b), and the *Brighton and Hove City Plan* (Brighton and Hove City Council, 2016)).
- 17.6.72 Whilst the level of project expenditure that is expected to be captured at the Sussex level, both during construction and operation and maintenance is anticipated to be limited in the context of the study area as a whole (see Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES:

(Document Reference 6.4.17.2), the absence of Rampion 2 would mean a much smaller offshore wind sector, and related supply chain within Sussex. This includes both the direct operation and maintenance jobs, which is assumed to be supported at Newhaven (which can increase by a further 40-50 FTE jobs) as well as the indirect jobs supported within the sector's supply chain.

# 17.7 Basis for ES assessment

# Maximum design scenario

- 17.7.1 Assessing using a parameter-based design envelope approach means that the assessment considers a maximum design scenario whilst allowing the flexibility to make improvements in the future in ways that cannot be predicted at the time of submission of the DCO Application. The assessment of the maximum adverse scenario for each receptor establishes the maximum potential adverse impact and as a result impacts of greater adverse significance would not arise should any other development scenario (as described in **Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4)) to that assessed within this Chapter be taken forward in the final scheme design.
- 47.7.1 A change request [**AS-046**] to the DCO Application was accepted by the Examining Authority on 24 July 2024 [**PD-018**]. These changes included minor reductions to the proposed DCO Order Limits (onshore only) where adjacent to areas of Ancient Woodland to provide a 25m buffer from these features. Further localised reductions to the extent of Works 9 and 19 were also made, assigning these areas to a class of work with lower impacts from those previously assessed as cable installation. The changes made result in no new or different effects from those reported in this chapter of the ES. The figures supporting this chapter of the ES have not been updated due to the minor nature of these changes, the final proposed DCO Order Limits and Works areas should be viewed on the **Onshore Works Plans** (Document Reference: 2.2.2 and [**AS-026**].
- 17.7.2<u>17.7.3</u> The maximum design scenario has been identified to be relevant to socioeconomics are outlined in **Table 17-18** and are in line with the Project Design Envelope (**Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4)).

Table 17-18	Maximum design scer	nario for impacts on	socio-economics

Project phase and activity/impact	Maximum design scenario	Justification
Construction		
Direct and indirect employment creation Direct and indirect GVA creation	Rampion 2 will have an estimated capacity of 1,200MW. This is a key assumption for the socio-economic assessment as cost assumptions are based on construction cost per MW benchmarks (£/MW) from The Crown Estate (2019). This assumes that a higher capacity wind farm would cost more. More detail about potential costs and sourcing from within the Sussex and UK study areas is provided in Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES (Document Reference 6.4.17.2).	Construction expenditure incurred by Rampion 2 is key driver of economic impacts. The use of sourcing assumptions (at both Sussex and UK levels) allows for an assessment of the positive impacts that could be supported by the Proposed Development.
Impact on tourism economy	Maximum blade tip height above lowest astronomical tide (LAT) (m) = 325m. Rampion 2 will consist of 65 WTG, each with a rotor diameter of 295m and has a maximum blade tip of 325m above LAT.	The assessment is based on the largest WTG option being deployed. This is based on the assumption that the larger turbines (of 325m above LAT compared with a maximum tip height of 210m above LAT) are visible from a much wider area. As the assessment of the tourism economy is undertaken at the Sussex level, the use of the larger WTG is assumed to have the largest-possible impact on visitor activity.

Project phase and activity/impact	Maximum design scenario	Justification
Onshore recreation	The maximum size of the construction compound at landfall is proposed to be 120m x 100m size. Landfall at Climping Beach via HDD. Connection to the onshore export cable is proposed to be via a transition joint bay (TJB) located behind Climping Beach. Work is proposed to last up to 24 months from start to finish. Testing may fall outside this point.	24 months represents the maximum work period over which landfall activity will be taking place. It should be noted that work will not be continuous throughout this period; however, under the maximum design scenario it is assumed that any diversions/reduced access will remain in place continuously.
Inshore recreation (at landfall)	Export cable ducts will be installed underneath Climping Beach using HDD. The drilling will start from the compound to the north of Climping beach and extend for approximately 1km to exit below the mean low water springs. A shallow barge will be located at the exit point for a period of approximately 10 to 14 days while each HDD is completed, and each duct installed.	A period of 10 to 14 days per duct represents the maximum working period for which access to the HDD exit location (assumed to extend beyond the inshore zone) will be impacted. Under the maximum design scenario, it is assumed that this construction activity takes place over peak season.
Onshore recreation and tourism	An onshore temporary cable corridor approximately 38.8km in length and 40m wide (not including end points). Cable installation is anticipated to progress in sections. Up to 45 joint bay and link boxes may be required, with construction lasting between six to eight weeks per location. It should be noted that this does not include the cable pulling. Joint bay and link boxes to be located every <del>750m_600m_10_950m_1000m</del> (with actual location dependant on factors such as crossing and bends). There will be up to five construction compounds: • Climping compound; • Washington compound;	This represents the maximum design scenario for the construction of the Proposed Development. It is assumed that cable installation will take place at peak season and will therefore have the greatest impact on the volume and value of tourism, and onshore recreation. Where they are not separate to the route, the construction compounds are expected to fit within the proposed cable corridor however the actual width may vary to allow for small changes to the HDD location. 42 months represents the absolute maximum

Project phase and activity/impact	Maximum design scenario	Justification
	<ul> <li>Oakendene substation compound;</li> <li>Oakendene west compound; and</li> <li>Existing National Grid Bolney substation compound.</li> <li>Each compound will measure 50m x 75m and will be used for up to 42- months.</li> </ul>	period when access to the construction compounds is required. Following this period, original conditions will have been reinstated.
Operation and Mainte	nance	
Direct and indirect operation and maintenance employment Direct and indirect GVA creation	Annual operation and maintenance costs are assumed to amount to 1.5% of initial investment (or £43 million per annum). It is assumed that the operation and maintenance port will be located in Sussex, and that all direct labour (estimated to range 40-50 FTE per annum) will be based within the area. As outlined in <b>Appendix 17.2: Socio-</b> economics cost and sourcing report, Volume 4 of the ES (Document Reference 6.4.17.2), it is likely that the existing facilities at Newhaven Port will be used (and expanded where necessary) as the base for operation and maintenance of Rampion 2, as this will yield synergies and enable effective coordination with the existing operations of the existing Rampion 1 project.	Annual operation and maintenance expenditure incurred by Rampion 2 (i.e., expenditure on direct labour, as well as supply chain expenditure) is key driver of economic impacts. At this stage, detailed cost estimates are not available, and are likely to be highly commercially sensitive. The use of sourcing assumptions (at both Sussex and UK levels) allows for an assessment of the positive impacts that could be supported by the Proposed Development.
Onshore recreation	The operational lifetime of the proposed development is expected to be around 30 years.	30 years expected lifetime for Rampion 2.
Onshore recreation	Maintenance of the onshore cable is expected to be minimal. Periodic testing will be required every two to five years. Access to the cable will be via link boxes located every 750m 600m to 1000950m. Unscheduled maintenance	

Project phase and activity/impact	Maximum design scenario	Justification
	or emergency repair visits will typically involve a small number of vehicles and may include the occasional HGV (depending on nature of the repair).	
Decommissioning		
Onshore cable	It is anticipated that the onshore electrical cables will be left in-situ with ends cut, sealed and buried to minimise environmental effects associated with removal.	
Onshore substation	The onshore substation may be used as a substation site after decommissioning, or it may be upgraded for use by another offshore wind farm project.	Under the maximum assessment assumption, it is assumed that the site of the onshore substation remains in use (either as a substation, a related use or another activity), and that if there were any loss of (onshore) recreation associated with its construction (incl. loss of PRoW) then this would be permanent.



### **Embedded environmental measures**

- 47.7.317.7.4 As part of the Rampion 2 design process, a number of embedded environmental measures have been adopted to reduce the potential for impacts on socio-economics. These embedded environmental measures have evolved over the development process as the EIA has progressed and in response to consultation.
- <u>47.7.417.7.5</u> These measures also include those that have been identified as good or standard practice and include actions that would be undertaken to meet existing legislation requirements. As there is a commitment to implementing these embedded environmental measures, and also to various standard sectoral practices and procedures, they are considered inherently part of the design of Rampion 2 and are set out in this ES.
- **Table 17-19** sets out the relevant embedded environmental measures within the design and how these affect the socio-economics assessment

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#### Table 17-19 Relevant socio-economics embedded environmental measures

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
C-1	The onshore cable route will be completely buried underground for its entire length.	Scoping	Draft Development Consent Order (DCO) Schedule 1, Part 1, The Authorised Development, Work No. 6, 7, 8, 9, <u>19DCO works plans,</u> description of development and requirements	Reduce disruption to onshore recreation receptors.
C-2	Cables will be installed in ducting.	Scoping	Draft DCO Schedule 1, Part 3, Requirement 6 Cable parameters (3) DCO works plans, description of development and requirements	Should repairs be required during the operation and maintenance's phase, these can be affected through link boxes, and therefore reduce the need for excavation/ trenching (and therefore disruption to onshore recreation receptors).
C-7	Post construction, reinstatement of agricultural land, or other areas of 'soft' land use where the natural soil profile is present, will be to pre- existing conditions and if remaining in agricultural use, to the original ALC grade, except where a permanent at	Scoping	Draft DCO, Schedule 1, Part 3, Requirement 22 CoCP (4) (e) Draft DCO, Schedule 1, Part 3, Requirement 23 Onshore construction	This will seek to reduce the Proposed Development's overall impact on onshore recreation receptors, in addition to the wider tourism economy.

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
	or above ground structure including the transition joint bay, joint bays and the onshore substation and related access, landscape and drainage works are required. This will be completed in accordance with the Materials Management Plan (MMP) (C-69) and Defra 2009 Code of Construction Practice for the Sustainable Use of Soils on Construction Sites PB13298. The stage specific Soil Management Plan(s) (SMP(s)) are to be used in conjunction with the MMP (and Soil Resource Plan – which will be integrated with and may form a sub- section of the MMP) to maximise the restoration of excavated soils to their pre-existing condition and location, and if this is not possible, to maximise the reuse of soils within the Proposed Development, minimising soils being relocated outside the Proposed Development or becoming waste.		method statement (2) (h)Outline COCP and DCO requirement	
C-9	Joint bays will be completely buried with the land above reinstated to pre- construction ground level, with the	Scoping	Draft DCO, Schedule 1, Part 3, Requirement 6 Cable parameters (3)	This will seek to reduce the Proposed Development's overall impact on onshore

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
	exception of link box chambers where access will be required from ground level (via manholes). Once constructed, joint bays and link box chambers will be resilient to flooding.		DCO works plans, description of development and requirements	recreation receptors, in addition to the wider tourism economy.
C-18	Appendix A Crossing Schedule of the Outline Code of Construction Practice includes the crossing methodology which will be used for each crossing of road, rail, public right of way (PRoW) and watercourse.	Scoping	Draft DCO <sub>τ</sub> Schedule 1, Part 3, Requirement 22 CoCP (4) (p)Outline COCP and DCO requirement	This will seek to reduce the Proposed Development's overall impact on onshore recreation receptors, in addition to the wider tourism economy.
C-19	The onshore cable will be constructed in discrete sections. The trenches will be excavated, the cable ducts will be laid, the trenches backfilled, and the reinstatement process commenced in as short a timeframe as practicable. At regular intervals (typically 600m – 1,000m) along the <u>cable route joint</u> bays (and associated ancillary infrastructure including link and communication boxes will be installed to enable the cable installation and jointing process. The stage specific CMS will set out a protocol for the reinstatement of land used	Scoping	Draft DCO <sub>7</sub> Schedule 1, Part 3, Requirement 10 Programme of works (1), Requirement 22 (4) CoCP, Requirement 23 Onshore construction method statement (2) (h)Outline COCP and DCO requirement	This will ensure that local disruption to onshore recreation receptors will be limited to when the relevant section is being constructed, thereby reducing the proposed development's overall impact on onshore recreation.

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
	temporarily for construction including the timing in accordance with C-103.			
C-20	The typical construction working <u>corridorarea</u> will be 40m along the onshore cable corridor to minimise the construction footprint. At other discrete locations this may be expanded to accommodate working area for example for Horizontal Directional Drilling (HDD)	Scoping	Draft DCO, Schedule 1, Part 3, Requirement 22 (4) CoCPCOCP and DCO articles / requirement	This will limit the overall impacts on reduced access to PRoW and onshore amenities.
C-22	Core working hours for construction of the onshore components will be <u>Core working hours for construction</u> of the onshore components will be 08:00 to 18:00 Monday to Friday, and 08:00 to 13:00 on Saturdays. Apart from specific circumstances that are set out in the Outline COCP, where extended and continuous periods of construction are required. <u>Prior to and following the core</u> working hours Monday to Friday, a 'shoulder hour' for mobilisation and shut down will be applied (07:00 to	Scoping	Draft DCO, Schedule 1, Part 3, Requirement 22 CoCP (5) (n)Outline COCP and DCO requirement	This will reduce the overall impact and disruption (especially noise as well as traffic and transport) on people's enjoyment of onshore recreation (the majority of which typically occurs outside of working hours).

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
	activities permitted during the shoulder hours include staff arrivals and departures, briefings and toolbox talks, deliveries to site and unloading, and activities including site and safety inspections and plant maintenance. Such activities shall not include noise generating activity including use of heavy plant or activity resulting in impacts between objects resulting in loud noises, ground breaking or earthworks.			
C-26	Where noisy activities are planned and may cause disturbance, the use of mufflers, acoustic barriers(or <u>shrouds</u> ) and other suitable solutions will be applied. For HDD work sites near to noise sensitive receptors where predicted levels may exceed the BS 5228 thresholds of significance, mud pumps that operate overnight will be shrouded and the drill will be fitted with acoustic (i.e. high mass) panelling and louvres as well as	Scoping	Draft DCO Schedule 1, Part 3, Requirement 22 CoCP (4) (g)Outline COCP and DCO requirement	This will reduce the overall noise impact on people's enjoyment of onshore recreation.

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
	engine silencers where diesel powered drills are used.			
C-32	Signage and/or temporary <u>public</u> <u>rights of way (PRoW)</u> PRoW /footpath diversions will be provided during construction.	Scoping	Draft DCO <sub>T</sub> Schedule 1, Part 3, Requirement 20 Public rights of way (5) (a)Outline COCP and DCO requirement	Whilst construction may result in temporary closures and/or diversions, this seeks to limit the overall impact on people's enjoyment of their recreation activity.
C-33	Stage specific CoCPs will include measures to minimise temporary disturbance to residential properties, recreational users and existing land users. It will include details of measures to protect these receptors including the use of screen fencing at the temporary construction compounds to contribute to minimising visual and noise impacts.	Scoping	Draft DCO <sub>T</sub> Schedule 1, Part 3, Requirement 22 CoCP and 22 (4) (g) Outline COCP and DCO requirement	Whilst construction may result in temporary closures and/or diversions, this seeks to limit the overall impact on people's enjoyment of their recreation activity.
C-34	RED will identify opportunities for companies based or operating in the region to access supply chain for the Proposed Development.	Scoping	Draft DCO <sub>T</sub> Schedule 1, Part 3, Requirement 33 Skills and employment strategy (1)Outline COCP and DCO requirement	This will seek to maximise the benefits of construction, operation and maintenance and decommissioning activity on the local economy.

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
C-35	RED will work with local partners and seek to maximise the ability of local people to access employment opportunities associated with the construction and operation of the Proposed Development.	Scoping	Draft DCO Schedule 1, Part 3, Requirement 33 Skills and employment strategy (1)Outline COCP and DCO requirement	This will seek to maximise the Proposed Development's local employment benefits.
C-43	The subsea export cable ducts will be drilled underneath the beach using horizontal directional drilling (HDD) techniques.	Scoping	Draft DCO Schedule 1, Part 1 (1) (Work No. 6) & (Work No. 7)DCO requirements or DML conditions	HDD at landfall will bypass Climping Beach, thus maintaining access to the beach and the inshore zone throughout landfall construction.
C-66	The Proposed Development has sought to minimise effects on the special qualities of the South Downs National Park and High Weald Area of Outstanding Natural Beauty (AONB) through careful design consideration in terms of scale, size and location, and taking account of the relevant policy and guidance. Further consideration of the special qualities during detailed design of the onshore cable corridor will be provided in accordance with C-292.	Scoping	Draft DCO Schedule 1, Part 1 The Authorised Development Work Nos 9, 10, 11, 12, 13, 14, 15,17 Draft DCO Schedule 1, Part 3, Requirement 12 Provision of landscaping (1), (3), (4) Requirement 13, Implementation and maintenance of landscaping (1)	This is especially relevant when considering the Proposed Development's overall impact on onshore receptors, people's enjoyment and the wider visitor economy.

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
			Draft DCO Schedule 1, Part 3, Requirement 22 CoCP (4) (a) and Requirement 40 Vegetation Retention and RemovalDCO works plans, description of development and requirements	
C-128	Any temporary crossings will be in place for the minimal time possible.	PEIR	Draft DCO, Schedule 1, Part 3, Requirement 22 CoCP (4)Outline COCP and DCO requirement	This measure will seek to reduce the overall level of disruption and loss of onshore recreation amenity
C-161	The South Downs Way and the Downs Link <u>Public Rights of Ways</u> (PRoWs) will be managed in a way that minimises any closures or diversions.	PEIR	Draft DCO Schedule 1, Part 3, Requirement 20 Public rights of way (1) (a), (b)Outline Public Rights of Way Management Plan (PRoWMP)	This measure will seek to reduce the overall level of disruption and loss of onshore recreation amenity
C-162	Public Rights of Ways (PRoWs) that cross the onshore cable corridor will be managed or diverted over the shortest distance possible with potential to provide adjacent crossings.	PEIR	Draft DCO, Schedule 1, Part 3, Requirement 20 Public rights of way (1) and (2)Outline PRoWMP	This measure will seek to reduce the overall level of disruption and loss of onshore recreation amenity

ID	Environmental measure proposed	Project phase measure introduced	How the environmental measures will be secured	Relevance to socio- economics assessment
C-163	Public Rights of Way (PRoW) condition surveys will be undertaken before, during and after the construction phase. If damage has been identified during the construction phase, the damage will be repaired. Post-construction, all PRoWs will be returned to their pre- construction condition.	PEIR	Draft DCO Schedule 1, Part 3, Requirement 20 Public rights of way (1)Outline PRoWMP	This measure will seek to reduce the overall level of disruption and loss of onshore recreation amenity.

