

# SEAS Response to Sealink Statutory Consultation

#### **18 December 2023**

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#### 1. INTRODUCTION

Suffolk Energy Action Solutions (SEAS) is a Community Group established in July 2019 promoting offshore solutions and landfall at existing brownfield sites close to demand for all major energy infrastructure hubs. SEAS is a loose Confederation of an increasing number of local pressure groups including those along the Suffolk Heritage Coast. SEAS has thousands of followers on social media and has submitted over 20 detailed proposals to the relevant Committees established over the last four years including the recent "Flexible Offshore Grid Review" and was asked to answer questions at the recent House of Commons Select Committee Hearings on 17 November 2023. For the last four years SEAS has benchmarked offshore developments in Belgium, Netherlands, Denmark, Germany and other countries where offshore wind farms are being constructed along with offshore platforms, artificial islands and major energy infrastructure hubs at existing brownfield sites close to shoreline, such as Rotterdam and Zeebrugge. Holistic planning has been the dominant model for these other North Sea countries where environmental and socio-economic criteria have influenced the spatial plans for siting energy hubs and landfall locations.

In August 2023 the Winser Report was published which heralded a new era for energy infrastructure planning. The Winser Report promotes early consultation with local communities and the careful planning of hubs to minimise environmental and socioeconomic harm including adverse impacts on the tourism sector.

SEAS objects to the current Sealink project proposals because these are the WRONG PLANS and in the WRONG LOCATIONS. These plans fail the Winser Test.

NGET has come forward with these proposals without providing adequate assessment of key issues relating to the following:

Landscape and Visual
Terrestrial Ecology
Cultural Heritage
Water/flood risk
Traffic and Transport
Air Quality
Noise and Vibration
Tourism: the principal economic sector for this area
Health and Well-being
Intra-project Cumulative effects

NGET has failed to ascribe the significant impact that would be caused across most of these factors, which is in its own right, of huge concern to local communities because it suggests that these projects are being pushed through without in-depth research and duty of care.

Local Councils and residents have worked immensely hard over the last few weeks to analyse these flawed plans and submit their responses up against the pressures of the festive season and end of year work, shocked by the sheer scale of what is being proposed and the sense of reckless planning being foisted upon this region without any due regard for cultural identity and the value of what is priceless for this rural community and for the millions of visitors who love Suffolk Coast and Heaths.



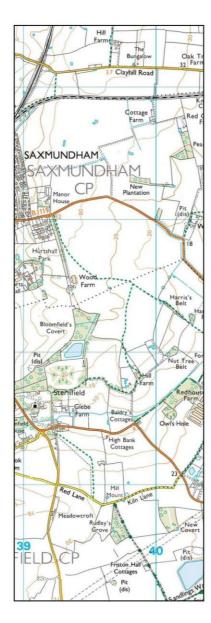
The Consultations have been as disappointing as previous Consultations, one-sided and where official executive responses have been factually inconsistent.

As we indicate in the Conclusions, the Sealink project is redundant if the Offshore Pilot Tests are implemented. There will be no excess electricity to return to London via Kent.

Detailed below are the Topics which SEAS has reviewed in order to flag the inadequacies of what NGET has presented to date.

#### 2. LANDSCAPE AND VISUAL - SIGNIFICANT IMPACT

SEAS has commissioned Michelle Bolger to conduct a Landscape and Visual Review:





Landscape and Visual Review

Of

Preliminary Environmental Information Report for Proposed Sealink Converter Station

at

Saxmundham

 $\begin{tabular}{ll} \it Prepared for \\ \it Suffolk Energy Action Solutions (SEAS) \end{tabular}$ 

*LPA*East Suffolk

December 2023





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#### 1 Executive Summary

- 1.1 This Landscape Review of the Sea Link Preliminary Environmental Information Report prepared by National Grid (NG) has been prepared by Michelle Bolger Expert Landscape Consultancy for Suffolk Energy Action Solutions (SEAS). It is concerned with Saxmundham Converter Station and the two co-located stations only. With regard to site selection NG need to provide an explanation of how a site that they had not originally identified as suitable for a single converter station is now considered suitable for three converter stations. NG also need to provide the full assessment of the site considered for the three converter stations so that it is possible to interrogate the judgments made and the weight given to them.
- 1.2 The choice of the Saxmundham Converter Station site is as a direct result of the intention to include 'opportunities to co-locate infrastructure for up to two further projects at the converter station site'. The additional converter stations are therefore a likely effect of the Sea Link Project and should be assessed as such as part of the EIA rather than having a separate 'add on' assessment.
  - In describing both the baseline character of the landscape and in the consideration of effect the final Landscape and Visual Chapter should include a consideration of:
    - Settlement Sensitivity Assessment Volume 2: Suffolk Coastal (Ref 2.2.21)
       published in 2018 by ESC
    - Suffolk Historic Landscape Characterisation Study.
- 1.4 LCA L1, Heveningham and Knodishall Estate Claylands the proposed location for the three converter stations, has a simple, unified and deeply rural character that is not reflected accurately in either the baseline description within Chapter 2 Landscape and Visual or the assessment of magnitude of change.
- 1.5 The authors of Chapter 2 have placed too much emphasis on detractors in the landscape which are either not present in the landscape in which the three converter stations are proposed or have much less influence that suggested. A review of the viewpoint photographs reveals this. Consequently, Chapter Two Landscape and Visual has underestimated the value and susceptibility of LCA L1 and its sensitivity.

1.3



- 1.6 Taking a step back it is clearly absurd to suggest that this attractive, rural landscape has only medium sensitivity to three converter stations that would be entirely alien in character and dwarf anything in the vicinity. Taken together the three converter stations are similar in size to all development east of the railway line in Saxmundham.
- 1.7 Where there is a loss of character in the area in which the three converter stations are proposed it is due to loss of field boundaries which increase the potential visibility of the three converter stations and their effects on the perceptual qualities of the surrounding landscape.
- 1.8 Chapter 2 Landscape and Visual has not fully considered the additional harm that would arise if all three converter stations were built. It would firstly significantly extend the construction period. In operation, whilst one converter stations may be seen as a large-scale incongruous intervention in the landscape, the presence of three converter stations will change the landscape character to one dominated by electrical infrastructure. The change is likely to be permanent.
- 1.9 Permanent access option from the B1121 to the south of Saxmundham would be significantly more harmful than Option One with regard to landscape and visual issues. It would introduce development into the very visible eastern valley slopes of the Fromus Valley. Currently they are free from development and afford memorable views to the Grade II listed Hurts Hall and the Grade II\* listed St John's church beyond.



#### 2 Introduction

#### Introduction

- 2.1 This Landscape Review of the Preliminary Environmental Information Report prepared by National Grid (NG) has been prepared by Michelle Bolger Expert Landscape Consultancy Ltd (MBELC). It is concerned with the potential landscape and visual effects of 'A 2 GW HVDC converter station up to 26 m high plus external equipment (such as lightning protection & railings for walkways) near Saxmundham'<sup>1</sup>, described in this review as the Saxmundham Converter Station. It is also concerned with the prospect of two additional converter stations, likely to be of a similar size and style to the Saxmundham Converter Station which are referred to in the Preliminary Environmental Information Report (PEIR) as 'Proposed Project with co-location'. In this review, that proposal is described as the three converter stations.
- 2.2 This review considers the following issues:
  - Site selection and Co-location;
  - Suitability of the landscape for the proposed developments;
  - Access Options;
  - Other Matters;

<sup>&</sup>lt;sup>1</sup> Volume: 1 Part 1 Introduction Chapter 1 Introduction Version A October 2023 Paragraph 1.1.1.5





#### 3 Site Selection and Co-Location

#### Site Selection

- 3.1 PEIR Volume: 1 Part 1 Introduction Chapter 3 Main Alternatives Considered Version A
  October 2023 (Chapter 3 Main Alternatives) and PEIR Volume: 1 Part 2 Suffolk Onshore
  Scheme Chapter 1 Evolution of the Suffolk Onshore Scheme Version A October 2023
  (Chapter 1 Evolution of Suffolk Onshore Scheme) set out the evolution of the scheme in
  Suffolk. Several locational decisions were required with respect to the Network
  Connection, the Landfall, the Converter Station and the cable route. This review is only
  concerned with the process by which the Saxmundham Converter Station become the
  preferred option for both the Saxmundham Converter Station and the three converter
  stations proposal.
- 3.2 Initially nine converter site areas were identified.<sup>2</sup> For ease of reference Figure 1.3.5 Suffolk Converter Site Areas is included in Appendix A. Chapter 3 Main Alternatives Paragraphs 1.3.5.16 1.3.5.20 set out the criteria for the Converter station site option areas. It is notable that the site for the Saxmundham Converter Station is not one of the nine sites identified in Figure 1.3.5 Suffolk Converter Site Areas.
- 3.3 Chapter 3 Main Alternatives Paragraph 1.3.5.68 sets out that 'During engagement with stakeholders Suffolk County Council and East Suffolk District Council emphasised the importance of looking at opportunities to co-ordinate with the interconnector projects being proposed by National Grid Ventures (NGV) in the area.' As a result, the nine site options already identified were reviewed and 'This process was also used to identify any additional sites that should be investigated/appraised further for co-location opportunities.'
- 3.4 Seven sites were then identified as potentially offering opportunities for three converter stations and an 'appraisal was undertaken of these sites in accordance with the National Grid options appraisal methodology'<sup>3</sup>. Chapter 3 Main Alternatives states that 'A summary of this appraisal is presented in Volume 1, Part 2, Chapter 1, Evolution of the Suffolk Onshore Scheme.' It then concludes that 'Two sites were identified as preferred for the

<sup>&</sup>lt;sup>3</sup> Part 1 Introduction Chapter 3 Main Alternatives Considered paragraph 1.3.5.71



 $<sup>^2</sup>$  Suffolk Onshore Scheme Chapter 1 Evolution of the Suffolk Onshore Scheme Version A Paragraph 2.1.2.22



development of the Proposed Projects converter station, as well as offering the potential to co-locate with the NGV projects.'