17.7.617.7.7 Further detail on the environmental measures in **Table 17-19** is provided in the **Commitments Register** (Document Reference: 7.22) which sets out how and where particular environmental measures will be implemented and secured.

# 17.8 Methodology for ES assessment

# Introduction

- 17.8.1 The project-wide generic approach to assessment is set out in **Chapter 5**: **Approach to the EIA** of the ES: (Document Reference 6.2.5) and a detailed overview of the methodology for socio-economics is presented in **Appendix 17.1**: **Socio-economics method statement** of the ES: (Document Reference 6.4.17.1). The assessment methodology for socio-economics for the ES is consistent with that provided in the Scoping Report (RED, 2020) and no significant changes have been made since the scoping phase and PEIR provided alongside Statutory Consultation. The ES assessment also provides more detail than the PEIR where necessary such as increased cross references to other assessments and a more detailed assessment where required (e.g., assessment of potential effects on tourism related to the onshore and offshore development of Rampion 2). This also reflects the refinement of the project through the development process.
- In its guidance on socio-economics, EN-1 National Policy Statement states that all relevant socio-economic effects (which may include the creation of jobs and training opportunities, additional local services, improvements to local infrastructure, the effects on tourism and impacts on the labour market) should be considered. However, guidance provided is limited, and as such the assessment considers the likely significant effects associated with both onshore and offshore project infrastructure. For offshore infrastructure (such as turbines) the assessment considers both onshore and offshore receptors. For instance, in relation to tourism activity. However, the assessment of effects associated with onshore infrastructure (e.g., cable and substation construction) will be limited to only onshore receptors.

# Modelling economic activity and employment impacts

- 17.8.3 For the key quantitative measures of economic (i.e., employment and GVA), the socio-economic assessment uses an economic impact model which estimates the direct (as well as supply chain/indirect) employment and GVA impact supported during both construction and operation and maintenance phases, based on retained expenditure within each of the study areas assessed. More detail about the assumed investment required to deliver Rampion 2, and the sourcing assumptions used (based on potential locations for both construction and operation and maintenance ports) is provided in Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES (Document Reference 6.4.17.2).
- 17.8.4 At this stage, there is very little information about the proposed approach, costs, and therefore impacts supported during the decommissioning phase, and as such this is assessed qualitatively.

- 17.8.5 The socio-economic assessment excludes the induced impacts generated by Rampion 2 across all phases, as these are typically affected by greater uncertainty and are more difficult to measure and defend robustly in terms of their scale and additionality.
- 17.8.6 The absolute scale of the economic impacts supported during the construction phase is measured using the following approaches:
  - Direct construction employment and GVA This relates to the economic impacts driven by capital spend during the design and construction of Rampion 2. In other words, this relates to the employment and GVA which is associated with the first round of capital expenditure (i.e., Rampion 2's direct expenditure with prime (i.e., Tier-1) contractors within each impact area identified). The assessment is driven by the level of expenditure on goods and services retained in each area. The additional output in each sector is converted to jobs and GVA using sector-based benchmarks (e.g., from the ONS's Annual Business Survey) for each impact area.
  - Indirect construction employment and GVA These impacts are driven by supply chain expenditure in the study areas during the construction phase. The assessment uses UK and regional Input-Output tables supplemented by National Accounts data to estimate the value of output generated across various sectors as a result of input into (or spend in) a particular sector of the economy. The model generates estimates of how direct spend with Tier-1 suppliers leads to indirect outputs further down the supply chain. The output from the model is then converted to full-time equivalent (FTE) jobs and GVA using sector benchmarks.
- 17.8.7 The absolute scale of the economic impact during the operation and maintenance phase is measured using the same indicators as set out above (i.e., employment and GVA) although the methodology differs slightly:
  - Direct operation and maintenance employment and GVA Jobs and wealth creation directly associated with operation and maintenance activity is defined as the FTE employees directly engaged in activities relating to the management, operation, monitoring and maintenance of Rampion 2. The assessment will be driven by the anticipated number of FTEs and their salaries broken down by type of employment. It is estimated that an offshore wind farm the size of Rampion 2 will require between 40-50 direct FTE posts, allowing for some degree of efficiency across the operation of Rampion 1 and 2.
  - Indirect operation and maintenance employment and GVA Jobs and GVA associated with supply chain spend during the operation and maintenance phase include second round supply chain impacts. These are measured using UK and regional Input-Output tables, supplemented by National Accounts data 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 estimates how direct spend with Tier-1 suppliers leads to indirect output further down the supply chain. The output from the model will be converted to jobs and GVA using sector benchmarks.

- 17.8.8 The output from this quantitative assessment underpins the assessment of the magnitude of impacts on each receptor, which is in turn determined by the scale and nature of the impact in the context of the baseline position.
- 17.8.9 The method used to quantify the impacts of Rampion 2 starts by breaking down project expenditure into the following individual phases.
  - The development expenditure (DEVEX) and capital expenditure (CAPEX) spending phases are broken down into the following stages:
    - Development and consent this captures all survey work and studies required to obtain consent, from environmental surveys and seabed surveys to human impact studies and design studies;
    - Manufacture of components this includes all infrastructure, namely the WTG (broken down into individual components – including the nacelle, rotor and tower), and balance of plant (which includes the remaining segments of the wind farm excluding turbines, such as foundations, cables and substations); and
    - Installation and commissioning.
  - Operational expenditure (OPEX) direct employment the type of jobs which will be expected to be required to operate a wind farm.
  - **OPEX supply chain spend** this includes costs associated with the maintenance of equipment and spare parts, other operational services (incl. offices, admin and transportation) and other costs (business rates, etc.) related to operating and maintaining the wind farm once it becomes operational; and
- <sup>17.8.10</sup> Using the sourcing assumptions set out in Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES (Document Reference: 6.4.17.2), the GVA and employment impacts are quantified using an economic impact model which captures the multiplier effects of local expenditure and identifies the direct and indirect benefits created at the local (i.e., Sussex) and national levels.

### **Tourism economy**

- 17.8.11 The assessment of the tourist economy draws primarily on desk-based research about the impact of both onshore and offshore wind farms on visitor numbers and the visitor economy, and the application of this evidence to the characteristics of Rampion 2. The steps undertaken to assesses Rampion 2's impact on the tourism economy include:
  - consideration of the findings of published research assessing the impact of both onshore and offshore wind farms on visitors and visitor economies in the UK. This includes both the wind turbines and towers, as well as the transmission and grid infrastructure. No empirical, ex-post evidence for existing wind farms off the Sussex coast could be found. That said, reports quantifying the volume and value of tourism to the Brighton and Hove economy dating from 2014 (i.e., prior to onshore construction for Rampion 1 starting in September 2015) have also been considered. Please note that long-term data about the volume and value of tourism is available only at the Brighton and Hove level;

- examination of the characteristics of the tourism sector within the defined study area, including the main visitor centres, types of visiting activity, and types of visitors (subject to the availability of information); and
- assessment of the scale, location and nature of the proposed offshore and onshore infrastructure and proposed construction methods in relation to the main centres of tourism and types of visitors.

### Onshore recreation

- 17.8.12 IPROW (2020) published its best practice guidance for assessing development impacts upon outdoor access and recreation. The approach in this assessment has been consistent with IPROW's guidance. The assessment of potential impact on receptors has been conducted through:
  - consideration of the strategic importance of individual recreation resources, with reference to published plans, policies and strategies;
  - examination of the characteristics of the recreation assets and their users, and analysis of the dependency of users on a particular resource;
  - consideration of the geographical position of the resource, for example, the local paths network; and
  - review of the expected scale, construction methods and timetable for onshore infrastructure in relation to particular resources.

# Assigning significance

- With the exception of outdoor (i.e., onshore) access, there are no formalised technical guidance and/or criteria when assessing the scale (and therefore significance) of socio-economic effects. The significance of effect upon outdoor access and recreation is assessed in accordance with IPROW's guidance. Otherwise, the likely effects of Rampion 2 on the other receptors identified (i.e., jobs, GVA and the visitor economy) is based on professional judgement and considers the sensitivity of each receptor in addition to the magnitude of change to the receptor brough about by Rampion 2. The assessment of socio-economics also draws on industrial best practice and the guidance set out in The Green Book (HM Treasury, 2022b).
- 17.8.14 The socio-economics assessment has assigned significance as per the approach outlined within the Scoping and PEIR phases, drawing upon both the sensitivity of the receptor and the magnitude of impact.

		Magnitude of Impact				
		Major	Moderate	Minor	Negligible	
	Very High	Major	Major	Moderate/ Major	Negligible	
eceptor	High	Major	Moderate/ Major	Minor/ Moderate	Negligible	
Sensitivity of Receptor	Medium	Moderate/ Major	Moderate	Minor	Negligible	
Sensit	Low	Minor/ Moderate	Minor	Negligible	Negligible	

#### Table 17-20 Matrix used to determine scale of effects

- 17.8.15 Any effect with a significance level of moderate and/or major (as identified in **Table 17-20** above) has been defined as being significant in EIA terms.
- 17.8.16 The sensitivity of each receptor is evaluated as either very high, high, medium or low based on the baseline position and its performance against benchmark areas, together with consideration of the importance of the receptor in policy terms. **Table 17-21** and **Table 17-22** below provide more detail on the approach that is used in defining receptor sensitivity. For recreation, the benchmarks set have drawn upon guidance set out by IPROW (2020).

Sensitivity	Definition
Very High	Receptor is defined as being of very high sensitivity where it is identified as a policy priority and there is evidence of major socio- economic challenges or opportunities for the receptor within the study area.
High	Receptor is defined as being of high sensitivity where it is identified as a policy priority (as a result of economic potential and/or need). There is evidence of socio-economic challenges and/or opportunities for the receptor within the study area.
Medium	Receptor is defined as being of medium sensitivity where it is not identified as a policy priority (as a result of economic potential and/or need). There is however evidence of considerable socioeconomic challenges and/or opportunities for the receptor within the study area.
Low	Receptor is defined as being of low sensitivity where it is not identified as a policy priority (as a result of economic potential and/or need). There is evidence that the receptor is resilient within the study area.

#### Table 17-21 Sensitivity of receptor for socio-economics

#### Table 17-22 Sensitivity of receptor for recreation

Sensitivity	Definition
Very High	Effects can be felt by users of a type that are very high sensitivity either because they are identified as having a high priority in policy (e.g. mobility-impaired users) and/or are especially dependent on the recreation resources which the area has to offer (especially if there are no alternative resources available regionally).
High	Effects can be felt by users of a type that are of high sensitivity either because they are identified as having a medium priority in policy and/or are largely dependent on the recreation or access resources which the area has to offer and have few alternative resources available locally.
Medium	Effects can be felt by users of a type that are of medium sensitivity either because they are identified as low priority in policy and/or are not particularly dependent on the specific recreational resources which the area has to offer and have some alternative resources available locally.
Low	Low effects can be felt by those given no specific mention in policy, or by casual and/or local users with many alternative recreational resources available to them.

17.8.17 The magnitude of impact to the receptor is determined by considering the estimated deviation from baseline conditions once measures aimed at mitigating any adverse impacts are taken into consideration. The criteria used for the assessment of magnitude has been evaluated as either major, moderate, minor or negligible, and are set out in more detail below.

Phase	Baseline Measure	Negligible	Minor	Moderate	Major
GVA impacts					
Construction	Direct = relevant sectors Indirect = wider economy	<0.1%	0.1% - 0.5%	0.5% - 1%	>1%
Operation and maintenance	Direct = electricity generating sector Indirect = wider economy	<0.1%	0.1% - 0.5%		>1%
Decommissioning	Relevant sectors and wider economy	decommiss nature to, b	ioning act ut no wor	. In general, tivities are of se than the in construction	mpacts
Employment impac	ts				
Construction	Direct = relevant sectors Indirect = wider economy	<0.1%	0.1% - 0.5%	0.5% - 1%	>1%
Operation and maintenance	Direct = electricity generating sector Indirect = wider economy	<0.1%	0.1% - 0.5%	0.5% - 1%	>1%
Decommissioning	Relevant sectors and wider economy	decommiss nature to, b	ioning act ut no wor	. In general, tivities are of se than the in construction	mpacts

#### Table 17-23 Criteria for assessing magnitude of impact



Phase	Baseline Measure	Negligible	Minor	Moderate	Major
Tourism Economy					
Construction, operation and maintenance, and decommissioning	Tourism economy	Qualitative a review of re		based on the vidence.	e applied

17.8.18 For the assessment of the magnitude of impact on outdoor recreation, the assessment follows the guidance set out by IPROW (2020).

Table 17-24	Criteria for assessing	magnitude of	impact (recreation)
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Magnitude of Impact	Definition
Major	Proposals will cause a substantial change (i.e. greater than 30%) to existing patterns and levels of use of recreational resources, either permanently or for a significant period of time (i.e. several months to permanent) and only poor-quality alternatives are available.
Moderate	Proposals will cause a modest change (i.e. between 10% and 30%) to existing patterns and levels of use, of recreation resources, or a more substantial change for a limited period (of a few weeks). Some acceptable alternatives may be available.
Minor	Proposals will cause a slight (i.e. of under 10%) or short-term (i.e. less than one month) change to existing patterns and levels of use of recreation resources, with a slight reduction in overall numbers and a low level of displacement. Good alternatives may be available.
Negligible	No discernible changes in levels and/or patterns of use.

# 17.9 Assessment of effects: Construction phase

#### Impact of construction on employment

#### Overview

17.9.1 As outlined above and in Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES (Document Reference: 6.4.17.2), the assessment of the key quantitative measures of economic impact (i.e., employment and GVA output) during the construction phase are driven by the amount of the Proposed



Development's supply chain expenditure captured by businesses located within each study area identified.

- 17.9.2 For Rampion 2, it is estimated that around 40% of the Proposed Development's £2.87 billion (in 2019-pricing) construction cost, or the equivalent of £1.14 billion (in 2019-pricing) will be retained by businesses in the Proposed Development's supply chain nationally. At the Sussex-level, the overall level of supply chain expenditure retained by local businesses is anticipated to be minimal (around 1.0% of total construction costs), adding up to £30.1 million (in 2019-pricing).
- 17.9.3 Using employment in addition to regional multiplier benchmarks from the Hatch input-output model (Hatch Associates, 2017) derived from UK national accounts data, it is possible to generate estimates for employment as well as economic impact that could be supported by the expenditure by national and Sussex-based businesses.
- **Table 17-25** below summarises the potential annual employment benefits supported by Rampion 2 for the UK and Sussex study areas.

Table 17-25	Annual employment impacts supported during the construction of
	Rampion

	UK study area	Sussex study area
Direct + Tier-1 jobs (FTEs)	2,270	70
Indirect (FTEs)	1,790	10
Total (FTEs)	4,060	80

- 17.9.5 At the UK level, the potential employment supported by the Proposed Development (i.e., when taking account of the direct, Tier-1 and wider supply chain impact) is estimated to average around 4,060 FTE jobs per annum. The direct employment effects supported by Rampion 2 at the national level can be expected to be concentrated in a relatively small number of employment sectors, namely:
  - manufacturing and engineering particularly in the manufacture of fabricated metal products, electric motors, wiring and general-purpose machinery;
  - construction particularly the building of ships, boats and civil engineering projects;
  - transport particularly freight transport by road, sea and coastal freight, as well as support activities for transportation; and
  - professional services notably management consultancy activities, architectural and engineering consultancy and other professional, scientific and technical sectors.

- At the Sussex level, the expenditure retained locally is estimated to support around 80 FTE jobs over the construction phase of Rampion 2. Analysis of local supply chain capability undertaken as part of the baseline analysis (see Section 17.6) and the development of construction and sourcing assumptions (see Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES (Document Reference: 6.4.17.2)) shows that there are no Tier-1 major plant suppliers (e.g. WTG or foundations), and despite the efforts on the existing Rampion 1 project there is not yet an established supply chain cluster in Sussex.
- 17.9.7 Based on research about offshore wind supply chain engagement (RenewableUK, n.d.), it is estimated that currently there are in the order of 20 businesses directly engaged in offshore wind supply chain activity within Sussex, a number of which are local offices of much larger (often national/international) businesses within the sector. On this basis, it is anticipated that jobs supported during the development and construction phase of Rampion 2, will include jobs employed in development and consent activities, including engineering and professional services.

#### Magnitude of impact

- As set out within the baseline section (**Section 17.6**), total employment nationally currently stands in the region of 25.5 million FTE employees. The 4,040 FTE jobs supported by the construction of Rampion 2 is therefore estimated to represent less than 0.02% of the current baseline. On this basis, the magnitude of impact of the Proposed Development's construction phase on employment at the national level is therefore assessed as **Negligible**.
- 17.9.9 At the Sussex level, the 80 FTE jobs supported throughout construction of the Rampion 2 are anticipated to constitute a very small increase over the current baseline. On this basis, the magnitude of impact of construction activity on local employment is therefore assessed as **Negligible**.

Sensitivity or value of receptor

- Job creation is identified as a major policy priority at various levels of government, including the national (i.e., UK), sub-regional (i.e. Coast to Capital LEP and South East LEP) and local (i.e. within Sussex).
- 17.9.11 At the national level, the Build Back Better Strategy (HM Government, 2021) and the British Energy Security Strategy (HM Government, 2022a) sets out the government's ambition to support clean growth through the development of the renewable energy sector and the creation of green jobs. The offshore wind sector is highlighted as a key area for green growth, and in 2019 the UK government along with the offshore wind industry committed to a sector deal (HM Government, 2019a) to help the industry raise its productivity and competitiveness of UK businesses. Ultimately, the Sector Deal aims to increase UK content to 60% by 2030, and in the process build a stronger UK supply chain for the offshore wind sector.
- 17.9.12 On this basis, the sensitivity of the receptor (i.e., employment) is therefore considered to be **Very High** at both Sussex and national levels.

#### Significance of residual effect

- 17.9.13 The Rampion 2 commitments (shown in **Table 17-19**) highlight RED's commitment to encourage, and where possible increase local and national sourcing by supporting businesses to access supply chain opportunities (C-34), whilst at the same time working with local partners to maximise the ability of local people to access employment opportunities associated with the construction of Rampion 2 (C-35).
- 17.9.14 With the sensitivity of the receptor assessed as **Very High**, and the magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 on the receptor is of **Negligible** significance, which is **Not Significant** in EIA terms.
- 17.9.15 It is assumed that the effect on employment generated during the construction phase of Rampion 2 is **Direct** and **Temporary** in nature.

#### Impact of construction on gross value added

#### Overview

- 17.9.16 The employment supported by the construction of Rampion 2 will also contribute to the size and overall productivity of the national and local economies, ultimately supporting their recovery from the current downturn experienced as a result of the COVID-19 pandemic.
- 17.9.17 It is estimated that construction activity will contribute in the region of £233 million GVA per annum, totalling to £936 million over the Proposed Development's anticipated four-year construction programme. Of this, an estimated £16 million GVA (or around £4.1 million per annum) are anticipated to be generated by Sussex-based businesses engaged with the Rampion 2 supply chain.

#### Table 17-26 Potential economic impacts supported during construction, (£ million)

	UK study area	Sussex study area
GVA per annum (£m)	234.0	4.1
Total lifetime GVA	936.1	16.4

#### Magnitude of impact

- 17.9.18 With the size of the national economy measured as £1,950 billion GVA it is estimated that the Proposed Development's annual contribution (of £234 million GVA) to the national economy will represent an increase of just under 0.02% over the annual baseline (for 2020).
- 17.9.19 On this basis, the magnitude of impact on the national economy is therefore assessed as **Negligible**. At the Sussex level, the magnitude of impact of an annual contribution of £4.1 million GVA (generated by employment supported within the Rampion 2 supply chain) is also anticipated to be **Negligible**.

#### Sensitivity or value of receptor

17.9.20 Clean growth is one of the key policy aims of the UK and more locally within Sussex. On this basis of the reasoning set out above the sensitivity of the receptor (i.e., economy) is therefore assessed to be very high at both Sussex and national levels.

#### Significance of residual effect

- 17.9.21 The Rampion 2 commitments outlined in **Table 17-19** i.e. of encouraging and supporting businesses to access supply chain opportunities (C-34), whilst at the same time maximising the ability of local people access employment opportunities (C-35) associated with the Proposed Development, will generate further support to, and potentially increase the level of impact on the national economy.
- 17.9.22 With the sensitivity of the receptor assessed as **Very High**, and the magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 on the receptor is of **Negligible** significance, which is **Not Significant** in EIA terms.
- 17.9.23 It is assumed that the effect on the Rampion 2 construction phase on the economy is **Direct** and **Temporary** in nature.

#### Impact of construction on volume and value of the tourism economy

#### Overview

- 17.9.24 The assessment of the receptor considers the extent to which the volume and value of tourism economy within the Sussex study area may be affected by construction activity (both related to onshore and offshore infrastructure) of Rampion 2.
- 17.9.25 The relationship between visitors' attitudes to wind farm developments, construction activity (both construction of onshore and offshore infrastructure) and the consequences upon visitors' behaviour is complex. Overall, the research does not suggest that the extent to which tourists are attracted to an area by the quality of the landscape is important in determining their reactions to wind farm development. In addition, the analysis presented in **Appendix 17.3: Socio-economics technical baseline, Volume 4** of the ES (Document Reference: 6.4.17.3) states that visitors and tourism related businesses recognise the potential for positive impacts associated with the increase in local expenditure arising from construction activity.

#### Impact from the construction of offshore infrastructure

17.9.26 An assessment of the Proposed Development's impact on seascape and landscape views is undertaken in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15) which states that 'Although some significant effects on views from the SDNP have been identified in the assessment, effects of major significance in EIA terms have been avoided, with the highest levels of effect being major/moderate on views from the closest parts of the SDNP outside the most sensitive area defined by the Sussex Heritage Coast.'.

- 17.9.27 The baseline analysis (see **Section 17.6** above and **Appendix 17.3: Socio**economics technical baseline, Volume 4 of the ES (Document Reference: 6.4.17.3)) indicates that there is limited ex-post research examining the relationship between the visual impacts of offshore wind farms and their construction upon tourism activity and the associated visitor economy. The evidence suggests that:
  - whilst there is potential for some visitors to be discouraged from making future visits to an area affected by the construction of a wind farm development, this is usually balanced (and in some cases exceeded) by visitors reporting that they will visit more frequently;
  - the research also points out that visitors and tourism-related businesses recognise the potential for positive impacts associated with the extra expenditure to the local economy arising from construction activity, or in some cases the additional interest in seeing the Proposed Development and its construction; and
  - the research typically focusses on measuring opinions of what the impacts on the visitor economy could be prior to implementation of the scheme. However, ex-post research suggests that even where there have been negative effects, these often occur in the form of displaced tourism with visitors diverting to neighbouring areas instead.

#### Impact from the construction of onshore infrastructure

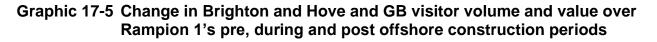
- 17.9.28 Construction and installation activity of the onshore infrastructure related to Rampion 2 (i.e., installation of the onshore buried cable, as well as construction of the onshore substation and connection to the National Grid) has potential to negatively impact upon assets that are of value to tourism activity in Sussex. The impact of the construction activity on onshore recreational activity is considered elsewhere (see **paragraphs 17.9.49 to 17.9.59**).
- At a more localised level tourism assets within 500m of the onshore cable , substation and connection to the national grid (identified in Appendix 17.3: Socioeconomics technical baseline, Volume 4 of the ES (Document Reference: 6.4.17.3)) have potential to be negatively impacted. The impact on these tourism assets is considered below. RED has committed to several embedded environmental measures aimed at reducing the disruption caused by construction activity (and therefore the impact on the volume and value of the tourism economy). This includes the environmental measures outlined in Table 17-19 (including C-19, C-22, C-26, C-32 and C-66).

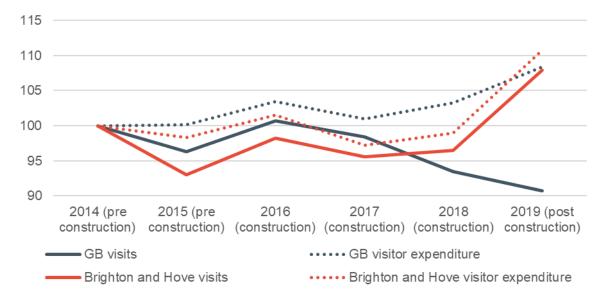
#### Magnitude of impact

 Overall, the evidence base presented in Section 17.6 and Appendix 17.3: Socioeconomics technical baseline, Volume 4 of the ES (Document Reference: 6.4.17.3) suggests that activity related to the construction of onshore and offshore infrastructure of offshore wind farm developments does not have a significant effect on the overall volume and value of tourism activity. In most instances, the available research suggests that visitors do not expect their behaviour to be influenced (either positively or negatively) by the presence of construction activity related to wind farm developments.

- 17.9.31 Data on tourism activity in the Sussex study area during the construction of the Rampion 1 project appears to align with the analysis outlined above. The baseline analysis (presented in Section 17.6 and Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference: 6.4.17.3) indicates that employment in tourism-related activity (as defined by UNWTO (UNWTO, 2019)) which stood at 70,500 FTE jobs in 2014 (i.e. prior to onshore construction starting on the Rampion 1 project and offshore construction commencing in January 2016 ), increased to around 78,000 FTE jobs in 2019 (i.e. when construction on the existing Rampion 1 project was complete (Rampion 1 was fully commissioned by end of November 2018), and all WTGs commissioned). Employment subsequently fell during the COVID-19 pandemic to below 2014 levels and the latest data shows the tourism industry supported 69,500 FTE jobs in 2021.
- 17.9.32 Trend based data on the volume and value of tourism economy is not available for the whole of Sussex . However, the economic impact of the visitor economy assessments for Brighton and Hove provides a good overview of the impact the construction of the existing Rampion 1 project's offshore infrastructure has had on the Brighton and Hove economy. Data on the volume and value of the visitor economy for Brighton and Hove shows that:
  - Pre construction: In the two years before offshore construction commenced (2014 and 2015) the average number of visits to Brighton and Hove was 11 million and was 1.79 billion in the UK. Visitor expenditure averaged £866 million per annum in Brighton and Hove and 61.85 billion in GB;
  - During construction: In the three years during offshore construction (2016-2018) the average number of visits was also 11 million in Brighton and Hove and expenditure also averaged £866 million per annum. In comparison GB visitor numbers fell slightly to an average of 1.78 billion and visitor expenditure rose to £63.37 billion; and
  - Post construction: In 2019, the year following full commissioning, (and not impacted by the COVID-19 pandemic) the number of visits to Brighton and Hove rose to 12.3 million and visitor expenditure was £967 million. In comparison GB visitor numbers fell to an average of 1.65 billion and visitor expenditure rose to £67.0 billion.







- Please note: Base year (2014) = 100. Source: Visit Britain (2020) The Great Britain Day Visitor 2019 Annual Report and
- 17.9.33 This assessment is further supported by evidence about the volume and value of tourism in Norfolk before, during and after the construction of the Dudgeon offshore wind farm (built between 2015 and 2017 and located 32 km off the North Norfolk coast). Employment data for tourism related activity in Norfolk shows that there were small variations in employment between 2014 and 2019, whilst the number of visits and visitor spend both increased (by 21% and 16% respectively). The impacts of Dudgeon on tourism would be concentrated on the North Norfolk coast. The volume and value data is not available for 2014 however it can still be seen that North Norfolk saw a general growth in visits and visitor spend during the construction period and post construction, whilst employment in tourism related sectors slightly fell when comparing 2014 levels to 2015, 2018 and 2019 levels.

	Norfolk			North Norfolk	<u> </u>	
Year	Employment (FTE 000s)	Visits (million)	Visitor Spend (000s)	Employment (FTE 000s)	Visits (million)	Visitor Spend (000s)
2014	29.0	43.0	£2,094	4.75	n/a	n/a
2015	27.5	42.7	£2,164	4.25	8.0	£399
2016	30.0	44.1	£2,234	4.75	8.3	£404
2017	30.5	46.7	£2,300	4.75	8.8	£416
2018	29.0	50.9	£2,370	4.25	9.6	£421
2019	29.9	52.0	£2,420	4.5	9.9	£435

## Table 17-27Data on volume and value of tourism economy in Norfolk and North<br/>Norfolk, 2014-19

Source: ONS (2020), Business Register and Employment Survey; Destination Research (2014, 2015, 2016, 2017, 2018, 2019), Economic Impact of Tourism in Norfolk.

- 17.9.34 A study by Scottish Power Renewables (2020) echoes the analysis presented above and suggests that based on its analysis of 11 areas with offshore wind farm located within 40km of the shore (including Rampion 1 along the south coast), there is no evidence that suggests any relationship between the construction of offshore wind farms and a reduction in tourism activity, visitor spending or tourismrelated employment.
- 17.9.35 On the basis of the analysis outline above, the magnitude of impact of construction activity on the volume and value of the tourism economy on Sussex is therefore assessed as **Negligible**.
- It is noted that consultees raised concerns that coastal towns with large tourism 17.9.36 industries are potentially at greater risk of negative impacts from the development of offshore wind farm infrastructure. The assessment therefore also considers the potential for greater impact on coastal areas that are within 30km of the offshore wind farm and are recognised as important tourism locations. The character of these areas is considered in more detail in Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference: 6.4.17.3). This shows Brighton as the outlier, with a more diverse urban seaside tourist offer (with Brighton Pier as the central offer) and the rest of the coast more broadly characterised by a traditional family seaside offer dominated by beaches. It is recognised Victorian seaside towns, such as Brighton and Worthing, may be at greater risk of a negative impact on tourism due to their historic tourist offering. However, both Brighton and Worthing have been influenced by their proximity to London, having a significant commuting population has an influence on the character of these areas and the visitor offer. These centres are therefore more

diverse and less dependent on seaside related tourism than other areas in the country with offshore wind development within 30km of the coast such as North Wales or East Anglia.

- 17.9.37 Hatch (2022) also conducted a similar study looking at employment trends across English and Welsh coastal towns (including along the Sussex coast) with local tourism industries within close proximity of developed offshore windfarms. The employment data did not provide evidence that the development of large-scale offshore wind farms near to significant seaside towns coincides with a decline in tourism employment either during or after construction. The trends in employment in the tourism sector tended to be positive or neutral. It was noted that other economic factors are likely to have a greater influence on trends in visitor numbers/expenditure and associated tourism employment.
- 17.9.38 The research by Hatch presented further analysis of tourism employment trends (from two years pre construction, 2014 to 2 years post construction 2019) for towns located within 30km of the existing Rampion Offshore Wind farm. The data showed that, cumulatively across the nine seaside towns within 30km of Rampion (Bognor Regis, Littlehampton & Worthing, Saltdean & Seaford and Brighton, Shoreham-by-sea, Southwick & Portslade-by-sea.), tourism employment was higher in the construction period (22,100 FTE jobs) than in the pre-construction period (21,000 FTE jobs). Tourism employment in the nearby seaside towns was 5% higher in during the construction period than the preconstruction period. This was higher than the average growth for local districts (2%) and the region (2%) and equalled the average growth rate for Great Britain (5%).
- 17.9.39 On the basis of the analysis outlined above related to the character of the area and its visitors and recent employment trends in addition to the evidence base that shows no evidence of significant impacts on tourism. The magnitude of impact of construction activity on the volume and value of the tourism economy on specific coastal towns along the Sussex coast during the construction phase is therefore also assessed as **Negligible**.

#### Impact of onshore infrastructure on volume and value of tourism

- 17.9.40 At a more localised level, construction and installation activity along the onshore cable corridor may have a negative impact on walking and cycling routes, coastal paths, holiday parks and other tourism-related assets that are located in close proximity to onshore construction works.
- 17.9.41 In addition to the impact on recreational routes there are a number of topics that potentially interrelate in terms of impact on tourism assets and therefore the volume and value of local tourism. These topics are detailed below:
  - Landscape and visual impact: Onshore construction works could have potential to impact on visitors' visual experience of a location should the construction works cause a high level of visual impact, especially if visitors place high value on the views and character of an area. Chapter 18: Landscape and visual, Volume 2 of the ES (Document Reference: 6.2.18) assesses the visual impacts on tourist destinations along the onshore cable corridor. However, it should be noted that high levels of visual impact does not necessarily lead to significant impacts on tourism. The assessment finds that for most visitor

destinations there would be no significant effect. However, the assessment concludes that during the construction phase there would be major / moderate, and therefore significant effects on a limited number of tourist destinations. These locations are Climping Beach, Climping Camp Site, Climping Caravan Park and Washington Caravan Park . There are also number of significant visual impacts predicted on the following landscape character areas:

- Climping to SDNP at: Climping Lower Coastal Plain, Middle Arun Valley Floor, Lower Arun Valley Floor, Lyminster-Angmering Coastal Plain, Black Ditch Rife
- SDNP at: South Downs Upper Coastal Plain, Angmering and Clapham Wooded Estate Downland, Arun to Adur Open Downs, Arun to Adur Scarp Footslopes,
- SDNP to Oakendene / Bolney at: Amberley to Steyning Farmlands, Pulborough, Chiltington & Thakeham Farmlands, Ashurst & Wiston Wooded Farmlands, Steyning & Henfield Brooks, Cowfold & Shermanbury Farmlands and Hickstead Low Weald.
- Noise and vibration: High levels of noise and vibration have potential to disturb visitors to the extent that they no longer choose to visit an area/visitor asset which is subject to high levels of noise disturbance. This is especially true in tranquil areas such as is found in the SDNP. This impact would be highly localised, for example should visitor accommodation be located in close proximity to construction works subject to significant noise and vibration impacts there would be potential impacts on the number of customers that accommodation receives over the duration of the works. However, no significant residual effects are found in the assessment of noise and vibration detailed in Chapter 21: Noise and vibration, Volume 2 of the ES (Document Reference: 6.2.21) and as a consequence the impact on visitors' volume and value from noise and vibration disturbance is predicted to be negligible.
- Transport: High levels of traffic could cause disruption to the visitor experience • of an area or in some cases causes avoidance by visitors of a particular visitor asset which is heavily impacted by high levels of traffic congestion. However, Chapter 23: Transport, Volume 2 of the ES (Document Reference: 6.2.23) and Chapter 32: ES Addendum, Volume 2 (Document Reference 6.2.32) [REP5-038] found that, given the use of a range of embedded environmental measures, the residual effects of the Proposed Development are predicted to be on the whole negligible to minor adverse. Although Chapter 23: Transport, Volume 2 of the ES (Document Reference: 6.2.23) and Chapter 32: ES Addendum, Volume 2 (Document Reference 6.2.32) [REP5-038] identifies significant effects on Michelgrove Lane (receptor P) and Kent Street (receptor U) in relation to pedestrian amenity, pedestrian delay and fear and intimidation these conclusions are based on the absolute peak week of construction activities at each receptor and these peak periods do not occur over a long period. As such effects related to traffic would have a negligible impact on visitors.
- 17.9.42 It is noted that these effects have been reduced as far as practicable by the use of a wide range of embedded environmental measures detailed in the assessments outlined above and that impacts will be localised and temporary. There were no

significant transport and noise effects for tourism receptors and therefore it is not expected that this would result in any effects on tourism. Although there are a number of visual effects related to tourism, these impacts would be temporary and only relate to the period during which construction of the onshore cable corridor would be visible. Although this may detract from the visitor experience, the time limited nature of these effects means it is not expected that this would result in a reduction in tourism volume and value at the relevant receptors. Based on the assessment outlined above it is predicted that there will be a **Negligible** impact on tourism along the onshore cable corridor.

17.9.43 Whilst the impact on recreational assets such as PROWs are considered elsewhere RED has committed to several embedded environmental measures aimed at reducing the disruption caused by construction activity (and therefore the impact on the volume and value of the tourism economy and assets within close proximity of construction works). This includes the environmental measures outlined in **Table 17-19** (including C-19, C-22, C-26, C-32 and C-66).

#### Sensitivity or value of receptor

- 17.9.44 The baseline analysis (presented in **Section 17.6** and **Appendix 17.3: Socio**economics technical baseline, Volume 4 of the ES (Document Reference: 6.4.17.3)) shows that tourism currently supports 69,500 FTE jobs across Sussex, representing 12% of all employment within the study area. This is around three percentage points higher than the national average, giving Sussex an overall level of specialisation (often defined as Location Quotient) of 1.3. Visitors to Sussex are drawn to a number of visitor attractions (such as Brighton Pier, and the Royal Pavilion), and the area's AONBs and National Parks (e.g., High Weald AONB and SDNP).
- 17.9.45 On the basis of the above, the sensitivity of the receptor is therefore assessed as **Very High** at the Sussex level.