- 3.5 It is not clear what two sites are being referred to here<sup>4</sup>. No references are provided and none of the figures that accompany Chapter 3 show them. Nor is it made clear that one of these sites, the Saxmundham Converter Station site, was not one of the nine original sites reviewed. There is no explanation as to why a site that was not even included at the initial stage is now the proposed site.
- 2.6 Chapter 1 Evolution of Suffolk Onshore Scheme starts with Figures 1-4 which show the Evolution of the Suffolk Onshore Scheme Routeing and Siting Stage. The site for the Saxmundham Converter Station does not appear on these figures. The site first appears on Figure 2.1.3 Potential Coordinated Converter Station Sites Routeing and Siting Stage (included in Appendix A for ease of reference) which shows the location of seven sites identified as possible sites for three converter stations. Figure 2.1.3 includes two entirely new sites.
- 3.7 Paragraphs 2.1.2.72 2.1.2.78 provides a summary of the appraisal of the sites undertaken in accordance with the National Grid options. However, it is a narrative summary only and does not explain why Site 3, the Saxmundham Converter Station is the preferred site.
- 3.8 It is requested that NG provide the full assessment along with the National Grid options appraisal methodology so that it is possible to interrogate the judgments made and the weight given to them. For example, the settlement of Sternfield is described as being located to the northwest of Site 2 but no reference is made to the fact that it is located to the southeast of Site 3. This suggests that no weight was given in the assessment to the proximity of the Saxmundham Converter Station to the settlement of Sternfield.
- 3.9 Without the full assessment it is not possible to know whether the judgments that have been made are reliable. In addition, NG needs to explain how a site that they had not originally identified as suitable for a single converter station is now considered suitable for three converter stations.

<sup>&</sup>lt;sup>4</sup> In fact they are Sites 1 & 3 shown on Figure 2.1.3 Potential Coordinated Converter Station Sites - Routeing And Siting Stage which is not included in Chapter 3 Main Alternatives





#### Three Converter Stations

- 3.10 The PEIR has been prepared to assess the impact of the Sea Link Project which includes the Saxmundham Converter Station. However, the choice of the Saxmundham Converter Station site is a direct result of the intention to include 'opportunities to co-locate infrastructure for up to two further projects at the converter station site.'<sup>5</sup>
- 3.11 The two additional converter stations are therefore a likely effect of the Sea Link Project and should be assessed as such as part of the EIA rather than having a separate 'add on' assessment.

<sup>&</sup>lt;sup>5</sup> Volume: 1 Part 1 Introduction Chapter 1 Introduction Paragraph 1.1.1.6



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#### 4 Landscape Effects

#### Introduction

4.1 This review considers some issues which have been identified within Volume: 1 Part 2
Suffolk Onshore Scheme Chapter 2 Landscape and Visual (Chapter 2 Landscape and Visual)
which require consideration or reviews prior to the issue of the final Landscape and Visual
chapter of the EIA. It is not a full review of the chapter and the fact that an aspect of the
chapter is not mentioned here does not imply that we agree with the conclusion of
Chapter 2 Landscape and Visual.

#### Omissions

- 4.2 We consider that there are two omissions within Chapter 2 Landscape and Visual which need to be addressed for the final Landscape and Visual chapter of the EIA. They are set out below.
- Chapter 2 Landscape and Visual decided not to include a consideration of Settlement Sensitivity Assessment Volume 2: Suffolk Coastal (Ref 2.2.21) published in 2018 by ESC (Settlement Sensitivity Assessment). Paragraph 2.2.2.39 of Chapter 2 Landscape and Visual refers to the Settlement Sensitivity Assessment only to say that it is 'not referred to as it is based upon two development scenarios which are housing and commercial developments, of which the Suffolk Onshore Scheme is not relevant to.' We challenge this conclusion. Under Background to the study, section 1.3 the Settlement Sensitivity Assessment states that 'The purpose of the settlement fringe assessment is to provide a robust analysis of the sensitivity of settlement fringes to development and change.' The study was not restricted to 'housing and commercial developments'. The proposed Saxmundham Converter Station and the three converter stations very clearly represent 'development and change'.
- The Settlement Sensitivity Assessment provides the most detailed objective assessment of the character of the landscape between Saxmundham and Sternfield. It describes in detail the aspects of the landscape that are important to the setting of Saxmundham (Pages 24 to 27) and to the character of Sternfield (Pages 34-36).





- 4.5 The final Chapter 2 Landscape and Visual should include a consideration of the judgments reached in the Settlement Sensitivity Assessment and an assessment of whether the proposed developments would harm landscape features of value. For example, the landscape approach to Saxmundham on either side of the B1121 is identified as an area 'sensitive to change due to its rural character, valued views and historic associations.'6 The southern edge of Saxmundham is described as 'well vegetated and not highly visible on approaching the town. The 20th century built edge of Saxmundham to the west of the B1121 is not visible as it sits behind the vegetated railway line and field hedgerows/trees. There is no development within this landscape except for the mansion house of Hurst Park within a rural valley context.' Referring to land to the east it says 'The parkland landscape is open, affording memorable views to the rebuilt manor house (Hurts Hall) and church beyond.' 8 The Saxmundham Converter Station and one of the other converter stations would be visible on the skyline in this view, and the access road for Option Two (see Section 5 of this review) would cut across the valley introducing modern development into the rural valley context.
- 4.6 The second omission is that Chapter 2 Landscape and Visual makes no reference to Historic Landscape Characterisation (HLC). A HLC has been undertaken for Suffolk and the historic landscape types (HLC) that cover the site, the potential access routes and the surrounding landscape should be identified, and conclusions drawn with regard to the effect of the proposed development.

#### Landscape Character - published assessment

- 4.7 Within the East Suffolk Council (2018). Suffolk Coastal Landscape Character Assessment (Ref 2.2.B.6) there are two landscape character areas (LCA) that will be affected by the three converter stations (other LCAs are affected by other aspects of the Sea Link Project). The two LCAs are:
  - LCA B4 Fromus Valley covers both sides of the valley and the B1121 roughly runs along the valley floor, and
  - LCA L1 Heveningham and Knodishall Estate Claylands which lies to the east of the Fromus Valley located on higher ground that comprises the 'gently rolling dissected plateau'9

<sup>9</sup> Suffolk Coastal Landscape Character Assessment Page 102



<sup>&</sup>lt;sup>6</sup> Settlement Sensitivity Assessment Volume 2: Suffolk Coastal Page 26

<sup>7</sup> Settlement Sensitivity Assessment Volume 2: Suffolk Coastal Page 26

<sup>8</sup> Settlement Sensitivity Assessment Volume 2: Suffolk Coastal Page 26





- 4.8 The Saxmundham converter and the two additional converter stations are proposed for LCA L1 and it is the assessment of this LCA within Chapter 2 Landscape and Visual that we take issue with.
- 4.9 LCA L1 is described as 'deeply rural and attractive.' Large industrial agricultural buildings are described as having a negative impact but the mix of some larger fields of post-1950s farmland and pockets of 'distinctive small field patterns' is described as providing 'a variety in visual experience from more open with long views, to intimacy in the narrow hedged lanes and away from the busy road corridors (A12 and A1120)'. This mix is evident in the landscape surrounding the location for the three converter stations. It is noted that this LCA contains 'no villages of any size.'
- 4.10 The special qualities of LCA L1 include:
  - 'Its particularly unified character a peaceful, deeply rural 'backwater', focused on farming.' 14
  - 'There is little intrusion from modern development'. 15
- 4.11 LCA L1 is described as generally a landscape with its structure in good condition although amalgamation and hedge loss has occurred in some parts. <sup>16</sup>
- 4.12 The Strategy Objectives for this LCA include:
  - 'Protect the unspoilt, quiet, and essentially undeveloped rural character of the area;
  - Protect the plateau landscape from visual intrusion of development in areas beyond this character area e.g. from new tall vertical features such as masts or turbines or new urban development.
  - Protect the landscape from development of a scale that harms the prevailing light, scattered nature of the existing settlement.'

<sup>16</sup> Suffolk Coastal Landscape Character Assessment Page 104



<sup>10</sup> Suffolk Coastal Landscape Character Assessment Page 102

<sup>11</sup> Suffolk Coastal Landscape Character Assessment Page 103

<sup>12</sup> Suffolk Coastal Landscape Character Assessment Page 103

 $<sup>^{13}</sup>$  Suffolk Coastal Landscape Character Assessment Page 103

 <sup>14</sup> Suffolk Coastal Landscape Character Assessment Page 104
 15 Suffolk Coastal Landscape Character Assessment Page 104



#### Landscape Character - the location of the three converter stations

- 4.13 The field in which it is proposed to locate the three converter stations represents an area of hedgerow loss which has created a significantly larger field than those within the surrounding landscape. Hedgerow loss along the road edge (B1119) has also opened up views from this field to the wider landscape and views towards this field from the wider landscape. This loss of hedgerow has resulted in a loss of landscape character such that the site is not typical of the surrounding landscape in which there is generally a fairly good persistence of the historic small scale field pattern interspersed by small copses and woodland, often named 'coverts'.
- 4.14 Although there has been a loss of character in the field proposed for the three converter stations due to loss of hedgerows the field does not contain any incongruous features. In addition, the loss of hedgerows has opened up longer distance views to and from the north and east. In these views, the tree belts that are found in the surrounding landscape, form the horizon and the relatively elevated nature of the site is evident. Whilst the site doesn't contribute actively to the small scale, historic character of the surrounding landscape, it does nothing to detract from the character 'of quiet farmland with a simple, unified and deeply rural character.' 177
- 4.15 The highpoint in the landscape is at the north-western corner of the field at 32m AOD. The land falls from there to the west to the River Fromus with some noticeable slopes visible from the B1121. Hurts Hall sits on the side of this slope, giving it prominence to the west and to the south as described in the Settlement Sensitivity Assessment<sup>18</sup>. This highpoint marks the edge of the plateau which falls very gently to the East with a low point on the B1119 near Harris's Pit. The land also falls to the south to a stream that runs through Sternfield roughly parallel to the B1121. These changes in elevation mark the transitions between LCA L1 and LCA B4.

<sup>18</sup> Settlement Sensitivity Assessment Volume 2: Suffolk Coastal Page 26



<sup>17</sup> Suffolk Coastal Landscape Character Assessment Page 102



#### Landscape Character: Assessment within Chapter 2 Landscape and Visual

- 4.16 Volume: 2 Part 2 Suffolk Onshore Scheme Appendix 2.2.B Landscape and Visual Baseline assesses all the District LCAs potentially affected by the scheme. Table 2.2.B.4: Suffolk coastal landscape character assesses the value of each of the LCAs. The text in the table is entitled 'Summary of description in published study relevant to the study area.'
- 4.17 The three converter stations are proposed to be located in LCA LCA L1, close to the boundary with LCA B4 which lies to the west and to the south. B4 is assessed as having high value. L1 is only considered to have medium value. From Table 2.2.B.4 this appears to be due to 'Fragmented green infrastructure network' and 'juvenile commercial plantations'. The relevant published study does not refer to juvenile commercial plantations and the condition of LCA L1 is not described as being fragmented but as being a 'landscape with its structure in good condition'<sup>19</sup> despite some hedgerow loss.
- 4.18 Table 2.2.B.4 considers that 'The LCA has limited distinctiveness and predominantly comprises typical farmland which lowers value.'<sup>20</sup> This does not reflect the published description of LCA L1 that it is an area 'of quiet farmland with a simple, unified and deeply rural character.'<sup>21</sup>
- 4.19 Table 2.2.B.4 includes the following 'Friston Substation would be located on the southern edge of the LCA, which would introduce large-scale, uncharacteristic energy infrastructure into the arable landscape.' The implication is that the approval of Friston Substation is a relevant landscape factor.
- 4.20 We do not agree that the value of LCA L1 is significantly lower than LCA B4. The factors mentioned in Table 2.2.B.4 are not significant detractors in the landscape and due to its simple, unified and deeply rural character LCA L1 has medium/high value.
- 4.21 The sensitivity of the site is a combination of the susceptibility of the site (and the surrounding landscape) to the development proposed and the value placed on the site and the surrounding landscape.

<sup>&</sup>lt;sup>21</sup> Suffolk Coastal Landscape Character Assessment Page 102



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<sup>19</sup> Suffolk Coastal Landscape Character Assessment Page 104

<sup>&</sup>lt;sup>20</sup> Volume: 2 Part 2 Suffolk Onshore Scheme Appendix 2.2.B page 11



- 4.22 The susceptibility to change of a landscape is its ability 'to accommodate proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies'.<sup>22</sup> GLVIA3 makes it clear that the assessment of susceptibility 'should not be recorded as part of the landscape baseline but should be considered a part of the assessment of effects.'<sup>23</sup>
- 4.23 Chapter 2 Landscape and Visual defines landscape susceptibility at 2.2.5.13 states that 'The evaluation of landscape susceptibility is defined as very high, high, medium, low and negligible and is supported by a clear explanation based upon the analysis of the landscape receptor and the extent to which it is able to accommodate the changes that would result from the Suffolk Onshore Scheme.'<sup>24</sup>
- 4.24 Chapter 2 Landscape and Visual does not appear to have a simple table that sets out the value, susceptibly and consequent sensitivity of each of the LCAs. The assessment of susceptibility appears to be in Table 2.2.21: Preliminary assessment of landscape character effects at construction, maintenance and decommissioning for SCLCA LCA L1 but not in Table 2.2.45: which deals with effects at operation.
- 4.25 MB Table 1 which can be found Appendix B to this review extracts some of the preliminary judgments in Chapter 2 Landscape and Visual with regard to LCAs L1 and B4, the two LCAs most affected by the Saxmundham Converter Station. Concerning the susceptibility of LCA L1 Table 2.2.21: Preliminary assessment of landscape character effects at construction, maintenance and decommissioning for SCLCA LCA L1<sup>25</sup> states the following:

'Susceptibility: Medium as the typically large-scale field pattern is considered to have the ability to accommodate this type of development. The woodland blocks and layered vegetation in the wider landscape have the ability to be backcloths to development. The landform is relatively level, which would result in less landform interventions, but also noting the potential for perceptual effects due to the flat landform.'26

<sup>&</sup>lt;sup>26</sup> Chapter 2 Landscape and Visual Page 84



<sup>&</sup>lt;sup>22</sup> GLVIA3 Page 88, Paragraph 5.40

<sup>&</sup>lt;sup>23</sup> GLVIA3 Page 89, Paragraph 5.42

<sup>&</sup>lt;sup>24</sup> Chapter 2 Landscape and Visual 2.2.5.14

<sup>&</sup>lt;sup>25</sup> Chapter 2 Landscape and Visual Page 83



- 4.26 We do not agree with this assessment for the following reasons:
  - Although the Saxmundham Converter Station is located within a large field the
    overall field pattern within this part of LCA L1 is not large scale. In fact, many
    fields included within the order limits to the south and east of the site for the
    Saxmundham Converter Station building are small scale.
  - Although there are some woodland blocks to the south and west of the site the
    northern and eastern boundaries along the B1119 have no boundary vegetation
    and nothing that would either limit visibility of the converter stations or provide
    'a backcloth to development'.
- 4.27 We agree that the elevated landform increases the potential visibility of the converter stations and consider that the susceptibility of the landscape to the proposed development is medium/high due to the simple, unified rural character and the lack of enclosure along the B1119.
- 4.28 The assessment of landscape character effects at construction, maintenance and decommissioning appears to include the construction of the Friston Substation. This is confusing as elsewhere the Friston substation is treated as an existing element in the landscape (e.g. Table 2.2.B.4).
- 4.29 With regard to the magnitude of change for the Saxmundham Converter Station Table 2.2.21 lists as lessening factors:

'The construction activity within the LCA would be located in a part of the LCA which is already influenced by the existing OHL, intrusion from modern development including the busy B1119, large-scale agricultural buildings and land uses such as juvenile commercial plantation not typical of the arable farmland characteristic across the LCA, which lessens the change of key characteristics.'

- 4.30 We do not consider this description of the LCA to be accurate and would question why it appears in this form in the assessment of magnitude of change. In particular:
  - The existing OHL has a limited effect on the area in which the three converter stations would be located:
  - There is limited intrusion from modern development;
  - Whilst the B1119 is a busy rural B road but is not even an A road, far less a trunk road or dual carriageway;
  - Large scale agricultural buildings are not widespread in the area;
  - Juvenile commercial plantations are not widespread either, assuming the cricket bat plantation along the River Fromus is not included here.



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- 4.31 None of these factors currently have a significant effect on the character of the landscape which remains typical of the arable farmland across the LCA. The only significant loss of character is due to the field enlargement that has occurred but even this is largely limited to the field in which it is proposed to locate the three converter stations and the field immediately to the north beyond the B1119.
- 4.32 The lack of intrusive, modern developments is evident in a review of the viewpoints selected for the assessment.
  - Vp 1 distant energy infrastructure.
  - Vp 2 no detracting features, entirely characteristic. A distinctive approach to
     Saxmundham providing a landscape setting to the village and Hurts Hall.
  - Vp 3 no detracting factors.
  - Vp 4 no detracting factors except the 'Juvenile commercial plantation'. This is
    in fact a Christmas Tree plantation which is a crop which does not have a long
    term effect on the local landscape character;
  - Vp 5 Agricultural buildings are visible but they are not out of scale to the landscape.
  - Vp 6 The OHL do have an impact on the landscape in views to the south but in views to the north, towards the site of the converter stations, there are no detracting factors.
  - Vp 7 The OHL do have an impact on the landscape as will the Friston substation. However, the landscape around the three converter stations is and not visible in this view.
  - Vp 8 Currently no detracting factors. The Friston substation will be visible from here.
  - Vp 9 The OHL do have an impact on what is otherwise a very attractive landscape. Agricultural buildings are in keeping with the scale of the adjacent farm. The landscape around the three converter stations is and not visible in this view.
  - Vp 10 No detracting factors. OHL is too distant to have any influence of the character of the. landscape.
  - Vp 11 No detracting factors. The woodland identified as a plantation is not a
    detractor in the landscape. This Vp is at some distance from the site for the
    three converter stations.







- Vp 12 Sizewell Nuclear Power Station is a detractor in an otherwise intact landscape. This Vp is at some distance from the site for the three converter stations.
- Vp 13 Attractive intact landscape. This Vp is at some distance from the site for the three converter stations.
- Vp 14 Small scale landscape no detractors
- Vp 15 Larger scale landscape in good condition with no detractors
- Vp 16 Attractive long distance views across attractive landscape. No detractors
- Vp 17 Attractive landscape with no detractors
- Vp 18 OHL although at some distance are a detractor in the view. Other built features are agricultural in character (e.g. pig arcs) and of an appropriate scale.
- 4.33 The viewpoints are not all located in LCA L1 but they illustrate the simple, rural unified character of the landscape which is not noticeably affected by intrusive modern development. The most noticeable detractor in the landscape, the OHL, has virtually no impact on the character of the landscape in which the three converter stations would be located.
- In conclusion we consider that Chapter 2 Landscape and Visual has not accurately represented the character of the landscape in which the three converter stations are proposed. The value and susceptibility of the landscape have been underestimated and as a consequence, the sensitivity of the landscape to the development proposed is also underestimated. In both the assessment of sensitivity and the assessment of magnitude of change the authors of Chapter 2 Landscape and Visual have relied on detracting factors that are not present in the landscape in which it is proposed to locate the three converter stations.





Co-Location Assessment - Three Converter Stations

- 4.35 Chapter 2 Landscape and Visual has also failed to properly assess the additional adverse effects of the 'co-location'. The preliminary assessments with regard to 'co-location' should effectively be the assessment of three converter stations rather than one. For ease of reference Table 1 in Appendix B shows the assessments for the operational effects on LCAs LCA L1 and B4 with regard to one converter stations and three converter stations.
- 4.36 Chapter 2 Landscape and Visual has not fully taken into account the additional harm that would arise if all three converter stations were built. For example:
  - The assessment of susceptibility is the same for both the Saxmundham Converter Station and the three converter stations. This is not correct. For example, the trees and woodland to the south and west of the Saxmundham Converter Station do have the potential to act as a mitigating factor for the Saxmundham Converter Station but have little effect on the three converter stations.
  - There is no difference in the magnitude of change between the Saxmundham Converter Station only and the three converter stations.
- 4.37 It is not reasonable to suggest that the effects on the character of the local landscape will be the same regardless of whether there is one converter station or three. Whilst one converter stations may be seen as a large-scale incongruous intervention in the landscape the presence of three converter stations will change the landscape character to one dominated by electrical infrastructure. The change is likely to be permanent even if the converter stations were decommissioned.
- 4.38 Similarly with the assessment of construction, maintenance and decommissioning Table2.2.21 considers that the additional effects of the three converter stations would be as follow:

'In addition to the impacts described above, this scenario would require a slightly wider construction swathe for the additional ducts associated with co-location. However, this is unlikely to result in a perceptible change to the overall magnitude of effect described above.'<sup>27</sup>

4.39 The magnitude of effect has been assessed as 'very large' which is the highest category possible in the methodology (Table 2.2.10: Magnitude of Effect - Landscape Receptors<sup>28</sup>) so technically there cannot be an increase in the overall magnitude of change. However, the assessment makes no reference to duration. The duration of effects if three converter

<sup>28</sup> Chapter 2 Landscape and Visual Page 46



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<sup>&</sup>lt;sup>27</sup> Page 86



stations are built rather than one should increase from short-term to medium term as the most likely scenario will be that they will be built sequentially.