Significance of residual effect

- 17.9.46 RED has identified several commitments aimed at reducing the impact of construction activity on the volume and value of tourism (including C-19, C-22, C26, C-32 and C-66).
- 17.9.47 With the sensitivity of the receptor assessed as **Very High**, and the magnitude of impact assessed as **Negligible** at the Sussex level, the effect of Rampion 2 on the receptor is of **Negligible** significance, which is **Not Significant** in EIA terms.
- 17.9.48 It is assumed that the effect of the Rampion 2 construction phase on the volume and value of the tourism economy is **Direct** and **Temporary** in nature.

# Impact of construction on access to and enjoyment of onshore recreation activity

#### Overview

17.9.49 This section of the assessment considers the extent to which access to, and the enjoyment of onshore recreation activity may be affected by the construction of

Rampion 2. It focusses on landfall, the onshore cable corridor and construction of the onshore substation at Oakendene and the extension to the National Grid substation at Bolney.

- 17.9.50 An overview of the proposed approach to construction of the onshore infrastructure of Rampion 2 is provided in Chapter 4: The Proposed Development, Volume 2 of the ES (Document Reference: 6.2.4), and the maximum design scenario considered is presented in Section 17.7 above. The key assessment assumptions relevant to the assessment of the impact of construction on onshore recreation activity include:
  - landfall will take place between Middleton on Sea and Littlehampton at Climping Beach;
  - a standard temporary construction corridor 40m in width, consisting of the trenches, excavated material and a haul road. In some cases, the construction corridor may require widening beyond this width (i.e., 40m) to allow enough space for access/equipment at crossings and avoidance of obstacles. In other cases, the width may also be narrowed in areas with particular constraints or to minimise the impact of construction on sensitive areas;
  - joint bays will be located every 750 to 950m; however, their location will depend on a number of factors such as crossings. It is estimated that up to 45 joint bays will be required;
  - the onshore temporary cable corridor will need to cut across a number of roads, railway lines, water courses, footpaths, and other third-party services. In most cases, open cut crossing methods will be used, although HDD or other trenchless methods will also be adopted for main watercourses, railways and roads that form part of the Strategic Highway Network. HDD will also be used to cross the Washington Recreation Ground and allotments;
  - the use of temporary access points and a haul road (up to 10m wide) is required within the onshore cable corridor to allow for the transportation of materials, equipment and personnel. The haul road will consist of crushed aggregates and a geotextile membrane where the existing ground is not considered to be stable enough and will be removed prior to final reinstatement; and
  - the onshore cable will connect to the National Grid at a new substation at Kent Street, Oakendene and then the power will be connected to an extension to the existing National Grid substation at Bolney.
- 17.9.51 The evidence presented within the baseline analysis (see **Section 17.6** above and **Appendix 17.3: Socio-economics technical baseline, Volume 4** of the ES (Document Reference: 6.4.17.3)) indicates that there are several onshore receptors that may be affected by onshore construction activity. The receptors considered in the assessment of onshore recreation include:
  - it is anticipated that up to 154 PRoW may be impacted; however, only a small number (up to thirteen) of these are heavily used. Other promoted routes (such as the ECP, Monarch's Way, the Downs Link and the South Downs Way National Trail) will also be impacted by construction activity;



- two cycle routes National Cycle Network route 2 and regional route 223 (running along the Downs Link);
- the rivers Arun and Adur; and
- Access Land and public green spaces.
- 17.9.52 RED has identified and committed to several embedded environmental measures aimed at reducing the impact of onshore construction activity on onshore recreation receptor users. These have been considered as part of the assessment, and outlined in **Table 17-19** (including C-1, C-18, C-19,C20, C-22, C-26, C-32, C-33, C-43, C-128, C-161 and C-162).

#### Magnitude of impact

**Table 17-28** below identifies the magnitude of impact for each of the activities identified in the assessment and provides an overview of the duration over which the various impacts could be expected to affect each of the receptors identified.

Activity	Impact	Magnitude of Impact
Landfall construction	Temporarily reduced amenity of ECP and Climping Beach	Negligible
Laydown areas and haul road	Temporary or intermittent obstruction to public access routes	Moderate
	Temporary exclusion from areas of Access Land	Moderate
	Temporary or intermittent disturbance and reduced amenity	Moderate
Trench excavation and cable laying	Temporary obstruction and/or diversion of PRoW	Minor
	Temporary exclusion from areas of Access Land and Washington recreation grounds and allotments	Minor
	Temporary disturbance and reduced amenity	Minor
	Temporary interruption to public events	Minor

#### Table 17-28 Magnitude of impact on onshore recreation receptors

Activity	Impact	Magnitude of Impact
HDD	Temporary HDD entry and exit sites will not be located across PRoW or other publicly accessible land, but may be located nearby, potentially reducing amenity.	Minor
Construction of substation	Temporary closure and/or diversion of PRoW.	Moderate

As outlined above the magnitude of impact the onshore construction (i.e., including landfall, onshore cable corridor and substation) will have on recreation assets is considered to **be** either **Negligible**, **Minor** or **Moderate**, depending on upon the length of time of activity.

Sensitivity or value of receptor

- 17.9.55 The sensitivity of the receptors is considered in **Table 17-29** below. For clarity and brevity, only PRoW receptors of medium, high or very high sensitivity have been included within the table.
- In some instances, temporary closures and diversions are proposed for paths that are considered to be of only low sensitivity for recreation. These have been described in the Access, Rights of Way and Street Plans (ARoW Plan) (Document Reference: 2.5) and the Outline Public Rights of Way Management Plan (Document Reference: 7.8), however, for brevity, they have not been included in Table 17-29. A full schedule of PRoW assessed is included in Appendix 17.4: Assessment of sensitivity of Public Rights of Way, Volume 4 of the ES (Document Reference: 6.4.17.4). This table may be read alongside the Access, Rights of Way and Street Plans (ARoW Plan) (Document Reference: 2.5) and Figure 17.3, Volume 3 of the ES (Document Reference: 6.3.17).

PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
2092	Restricted byway	Heavy	Very High	This forms part of SDW at its northern end. It is a critical crossing point near to a major junction of paths with very high sensitivity. The byway follows the ridgeline, so users will see the works even if not directly impacted. The RB continues	Storrington and Sullington, & Findon ARoW Plan (Document Reference:

#### Table 17-29 PRoW receptors of medium, high and very high sensitivity



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
				south from the SDW with high sensitivity as an arterial route to Worthing. This section will be a construction access route (A-28). It is proposed that byway 2092 will be subject to temporary closures with new temporary routes (short term) between ARoW references 23a to 23b (T09), 24a to 24b (T09). Between 25a and 25b the RB will be subject to temporary closure.	2.5) Sheet Reference 15,16, 17, 18, 19.
2693	Bridleway	Heavy	Very high	This is a continuation of the SDW on the ridgeline, so there will be visual intrusion. Both 2693 and 2092 may require local diversion during crossing works. It is proposed that bridleway 2693 will be subject to a temporary diversion between ARoW reference 30a and 30b via T10.	Storrington and Sullington <b>ARoW Plan</b> (Document Reference: 2.5) Sheet Reference 15, 18, 19.
829	Footpath	Frequent	High	ECP (when launched). Amenity may be slightly affected for several weeks during landfall construction. Path is subject to application to upgrade to Restricted Byway. It is proposed that footpath 829 will remain open (HDD) and drilling operations will be sited some way from the path.	Climping ARoW Plan (Document Reference: 2.5) Sheet Reference 01.
2175	Bridleway	Moderate to frequent	High	This forms part of Monarch's Way. It is crossed by the cable corridor and is partly used as a light construction and operational access route. This is a woodland route with	Patching ARoW Plan (Document Reference: 2.5) Sheet



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
				alternative trails (unofficial) throughout the wood. It is proposed that bridleway 2175 will remain open (HDD).	Reference 10, 11.
2264	Bridleway	Moderate to frequent	High	This is part of Monarch's Way. It is crossed by an access route but on an estate road. Therefore, a low impact is expected.	Patching ARoW Plan Sheet Reference N/A - outside proposed DCO Order Limits. See Figure 17.3, Volume 3 (Document Reference: 6.3.17).
2211	Bridleway	Frequent	High	This forms part of Monarch's Way and will be used as a light construction vehicle and operational access route from A-25. It is proposed that bridleway 2211 will remain open as it will be crossed by HDD.	Patching ARoW Plan (Document Reference: 2.5) Sheet Reference 09, 10, 11.
2208	Bridleway	Moderate to frequent	High	Part of Monarch's Way. Within 500m for several hundred metres but low impact expected. Crossed by cable corridor (not on Monarch's Way). Local, short-term, temporary diversion proposed (T-05).	Patching ARoW Plan (Document Reference: 2.5) Sheet Reference 08.
2093	Restricted byway	Frequent	High	This is a spinal route between SDW and Worthing via 2092. It is within 500m of an access route. There will be an indirect	Findon ARoW Plan (Document Reference:

# wsp

PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
				impact from interruptions to 2092.	2.5) Sheet Reference N/A – outside proposed DCO Order Limits. See <b>Figure 17.3,</b> <b>Volume 3</b> (Document Reference: 6.3.17).
3514	Bridleway	Heavy	High	This forms part of the Downs Link. It will need to be crossed. This is a busy route on a railway embankment. It is proposed that bridleway 3514 will be subject to a temporary diversion via a new temporary route (short term) between ARoW reference 43a and 43b via T21.	West Grinstead <b>ARoW Plan</b> (Document Reference: 2.5) Sheet Reference 28
2372_ 2	Bridleway	Heavy	High	This is an access route for Downs Link/Sustrans regional route 223. It is also an operational access route to the cable corridor (A-51).	West Grinstead <b>ARoW Plan</b> (Document Reference: 2.5) Sheet Reference 28.
2666	Bridleway	Moderate to frequent	High	The bridleway is an alternative, less well used route for the SDW, giving users access to Washington. The bridleway is within 500m. A low impact is expected unless the bridleway is promoted as a diversion route.	Washington AROW Plan (Document Reference: 2.5) Sheet Reference 20 & 21 outside proposed DCO Order Limits. See



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
					Figure 17.3, Volume 3 (Document Reference: 6.3.17).
197	Byway open to all traffic (BOAT)	Moderate	Medium	This is not heavily used for recreation. Users may experience very minor impact as this will be an operational access route (A-04).	Climping ARoW Plan (Document Reference: 2.5) Sheet Reference 01.
2213	Bridleway	Moderate to light	Medium	This is within 500m of an access route (A-25). A low impact is expected; however, it is part of Monarch's Way.	Burpham ARoW Plan (Document Reference: 2.5) Sheet Reference 09 - outside proposed DCO Order Limits.
2221	Bridleway	Moderate	Medium	Within 500m of access route at its southern end but expect low impact.	Burpham ARoW Plan (Document Reference: 2.5) Sheet Reference 09. – outside proposed DCO Order Limits. See Figure 17.3, Volume 2 (Document Reference: 6.3.17).
3740	Bridleway	Heavy	Medium	This is a feeder route to Monarch's Way and will be used as a light construction	Warningcamp ARoW Plan Sheet



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet
				vehicle and operational access route from A-25.	Reference 09.
2212	Bridleway	Moderate to light	Medium	This is part of Monarch's Way but alternative routes are available. It is within 500m of access route but a low impact is expected. It offers an alternative route to 3740, although it is less direct.	Burpham & Warning Camp <b>ARoW Plan</b> (Document Reference: 2.5) Sheet Reference 09.
2260	Bridleway	Frequent	Medium	This connects to BW2208_1, which is crossed by cable corridor, but will not be directly impacted.	Angmering ARoW Plan (Document Reference: 2.5) Sheet Reference 13.
2187_ 1	Bridleway	Frequent	Medium	This is a link to a key crossing of A27. It is located on an light construction and operational access route at the southern end (A-24) which is also a sealed estate road.	Angmering ARoW Plan (Document Reference: 2.5) sheet Reference 07.
2208_ 1	Bridleway	Moderate	Medium	Crossed by cable corridor between 17a and 17b, also access route from the south (A-26). Subject to temporary closure with diversion possible via existing routes 2173 & 2264 (short-term).	Patching ARoW Plan (Document Reference: 2.5) Sheet Reference11.
2209	Bridleway	Moderate	Medium	Within 500m but may be impacted by temporary closure of 2208_1 and may see an increase in traffic as an alternative to 2173.	Patching ARoW Plan (Document Reference: 2.5) Sheet Reference11, 13, 14, 15. Outside



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
					proposed DCO Order Limits. See Figure 17.3, Volume 3 (Document Reference: 6.3.17)
2185	Footpath	Moderate	Medium	Within 500m but low impact expected.	Patching AROW Plan (Document Reference: 2.5) Sheet Reference 08.
2174_ 1	Footpath	Moderate	Medium	This is crossed by the cable corridor between 16a and 16b. However, an alternative route is available via 2208.	Patching ARoW Plan (Document Reference: 2.5) Sheet Reference 8
2173	Bridleway	Moderate to frequent	Medium	Crossed by onshore cable corridor between 20a & 20b. Proposed local temporary diversion - T06. Also, used along much of its length as an operational access route (A- 27).	Patching ARoW Plan (Document Reference: 2.5) Sheet Reference 13, 14, 15 & 19.
2186_ 1	Footpath	Moderate to frequent	Medium	This forms part of a well-used north-south route within 500m of the cable corridor. However it is shielded by woodland so a low impact is expected.	Patching AROW Plan (Document Reference: 2.5) Sheet Reference 08 - outside proposed DCO Order Limits. See Figure 17.3, Volume 3 (Document



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
					Reference: 6.3.17).
2180_ 1	Bridleway	Moderate to frequent	Medium	Crossed by trenchless crossing. Monarch's Way abuts its northern terminus, also light construction and operational access route A-25. A low impact is expected.	Patching ARoW Plan (Document Reference: 2.5) Sheet Reference 8,10 & 11.
2107	Bridleway	Moderate	Medium	This is a short connecting path within 500m of an access route. A low impact is expected. It is proposed that bridleway 2107 will be subject to temporary closures between ARoW reference 27a and 27b.	Findon ARoW Plan (Document Reference: 2.5) Sheet Reference 17 - outside proposed DCO Order Limits.
2103	Bridleway	Moderate	Medium	This is a short connecting path within 500m of an access route. A low impact is expected. It is proposed that bridleway 2103 will be subject to temporary closures between ARoW reference 26a and 26b with diversion via an existing route.	Findon ARoW Plan (Document Reference: 2.5) Sheet Reference 16, 17.
2106	Bridleway	Moderate	Medium	Within 500m but low impact expected. However, this north- south bridleway provides a potential link from the SDW at the A24 near Washington south to Findon, a potential alternative to 2092, as such, it may experience an increase in users.]	Findon ARoW Plan (Document Reference: 2.5) Sheet Reference 16, 17 & 18 - outside proposed DCO Order Limits. See Figure 17.3,



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
					Volume 3 (Document Reference: 6.3.17).
2109	Bridleway	Frequent	Medium	This is a short connecting path within 500m of an access route. A low impact is expected. It is proposed that bridleway 2109 will be subject to temporary closures between ARoW reference 29a and 29b with diversion via existing routes.	Findon ARoW Plan (Document Reference: 2.5) Sheet Reference 17, 18.
2665	Bridleway	Frequent	Medium	This is crossed by the onshore cable corridor and will be subject to temporary closure with diversion by new temporary route (short term) via T11.	Washington ARoW Plan (Document Reference: 2.5) Sheet Reference 20, 21.
2697	Bridleway	Frequent	Medium	Bridleway 2697 will be subject to temporary closure and diversion with a new route between ARoW reference 32a and 32b via T11a. This is also used as an operational access (A-34)	Storrington and Sullington <b>AROW Plan</b> (Document Reference: 2.5) 21.
2623	Bridleway	Moderate to frequent	Medium	This is within 500m of access routes A-34 and A-35. A low impact is expected.	Washington AROW Plan (Document Reference: 2.5) Sheet Reference 21 - outside proposed DCO Order Limits. See Figure 17.3, Volume 3 (Document



PRoW No.	Туре	Use	Sensitivity	Reason and additional information	Parish and ARoW Plan Sheet Reference
					Reference: 6.3.17).
1730	Bridleway	Moderate to frequent	Medium	Crossed by onshore cable corridor. Bridleway 1730 will be subject to temporary closure and diversion with a <u>new route</u> between ARoW reference 50a and 50b via <u>T27. with diversion via existing</u> routes (short term). Also, operational access with low impact expected.	Cowfold ARoW Plan (Document Reference: 2.5) Sheet Reference 32 & 33.
2214	Bridleway	Moderate	Medium	At southern end joins 2211/ 3740, which is access A-25. Access is for only light construction and operational traffic. Low impact expected.	Burpham AROW Plan (Document Reference: 2.5) Sheet Reference 09 – outside proposed DCO Order Limits. See Figure 17.3, Volume 3 (Document Reference: 6.3.17).

### Table 17-30 Recreational land receptors

Туре	Use	Sensitivity	Reason
Access Land	-	-	There are no areas of Access Land assessed as being of medium or high sensitivity
Bines Green Common	Frequent	Medium	The common is subject to regular or frequent use but only a small area to the south is at risk of impact and other commons are available locally



Туре	Use	Sensitivity	Reason
Horsebridge Common	Frequent	Medium	The common is subject to regular or frequent use but will not be directly affected and other commons are available locally
Washington Recreation Ground	Frequent	Medium	Frequently used recreation grounds but other playing fields are available locally.
Climping Beach	Frequent	Low	Frequently used but there is a generous supply of alternative beaches locally

#### Significance of residual effect

- 17.9.57 As outlined above, RED has identified and committed to a number of embedded environmental measures aimed at reducing (and mitigating) the impact of construction activity on onshore recreation receptors (including C-1, C-18, C-19, C-20, C-22, C-26, C-32, C-33. C-43, C-128, C-161 and C-162 see **Table 17-19**).
- 17.9.58 As outlined in **Table 17-19**, the significance of the residual effect has been determined for each receptor by considering its sensitivity alongside the magnitude of impact, giving the results in the **Table 17-31** below.