#### Summary

- 4.40 In describing both the baseline character of the landscape and in the consideration of effect the final Landscape and Visual Chapter should include a consideration of:
  - Settlement Sensitivity Assessment Volume 2: Suffolk Coastal (Ref 2.2.21)
     published in 2018 by ESC
  - Suffolk Historic Landscape Characterisation Study.
- 4.41 LCA L1, in which it is proposed to locate the three converter stations, has a simple, unified and deeply rural character that is not reflected accurately in either the baseline description within Chapter 2 Landscape and Visual or the assessment of magnitude of change. The authors of Chapter 2 have placed too much emphasis on detractors in the landscape which are either not present in the landscape in which the three converter stations are proposed, or have much less influence that suggested. A review of the viewpoint photographs reveals this. As a consequence, Chapter Two Landscape and Visual has underestimated the value and susceptibility of LCA L1 and its sensitivity.
- 4.42 Taking a step back it is clearly absurd to suggest that this attractive, rural landscape has only medium sensitivity to three converter stations that would be entirely alien in character and dwarf anything in the vicinity. Taken together the three converter stations have a similar footprint to all development east of the railway line in Saxmundham.
- 4.43 Where there is a loss of character in the area in which the three converter stations are proposed it is due to loss of field boundaries which increase the potential visibility of the three converter stations and their effects on the perceptual qualities of the surrounding landscape.
- 4.44 Chapter 2 Landscape and Visual has not fully taken into account the additional harm that would arise if all three converter stations were built. It would significantly extend the construction period and whilst one converter station may be seen as a large-scale incongruous intervention in the landscape the presence of three converter stations will change the landscape character to one dominated by electrical infrastructure. The change is likely to be permanent.





## 5 Access Options

- 5.1 There are three permanent access options which are shown on Figure 1.4.4. Saxmundham Converter Station Permanent Access Arrangements.
- 5.2 Option One The most northerly option runs from the B1121 west of the Saxmundham railway junction, across the railway line and through the landscape immediately to the west of the settlement edge. It would cross the B1119 and run into the field which is proposed for the converter stations. It is assumed that the section of road between the B1121 and the B1119 would become a permanent public road and that this would take some traffic out of the centre of Saxmundham.
- 5.3 Option Two The middle option would run from the B1121 close to the northern edge of Benhall at Bigsbys Corner. It would cross the Fromus valley floor and require a bridge over the Fromus River. It would then run up the sloping side of the Fromus Valley before reaching the trees on the skyline and entering the field in which the three converter stations are proposed.
- 5.4 Option Three This would leave the B1121 close to Baldry's Cottage to the south of the field in which the three converter stations are proposed. I understand that this third option is no longer being pursued due to transport issues.
- 5.5 Option Two is significantly more harmful than Option One with regard to landscape and visual issues. It would introduce a large new access onto the B1121 and would disrupt the valley both by requiring a bridge to cross the River Fromus and by climbing the valley side. The Settlement Sensitivity Assessment identified this area as sensitive to change due to the lack of modern intrusions 'There is no development within this landscape except for .. Hurts Hall within a rural valley context.' <sup>29</sup> The valley side which the access road would cross is described as open and 'affording memorable views to the rebuilt manor house (Hurts Hall) and church beyond.'
- 5.6 The access road would not only harm LCA B4 Fromus Valley in which it is located but it would also draw attention to its destination, the converter stations which would be located on the skyline looking down on the Fromus Valley.

<sup>&</sup>lt;sup>29</sup> Settlement Sensitivity Assessment Volume 2: Suffolk Coastal Page 26



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5.7 In summary, permanent access Option Two would be significantly more harmful than Option One with regard to landscape and visual issues. It would introduce development into the very visible eastern valley slopes of the Fromus Valley. Currently they are free from development and afford memorable views to the Grade II listed Hurts Hall and the Grade II\* listed St John's church beyond.



#### 6 Other Matters

#### Visual Assessment

- 6.1 This review does not include an assessment of visual harm. We anticipate that this will be provided when the final Landscape and Visual Chapter is produced. We assume that at that stage the visualisations will include more detail regarding the actual appearance of the converter stations in addition to the Rochdale Envelope blocks.
- 6.2 We consider that there ought to be additional viewpoints:
  - From south of the Saxmundham Converter Station from the PRoW that leads from Sternfield, via Hall Farm towards the site of the Saxmundham Converter Station;
  - From the B1119, about midway between Vps 1 and 3; and
  - From the B1121 west of High Bank Cottages
- 6.3 We consider that the proposed permanent access road should be shown in the visualisations such as Vp 2. However, there shod be visualisations from the B1119 and the B1121 that include the access roads and bell mouths. If necessary, additional viewpoints should be included to show these.

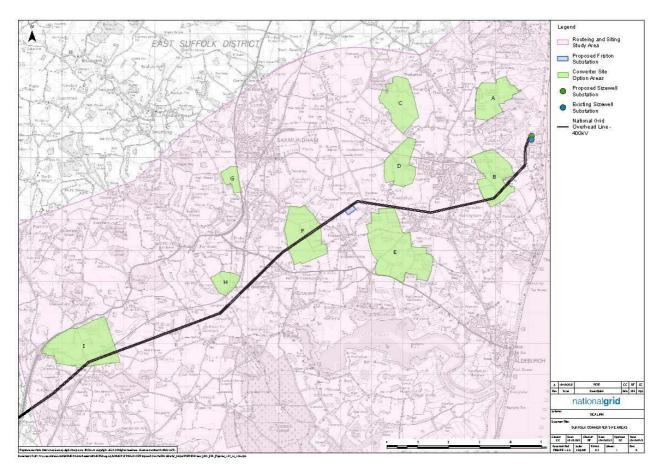
#### Potential Architectural Mitigation

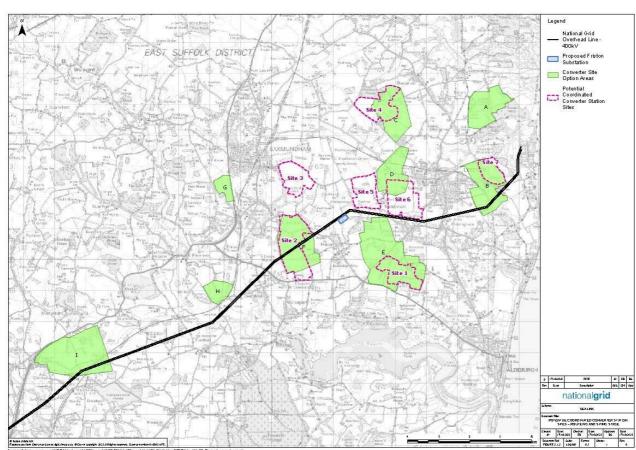
6.4 During the consultation phase potential architectural mitigation ideas were put forward to the public. These included a green roof option where the converter stations were surrounded by bunding and enclosed by a green roof. This option does have the potential to lessen some of the identified harms and should be considered further.





# Appendix A Figures from the PEIR







# Appendix B MB Table 1: Summary of Assessments for LCA B4 Fromus Valley and LCA L1

#### MB Appendix B

#### MB Table 1: Summary of Assessments for LCA B4 Fromus Valley and LCA L1 Heveningham and Knodishall Estate Claylands

Table 2.2.18 and Table 2.2.21 (Pages 76 and 83) Assessment of Effects at Construction, maintenance, and decommissioning		From Table 2.2.42 and Table 2.2.45 Assessment of Effects at Operation (Pages 131 and 138)				Effects at	
		Susceptibility	Sensitivity	Magnitude of Change Signific		ficance	
Receptor	Value	Only provided for single converter station		Single converter station	Three converter stations	Single converter station	Three converter stations
LCA B4 Fromus Valley	High	Medium  Due to the large-scale field pattern in close proximity to the Proposed Project which reduces the susceptibility. There is also infrastructure present, including the B1121. The parkland vegetation and pattern is also acknowledged, including near to Hurts Hall, which is susceptible to the type of development proposed.	High	Medium	Medium	Significant	Significant
LCA L1 Heveningham and Knodishall Estate Claylands	Medium	Medium  As the typically large-scale field pattern is considered to have the ability to accommodate this type of development. The woodland blocks and layered vegetation in the wider landscape have the ability to be backcloths to development. The landform is relatively level, which would result in less landform interventions, but also noting the potential for perceptual effects due to the flat landform.	Medium	Large	Large	Significant	Significant



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# 3. TERRESTRIAL ECOLOGY - SIGNIFICANT IMPACT

#### Terrestrial deterioration

The Suffolk coastal area is unusually rich in biodiversity and is one of the last habitats for numerous red-listed species. The SSSIs of coastal Suffolk are linked, and are protected to some degree by the AONB rules (NSP-EN-1 applies) and ad hoc diversity corridors linking designated areas despite industrial agriculture. Multiple projects will compromise all of this.

We note that NG are undertaking Ecological surveys in winter. These surveys are being conducted in the wrong Season and are not able to assess the diversity of the area, which supports rare reptiles and amphibians plus migratory species; also, specialist botanical qualifications are needed to record the rare plant life in this rare environment.

# Landfall Ecology:

North Warren was acquired by the RSPB in 1939 so has been a safe home for wildlife for 84 years. The Haven, lying between North Warren and the sea is a Site of Special Scientific Interest being a rare shingle beach and is an area known for its rare flora - Sea Pea, Sea Poppy and Sea Kale. Red deer are frequently heard around North Warren and their travel corridors can be seen across the old railway line.

During the summer, bird sightings at RSPB North Warren include a large variety of song birds, waders and falcons. Iconic birds such as Bittern, Marsh Harrier, Black Tailed Godwit, Spoonbill and Bearded Tits can be seen and in winter it provides a home for hundreds of ducks and geese. In recent years Suffolk Bird groups have recorded sightings at RSPB North Warren of hundreds of Eurasian White-fronted Geese, Pintail, Teal, Shoveler, Pochard, Gadwall and Mallard overwintering on this important feeding ground. Other sightings along the coast from Southwold to Aldeburgh have been Waxwing, Caspian Gull, Jake Snipe, Pink Footed Geese, Purple Sandpiper, Little Auk, Black Redstart, Red-necked Grebe, Great Egret, Goosander to name just a few.

The National Biodiversity database records 1699 species within a 1km radius of the River Hundred coastal wetlands SSSI and SPA (this count includes part of the areas known as The Haven and RSPB North Warren). This SSSI/SPA will be subject to microtunnelling. While microtunnelling is the least destructive of the options, this does not mean it is harmless as the solvent used for the drill components can have environmental impact, and in a protected wetland area the consequences of normal use, let alone accident, could be grave. Nor has the effect on the ancient, silted harbour at the mouth of the river been calculated since the depth of the original Hundred estuary has not been assessed.