Receptor	Sensitivity of receptor	Magnitude of impact	Significance of residual effect	Nature of Impact
PRoW users – 2092, 2693	Very high	Minor (for trenching and cable laying)	Moderate/ major (Significant)	Direct and temporary
PRoW users – 829	High	Negligible (Landfall construction)	<b>Negligible</b> (Not significant)	Indirect and temporary
PRoW users – 2208, 3514, 2211	High	Minor (for trenching and cable laying)	Minor/ Moderate (Significant)	Direct and temporary
PRoW users – 2175, 2264,	High	Negligible (Within ZOI but not directly	<b>Negligible</b> (not significant	Indirect and temporary

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Receptor	Sensitivity of receptor	Magnitude of impact	Significance of residual effect	Nature of Impact
2091, 2093, 2666		affected by works)		
PRoW users – 2092 (section used for access A-28)	High	Minor (access road)	Minor/ Moderate (Significant)	Direct and temporary
PRoW users – 2174_1, 2208_1, 2665, 2697, 1730	Medium	Minor (for trenching and cable laying)	<b>Minor</b> (not significant)	Direct and temporary
PRoW users – 2180_1	Medium	Negligible (for trenchless crossing)	<b>Negligible</b> (not significant)	Indirect and temporary
PRoW users – 197, 3740, 2187_1, 2173, 2208_1, 2107, 2103, 2109, 2665, 2697, 1730	Medium	Minor (access road)	<b>Minor</b> (not significant)	Direct and temporary
PRoW users – 2213, 2221, 2214, 2212, 2260, 2186_1, 2185, 2209, 2106, 2623,	Medium	Negligible (Within ZOI but not directly affected by works)	<b>Negligible</b> (not significant)	Indirect and temporary
Access Land users	Low	Minor	<b>Negligible</b> (not significant)	Direct and temporary
Horsebridge Common users	Medium	Negligible (Within ZOI but not directly affected by works)	<b>Negligible</b> (not significant)	Indirect and temporary

Receptor	Sensitivity of receptor	Magnitude of impact	Significance of residual effect	Nature of Impact
Bines Green Common users	Medium	Minor (access road)	<b>Minor</b> (not significant)	Direct and temporary
Washington Recreation Ground users	Medium	Negligible (trenchless crossing)	<b>Negligible</b> (not significant)	Direct and temporary
Climping Beach users	Low	Negligible (Landfall construction)	<b>Negligible</b> (not significant)	Direct and temporary
Event attendees	Medium	Minor	<b>Minor</b> (not significant)	Direct and temporary

- 17.9.59 Based on the above, the assessment of the construction of Rampion 2 on onshore recreation is anticipated to have a significant residual effect (i.e., post-embedded environmental measures) on the following receptors:
  - Minor/moderate residual effect on PRoW users of 2208, 3514, 2211 and 2092; and
  - Moderate/major residual effect on PRoW users of 2092 and 2693.

# 17.10 Assessment of effects: Operation and maintenance phase

#### Impact of operation and maintenance on employment

#### Overview

- 17.10.1 Once completed, Rampion 2 is anticipated to support employment in operation and maintenance activity, both directly and indirectly through supply chain expenditure on the purchase of goods and services. It is assumed that the operation and maintenance port for Rampion 2 will be located in Sussex, and that all direct labour will be based within the area.
- 17.10.2 It is likely that the existing facilities at Newhaven Port will be used (and expanded where necessary) as the operation and maintenance base for Rampion 2, as this will yield synergies and enable effective coordination with the existing operations team on the existing Rampion 1 project. That being said, there is also a possibility that a supplementary facility (i.e., in addition to Newhaven) further west in Sussex is also delivered.

- 17.10.3 At this stage it is not possible to quantify the exact number of direct jobs that will be supported by the Proposed Development's day-to-day operations. That said, it is estimated that an offshore wind farm the size of Rampion 2 will require between 40 to 50 FTE posts (allowing for some degree of efficiency across operations for the existing Rampion 1 project and Rampion 2). Additional employment will also be supported through supply chain expenditure with businesses located in Sussex and elsewhere in the UK.
- **Table 17-32** below summarises the potential employment benefits supported during the operation and maintenance phase of Rampion 2. It shows that between 540-550 (FTE) direct, indirect and supply chain jobs will be supported nationally, of which between 100-110 jobs will be based in Sussex.
- 17.10.5 The majority of jobs supported during the operation and maintenance phase will be through the Proposed Development's supply chain expenditure, providing essential goods and services to the Proposed Development's day-to-day operations. This reflects the current levels of UK-based sourcing, estimated to be in the region of 77% of annual operational expenditure (OPEX) (The Crown Estate, 2019).

Table 17-32	Potential annual employment impacts supported during the operation
	and maintenance phase

	UK study area	Sussex study area
Direct (FTEs)	40-50 (all within Sussex)	40-50
Indirect/supply chain (FTEs)	500	60
Total (FTEs)	540-550	100-110

#### Magnitude of impact

- 17.10.6 At 540-550 FTE jobs, the employment supported as a result of operation and maintenance activity by Rampion 2 is estimated to represent significantly less than 0.01% of the current employment base nationally. On this basis the magnitude of impact of the Proposed Development's operation and maintenance phase on employment at the national level is therefore assessed as **Negligible**.
- 17.10.7 At the Sussex level, the 100-110 FTE jobs supported during the Proposed Development's operation and maintenance phase are anticipated to represent a little under 0.02% of the current baseline. Whilst the number of jobs created as a result of operation and maintenance activity is **Negligible** in magnitude, it represents an important addition to the local and Sussex-wide economy, especially in the diversification of jobs, and growing the presence of offshore windrelated employment.

#### Sensitivity or value of receptor

17.10.8 The evidence underpinning the sensitivity of the receptor is as outlined for the Rampion 2 construction phase (see **paragraphs 17.9.10** to **17.9.12**). On this basis, the sensitivity of the receptor (i.e., employment) is therefore considered to be **Very High** at both Sussex and national levels.

#### Significance of residual effect

- 17.10.9 The Rampion 2 commitments (shown in **Table 17-19**) highlight RED's commitment to encourage, and where possible increase local and national sourcing by supporting businesses to access supply chain opportunities (C-34), whilst at the same time working with local partners to maximise the ability of local people to access employment opportunities associated with the construction of Rampion 2 (C-35).
- 17.10.10 With the sensitivity of the receptor assessed as **Very High**, and the magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 on the receptor is of **Negligible** significance, which is **Not Significant** in EIA terms.
- 17.10.11 It is assumed that the effect on employment generated during the construction phase of Rampion 2 is **Direct** and **Permanent** in nature.

#### Impact of operation and maintenance on gross value added

#### Overview

- 17.10.12 The employment supported during the Proposed Development's operation and maintenance phase will also contribute to the size and overall productivity of the national economy. This is especially pertinent in the current context, where long-term, sustainable and low carbon growth is being promoted.
- 17.10.13 It is estimated that operation and maintenance phase of Rampion 2 will generate an annual GVA impact of around £54 million to the national economy, totalling to £1.6 billion over the course of its 30 year operational lifetime. At the Sussex level, the direct and wider supply chain employment supported will generate an annual impact of £14 million, adding up to £429 million over the Proposed Development's operational lifetime.

## Table 17-33Potential economic impacts supported during the operation and<br/>maintenance phase, (£ million)

	UK study area	Sussex study area
GVA per annum	£54	£14
Total lifetime GVA	£1,604	£429

#### Magnitude of impact

- 17.10.14 With the size of the national economy measured as £1,950 billion GVA it is estimated that the annual contribution of operation and maintenance activity (of £54 million) to the national economy will represent an increase of under 0.01% over the baseline (for 2020). On this basis, the magnitude of impact on the national economy is therefore assessed as **Negligible**.
- 17.10.15 At the Sussex level, an annual contribution of £14 million GVA per annum is also assessed to be **Negligible**.

Sensitivity or value of receptor

17.10.16 The evidence underpinning the sensitivity of the receptor is as outlined for the construction phase of Rampion 2 (see **paragraph 17.9.20**). On this basis, the sensitivity of the receptor (i.e., employment) is therefore considered to be **Very High** at both Sussex and national levels.

Significance of residual effect

- 17.10.17 The Rampion 2 commitments outlined above (i.e., of encouraging and supporting businesses to access supply chain opportunities (C-34), whilst at the same time maximising the ability of local people access employment opportunities (C-35) associated with the Proposed Development) will generate further support to, and potentially increase the level of impact on the national economy.
- 17.10.18 With the sensitivity of the receptor assessed as very high, and the magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 on the receptor (i.e., the economy) is of **Negligible** significance, which is Not Significant in EIA terms.
- 17.10.19 It is assumed that the effect on the Rampion 2 operation and maintenance phase on the economy is direct and permanent in nature.

# Impact of operation and maintenance on volume and value of the tourism economy

#### Overview

17.10.20 Under the maximum design scenario, it is assumed that Rampion 2 will consist of 65 WTGs of up to 325m in height (or up to 90 WTGs of up to 210m in height if smaller capacity WTGs are used).

Impact associated with the operation of offshore infrastructure

17.10.21 Once operational, the only offshore infrastructure visible for Rampion 2 will be the offshore WTGs and offshore substation(s). **Chapter 15: Seascape, landscape and visual impact, Volume 2** of the ES (Document Reference: 6.2.15) has considered the operational impact of Rampion 2 on the seascape. It identified a significant, indirect, long-term and reversible impact on the perceived character along most of the Sussex coastline, which generally becomes less significant (ultimately negligible) as one moves inland. The seascape assessment found that

in general, 'there is clear separation between the coast and the offshore elements of Rampion 2 in views, such that it is clearly viewed 'offshore' in its open seascape'.

- 17.10.22 RED has identified and committed to a number of mitigation measures that will seek to reduce the overall impact of Rampion 2's day-to-day operation and maintenance activity of offshore infrastructure. For instance, RED will apply for safety zones post consent. Safety zones of up to 500m will be sought during construction, maintenance and decommissioning phases. Where appropriate, guard vessels will also be used to ensure adherence with Safety Zones or advisory passing distances, as defined by risk assessment, to mitigate any impact which poses a risk to surface navigation during construction, maintenance and decommissioning phases. Such impacts may include partially installed structures or cables, extinguished navigation lights or other unmarked hazards. This will be secured by DCO requirements or dML conditions.
- 17.10.23 As outlined above (see paragraphs **17.9.24** to **17.9.48**) and the baseline analysis (see **Section 17.6** and **Appendix 17.3**: **Socio-economics technical baseline**, **Volume 4** of the ES (Document Reference: 6.4.17.3)), research indicates that the offshore infrastructure associated with wind farm developments will not have a significant effect on the overall volume and value of tourism activity in most circumstances, and that visitors do not expect their behaviour to be influenced (either positively or negatively) by the presence of infrastructure related to operational wind farm developments.

Impact associated with the operation of onshore infrastructure

- 17.10.24 Once construction on Rampion 2 is finished, all cable-related infrastructure onshore will be buried, and original conditions reinstated. When maintenance and/or repairs are required, any disturbance will be constrained to the local area and alternative measures put in place to ensure than any disruption to the visitor activity (and therefore the visitor economy) kept to a minimum. RED has identified and committed to a number of mitigation measures that will seek to reduce the overall impact of Rampion 2's day-to-day operation and maintenance activity:
  - The onshore cable route will be completely buried underground for its entire length where practicable. This will be secured by producing DCO works plans, including a description of development and requirements.
  - Post construction, the work area will be reinstated to pre-existing condition as far as reasonably practical in line with the Outline Materials Management Plan (MMP) (C-69) and Defra 2009 Code of Construction Practice for the Sustainable Use of Soils on Construction Sites PB13298. This will be secured by an Outline COCP and a DCO requirement.
  - Joint bays will be completely buried with the land above reinstated with the
    exception of link box chambers where access will be required from ground
    level (via manholes). Once constructed, joint bays and link box chambers will
    be resilient to flooding. This will be secured by producing DCO works plans,
    including a description of development and requirements.

- Where noisy activities are planned and may cause disturbance, the use of mufflers, acoustic barriers and other suitable solutions will be applied. This will be secured by an Outline COCP and a DCO requirement.
- PRoW condition surveys will be undertaken before, during and after the construction phase. If damage has been identified during the construction phase, the damage will be repaired. Post-construction, all PRoWs will be returned to their pre-construction condition. This will be secured by the production of an Outline PRoWMP.
- 17.10.25 These commitments are also outlined in more detail in **Table 17-19** (see ID C-1, C-7, C-9, C-26, C-53 and C-163).

#### Magnitude of impact

- 17.10.26 Employment in tourism related sectors in Sussex increased from 70,500 FTE jobs in 2014 (before the construction of Rampion 1 offshore wind farm), to 76,500 FTE jobs in 2018 (i.e., once Rampion 1 was fully commissioned and operational) and 77,000 FTE jobs in 2019. Although tourism employment subsequently fell to 69,500 in 2020, this was due to the impact of the COVID-19 pandemic rather than the development or operation of Rampion. Data on the volume and value of the tourism economy in Brighton and Hove shows that both the number of visits and visitor expenditure both grew in the years after construction, increasing by 8% and 11% respectively between 2014 and 2019.
- 17.10.27 In Norfolk, data on the volume and value of the tourism economy shows that both the number of visits and visitor spend increased (by 18% and 13% respectively) relative to pre-construction level (i.e., 2014) once the Dudgeon offshore wind farm started operations (i.e., in 2018). In addition, similar trends of growth in tourism sector employment have been experienced along the North Wales coast which has seen a steady growth (including commissioning of Gwynt y Mor in 2015) in tourism sector employment up to 2019 despite the presence of a number of operational offshore wind farms that are within 20km of the coast. Data on tourism employment (based on the definition set out by the UNWTO) from 2009 onwards shows employment growth in North Wales (+23%) and Wales (+27%) albeit volatile, compared to 23% across GB. Tourism employment in North Wales ranged from a minimum of 32,400 workers in 2011 to a maximum of 43,500 in 2019.
- 17.10.28 On the basis of the above and the wider evidence already presented in the assessment of impacts of construction on volume and value of tourism(see paragraphs **17.9.24** to **17.9.48**) and the baseline analysis (see **Section 17.6** and **Appendix 17.3: Socio-economics technical baseline, Volume 4** of the ES (Document Reference: 6.4.17.3)), the magnitude of operation and maintenance activity by Rampion 2 on the volume and value of tourism economy in Sussex is therefore assessed as **Negligible**.
- 17.10.29 It is noted that consultees raised concerns that coastal towns with significant tourism industries are potentially at greater risk of negative impacts on tourism associated with the development of offshore wind farm infrastructure. The assessment therefore also considers the potential for greater impact on coastal towns that are within 30km of the offshore wind farm and have considerable tourism industries. The character of these areas is considered in more detail in

Appendix 17.3: Socio-economics technical baseline, Volume 4 of the ES (Document Reference: 6.4.17.3) with Brighton largely the outlier for its more diverse urban seaside tourist offer and the rest of the coast more broadly characterised by traditional family seaside offering dominated by visits to beaches. It is recognised Victorian seaside towns, such as Brighton and Worthing, may be at greater risk of negative impacts on tourism due to their historic tourist offering. However, Brighton and Worthing have been influenced by their proximity to London and a significant commuting population. These centres are therefore far more diverse and less dependent on seaside related tourism than other areas of the UK that have seen offshore wind development within 30km of shore such as North Wales and East Anglia.

- 17.10.30 Research by Hatch (2022) presents further analysis of tourism employment trends (from two years pre construction, 2014 to 2 years post construction 2019) for seaside towns located within 30 km of the existing Rampion Offshore Wind farm. The data showed that, when totalled across the nine seaside towns (Bognor Regis, Littlehampton & Worthing, Saltdean & Seaford and Brighton, Shoreham-bysea, Southwick & Portslade-by-sea), tourism employment was higher in the operational period (23,000 FTE jobs) compared to the pre-construction period (21,000 FTE jobs). Tourism employment in the nearby seaside towns increased by 9% when comparing average employment levels in the preconstruction period to the post completion operational period. This was above the growth in local districts (5%), the region (4%) and Great Britain (5%). Brighton was just below the local districts and Great British averages, with tourism employment 8% higher during the post completion period than in the period prior to construction.
- 17.10.31 On the basis of the analysis outlined above in addition to the evidence base of potential for impacts on coastal tourism which that shows no evidence of significant impacts on tourism, the magnitude of impact of construction activity on the volume and value of the tourism economy on specific coastal towns along the Sussex coast during the operation phase is therefore also assessed as **Negligible**.

#### Sensitivity or value of receptor

17.10.32 The sensitivity of the tourism economy once Rampion 2 is operational is the same as that identified during the construction phase. The sensitivity of the receptor is therefore assessed as **Very High** at the Sussex level.

#### Significance of residual effect

- 17.10.33 As outlined above, RED has identified and committed to several measures aimed at reducing the overall impact of an operational Rampion 2 on the volume and value of the tourism economy in Sussex (including C-1, C-7, C-9, C-26, C-53 and C-163).
- 17.10.34 With the sensitivity of the receptor assessed as **Very High**, and the magnitude of impact assessed as **Negligible** at the Sussex level, the effect of Rampion 2 operation and maintenance activity on the receptor is of **Negligible Significance**, which is not significant in EIA terms.

17.10.35 It is assumed that the effect of operation and maintenance activity of Rampion 2 is **Direct** and **Permanent** in nature.

# Impact of operation and maintenance on access to and enjoyment of onshore recreation activity

#### Overview

- 17.10.36 Once constructed and fully commissioned, the only onshore infrastructure visible during the operation and maintenance phase of Rampion 2 will be up to 45 manhole covers giving access to the joint bay and link boxes (located every 750 and 950m), and the onshore substation at Oakendene and the extension to the existing National Grid Substation at Bolney.
- 17.10.37 RED has already committed to burying the full length of the onshore cable corridor (commitment C-1).
- 17.10.38 At this stage no activities are planned during the operation and maintenance phase that are likely to have any significant impact on onshore recreation receptors. No access is required to the cables during normal operations. Access for routine checking and maintenance will be via manhole covers to the buried joint bays, which wherever possible will not be sited under PRoW or within Access Land. In the unlikely event that cable repairs and/or replacement is required, this will be implemented via the existing joint bays and will not require new excavation.
- 17.10.39 Routine maintenance and any repair of the onshore substation and the extension to the National Grid substation at Bolney will take place within the fenced perimeter and will therefore not be expected to impact upon recreational activity locally.

Magnitude of impact

17.10.40 On the basis of the above, the magnitude of impact on all onshore recreation receptors is therefore assessed as **Negligible**.