# Cable Route Ecology

Within 1km radius of <u>Chapel Barn Farm/Leiston Rd</u>, <u>Aldeburgh IP15 5QE</u>, <u>which includes the golf course</u>, 1479 species have been recorded, including many endangered species: for instance, nightingale, red-legged partridge, Dartford warbler, linnet, Water vole, Brown longeared bat, Noctule bat, yellow-necked mouse. This area is not part of the SSSI, so the proposals for trenching the golf course have not adequately considered the effects on endangered migratory species, nor have there been adequate mitigation proposals which are necessary to establish in situ before the beginning of the trenching to ensure suitable habitat and forage for relocation.



Other examples of rich biodiversity that will be affected by traffic and construction are at <u>Black Heath corner</u>, where 705 species have been recorded within 1km radius, no doubt thanks to the remains of ancient woodland nearby and the close proximity of the Alde RAMSAR to the south. The species include the threatened yellowhammer and swallow. The drainage of the land at Blackheath Corner - either above ground or through local aquifers - into the Alde marshes and protected environment has not been adequately addressed.

# Converter Station(s)

In view of the size of the proposed site at Saxmundham, a 2km radius from the Wood Farm fields was selected because of the project's spreading and permanent impact on the ecology: multi-season disturbance leading to loss of ability to breed, loss of forage, loss of habitat, loss of wildlife corridors, seepage into groundwater and the river systems, likely flooding, 24-hour lighting preventing nocturnal creatures from hunting, and noise.

Again, there is rich diversity on site with 1310 species recorded, including many priority species at risk, such as otter, dormouse, water vole, Barbastelle bat, Daubenton's bat, hare, grass snake, slow worm, stag beetle, hairy dragonfly, fieldfare, gold crest, cuckoo, turtle dove, several owl species, nightingale and redshank. Drainage and run-off into the Fromus and underground water sources will impact the water meadows from Benhall to Snape Watering as well as the Alde marshes, thereby compromising the protected RAMSAR of the Alde Estuary.

#### Friston Substation

The Friston site is adjacent to the Saxmundham site. The Friston site again shows - in only a 2km radius - 1500 species at risk, many of which red-listed, with, again an ongoing, spreading and permanent impact on ecology and geology. Not surprisingly this site shares many red-listed species with the Saxmundham site, a combination which suggests a worstcase scenario for local extinctions. The at risk protected species include stone curlew, woodlark, skylark, song thrush, snipe, many owls, ring ouzel, water shrew, water rat, various rare bats, rare butterflies and populations of grass snake, adder and slow worm. The multi-season disturbance over such a large combined area means loss of ability to breed, loss of migratory birds, loss of forage for all wildlife, loss of habitat, and loss of wildlife corridors. The effect of 24-hour lighting during construction and then during the plant's operational life will prevent nocturnal creatures from hunting, and the effects of noise have not been assessed on the wellbeing of living creatures in the vicinity. Geological and construction impacts on the site mean seepage into groundwater and the river system, with likely flooding, as was shown in SPR application. In addition, Friston is nearer to the Alde RAMSAR than to the Fromus; its watercourse accesses the marshes south of the A1094, which is a protected environment (Suffolk and Essex coasts and heaths) and contamination should be strenuously avoided.

# 4. CULTURAL HERITAGE - SIGNIFICANT IMPACT

The PEIR does not demonstrate full assessment of the impacts to Cultural Heritage. You identified there are 154 Designated Heritage Assets within 2 km meters study area for the proposed converter station(s) in Saxmundham. (ref. Table 2.4.A.4 PEIR Vol 2 Part 2 Appendix 2.4.A Cultural Heritage Gazetteers)



The PEIR only provides assessment to 4 of them and fails to evaluate the impacts on the others.

We will be submitting a more detail response as a **postal submission to Cavendish Consultancy, FAO National Grid – Sea Link, 8 – 10 Mansion House Place London EC4N 8BJ.** We note the deadline is by 23:59pm on the 2 January 2024.

We have appointed;
David Edleston
BA(Hons) Dip Arch RIBA IHBC
Conservation Architect & Historic Built Environment Consultant

## 5. WATER ENVIRONMENT - SIGNIFICANT RISK

Flood Risk and future climate change has not been assessed. The recent, almost monsoon, rain has caused unexpected flooding closing many roads and causing accidents. Redirecting traffic is not easy on the rural B roads and many alterative roads were also flooded cutting off communities. Areas affected were Aldeburgh, Aldringham, Knodishall, Leiston, Friston, Saxmundham, Kelsale cum Carlton, Sternfield, Benhall, Snape and many villages and towns up and down the A12 (Suffolk Coast's main arterial road) were also affected.

Suffolk Coast, as are many other regions in the UK, was not prepared for the significant effects of flooding which can only get worse with climate change.

Note that flooding at Friston was not fully taken into account during Scottish Power's DCO for EA1N and EA2. These floods have been well documented by SASES and are presently under a Judicial Review Appeal.

NGET has not adequately assessed the flooding issue and needs to do so in the light of SeaLink proposals significantly altering the landscape in the construction of the converter stations(s) and haul roads – a full hydrological report should be conducted before proceeding with anything else.





# 6. TRAFFIC AND TRANSPORT - SIGNIFICANT IMPACT

A Transport Study by PJC has been commissioned and is ongoing. Herewith are its initial findings to date:



# **Technical Note**

**Project: Suffolk Heritage Coast Energy Projects** 

#### Subject: Traffic Impact Summary

Client:	Suffolk Heritage Coast Energy Alliance	Version:	В
Project No:	07705	Author:	LK/PR
Date:	15/12/2023	Approved:	MF

#### Introduction

- 1.1.1 This Technical Note (TN) has been prepared by PJA on behalf of the Suffolk Heritage Coast Energy Alliance to set out the results of a traffic impact assessment. The assessment reviewed the combined traffic impact of the proposed energy-related schemes on the Suffolk Coast.
- 1.1.2 The proposed schemes include:
  - Two new nuclear reactors, forming Sizewell C
  - A new substation with grid connection at Friston
  - Three new convertor stations close to Saxmundham
- 1.1.3 The area comprises rural villages, with single carriageway roads. The region is covered by the Suffolk Coast and Heaths AONB, whilst to the north is RSPB Minsmere. Traffic flows in the area are seasonal, increasing significantly during holiday periods. This makes the area sensitive to increases in traffic resulting from schemes such as the energy-related proposals.

# 2 Link Sensitivity

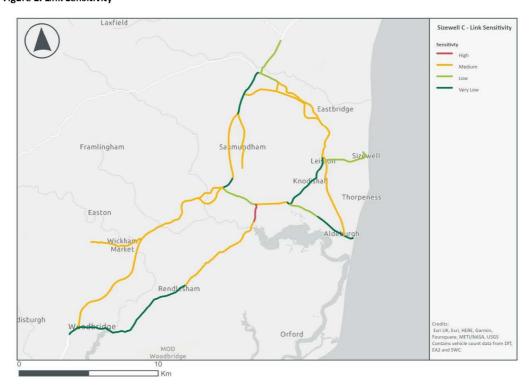
- 2.1.1 As part of its Environmental Statement, Sizewell C conducted a study of link sensitivity, attributing a rating (very low to very high) to roads based on likely effect of negative environmental impacts. These have been applied to the relevant road links for this study, which is presented in Figure 1
- 2.1.2 Most links are ranked as Medium or Very Low sensitivity. Only one link in the study area, the B1069 through Snape, is regarded as High sensitivity; this is due to the presence of the primary school and Snape Village Hall.

LOCATION





Figure 1: Link Sensitivity



# 3 Baseline Traffic Flows

- 3.1.1 Baseline annual average daily traffic (AADT) data was established from:
  - DfT traffic counts;
  - Planning applications / Development Consent Orders in the area (specifically East Anglia Two (EA2, PINS reference EN010078) and Sizewell C (PINS reference EN010012)).
- 3.1.2 The flows were growthed to provide a 2023 and a 2028 baseline, covering the two years assessed as part of the Sizewell C Environmental Impact Assessment. The growth factors were obtained from TEMPro v8.1, based on the core scenario for all road types.





Table 1: Growth Factors

Data Year	2023	2028
2009	1.0445	1.1192
2015	1.0254	1.0681
2019	1.0235	1.0565
2021	1.0089	1.0508
2022	1.0044	1.0462

3.1.3 Further, the data taken from the Sizewell C Environmental Impact Assessment was average annual weekday traffic (AAWT). This was scaled to AADT based on growth factors obtained from the automatic traffic count (ATC) surveys undertaken to support EA2, with separate factors obtained for 'all vehicles' and 'HGVs'.

Table 2: AAWT to AADT scaling factors

	All Vehicles	HGVs
Scaling factor	0.9603	0.8084

# 4 Development Traffic Flows

4.1.1 Traffic flows associated with the proposed energy-related schemes will largely occur during the construction phases.

#### 4.2 Sizewell C

- 4.2.1 Traffic flows for Sizewell C were extracted from the Environmental Statement, Volume 2 Chapter 10 Appendix 10B.
  - Table 1.1: 2023 ('early years') AAWT data extracted for reference case and reference case plus Sizewell, as well as equivalent data for HGVs.
  - Table 1.2: 2028 ('peak construction') AAWT data extracted for reference case and reference case plus Sizewell, as well as equivalent data for HGVs.
- 4.2.2 The AAWT data was converted to AADT data by multiplying by 5.5 and dividing by seven, assuming a 5.5 day working week (Monday to Friday and Saturday morning).
- 4.2.3 The Environmental Statement also provided forecast operational flows for Sizewell C for 2034. However, these were considerably lower than the construction flows and therefore have not been considered within this assessment.