#### Sensitivity or value of receptor

- 17.10.41 The sensitivity of onshore recreation PRoW receptors during the operation and maintenance phase of Rampion 2 remains unchanged from that assessed during the construction phase and range from **Low** (for the majority of PRoW), to **Medium** (for a few PRoW), and **High** (for PRoW 829, 2264, 2175, 2211, 2091, 2208,2093, 3514, 2372\_2 and 2666) and **Very high** (for PRoW 2092 and 2693)
- 17.10.42 The sensitivity of recreational land, including Access Land parcels, commons, Washington Recreation Ground and Climping Beach remains unchanged from that assessed during the construction phase, and range from **Low** (for the Access Land and Climping Beach to **Medium** for Washington Recreation Ground, Bines Green Common and Horsebridge Common. More detail about the sensitivity of all receptors considered as part of the assessment is presented in **Table 17-29** and **Table 17-30** above.

#### Significance of residual effect

- 17.10.43 RED has already committed to a number of measures aimed at reducing the residual effect of the operations of Rampion 2 on onshore recreation receptors (including C-1, C-7, C-9, C-66 and C-163).
- 17.10.44 On the basis of the above, the residual effect for all onshore recreation receptors, is therefore assessed as **Negligible**, which is **Not Significant** in EIA terms.
- 17.10.45 It is assumed that the effect of operation and maintenance activity of Rampion 2 is **Direct** and **Permanent** in nature.

### 17.11 Assessment of effects: Decommissioning phase

- 17.11.1 The impacts of the decommissioning phase of Rampion 2 is assessed in line with the methodology outlined above. At this stage, there is considerable uncertainty associated with the potential effects of the decommissioning process. This includes uncertainty about the approach to decommissioning, the technology to be used, associated costs and likely sourcing from within the Sussex study area.
- 17.11.2 At this stage, it is anticipated that at the end of the operational lifetime of Rampion 2, all structures above the seabed (i.e. WTGs and their foundations, inter array and export cables and offshore substation) or ground level will be completely removed. **Chapter 4: The Proposed Development, Volume 2** of the ES: (Document Reference 6.2.4) indicates that the decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and number of vessels and equipment.
- 17.11.3 Under the maximum design scenario, it is assumed that all offshore cables will be removed during decommissioning, though any cable protection installed will be left in situ. On the other hand, it is anticipated that the onshore electrical cables will be left in-site with ends cut, sealed and buried to minimise the environmental effects associated with cable removal.
- 17.11.4 The onshore substation may be used as a substation site after decommissioning of Rampion 2, or it may be upgraded for use by another offshore wind project. Should the onshore substation be fully decommissioning, works are likely to be undertaken in reverse of the sequence of construction works, and all relevant sites restored to their original states or made suitable for an alternative use.
- 17.11.5 In principle, it is assumed that the magnitude of impact for all effects considered will mirror (but is likely to be lower than) the magnitude relating to the Proposed Development's construction phase. Similarly, the sensitivity of the receptor is based on the local and national policy context as well as current socio-economic conditions (as per the assessment of both construction and operation and maintenance phases). On this basis, the effect of the Rampion 2 decommissioning phase is assessed as set out in **Table 17-34** below.
- 17.11.6 The only exception, and key variance in the decommissioning of Rampion 2 will be the impact on onshore recreation receptors, which is assessed separately.

Receptor	Study Area	Magnitude	Sensitivity	Significance of Effect	Nature of Impact
Employment	UK	Negligible	Very high	<b>Negligible</b> (not significant)	Direct and temporary
Employment	Sussex	Negligible	Very high	<b>Negligible</b> (not significant)	Direct and temporary
Economy	UK	Negligible	Very high	<b>Negligible</b> (not significant)	Direct and temporary
Economy	Sussex	Negligible	Very high	<b>Negligible</b> (not significant)	Direct and temporary
Tourism economy	Sussex	Negligible	Very high	<b>Negligible</b> (not significant)	Direct and temporary

#### Table 17-34 Impacts of decommissioning phase of Rampion 2

#### Impact of decommissioning on onshore recreation activity

#### Magnitude of impact

- 17.11.7 At decommissioning of Rampion 2, the onshore substation and the extension to the existing National Grid Substation at Bolney may be fully decommissioned, and the site returned to its original state. This is not anticipated to have significant effect any PRoW receptors.
- 17.11.8 With the onshore cables being left in-situ, the magnitude of impact on onshore recreation receptors is anticipated to be closer to the impact of the operation and maintenance phase, rather than the construction phase. On this basis, the magnitude of impact on all onshore recreation receptors during decommissioning is therefore assessed as **negligible**.

#### Sensitivity or value of receptor

17.11.9 The sensitivity of onshore recreation receptors during the decommissioning phase will be unchanged from that identified for both construction and operation and maintenance phases.

#### Significance of residual effect

17.11.10 The significance of the residual effect on all other onshore recreation receptors is assessed as **negligible**, which is **Not Significant** in EIA terms.

### 17.12 Assessment of cumulative effects

### Approach

- 17.12.1 A CEA examines the combined impacts of Rampion 2 in combination with other developments on the same single receptor or resource and the contribution of Rampion 2 to those impacts. The overall method followed in identifying and assessing potential cumulative effects in relation to the onshore environment is set out in Chapter 5: Approach to the EIA, Volume 2 of the ES (Document Reference: 6.2.5) and Appendix 5.3: Cumulative effects assessment detailed onshore search and screening criteria, Volume 4 of the ES (Document Reference: 6.4.5.3).
- 17.12.2 The onshore screening approach follows the Planning Inspectorate's Advice Note Seventeen (Planning Inspectorate, 2019) which is an accepted process for Nationally Significant Infrastructure Projects (NSIPs) and follows the four-stage approach set out in the guidance.

### **Cumulative effects assessment**

- 17.12.3 For socio-economics, for different receptors different Zones of Influences (ZOI) have been applied for the CEA to ensure direct and indirect cumulative effects can be appropriately identified and assessed. The socio-economics ZOI are equivalent to that outlined in **Table 17-8** shown in Figure 17.1 and Figure 17.2, Volume 3 of the ES (Document Reference: 6.3.17).
- 17.12.4 A short list of 'other developments' that may interact with the Rampion 2 ZOIs during their construction, operation or decommissioning is presented in Appendix 5.4: Cumulative effects assessment shortlisted developments, Volume 4 of the ES: (Document Reference 6.4.5.4) and on Figure 5.4.2 and Figure 5.4.4, Volume 3 of the ES (Document Reference: 6.4.5.4). This list has been generated applying criteria set out in Chapter 5 of the ES: (Document Reference 6.2.5) and Appendix 5.3: Cumulative effects assessment detailed onshore search criteria, Volume 4 of the ES: (Document Reference 6.4.5.3) and has been collated up to the finalisation of the ES through desk study, consultation, and engagement.
- 17.12.5 Only those 'other developments' in the short list that fall within the socioeconomics ZOIs have the potential to result in cumulative effects with the Proposed Development. All 'other developments' falling outside the socioeconomics ZOI are excluded from this assessment. The following types of 'other development' have the potential to result in cumulative effects on socioeconomics.
  - other developments that could result in loss or change (permanent and/or temporary) to the UK/Sussex economy (jobs & GVA);
  - other developments that could result in loss or change (permanent and/or temporary) to the Sussex tourism economy (volume and value); and



- other developments that could result in loss or change (permanent and/or temporary) to recreation (onshore, offshore, and inshore) in the relevant study area.
- 17.12.6 On the basis of the above, the 'other developments' that are scoped into the socioeconomics CEA are outlined in **Table 17-35**.

Table 17-35	Developments considered as part of the socio-economics CEA
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ID <sub>6</sub>	Development type	Development name	Application reference	Status	Confidence in assessment	Tier <sup>7</sup>	Distance to Rampion 2 (m)
5	Utilities infrastructure (energy) High voltage direct current marine and underground electric power transmission link	AQUIND Connector	EN020022	DCO granted (following appeal) 09/03/2023	High	1	34,446
7	Utilities infrastructure (other)	Southampton to London Pipeline Project	EN070005	DCO granted 07/10/2020	High	1	44,805

 <sup>&</sup>lt;sup>6</sup> ID reference as stated in Table 2-1 in Appendix 5.4: Cumulative effects assessment shortlisted developments, Volume 4 of the ES (Document Reference: 6.4.5.4) and on Figure 5.4.2 to 5.4.4, Volume 4 of the ES (Document Reference: 6.4.5.5).
 <sup>7</sup> Chapter 5: Approach to the EIA, Volume 2 of the ES (Document Reference: 6.2.5) sets out the full definitions of the tiers.



ID <sup>6</sup>	Development type	Development name	Application reference	Status	Confidence in assessment	Tier <sup>7</sup>	Distance to Rampion 2 (m)
	97km of new steel pipeline						
26	Highways Construction of a new access road	Ford Circular Technology Park	WSCC/027/18/F	Application approved 15/08/2019	High	1	967
54	Energy generation (solar)	Land at Coombe Farm	DM/15/0644	Application approved 17/02/2017	High	1	21
	Solarvoltaic panels and associated infrastructure						

# 17.12.7 The cumulative Project Design Envelope is described in **Table 17-36**.

Project phase and activity/impact	Scenario	Justification
Cumulative impact on jobs & GVA – construction phase	Tier 1: Energy from waste development at the Ford Circular technology park. British Solar Renewables development, Land at Coombe Farm. Tier 2: No other developments to consider. Tier 3: No Tier 3 projects identified.	The Energy from waste development at the Ford Circular technology park and British Solar Renewables development projects (if developed) are likely to overlap with the construction phase of Rampion 2 and would therefore have the potential to generate additional economic benefit to the Sussex economy during the construction phase of Rampion 2.
Cumulative impact on volume & value of tourism – construction phase	No onshore or offshore construction projects included with the CEA will impact on tourism receptors.	The projects identified in <b>Table</b> <b>17-35</b> do not detail an assessment of tourism within the applications and are unlikely to result in a significant effect on the volume and value of tourism at the Sussex level.
Onshore recreation receptors – construction phase	No projects included within the CEA will impact on Rampion 2 onshore recreation receptors.	The projects included within the CEA do not spatially overlap or abut with Rampion 2 with the exception of Coombe Farm. Footpath 8T is within the ZOI for Rampion 2 but is negligibly impacted by it. While the Coombe Farm development may have an adverse impact on 8T, there will be no cumulative impact.
Cumulative impact on jobs & GVA – operation phase	All projects considered in <b>Table 17-35</b> .	The operation and maintenance of Rampion 2 is likely to overlap with that of all other developments considered in <b>Table 17-35</b> .

# Table 17-36 Cumulative Project Design Envelope for socio-economics

Project phase and activity/impact	Scenario	Justification
Cumulative impact on volume & value of tourism – operation phase	Tier 1: AQUIND interconnector. Tier 2: No Tier 2 projects identified. Tier 3: No Tier 3 projects identified.	Likely overlap with operation and maintenance of Rampion 2.
Onshore recreation receptors – operation phase	No projects included within the CEA will impact on Rampion 2 onshore recreation receptors.	The projects included within the CEA do not spatially overlap or abut with Rampion 2 with the exception of Coombe Farm. Footpath 8T is within the ZOI for Rampion 2 but is negligibly impacted by it. While the Coombe Farm development may have an adverse impact on 8T, there will be no cumulative impact.

17.12.8 Table 17-37 below provides an overview of the other developments spatial overlap with Rampion 2. It considers the different ZOIs used in this preliminary assessment for the different receptors considered. The bold text highlighted (in Table 17-37) identify the receptors (and their relevant geographies) that are likely to have a spatial overlap (albeit not necessarily a temporal overlap) with Rampion 2.

Other development	Jobs & GVA	Volume & value of tourism	Onshore recreation receptors
Connector (ID 5)identifies South-east (SE) region as study area.		Assessment uses 500m development boundary corridor, with the safety around the onshore sub Lovedean).	along the onshore zone extended to 8km
	Sussex study area for Rampion 2 overlaps with SE region but is small proportion of UK study area.	Given that the development's onshore works wi be located primarily in Hampshire, it is not anticipated that the onshore works for the AQUIND Connector will overlap with any of the study areas identified for Rampion 2.	

Table 17-37	Other develop	pments spatia	l overlap wi	th Rampion 2



Other development	Jobs & GVA	Volume & value of tourism	Onshore recreation receptors
Southampton to London Pipeline Project (ID 7)	Socio-economics is not considered in the assessment of the Southampton to London pipeline replacement development. Whilst socio-economics is not considered in the assessment, the construction and operation and maintenance of the replacement pipeline will support GVA and employment impacts nationally (as well as within the Sussex study area).	Hampshire and Surrey, and therefore by-passes the various study areas identified for the preliminary assessment of Rampion	
Ford Circular Technology Park, Energy from waste project (ID 26)	The development is located at the Ford Circular Technology Park, (the former Tarmac blocworks site, which forms part of the former Ford Airfield) to the west of the village of Ford. This is north of the proposed landfall for Rampion 2. This means that the development will interact with the various onshore ZOIs identified in the assessment of Rampion 2.		
British Solar Renewables, Land at Coombe Farm (ID 54)	<ul><li>The development is located in Twineham, West Sussex and forms part of the Hookers Farm estate. The development is located within close proximity of where the onshore substation for Rampion 2 could be located.</li><li>Given the project's scale, it is not anticipated to interact with all the onshore receptors identified for Rampion 2, but the two developments are likely to overlap spatially.</li></ul>		

**Table 17-38** below identifies which of the construction, operation and maintenance and decommissioning phases of each other development identified for the CEA overlap with the respective phases of Rampion 2.

Other development	Construction	Operation & maintenance	Decommissioning
AQUIND Connector (ID 5)	Marine installation was anticipated to take place in 2022. However, this was on the assumption in the ES was that construction commenced in Q3 2021. Due to the delay in gaining development consent construction may now commence in 2024, or later and it is therefore anticipated that there may be temporal overlap with the construction on Rampion 2. On this basis, it is assumed that the two developments' 'construction phases may overlap.	AQUIND Connector is anticipated to have a 40-year operational lifetime. Likely temporal overlap with operation and maintenance of Rampion 2.	Very little is known about proposed approach to decommissioning (which may include removal of offshore cables or leaving these in-site). Also given the longer operational lifetime (of 40 years vs 30 years for Rampion 2). On this basis, it is not anticipated that the development's decommissioning phase will overlap with that of Rampion 2.
Southampton to London Pipeline Project (ID 7)	Construction of the Southampton to London Pipeline development began in late 2021 and is estimated to be completed in 2024. On this basis, it is assumed that the two developments' construction phases will not overlap. Once installed, the replacement pipeline will be buried.	The development's Operational lifetime will overlap with that of Rampion 2. However, given that this is a replacement of an operational pipeline between London and Southampton, none of its operational impacts are anticipated to be net additional, and is therefore excluded from the cumulative assessment for Rampion 2.	Decommissioning of the Southampton to London pipeline development is not considered in the assessment. The assessment states that 'when the operator [] determines that it will permanently cease pipeline operations, it will consider and implement an appropriate decommissioning strategy'. On this basis, it is

# Table 17-38 Other developments temporal overlap with Rampion 2

assumed that the two

Other development	Construction	Operation & maintenance	Decommissioning		
			developments' decommissioning phases will not overlap.		
Ford Circular Technology Park, Energy from waste project (ID 26)	Construction is likely to take approximately 61 months and is likely to overlap with the construction phase of Rampion 2.	The lifetime of the energy from waste project is anticipated to be around 25- years. On this basis, it is assumed that the two developments will overlap during operation and maintenance.	The development's decommissioning phase is not considered in the assessment. However, given that the development's anticipated lifetime is 25-years (i.e. five years shorter than that of Rampion 2) it is assumed that the developments' decommissioning phases will not overlap.		
British Solar Renewables, Land at Combe Farm		on and associated docum indicate timelines for con mmissioning.			
(ID 54)	On this basis, it is assumed that the two developments will overlap temporarily across their respective construction, operation and				

17.12.10 Based on the analyses presented in **Table 17-38** and **Table 17-37** this section provides an assessment of the level of impact that may arise as result of Rampion 2 and the other developments identified. The CEA is based on a review of evidence and documentation for each other development listed, with the level of magnitude based on professional judgement.

maintenance and decommissioning phases.

# **Cumulative effect of construction on employment**

# Overview

**Table 17-38** shows that of the four CEA other developments identified, only two are likely to overlap with the construction of Rampion 2. These are the Energy from waste development at the Ford Circular technology park (ID 26) and British Solar Renewables development (land at Coombe Farm) (ID 54) located close to the Rampion 2 onshore substation.

- 17.12.12 The assessment of the Energy from waste development (ID 26) indicates that at peak construction, the development will support over 450 jobs, although the number of FTE jobs throughout the construction period is anticipated to be much lower.
- 17.12.13 The assessment of the British Solar Renewables (land at Coombe Farm) development (ID 54) does not identify the number of jobs that could be supported as a result of construction activity. However, based on the development's scale (i.e., 44.5 hectares), the level of employment supported during construction is anticipated to be low.
- 17.12.14 As outlined above and Appendix 17.2: Socio-economics cost and sourcing report, Volume 4 of the ES: (Document Reference 6.4.17.2) the assessment of the key quantitative measures of economic impact (i.e. employment and GVA output) during the construction phase are driven by the amount of the Proposed Development's supply chain expenditure captured by businesses located within each study area identified.

### Magnitude of impact

17.12.15 Based on the above, it is assumed that the magnitude of impact on employment at both Sussex and national levels as a result of Rampion 2 in addition with the CEA other developments identified is assessed as **Negligible**.

#### Sensitivity or value of receptor

17.12.16 The preliminary assessment of Rampion 2 has identified employment as a major policy priority at various levels of government including the national, sub-regional and local, putting the sensitivity of the receptor as **Very High** at both Sussex and national levels.

### Significance of CEA residual effect

17.12.17 With the sensitivity of the receptor assessed as **Very High** and magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 in addition with the CEA other developments identified on the receptor is of **Negligible** significance, which is **Not Significant** in EIA terms.

# Cumulative effect of construction on gross value added

### Magnitude of impact

17.12.18 The analysis of the cumulative impact of construction on employment at the Sussex and national levels have identified an overall impact of negligible magnitude. As employment contributes to the overall output (i.e., GVA) created, it can therefore be assumed that the magnitude of impact on GVA at both Sussex and national levels as a result of Rampion 2 in addition with the CEA other developments identified is **Negligible** as well.

## Sensitivity or value of receptor

17.12.19 The assessment of Rampion 2 on the receptor has indicated that economic growth, and in particular clean growth is highlighted as one of the grand challenges in the UK government's Industrial Strategy (HM Government, 2017a), giving the receptor a **Very High** level of sensitivity at both Sussex and national levels.