#### Mitigation

- 4.2.4 Mitigation measures associated with Sizewell C include:
  - · On-site accommodation to reduce construction workforce trips
  - Park and ride facilities to bus construction workers to the main development site, as well as direct bus services and rail improvements
  - · Scope for the delivery of Abnormal Indivisible Loads by sea
  - · A freight management facility at Seven Hills
  - · PROW improvements and diversions
  - · Highway improvement works:
    - Two-village bypass around Farnham and Stratford St Andrew
    - Sizewell link road
    - Yoxford roundabout at junction of A12 and B1122 east of Yoxford
    - Other junction improvements

#### 4.3 EAIN and EA2

- 4.3.1 Wind farms are proposed in the area: East Anglia One North (EA1N) and EA2.
- 4.3.2 The proposed peak construction flows associated with EA1N and EA2 have been extracted from Table A26.3 of Appendix 26.2 Traffic and Transport Cumulative Impact Assessment of the EA2 Environmental Statement. It is noted that this includes traffic associated with all elements of EA1N and EA2 construction (assuming that these are constructed simultaneously).
- 4.3.3 Construction of EA1N and EA2 is forecast to commence in 2024 / 2025, with energisation commencing in 2027<sup>1</sup>. Given the uncertainty in these timescales, the traffic flows have been added to both the 2023 and 2028 scenarios.
- 4.3.4 Further, it is worth noting that the EA1N and EA2 flows included works to construct a new substation at Friston. Given that the flows associated with this construction were also identified to be included within the flows used in the Sea Link assessment, they were removed from EA1N and EA2 to ensure they were not double counted.

 $<sup>^1\,</sup>https://www.scottishpowerrenewables.com/pages/east\_anglia\_one\_north\_and\_two\_update\_dec2022.aspx$ 





#### 4.4 New Convertor Stations close to Saxmundham

- 4.4.1 Three new convertor stations are proposed close to Saxmundham.
- 4.4.2 One of these stations will form part of Sea Link, enabling electricity to be transported from Friston to Kent. The Development Consent Order application for this is expected to be submitted to the Planning Inspectorate in Quarter 3 of 2024. However, initial traffic flow data was found in the National Grid Preliminary Environmental Information Report for the scheme. This sets out that it provides a worst case assessment with the assumption that 100% of traffic would be assigned both north and south on the A12, a scenario which could never occur. Based on the anticipated construction hours, AAWT data was converted to AADT data by multiplying by six and dividing by seven. These flows were added to both the 2023 and 2028 scenarios as a worst case.
- 4.4.3 It is likely that the other two convertor stations will be used for Nautilus and LionLink. A Development Consent Order for LionLink is forecast to be submitted in Quarter 4 of 2024, with the application for Nautilus forecast for 2024. Given that it is not anticipated that more than one of the convertor stations will be constructed simultaneously, these have not been included.

# 5 Resulting Impact

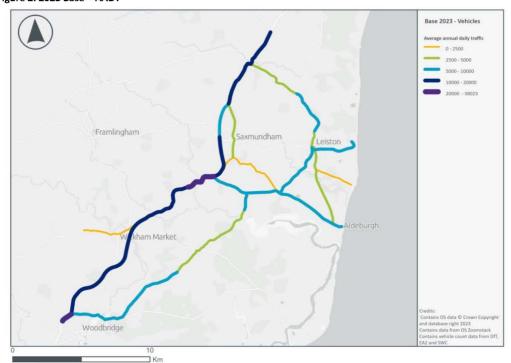
#### 5.1 2023 Impact

5.1.1 Figure 2 shows the baseline 2023 AADT, whilst Figure 3 shows the 2023 traffic with the addition of traffic associated with Sizewell C, SeaLink, EA1N and EA2, including the percentage increase in traffic volume compared with the baseline. Figure 4 shows how the percentage increase in traffic on each road link is split between Sizewell C, Sea Link and the two East Anglia wind farm projects.





Figure 2: 2023 Base - AADT



- 5.1.2 Figure 3 demonstrates that the cumulative traffic impacts of the energy developments is expected to lead to an increase in traffic on all roads studied. These increases are highest on the B1122 between Leiston and Yoxford, which experiences a traffic volume increase of up to 33% compared with the base level. Figure 4 shows that these increases are attributable to Sizewell C rather than EA1N and EA2. Further, there are plans for this impact to be mitigated with the construction of a new link road in this location.
- 5.1.3 The percentage increase on the A12 is forecast to be between 11% and 21% (with the exception of the point south of Woodbridge, which is forecast to have an increase of only 4%, likely due to an error in the source data).
- 5.1.4 There are also large increases in traffic volume forecast on the B1122 between Aldringham and Aldeburgh and the A1094 between Aldeburgh and the B1069.





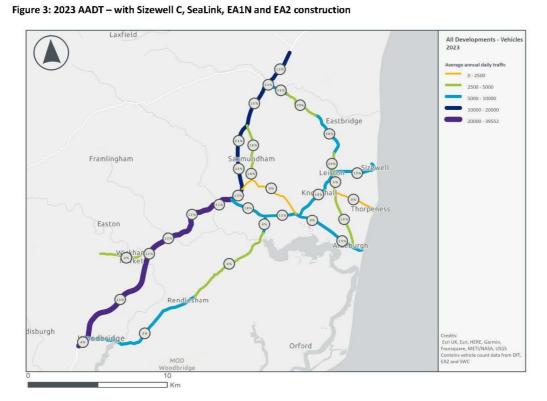
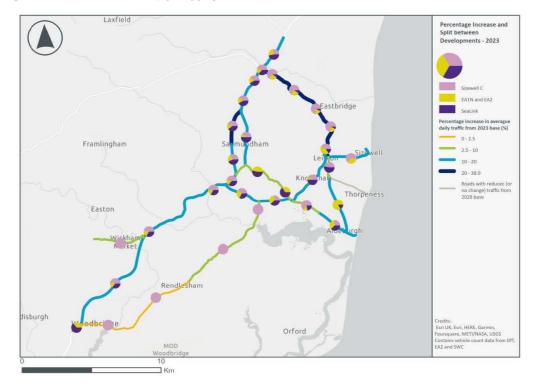






Figure 4: 2023 - Increase in AADT, split by project



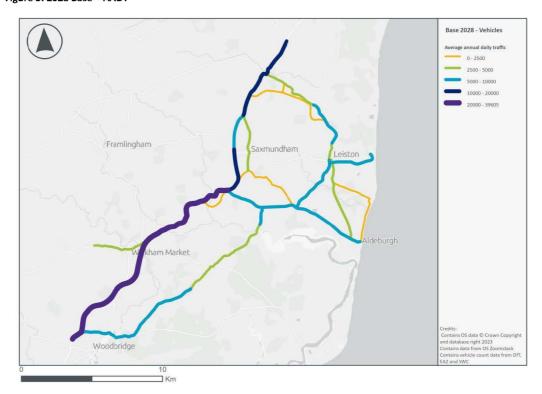
#### 5.2 2028 Impact

- 5.2.1 Figure 5 shows the baseline 2028 AADT, including the new roads to be constructed as part of Sizewell C by that date. Figure 6 illustrates the 2028 traffic with the addition of traffic associated with Sizewell C, Sea Link, EA1N and EA2, showing the percentage increase in traffic volume compared with the baseline.
- 5.2.2 Figure 7 shows how the percentage increase in traffic on each road link is split between Sizewell C, Sea Link and the two East Anglia wind farm projects. It should be noted that, where Sizewell C has constructed new roads, the increase in 'base' traffic on that road is assigned to Sizewell C.
- 5.2.3 Figure 5 shows that, even without the energy developments, traffic growth from 2023 to 2028 would see flows on the A12 above 20,000 AADT.





Figure 5: 2028 Base - AADT



5.2.4 Figure 6 shows the impact of the highway improvements that would be implemented as part of Sizewell C. The construction of the Sizewell Link Road would lead to a 68% reduction in traffic on the B1122 through Theberton and an even greater 80% reduction on the section of the B1122 west of Leiston Road compared with the 2028 base.





Figure 6: 2028 AADT - with Sizewell C, SeaLink EA1N and EA2 construction

5.2.5 Figure 7 shows that these changes are more associated with Sizewell C than the other energy development projects.

Orford

- There is a large increase in traffic travelling on the A12 (between its connection with the Sizewell C Link Road and the B1438 south of Woodbridge) compared with the 2028 base. This increase is fairly evenly split between the different energy developments, though Sizewell C has a disproportionate impact. As mitigation for this traffic increase, the construction of the 'Two Villages Bypass' redirects A12 through traffic away from Farnham and Stratford St Andrew, leading to a reduction of 79% on the main road through the villages. Nonetheless, there is still expected to be between 2,500 and 5,000 AADT on the road itself, which is likely associated with traffic accessing destinations to the north-west of Stratford St Andrew.
- 5.2.7 Otherwise, there are forecast to be increased traffic volumes on almost all roads in the study area, compared with the 2028 Base. The highest increase is on the B1122 just to the north of Leiston, which would see an 85% increase in traffic, which is mostly due to Sizewell C.





Laxfield

Figure 6: 2028 AADT – with Sizewell C, SeaLink EA1N and EA2 construction







Laxfield

Percentage Increase and Split between Developments - 2028

Strewell C
EATN and EA2
Solutils
Percentage increase in averague daily truth from 2028 base (s)
0 - 2.5 - 1.0
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Figure 7: 2028 - Increase in AADT, split by project

### 5.3 Comparison with Link Sensitivity

- 5.3.1 As noted in Section 2, only one link is classified as High Sensitivity, the B1069 as it passes through Snape. According to the data presented in this Section, this link will experience a 4% increase (compared with the baseline) in traffic in 2023 and a 9% increase in 2028.
- 5.3.2 Furthermore, the roads which generally experience the highest increases in traffic volume in 2023 and 2028, despite Sizewell C's proposed highway mitigations, are ones which were ranked Medium sensitivity. The most affected link in 2028, for instance, is given a 'Medium' ranking because it is a national cycle route.





### 6 Summary and Conclusion

- 6.1.1 This traffic impact assessment has reviewed the combined traffic impact of the proposed energy-related schemes on the Suffolk Coast, drawing on data sourced from the Department for Transport and the scheme planning applications.
- 6.1.2 Compared with the baseline data for 2023 and 2028, the combined energy schemes are expected to lead to increases in traffic volume on all studied roads in both years, with the exception of roads bypassed by new roads constructed as part of Sizewell C's highway mitigation package.
- 6.1.3 The largest traffic impacts in both 2023 and 2028 are on the B1122 between Leiston and Yoxford. Sizewell C has consequently proposed to construct a bypass of Theberton and a new road linking to the A12, leading to reduction in traffic volumes between a point south of Theberton and a point west of Middleton Moor. Nonetheless, there is still an 85% increase in traffic volume in 2028 on the existing B1122 between Leiston and the start of the new Theberton bypass.
- 6.1.4 There also significant (>10%) increases in traffic volume in 2028 on the following roads:
  - the B1122 between Theberton and Aldeburgh;
  - the B1121 through Saxmundham;
  - the B1069 between Leiston and Tunstall;
  - · the B1078 west of Wickham Market;
  - the A1094 between the B1069 (towards Leiston) and the A12;
  - · the A1094 through Aldebrugh; and
  - most of the A12.
- 6.1.5 A full assessment of the collective environmental impact of the locations where there is expected to be a significant cumulative impact from the combination of the schemes. This would need to include a review of the extent to which these links were previously assessed, with a further independent assessment then undertaken.



### 7. AIR QUALITY - SIGNIFICANT IMPACT

This is another Desk Study, this time using East Suffolk Council data on Air Pollution which does not take into account:

- the changes in concentration of air pollutants which cannot be considered insignificant.
- The long-term exposure of pollutants needs to be taken into account when direct impact on health is assessed.
- Exposure will have both acute and chronic effects on health, the latter continuing after completion of the construction
- There will be differential impact on groups: children and older adults will be affected more
- There are likely to be indirect effects on health and on the health service.

To state that switching off engines when stationary for 437 is going to mitigate the effect on residents' health is ridiculous.

During the Scottish Power DCO, SEAS commissioned Redmore to conduct a report on air pollutants – see Appendix A. A number of issues had not been considered and we would like to see NGETs findings on them:

- 1. Air quality impacts associated with vessel emissions
- 2. Air quality impacts associated with ammonia (NH3) emissions from road traffic and non-road mobile machinery (NRMM) have not been considered;
- 3. Optimistic assumptions had been adopted in regards generator exhaust positioning within the assessment of NRMM and haul road emissions;
- 4. The results of the sensitivity analysis of exhaust emission reduction and how these affects predicted pollutant concentrations have not been given any weight when determining the significance of air quality effects; and,
- 5. a number of cumulative developments have not been considered within the Air Quality Assessment.

See Appendix A - Redmore environmental. Air Quality Appraisal East Anglia ONE North and East Anglia TWO Offshore Windfarms. 2021Reference: 4242r1.

### 8. NOISE AND VIBRATION - SIGNIFICANT IMPACT

In the PEIR, NGET have only completed a desk top study and do not quote their data source for the local noise environment - just "publicly available noise mapping and noise surveys". This is not acceptable for the following reasons:

Construction noise: The idea that a buffer of 300 metres is sufficient to prevent noise nuisance from construction work on a development of this size is preposterous when in nearby villages a tractor ploughing can be heard at 500 metres.

Operational noise: Beyond about 250 metres sound propagation is heavily influenced by topography, surface "roughness" atmospheric temperature gradients and wind shear. Simple statements like a '1000 m buffer' is OK to eliminate operational noise impacts are not acceptable. NG have failed to provide any numerical data to support this



assertion. It is well known that transformer "hum" can travel considerable distance. Switchgear is also known to wake people at night when sounds travel even further distances.

Vibration: The proposed converter station is in an area of clay and wet sand substrata. If drop hammer or vibration hammers are used, vibration displacements may be felt at nearest residential properties.

Conclusion: NG's assertion that effects would be **NOT SIGNIFICANT** in relation to noise and vibration receptors (eg local resident) without defining '**NOT SIGNIFICANT'** is dishonestly cited. The belief by NG that the noise and vibration effects of the proposed development are unchanged when combined with other collocated activity is risible. This could only occur if all three projects were silent - ie no noise of vibration is detectable.

### 9. SOCIO-ECONOMIC, RECREATION AND TOURISM - SIGNIFICANT IMPACT

### 9.1. Background

Tourism impact from these plans for Sealink and the energy infrastructure hub will be far more significant than National Grid estimates.

The value of Tourism to East Suffolk is £679,747,000 in 2022 (Source: DMO National Tourism Surveys). 14.2% of all employment is tourism and hospitality related and the overall number working in services related to Hospitality and Leisure increases to over 20% for the Suffolk Coast and Heaths area taking into account home improvement trades, B&B services, garden services and catering".

Suffolk Coast and Heaths, including Minsmere and Dunwich, Southwold and Aldeburgh, represent over 50% of those revenues.

That equates to at least £300m and the question is how much of that value is threatened by these destructive plans? How many jobs are under threat? What kind of tourism will disappear?

## 9.2. Tourism in Suffolk Coast and Heaths is dependent on nature

There are many studies conducted to understand why tourists and visitors are attracted to a certain destination. Tourists flock to Brighton and Bournemouth for a beach side entertaining urban experience where they can access a variety of entertainments and retail experiences, a busy bustling vibe and lots of street life and noise.

Visitors making the journey to Suffolk Coast and Heaths state very different reasons for their trip. The Destination Marketing Office (DMO) quantitative report conducted in September 2019 by a market research company based in SW England, totally independent and objective survey, shows the ranking of criteria and the following are at the top of the list:

9.2.1. Tranquillity

9.2.2. Landscape

9.2.3. Beauty



The fish and chips, the small artisanal galleries and cafes enhance that market town experience, but it is a very different vibe set in the context of a deeply rural landscape and a watery wilderness; it is the very lack of development that is so appealing, timeless and almost other worldliness. The nightingale birdsong is enjoyed by ornithologists and ramblers alike; the sight of an otter or a red deer comfortable in their safe havens; dark skies at night where you can see the stars so brightly and a sense of the past, present and future melding into one.

"The understatement of the landscape has long appealed to Artists" (Craig Brown)

such as Constable: "..old rotten Banks, slimy posts.."

or Ralph Fiennes writing in "My Father's Arms" (2021):

"The fields of Suffolk - dark green hedges, the oaks, the broken elms - diseased and ivy-choked and in the summer, the pale coloured crops, wheat and barley. A landscape that might be dull for many people but its rhythm is hypnotic, compelling. Small churches pricking the horizon line under skies that dominate".

And, to Kenneth Clark, on his Tribute to Benjamin Britten (1963), he writes: "I found that the delicate music of the Suffolk coast, with its woods straggling into sandy commons, its lonely marshes and estuaries full of small boats, still had more charm for me than the great brass bands of natural scenery, the Alps or the Dolomites".

This fragile coast faces an existential threat from the sea and tourism faces an existential threat from these projects. National Grid has become the faceless monster or Mordor from the Middle Earth: Lord of the Rings (JR Tolkien) invading this coastline and as we faced Napoleon and other aggressors from the sea, this 21st century drama has forced those peace-loving communities to become increasingly militant in order to protect Nature, the rural peace and this thriving economy from attack.

Micro economies should be evaluated thoroughly by National Grid ESO (FSO) and the developers and Councillors before hub sites are chosen. Suffolk enjoys a wide range of micro economies, but we should nurture each of them and avoid mixing them up if that is to their detriment. Lowestoft will benefit from becoming a more vibrant urban destination, with a thriving renewable energy centre of excellence partnering with universities on future R&D projects relating to tidal energy, secondary crops, algae and wind. Lowestoft may become more like Brighton in the future, a youthful, lively urban beach side experience. Felixstowe is a remarkably successful cargo port and benefits from the Port experience building a reputation as an international trade facilitator.

The Suffolk Heritage Coast was given its AONB accreditation in 1970 and this award is not to be taken lightly. Its value has no retail price tag except it does in a less literal sense. The thriving tourism sector is dependent on Walberswick, Southwold, Dunwich, Minsmere, Aldeburgh and Thorpeness and the surrounding villages and towns cherishing their heathlands, lowland wetlands (their rainforest equivalent), the river estuaries, and the marshes, woodlands and meadows.

This is Nature at its most glorious. It's the reason why people choose to live here or holiday here.



Whilst conventional valuations do not take into account that which is most precious, it is the task of Government to ensure that if there is a better alternative site for major infrastructure development it should be used, even if it's more expensive for the developer to clean up the brownfield site at the outset.

Mark Carney in his Reith Lectures in 2021 signals to the failure in a typical Western capitalist society to put a price on what is not valued conventionally. It's time for NG ESO (FSO) to halt these needlessly destructive plans and choose major hub sites where they do not erode dramatically the intrinsic appeal to tourists.

### 9.3. Tourism Forecasts show 15% decline if these energy project are granted permission

This estimate is in fact, optimistic. The Sealink, Nautilus and LionLink projects were not confirmed when this study took place in 2019 and therefore not included. Landfall at North Warren was not known and the three converter stations on the outskirts of Saxmundham were not proposed.

Within a seven mile radius, Suffolk Coast and Heaths is being asked to HOST over a third of Britain's energy as a through motorway for much of it. The impact is described as NOT SIGNIFICANT by NGET in their Sealink PEIR Assessment of socio- economic impacts.

SEAS challenges NGET's flawed research, which is based on desk studies and where no original tailored quantitative studies have been undertaken.

That 15% decline is attributed to visitors who will choose to go to more attractive places. Over 12 million day trips took place in 2022 to East Suffolk.

These visitors are going to be deterred by the non-stop traffic on the A12, particularly along the distance between Woodbridge and Southwold.

We have submitted a new Traffic Flow study as one of our responses and you will see from that we can expect gridlocked traffic even if the four village by-pass is built this will not alleviate the problem. With the advent of large housing projects along the A12 at Saxmundham, running at the same time as the SZC, ScottishPower, NGV and NGET projects, this will be judged as a NO GO Zone.

Blessed with numerous river estuaries, Suffolk Coast is limited in terms of the roads that run North to South, and the main West East arterial routes such as the A1094 into Aldeburgh are already bumper to bumper at peak season peak times.

The true adverse impacts of this concatenation of construction projects has not been assessed by National Grid in any way. They acknowledge that they have not done any cumulative impact work and yet they are only 12 months away from a DCO application. This work should have been carried out at the outset four years ago, not at this juncture.

Tourism decline happens gradually to start with and then accelerates. It takes years to build a world class destination such as Snape Maltings, Aldeburgh and Southwold, but in a few years this success story can be eroded. Tourism and hospitality are interlinked with house prices, land value and retail shop value. Like a pack of cards, this can fall apart quite quickly. In the "People, Place" study carried out in 2020, current users perceived Aldeburgh as "quaint, lovely, attractive, delightful, great, charming and brilliant". Southwold is different yet equally has charm and a quirkiness.



The fragility of the tourism sector is such that one seismic trauma could be enough to destabilise this sector for 12 years and its unique character may then be gone for ever and homogenisation will take place.

The risk from this energy hub infrastructure to this particular sector is enormous. We challenge National Grid to find any research study that would confirm NOT SIGNIFICANT IMPACT from these industrial projects.

# 9.4. 15% decline means a loss of jobs and businesses and a minimum demand for compensation of £600m.

The 15% decline translates into the following losses:

- 4.1. Loss of 2000 jobs each year
- 4.2. Loss of £50m income each year to those businesses
- 4.3. SMEs will in particular suffer and some will fail
- 4.4. Over 12 years that equates to 24,000 jobs and £600m income

The local communities here in Suffolk Coast and Heaths will have every right and reason to claim compensation for that loss of £600m and more, given that the decay will have set in and there will never be a full reversal in view of the landscape blight, desecration of Nature and ripple down effect.