# Significance of CEA residual effect

17.12.20 With the sensitivity of the receptor assessed as **Very High** and magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 in addition with the CEA other developments identified on the receptor is of **Negligible** significance, which is **Not Significant** in EIA terms.

# Cumulative effect of construction on volume and value of the tourism economy

# Overview

- 17.12.21 Of the two other developments considered alongside Rampion 2 as part of the CEA assessment, only the assessment of the Energy from waste development (ID 26) has assessed the development's impact on tourism. Overall, the assessment found that 'while the proposed development will be visible from the [South Downs National Park], Arundel Castle and the coast, it will be seen in context with other large scale built features. As these features do not appear to affect visitors to these areas, it is considered that the proposed development will not significantly alter the overall visitor experience. No significant effects are therefore predicted on tourism as a result of the proposed development'.
- 17.12.22 The assessment of the British Solar Renewables (land at Coombe Farm) development (ID 54) does not consider its overall impact on the volume and value of tourism activity. However, given the development's relative scale, any impacts are most likely to be felt locally.
- 17.12.23 The assessment of construction activity of Rampion 2 on the volume and value of the tourism economy in Sussex (as per **Section 17.9**) has indicated that Rampion 2 is anticipated to have an overall negligible impact.

# Magnitude of impact

17.12.24 On the basis of the above, it is assumed that the magnitude of impact on the volume and value of the tourism economy as a result of Rampion 2 in addition with the CEA other developments identified is therefore assessed as **Negligible**.

# Sensitivity or value of receptor

17.12.25 The assessment of Rampion 2 has indicated that tourism supports around 69,500 FTE jobs across Sussex, representing 12% of all employment within the study area, and a level of specialisation higher than the national average.

17.12.26 On this basis, the sensitivity of the receptor at the Sussex level is identified as **Very High**.

# Significance of CEA residual effect

17.12.27 With the sensitivity of the receptor assessed as **Very High** and magnitude of impact assessed as **Negligible**, the effect of Rampion 2 in addition with the CEA other developments identified on the volume and value of the tourism economy is of **Negligible** significance, which is **Not Significant** in EIA terms.

# Cumulative effect of construction on access to and enjoyment of onshore recreation activity

### Overview

- 17.12.28 A review of the assessments submitted as part of the consenting process for both the Energy from waste (ID 26) and British Solar Renewables developments (ID 54) has not identified any significant impacts on access to, and enjoyment of onshore recreation activities.
- 17.12.29 In both cases, the developments are relatively small scale and somewhat contained (in terms of the geographical context in which they are located). Given that the British Solar Renewables (ID 54) is located close to the Rampion 2 onshore substation, there is however, potential for cumulative impacts to occur.

### Magnitude of impact

17.12.30 Based on the above, it is assumed that the magnitude of impact on access to and enjoyment of onshore recreation activity for all other CEA developments considered is not bigger than that identified in the assessment of Rampion 2 on the receptor, which for the area affected by construction of the substation (and therefore also the British Solar Renewables development (ID 54)) is identified as **Moderate**.

### Sensitivity or value of receptor

17.12.31 A review of the PRoW located along the onshore temporary cable corridor within proximity of the onshore substation for Rampion 2, and which would lie within a 500m ZOI of the British Solar Renewables development (ID 54), shows that only paths 8T and 34Bo might be affected. Both paths were assessed in Appendix 17.4: Assessment of sensitivity of Public Rights of Way, Volume 4 of the ES: (Document Reference 6.4.17.4) as being of Low sensitivity.

### Significance of CEA residual effect

17.12.32 With the sensitivity of the receptor assessed as **Low** and magnitude of impact assessed as **Moderate**, the effect of Rampion 2 in addition with the other CEA developments identified on access to and enjoyment of onshore recreation is of **Minor** significance, which is **Not Significant** in EIA terms. This is in line with the assessment of Rampion 2 on PRoW users of 34Bo and 8T.

# Cumulative effect of operation and maintenance on employment

# Overview

- 17.12.33 The analysis presented in **Table 17-38** has identified that the operation and maintenance of Rampion 2 is likely to overlap with that of all other developments considered. However, as the Southampton to London pipeline development (ID 7) will replace an existing pipeline, the Proposed Development's net additional impact on employment levels is estimated to be negligible.
- 17.12.34 The assessment of the AQUIND Connector (ID 5) does not consider its impacts on operational employment. It is therefore assumed that the development's overall impact on the receptor is negligible. Similarly, the documentation submitted as part of the British Solar Renewables development (land at Coombe Farm) (ID 54) indicates that the development is not anticipated to support any direct employment.
- 17.12.35 On the other hand, the assessment of the Energy from waste development (ID 26) determined that the development has potential to support 56 new jobs (in addition to the 24 full-time jobs provided by the existing plant).

# Magnitude of impact

17.12.36 Taken together, the jobs supported by the Energy from waste development (ID 26), in addition with the operational jobs supported by Rampion 2 are likely to add to no more than 100 FTE jobs. On this basis, it is assumed that the magnitude of impact on employment at both Sussex and national levels as a result of Rampion 2 in addition with the CEA other developments identified is assessed as **Negligible**.

Sensitivity or value of receptor

17.12.37 As outlined in the preliminary assessment of Rampion 2 (both on its own and cumulatively) the sensitivity of employment at both Sussex and national level, is identified as **Very High**.

# Significance of CEA residual effect

17.12.38 With the sensitivity of the receptor assessed as **Very High** and magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 in addition with the CEA other developments identified on employment is of **Negligible** significance, which is **Not Significant** in EIA terms.

# Cumulative effect of operation and maintenance on gross value added

# Magnitude of impact

17.12.39 In line with the analysis of the other developments' impact on employment, it is assumed that the magnitude of impact of operation and maintenance on GVA at both Sussex and national levels as a result of Rampion 2 in addition with the CEA other developments identified is assessed as **Negligible**.

## Sensitivity or value of receptor

17.12.40 As outlined in the preliminary assessment of Rampion 2 (both on its own and cumulatively) the sensitivity of economic growth at both Sussex and national level, is identified as being **Very High**.

# Significance of CEA residual effect

17.12.41 With the sensitivity of the receptor assessed as **Very High** and magnitude of impact assessed as **Negligible** at both UK and Sussex levels, the effect of Rampion 2 in addition with the CEA other developments identified on the economy (and therefore GVA) is of **Negligible** significance, which is **Not Significant** in EIA terms.

# Cumulative effect of operation and maintenance on volume and value of the tourism economy

# Magnitude of impact

17.12.42 The analysis of CEA other developments outlined in **paragraphs 17.12.21** to **17.12.23** indicates that the overall magnitude of impact on the overall volume and value of tourism economy in Sussex is anticipated to be **Negligible**. This is also expected to be the case during the other developments' operational phase, especially as for Rampion 2, all onshore infrastructure (with the exception of the onshore substation) is to be buried underground.

### Sensitivity or value of receptor

17.12.43 As outlined above, the sensitivity of the volume and value of the tourism economy at the Sussex level is identified as **Very High**.

### Significance of CEA residual effect

17.12.44 With the sensitivity of the receptor assessed as **Very High** and magnitude of impact assessed as **Negligible**, the effect of operation and maintenance of Rampion 2 in addition with the CEA other developments identified on the volume and value of the tourism economy is of **Negligible** significance, which is **Not Significant** in EIA terms.

# Cumulative effect of operation and maintenance on access to and enjoyment of onshore recreation activity

### Magnitude of impact

17.12.45 As outlined above, it is assumed that the magnitude of impact on access to and enjoyment of onshore recreation activity for all other CEA developments considered (including Rampion 2) will not be bigger than that identified in the assessment of Rampion 2. This remains the case during the other developments' operational phase. 17.12.46 The assessment of Rampion 2 found that PRoW will be subject to only **Negligible** impact during the Proposed Development's operation and maintenance phase.

Sensitivity or value of receptor

17.12.47 As outlined above in **paragraph 17.12.31** and in **Appendix 17.4: Assessment of sensitivity of Public Rights of Way, Volume 4** of the ES (Document Reference 6.4.17.4), both 34Bo and 8T are of **Low** sensitivity.

Significance of CEA residual effect

17.12.48 With the sensitivity of the receptor assessed as **Low** and magnitude of impact assessed as **Negligible**, the effect of Rampion 2 in addition with the other CEA developments identified on access to and enjoyment of onshore recreation is of **Negligible** significance, which is **Not Significant** in EIA terms. This is in line with the assessment of Rampion 2 on PRoW users of 34Bo and 8T.

# Cumulative effect of decommissioning

- 17.12.49 The analysis presented in **Table 17-37** suggests that only the British Solar Renewables development (land at Coombe Farm) (ID 54) has potential to overlap with Rampion 2's decommissioning phase. If that is indeed the case, the overall impact and significance of effect of the two developments will be similar to, albeit smaller than the impacts identified during the two developments' construction phase. The following is an overview of the maximum effect that could be anticipated:
  - cumulative effect of decommissioning activity on employment Negligible effect (Not Significant);
  - cumulative effect of decommissioning activity on GVA Negligible effect (Not Significant);
  - cumulative effect of decommissioning on volume and value of tourism activity Negligible effect (Not Significant); and
  - cumulative effect of decommissioning on access to and enjoyment of onshore recreation activity – Minor effect (Not Significant).

17.12.50 The CEA for socio-economics is set out in **Table 17-39**.

### Table 17-39 Cumulative effects assessment for socio-economics

ID	Development name	Application reference	Environmental measures
2	AQUIND Connector	EN020022	The AQUIND interconnector is not assumed to have a significant impact on jobs, GVA, recreation and tourism during the construction, operation, and decommissioning phases.

ID	Development name	Application reference	Environmental measures
3	Southampton to London Pipeline Project	EN070005	The construction and operation and maintenance of the replacement pipeline will support GVA and employment impacts nationally (as well as within the Sussex study area). The Development's net additional impact during operation on employment and GVA levels is estimated to be negligible because this is a replacement project.
19	Ford Circular Technology Park, Energy from waste project	WSCC/036/20	The assessment of the Energy from waste development indicates that at peak construction, the development will support over 450 jobs during construction and 56 jobs during operation and also contribute to overall output (GVA). The assessment of the Energy from waste development has assessed the development's impact on tourism. No significant effects are therefore predicted on tourism as a result of the development.
28	British Solar Renewables, Land at Coombe Farm	DM/15/0644	Based on the scale of the development the anticipated scale of job/GVA creation as a result of the project is estimated to be low. The assessment of the British Solar Renewables (land at Coombe Farm) development does not consider its overall impact on the volume and value of tourism activity. However, given the development's relative scale, any impacts are most likely to be felt locally. Only the British Solar Renewables development (land at Coombe Farm) has potential to overlap with Rampion 2's decommissioning phase.

# 17.13 Transboundary effects

17.13.1 Transboundary effects arise when impacts from a development within one European Economic Area (EEA) states affects the environment of another EEA state(s). A screening of transboundary effects has been carried out and is presented in Appendix B of the Scoping Report (RED, 2020).

- 17.13.2 For socio-economics, the potential for transboundary effects has been identified in relation to the potential impact upon the economies of other states within the EEA. This may arise through the purchase of Proposed Development components, equipment, and the sourcing of labour from companies based outside the UK. Under Regulation 32 part 6(a) of the 2017 regulations, the Secretary of State must consult with any EEA state concerned regarding the potential significant effects of the development on the environment of that EEA state, and the measures envisaged to reduce or eliminate such effects. However, the sourcing of materials and labour from other EEA states is assumed to provide beneficial effects in the economies of such states, and as such the consideration of 'measures envisaged to reduce or eliminate such effects' is not relevant within the context of transboundary impacts.
- 17.13.3 The location of the offshore infrastructure means that it will not be visible from other EEA countries. The onshore elements of Rampion 2 are entirely to be located within the UK, and as such there is no potential for significant transboundary effects (either beneficial or adverse) on other EEA states.
- 17.13.4 Given the above, transboundary impacts associated with socio-economics are therefore not considered further.

# 17.14 Inter-related effects

- 17.14.1 The inter-related effects assessment considers likely significant effects from multiple impacts and activities from the construction, operation and maintenance and decommissioning phases of Rampion 2 on the same receptor, or group of receptors.
- 17.14.2 Inter-related effects could potentially arise in one of two ways. The first type of inter-related effect is a Proposed Development lifetime effect, where multiple phases of the Proposed Development interact to create a potentially more significant effect on a receptor than in one phase alone. The phases for Rampion 2 are construction, operation and maintenance, and decommissioning. All Proposed Development lifetime effects are assessed in Chapter 30: Inter-related effects, Volume 2 (Document Reference: 6.2.30).
- 17.14.3 The second type of inter-related effect is receptor-led effects. Receptor-led effects are where effects from different environmental aspects combine spatially and temporally on a receptor. These effects may be short-term, temporary, transient, or longer-term. Receptor-led effects have been considered, where relevant, in this chapter. Full results of the receptor-led effects assessment can be found in **Chapter 30: Inter-related effects, Volume 2** of the ES (Document Reference: 6.2.30).

# 17.15 Summary of residual effects

**Table 17-40** presents a summary of the assessment of significant impacts, any relevant embedded environmental measures, and residual effects on socioeconomics receptors.

# Table 17-40 Summary of assessment of residual effects

Activity and impact	Magnitude of impact	Receptor and sensitivity or value	Embedded environmental measures	Assessment of residual effect (significance)
Construction				
Impact on employment	Negligible	UK and Sussex study areas – <b>Very high</b>	C-34 and C-35	<b>Negligible</b> (not significant)
Impact on GVA	Negligible	UK and Sussex Study areas – <b>Very high</b>	C-34 and C-35	<b>Negligible</b> (not significant)
Impact on tourism receptors related to onshore infrastructure	Negligible	Onshore study area – <b>Very high</b>	C-19, C-22, C-26 and C- 32	<b>Negligible</b> (not significant)
Impact on volume and value of tourism economy related to offshore infrastructure	Negligible	Sussex, including SDNP and coastal towns of Sussex – <b>Very high</b>	C-46 and C-66	<b>Negligible</b> (not significant)
Impact on access to and enjoyment of onshore recreation activity	<b>Negligible</b> for construction of substation. <b>Minor</b> to <b>Moderate</b> <b>Minor</b> for trench excavation, cable laying and trenchless crossing.	Very high – PRoW 2092 and 2693. High – PRoW 829, 2264, 2175, 2211, 2091, 2208, 2093, 3514, 2372_2 and 2666.	C-1, C-2, C-7, C-9, C- 18, C-19, C-20, C-22, C- 26, C-32, C-33, C-43, C- 66, C-128, C-161, C- 162, C-163 and C-202 (PRoWMP).	Moderate/ Major – PRoW 2092 and 2693 Minor/ Moderate – PRoW 2092, 2208, 2211 and 3514

Activity and impact	Magnitude of impact	Receptor and sensitivity or value	Embedded environmental measures	Assessment of residual effect (significance)
	<b>Moderate</b> for laydown areas and haul roads.	142no. PRoW in the ZOI have been assessed as being of <b>Low</b> and <b>medium</b> sensitivity.		
Operation and maintenance				
Impact on employment	Negligible	UK and Sussex study areas – <b>Very high</b>	C-34 and C-35	<b>Negligible</b> (not significant)
Impact on GVA	Negligible	UK and Sussex study areas – <b>Very high</b>	C-34 and C-35	<b>Negligible</b> (not significant)
Impact on tourism receptors related to onshore infrastructure	Negligible	Onshore study area – <b>Very high</b>	C-1, C-7, C-9, C-26, and C-163	<b>Negligible</b> (not significant)
Impact on volume and value of tourism economy related to offshore infrastructure	Negligible	Sussex and coastal towns of Sussex – <b>Very high</b>	C-46 and C-53	<b>Negligible</b> (not significant)
Impact on access to and enjoyment of onshore recreation activity	Negligible	<b>Very high</b> – PRoW 2092 and 2693. <b>High</b> – PRoW 829, 2264, 2175, 2211,	C-1, C-2, C-7, C-9, C- 18, C-19, C-20, C-22, C- 26, C-32, C-33, C-43, C- 66, C-128, C-161, C- 162, C-163 and C-202	<b>Negligible</b> (not significant)

Activity and impact	Magnitude of impact	Receptor and sensitivity or value	Embedded environmental measures	Assessment of residual effect (significance)
		2091, 2208, 2093, 3514, 2372_2 and 2666.		
		142no. PRoW in the ZOI have been assessed as being of <b>Low</b> and <b>medium</b> sensitivity.		
Decommissioning				
Impact on employment	Negligible	UK and Sussex study areas – <b>Very high</b>	C-34 and C-35	<b>Negligible</b> (not significant)
Impact on GVA	Negligible	UK and Sussex Study areas – <b>Very high</b>	C-34 and C-35	<b>Negligible</b> (not significant)
Impact on volume and value of tourism economy	Negligible	Sussex study area – <b>Very high</b>	C-19, C-22, C-26, C-32, C-46, and C-66	<b>Negligible</b> (not significant)
Impact on access to and enjoyment of onshore recreation activity	Negligible	<b>Very high</b> – PRoW 2092 and 2693. <b>High</b> – PRoW 829, 2264, 2175, 2211, 2091, 2208, 2093,	C-1, C-2, C-7, C-9, C- 18, C-19, C-20, C-22, C- 26, C-32, C-33, C-43, C- 66, C-128, C-161, C- 162, C-163 and C-202	<b>Negligible</b> (not significant)

Activity and impact	Magnitude of impact	Receptor and sensitivity or value	Embedded environmental measures	Assessment of residual effect (significance)
		3514, 2372_2 and 2666.		
		142no. PRoW in the ZOI have been assessed as being of <b>Low</b> and <b>Medium</b> sensitivity.		