Belgium, Netherlands and Denmark have not made the mistake of choosing tourism destinations dependent on Nature for their energy infrastructure hubs. They have chosen industrial brownfield sites close to the shoreline.

9.5. DESNZ must understand these implications and instruct the new FSO to Halt this reckless vandalism and re-evaluate brownfield sites as major energy hubs.

It is no longer acceptable for Government to wash its hands of these economic self-harm decisions. It's time for Government to take control and value the tourism sector fully before NG ESO (FSO) takes decisions on what constitutes an appropriate site for a hub.

IT IS NO LONGER ACCEPTABLE FOR A PYLON ROUTE TO BE CHOSEN SIMPLY BECAUSE IT EXISTS. FOR MAJOR HUB INFRASTRUCTURE SITE LOCATIONS, A SET OF CRITERIA NEED TO BE FULFILLED INCLUDING TOURISM ECONOMY ASSESSMENTS.

### 10. HEALTH AND WELLBEING - SIGNIFICANT IMPACT

Once again, a desk based research exercise has determined SeaLink's conclusion "that the effects would not be significant in relation to health and wellbeing". It is completely unacceptable to not consult with qualified representatives in the area: GPs, Health Professionals, Carers, Emergency Services and other qualified experts.

During EAN1/2 DCO hearings Health and Wellbeing expert, Dr Jane McNeill, gave an oral representation to the Planning Inspectors which clearly set out how such projects can cause severe mental health issues. - see Appendix B - Oral representations on Health and Wellbeing by Dr Jane McNeill Tuesday 9<sup>th</sup> March, 2021



Whilst Professor Kevork Hopayian wrote on the physical health effects of pollution from large projects on the local community. He surmises that the increase in traffic, air pollution and their cumulative effect will have a direct effect on children and residents who are at risk of developing lung disease. In addition, the indirect effect from unemployment due to the loss of tourism jobs, can lead to mental and physical problems. Such effects would continue after construction, some problems becoming chronic, all of which would see an inevitable increase in mortality.

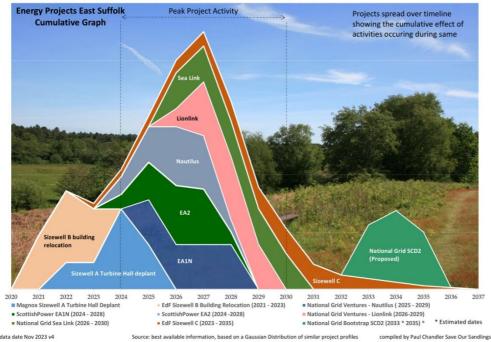
See Appendix C - Health paper by Prof. Kevork Hopayian, BSc MB BS, MD, FRCGP 19 January 2021

### 11. CUMULATIVE EFFECTS

The cumulative impacts for intra-project and inter-project have not been fully assessed by National Grid. You have missed out the most important energy project, the trojan horse, National Grid's substation which if not built means all the offshore wind, interconnector and subsea transmission lines have to re-think. Pushing Sealink before a substation and a power source comes in to an operable substation is like putting the cart before the horse.

Out of the twenty projects you list in the PEIR, at least eight are energy projects within a SIX MILE RADIUS. The others are spread up and down the A12:

- 1. Extending the life and relocation of Sizewell B
- 2. Sizewell C main build and pre-works, eg bypass, rail link, roundabouts, park and ride, compounds, storage sites, freight sites near Felixstowe etc.
- 3. A National Grid substation at Friston
- 4. ScottishPower EA1N
- 5. ScottishPower EA2
- 6. Sealink Converter Station at Saxmundham
- 7. LionLink Converter Station
- 8. Nautilus Converter Station
- 9. SDC2 (another Sealink bootstrap project)





This timeline graph of, the above projects, peaks in 2026. Not one energy project including SeaLink has assessed the probability of the whole area grinding to a halt due to each project vying for road space to deliver their materials, plant machinery, service vehicles and getting workers to each site, let alone what the impact is on the community going about their daily business.

It is like each developer is sticking their head in the sand hoping that it won't come to grid lock. Until the cumulative impact is taken seriously and discussed in the open with local stakeholders, community groups and the community, the probability of it happening increases and will cost each project dearly in delays.

Traffic is one of the critical issues and whilst our traffic assessment is only at an initial stage of research, we can see from the PJA study that there is very simply too much traffic for such a small area. If we estimate a cautious number of additional vehicles as 1500 per day for all projects taking place simultaneously such as SZC, Sealink and at least one substation, there will be too many HGVs, trades and workers vans and cars for narrow rural lanes which will become rat runs, creating more danger and risk to life, for cyclists, walkers, and school crossings. Emergency services will struggle to get to their destinations on time. Certain communities such as Friston and Kelsale will be "caged in" isolated from their easy access routes and surrounded by industrial projects.

The cumulative impact has now reached a tipping-point.

If SeaLink's plans come to the point of a DCO application National Grid will have to show their EA, 12 month wildlife recordings, comprehensive traffic flow assessments at peak times, and more specific data. Until then, SEAS cannot accept these plans and continues to request that alternative brownfield sites are considered by NG ESO (FSO) and compared against Friston given that the brownfield sites are already pre-industrialised and have pylons ready for upgrading.

### 12. CONCLUSION

We all need to consider the bigger picture, of the unprecedented planned scale of increase in offshore wind power capacity, and the need for more modern, flexible and efficient transmission network solutions, to deliver energy offshore, directly and more cheaply to brownfield major hub sites such as Rotterdam, Zeebrugge, Tilbury, Grain, and future sites yet to be nominated.

It is easy to dismiss all proposals made by local communities as "nimby". However, it is beholden on our energy systems operator and transmission distributor to listen carefully to what communities are saying, to differentiate between purely "nimby" self-interest and more strategic solutions which are in the long-term best interest of all Britain's consumers, and furthermore not be swayed by the self-interested marketing promulgated by commercial developers and their PR agencies, as well as by lazy journalists who fail to understand the nuanced arguments.



### SEAS committed to two objectives:

- Promoting the best long-term strategic wind energy solutions for Britain as a whole, encouraging opportunities for British businesses and the economic regeneration of brownfield areas, whilst preserving nature-based coastal economies.
- Safeguarding areas of outstanding beauty, rare heathlands, vital wetlands and diverse wildlife from needless damage

Right now, Britain has a golden opportunity to pivot to more strategic, flexible and cost-effective offshore solutions for the energy transmission network. Despite current media reports of increased costs for wind energy, this offshore wind is green and there are more opportunities yet to be achieved for Britain. Whilst we have been a world leader in windfarm capacity terms, <u>how</u> we deliver that energy has not been addressed as successfully.

We propose two Pilot Projects, following offshore grid design principles, in order to build a foundation of experience and expertise, that will then allow us to expand the offshore transmission network steadily over the next 20 years, matching realistic growth targets for offshore generation.

### Pilot One: Nautilus interconnector

This was the original OCSS proposal put forward by NGV, the Five Estuaries and North Falls developers RWE and SSE Renewables, taking power to West Grain in Kent. We continue to believe that this Pilot One should go ahead as originally planned because it is the most beneficial way to bring this wind energy directly to London and the South East. It is consistent with the Future Framework plan and should not be shelved. It would help decision-makers gain an understanding of the practical challenges to be overcome to deliver this modern approach to offshore coordination.

### Pilot Two: LionLink interconnector

Scottish Power Renewables Windfarms East Anglia One North (EA1N) and East Anglia Two (EA2) can combine energy offshore through LionLink and take power to the brownfield site of Bradwell-on-Sea.

Based on previous National Grid ESO analysis (December 2020), offshore transmission network solutions like this could offer savings of more than £2bn for East Anglia alone. Taking power closer to demand reduces grid constraint costs and potentially reduces the need for network reinforcement infrastructure projects to achieve the same goals, with associated substantial economic savings.

These cost savings cannot be dismissed without a transparent evaluation of the lifecycle costs carried out by independent assessors. There should also be an up to date, holistic Cost Benefit Analysis of Bradwell-on-Sea versus Friston as onshore infrastructure locations, to identify the better site for a major energy hub. In our view, the medieval village of Friston is manifestly unsuitable in comparison with Bradwell-on-Sea's multiple brownfield areas which already have a grid connection which could be upgraded.



If Government can provide greater leadership and the soon to be empowered FSO greater independent strategic direction, based on the needs of Britain rather than on National Grid's commercial agenda, a Master Plan for energy infrastructure, as envisioned by Nick Winser in his cogent report (August 2023), can be developed and implemented efficiently and with far greater stakeholder acceptance and even applause.

By 2050 we envisage a North Sea Corridor acting as the main arterial route for energy generation and transmission. There could be a mixed portfolio of renewable energy resources and storage systems including offshore platforms, energy islands, tidal energy capture, green hydrogen storage, secondary crop and algae alternative fuels, and other innovations.

Lowestoft on the north Suffolk coast is well-positioned as a leader in this fast-changing sector. Developers, innovators, academics and communities are already being brought together in the Orbis clean energy innovation and incubation centre. New job opportunities flow from innovation and technology advances. At the heart of this energy revolution, Lowestoft will become an international centre of excellence.

The Suffolk Heritage Coast is an economic success story for nature-based tourism, with popular destinations including Aldeburgh, Walberswick and Southwold. Snape Maltings is recognised internationally as a world-class music centre. The coast is also recognised by UNESCO for its role in bird migration as the East Atlantic Flyway. There are numerous rivers including Fromus, Hundred and Blythe, rich in biodiversity [for example 875 species recorded in the Hundred], some of which are threatened by these projects.

Local micro-economics and community wellbeing need to be given deeper consideration by energy planners. A developer-led "free for all" culture is no longer appropriate for the scaling-up of this energy revolution and it's time for a proactive step change to help deliver the Future Framework.

Suffolk Energy Action Solutions 18 December 2023

### **APPENDICES**

Appendix A - Redmore environmental. Air Quality Appraisal East Anglia ONE North and East Anglia TWO Offshore Windfarms. 2021Reference: 4242r1.

Appendix B - <u>Oral representations on Health and Wellbeing by Dr Jane McNeill</u> <u>Tuesday 9<sup>th</sup> March, 2021</u>

Appendix C - Health paper by Prof. Kevork Hopayian, BSc MB BS, MD, FRCGP 19 January 2021