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# 17.16 Glossary of terms and abbreviations

Tarma (aananawa)	Definition
Term (acronym)	Definition
Baseline	Refers to existing conditions as represented by latest available survey and other data which is used as a benchmark for making comparisons to assess the impact of development.
Baseline conditions	The environment as it appears (or will appear) immediately prior to the implementation of the Proposed Development together with any known or foreseeable future changes that will take place before completion of the Proposed Development.
Capital expenditure (CAPEX)	CAPEX is expenditure used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment. CAPEX is used to undertake new projects or investments by a company. CAPEX can include purchasing a piece of equipment.
Code of Construction Practice (COCP)	The code sets out the standards and procedures to which developers and contractors must adhere to when undertaking construction of major projects. This will assist with managing the environmental impacts and will identify the main responsibilities and requirements of developers and contractors in constructing their projects.
Construction effects	Used to describe both temporary effects that arise during the construction phases as well as permanent existence effects that arise from the physical existence of development (for example new buildings).
COVID-19 pandemic	The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory. In the UK COVID-19 pandemic had wide ranging socio-economic impacts due to the social distancing restrictions placed on UK citizens by the UK Government.
Cumulative effects	Additional changes caused by a Proposed Development in conjunction with other similar developments or as a combined effect of a set of developments.
Cumulative Effects Assessment (CEA)	Assessment of impacts as a result of the incremental changes caused by other past, present and reasonably

# Table 17-41 Glossary of terms and abbreviations – socio-economics



Term (acronym)	Definition
	foreseeable human activities and natural processes together with the Proposed Development.
DCO Application	An application for consent to undertake a Nationally Significant Infrastructure Project made to the Planning Inspectorate who will consider the application and make a recommendation to the Secretary of State, who will decide on whether development consent should be granted for the Proposed Development.
Decommissioning	The period during which a development and its associated processes are removed from active operation.
Development Consent Order (DCO)	This is the means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects, under the Planning Act 2008.
Development expenditure (DEVEX)	DEVEX refers to expenditure undertaken to develop the project through the consent and project design process. In the context of offshore wind projects this is undertaken before it is operational.
Direct employment and gross value added	Employment and gross value added which is associated with the first round of capital expenditure, i.e. Rampion 2's spend with prime contractors within each impact area of the study.
Economic activity rate	Economically active people are those aged over 16 who are either in employment or International Labour Organisation (ILO) unemployed. This group of people are those active in the labour force. The economic activity rate is the number of people who are economically active as a percentage of the total population.
Embedded environmental measures	Equate to 'primary environmental measures' as defined by Institute of Environmental Management and Assessment (2016). They are measures to avoid or reduce environmental effects that are directly incorporated into the preferred masterplan for the Proposed Development.
England Coast Path (ECP)	The England Coast Path (ECP) is a new National Trail. Although many sections are open and well-used, others are still at various stages of development. The ECP will be the longest managed coastal path in the world. It will go all the way around the coast of England and will be around 2,700 miles long when it is complete.



Term (acronym)	Definition
Environmental Impact Assessment (EIA)	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing circumstances (or 'baseline').
Environmental measures	Measures which are proposed to prevent, reduce and where possible offset any significant adverse effects (or to avoid, reduce and if possible, remedy identified effects.
Environmental Statement (ES)	The written output presenting the full findings of the Environmental Impact Assessment.
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach and the information required to support the EIA and HRA for certain aspects.
Full-time equivalent (FTE) jobs	Full time equivalent (FTE) is a unit that indicates the workload of an employed person. An FTE of 1.0 is equivalent to one full-time employee, whilst a part-time employee working half the hours a full-time employee does would be recorded as 0.5 FTE.
Future baseline	Refers to the situation in future years without the Proposed Development.
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.
Horizontal Directional Drill (HDD)	A trenchless crossing engineering technique using a drill steered underground without the requirement for open trenches. This technique is often employed when crossing environmentally sensitive areas, major water courses and highways. This method is able to carry out the underground installation of pipes and cables with minimal surface disruption.
Impact	The changes resulting from an action.
Indirect effects	Effects that result indirectly from the Proposed Development as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
	Often used to describe effects on landscape character that are not directly impacted by the Proposed



Term (acronym)	Definition
	Development such as effects on perceptual characteristics and qualities of the landscape.
Indirect employment and gross value added	Employment and gross value added which is associated with the suppliers of companies that supply goods and services as part of the supply chain of the proposed Rampion 2.
Induced employment and gross value added	Employment and gross value added which is not directly caused by the expenditure associated with a project. These are impacts associated with local expenditure as a result of those whose incomes are derived from the direct and indirect impacts of the intervention.
Likely Significant Effects	It is a requirement of Environmental Impact Assessment Regulations to determine the likely significant effects of the Proposed Development on the environment which should relate to the level of an effect and the type of effect.
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)	Location quotient (LQ) is a measure of a region's industrial specialisation relative to a larger region (eg. England). A LQ of 1.0 indicates that both regions have the same level of specialisation, whereas a LQ > 1.0 means that the smaller region has a higher concentration of a particular sector than is seen in the larger region.
Lowest astronomical tide (LAT)	The lowest tide level which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.
Magnitude (of change)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short-term or long-term in duration'. Also known as the 'degree' or 'nature' of change.
Nationally Significant Infrastructure Project (NSIP)	Nationally Significant Infrastructure Projects are major infrastructure developments in England and Wales which are consented by DCO. These include proposals for renewable energy projects with an installed capacity greater than 100MW.



Term (acronym)	Definition
Non-statutory consultation	Non-statutory consultation refers to the voluntary consultation that RED undertake in addition to the statutory consultation requirements.
Operational expenditure (OPEX)	OPEX relates to the costs that a company incurs for running its day-to-day operations.
Preliminary Environmental Information Report (PEIR)	The written output of the Environmental Impact Assessment developed to support statutory consultation and present the preliminary findings of the assessment to allow an informed view to be developed of the Proposed Development, the assessment approach that has been undertaken, and the preliminary conclusions on the likely significant effects of the Proposed Development and environmental measures proposed.
Proposed DCO Order Limits	The DCO Assessment Boundary combines the search areas for the offshore and onshore infrastructure associated with the Proposed Development. It is defined as the area within which the Proposed Development and associated infrastructure will be located, including the temporary and permanent construction and operational work areas.
Proposed Development	The development that is subject to the application for development consent, as described in <b>Chapter 4: The Proposed Development, Volume 2</b> of the ES (Document Reference: 6.2.4).
Rampion Extension Development Limited (RED)	Rampion Extension Development Ltd (the Applicant)
Receptor	These are as defined in Regulation 5(2) of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and include population and human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape that may be at risk from exposure to direct and indirect impacts which could potentially arise as a result of the Proposed Development.
Recreational land	Land identified as forming part of a common, open space, shore or other land to which the public has access for the purposes of recreation.
Scoping Opinion	A Scoping Opinion is adopted by the Secretary of State for a Proposed Development.



Term (acronym)	Definition
Scoping Report	A report that presents the findings of an initial stage in the Environmental Impact Assessment process.
Secretary of State (SoS)	The senior minister who makes the decision to grant development consent.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor.
Significance	A measure of the importance of the environmental effect, defined by criteria specific to the environmental aspect.
Significant effects	It is a requirement of the EIA Regulations 2017 to determine the likely significant effects of the development on the environment which should relate to the level of an effect and the type of effect. Where possible significant effects should be mitigated.
	The significance of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and the sensitivity of the receptor) that should be attached to the impact described.
	Whether or not an effect should be considered significant is not absolute and requires the application of professional judgement. Significant – 'noteworthy, of considerable amount or effect or importance, not insignificant or negligible' (The Concise Oxford Dictionary).
	Those levels and types of landscape and visual effect likely to have a major or important / noteworthy or special effect of which a decision maker should take particular note.
Temporal scope	The temporal scope covers the time period over which changes to the environment and the resultant effects are predicted to occur and are typically defined as either being temporary or permanent.
Temporary or permanent effects	Effects may be considered as temporary or permanent. In the case of wind energy development the application is for a 30 year period after which the assessment assumes that decommissioning will occur and that the site will be restored. For these reasons the development is referred to as long-term and reversible.



Term (acronym)	Definition
The Applicant	Rampion Extension Development Limited (RED)
UK Standard Industrial Classification (UK SIC)	A five-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity.
Zone of Influence (ZOI)	The area surrounding the Proposed Development which could result in likely significant effects.

# 17.17 References

Arun District Council (2018) Arun Local Plan. [online]. Available at:

https://www.arun.gov.uk/download.cfm?doc=docm93jijm4n12844.pdf&ver=12984. [Accessed: 15 June 2023].

Coast to Capital LEP (2018) *Gatwick 360 The Coast to Capital Strategic Economic Plan 2018-2030.* [online]. Available at:

https://www.coast2capital.org.uk/storage/downloads/coast\_to\_capital\_strategic\_economic\_ plan\_2018-2030\_pdf-1535099447.pdf [Accessed: 15 June 2023].

DECC (2011a) National Policy Statement for Electricity Networks Infrastructure (EN-5). [online]. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_ data/file/37050/1942-national-policy-statement-electricity-networks.pdf [Accessed: 15 June 2023].

DECC (2011b) National Policy Statement for Renewable Energy Infrastructure (EN-3). [online]. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_ data/file/37048/1940-nps-renewable-energy-en3.pdf [Accessed: 15 June 2023].

DECC (2011c) Overarching National Policy Statement for Energy (EN-1). [online]. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_ data/file/47854/1938-overarching-nps-for-energy-en1.pdf [Accessed: 15 June 2023].

Department for Energy Security and Net Zero (2023a) Draft Overarching National Policy Statement for energy (EN-1) . Available at:

https://www.gov.uk/government/consultations/planning-for-new-energy-infrastructurerevisions-to-national-policy-statements [Accessed: 15 June 2023].

Department for Energy Security and Net Zero (2023b) Draft National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_ data/file/1147382/NPS\_EN-3.pdf [Accessed: 15 June 2023].

Destination Research (2014) *Economic Impact of Tourism for Norfolk, 2014.* [online]. Available at: <u>https://www.visitnorfolk.co.uk/wp-content/uploads/2021/11/VV-Norfolk-2014.pdf</u> [Accessed: 15 June 2023].

Destination Research (2015) *Economic Impact of Tourism for Norfolk, 2015.* [online]. Available at: <u>https://www.visitnorfolk.co.uk/wp-content/uploads/2021/11/VV-Norfolk-2015.pdf</u> [Accessed: 15 June 2023].

Destination Research (2016) *Economic Impact of Tourism for Norfolk, 2016.* [online]. Available at: <u>https://www.visitnorfolk.co.uk/wp-content/uploads/2021/11/VV-Norfolk-2016.pdf</u> [Accessed: 15 June 2023].

Destination Research (2017) *Economic Impact of Tourism for Norfolk, 2017.* [online]. Available at: <u>https://www.visitnorfolk.co.uk/wp-content/uploads/2021/11/VV-Norfolk-2017.pdf</u> [Accessed: 15 June 2023].

Destination Research (2018) *Economic Impact of Tourism for Norfolk, 2018.* [online]. Available at: <u>https://www.north-norfolk.gov.uk/media/6108/economic-impact-of-tourism-north-norfolk-report-2018.pdf</u> [Accessed: 15 June 2023].

ESCC (2014a) *East Sussex Cultural Strategy, 2013-2023.* [online]. Available from: https://www.eastsussex.gov.uk/leisure-tourism/arts-music/networks-resources/eastsussex-cultural-strategy-2013-2023#:~:text=A%20ten%20year%20partnership%20framework,cultural%20organisations% 20and%20cultural%20leaders [Accessed: 15 June 2023].

ESCC (2014b) *East Sussex Growth Strategy, Doing Business Brilliantly 2014-2020.* [online]. Available at: <u>https://www.eastsussex.gov.uk/business/support/economic-development/growth-strategy-2014</u> [Accessed: 15 June 2023].

ESCC (2021) Sussex Visitor Economy Baseline Report. [online]. Available at: https://democracy.eastsussex.gov.uk/documents/s39574/LME%2012%20November%202 021%20Sussex%20Tourism%20and%20Culture%20Recovery%20Group%20Progress%2 0Appendix%203.pdf [Accessed: 15 June 2023].

Hatch Associates (2017) Hatch input-output model. London; Hatch Associates.

Hatch Associates (2022) Awel y Môr Offshore Wind Farm, Category 6: Environmental Statement, Volume 5, Annex 4.2: Seaside Tourism Economics Employment Evidence. [online] Available at: Volume 5, Annex 4.2: Seaside Tourism Economics Employment Evidence (awelymor.cymru) [Accessed: 15 June 2023].

HM Government (2019a) *Industrial Strategy, Offshore Wind Sector Deal.* [online] Available at: <u>https://www.gov.uk/government/publications/offshore-wind-sector-deal/offshore-wind-sector-deal</u> [Accessed: 15 June 2023].

HM Government (2017b) *The Clean Growth Strategy, Leading the way to a low carbon future*. [online] Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_ data/file/700496/clean-growth-strategy-correction-april-2018.pdf [Accessed: 15 June 2023].

HM Government (2019b) *Tourism Sector Deal*. [online] Available at: <u>https://www.gov.uk/government/publications/tourism-sector-deal/tourism-sector-deal</u>[Accessed: 15 June 2023].

HM Government (2011) *UK Marine Policy Statement*. [online] Available at: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment</u> <u>data/file/69322/pb3654-marine-policy-statement-110316.pdf</u> [Accessed December 2022].

HM Government (2021) Net Zero Strategy: Build Back Greener. [online] Available at: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment</u> <u>data/file/1033990/net-zero-strategy-beis.pdf</u> [Accessed: 15 June 2023].

HM Government (2022) *Levelling Up the United Kingdom*. [online] Available at: <u>Levelling</u> <u>Up the United Kingdom - GOV.UK (www.gov.uk)</u> [Accessed: 15 June 2023].

HM Treasury (2021) *Build Back Better: Our Plan for Growth*. [online]. Available at: <u>https://www.gov.uk/government/publications/build-back-better-our-plan-for-growth/build-back-better-our-plan-for-growth-html</u> [Accessed: 15 June 2023].

HM Treasury (2022a) *The British Energy Security Strategy*. [online] Available at: <u>https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy</u> [Accessed: 15 June 2023].

HM Treasury (2022b) *The Green Book*. [online]. Available at: <u>https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent/the-green-book-2020</u> [Accessed: 15 June 2023].

HM Treasury (2022c) *Levelling Up the United Kingdom*. [online]. Available at: <u>Levelling Up</u> the United Kingdom - GOV.UK (www.gov.uk) [Accessed: 15 June 2023].

Horsham District Council (2015) Horsham District Planning Framework (excluding South Downs National Park). [online]. Available at:

https://www.horsham.gov.uk/\_\_data/assets/pdf\_file/0016/60190/Horsham-District-Planning-Framework-November-2015.pdf [Accessed: 15 June 2023].

IPROW (2020) *Environmental Impact Assessment: Appraising Access*. Lancaster; IPROW.

MHCLG (2021) *National Planning Policy Framework*. [online] Available at: <u>https://www.gov.uk/government/publications/national-planning-policy-framework--2</u> [Accessed: 15 June 2023].

*Mid Sussex District Council (2018) Mid Sussex District Plan, 2014-2031.* [online]. Available at: <u>https://www.midsussex.gov.uk/media/3406/mid-sussex-district-plan.pdf</u>. [Accessed: 15 June 2023].

ONS (2019) Nominal regional gross value added (balanced) per head and income components. London; ONS.

Paths for All (2019) *Countryside for All Good Practice Guide.* [online]. Available at: <u>https://www.pathsforall.org.uk/mediaLibrary/other/english/countryside-for-all-guide.pdf</u> [Accessed: 15 June 2023].

Paths for All (2023). Outdoor Accessibility Guidance. [online] Available at: Outdoor Accessibility Guidance - Paths for All | Paths for All [Accessed: 18 June 2023].

RED (2020) Rampion 2 Offshore Wind Farm, Environmental Impact Assessment, Scoping Report. Reading; RED.

RenewableUK (n.d.) *Supply Chain Map.* [online]. Available at: <u>https://www.renewableuk.com/page/SupplyChainMap</u> [Accessed 15 January 2021].

Scottish Power Renewables (2020) East Anglia ONE North and East Anglia TWO Offshore Windfarms, Appendix 13 Tourism Impact Review. Glasgow; Scottish Power Renewables.

SDNPA (2017) An evaluation of Local Green Spaces proposed for the Storrington, Sullington and Washington Neighbourhood Plan (SSWNP).<u>Local-Green-Space-Report-March-2017.pdf (southdowns.gov.uk)</u> [Accessed: 15 June 2023].

SDNPA (2019) Visitor Survey 2018.

SDNPA (2019) South Downs Local Plan (2014-33). [online]. Available at: <a href="https://www.southdowns.gov.uk/planning-policy/south-downs-local-plan/local

South East LEP (2014) *South East LEP Growth Deal and Strategic Economic Plan.* [online]. Available at:

https://www.southeastlep.com/app/uploads/Strategic\_Economic\_Plan\_2014.pdf [Accessed: 15 June 2023].

The Crown Estate (2019) *Guide to an offshore wind farm, Updated and extended.* London; The Crown Estate.

The Planning Inspectorate (2019) *Advice Note Seventeen: Cumulative effects assessment*. [online]. Available at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-

notes/advice-note-17/ [Accessed: 15 June 2023].

Tourism South East (2014-2019) *Brighton Visitor Surveys, 2014-2019.* [online]. Available at: <u>https://www.visitbrighton.com/plan-your-visit/visitor-information/work-with-us/tourism-research</u> [Accessed: March 2023].

UNWTO (2019) UNWTO Tourism Definitions. [online]. Available at: <u>https://www.unwto.org/glossary-tourism-terms</u> [Accessed: 15 June 2023].

Visit Britain (2020) The Great Britain Day Visitor 2019 Annual Report. Available at: <u>https://www.visitbritain.org/sites/default/files/vb-corporate/gbdvs\_2019\_annual\_report.pdf</u> [Accessed May 2023].

Visit England. (2022). Visitor Attraction Trends in England 2021. London; Visit England.

WSCC (2017) *The West Sussex Plan, 2017-2022*. [online]. Available at: <u>https://www.westsussex.gov.uk/media/11856/the\_west\_sussex\_plan.pdf</u> [Accessed: 15 June 2023].

WSCC (2012) West Sussex County Council Interactive Map (iMap). [online]. Available at: http://www2.westsussex.gov.uk/lvmaps/imap.html [Accessed 25 February 2021].

WSCC (2018a) *West Sussex Economic Growth Plan 2018-2023.* [online]. Available at: <u>https://www.westsussex.gov.uk/media/11971/economic\_growth\_plan.pdf</u>. [Accessed: 15 June 2023].

WSCC (2018b) *West Sussex Rights of Way Management Plan, 2018-2028.* [online] Available at: <u>https://www.westsussex.gov.uk/media/11362/row\_management\_plan.pdf</u> [Accessed: 15 June 2023].



