

6. Socio-Economics, Tourism and Recreation and Land-Use

Non-Technical Summary

- 6.1 This Chapter provides the details of the changes to the site layout and the updated assessment of the significance of effects on Socio-Economics, Tourism & Recreation receptors as a result of the Proposed Development.
- 6.1. To ensure consistency of approach, the same significance criteria and assessment methodology has been followed to provide an assessment of the effects of the Consented Development.
- 6.3. In summary, the Proposed Development is likely to result in a minor increase in the beneficial effects on socio-economics, and a minor increase of adverse effects on tourism, recreation and land use.
- 6.4. The effect of the Proposed Development on Socio-Economics, Tourism & Recreation, and Land-Use is not significant.

Introduction

- 6.5. This Chapter address the potential effects of the proposed modification to the rotor diameter and crane hardstanding size (the 'Proposed Development') pursuant to the consented Lochluichart Wind Farm Extension II (the 'Consented Development') on the Socio-Economics, Tourism and Recreation resources. This Chapter supplements Chapter 6: Socio-Economics, Tourism and Recreation of the 2019 Environmental Impact Assessment Report (EIA Report, 2019) and Chapter 6: Socio-Economics, Tourism and Recreation of the 2019 Supplementary Information (SI, 2019). This Chapter should be read in conjunction with both the EIA Report 2019 and the 2019 SI 2019.
- 6.6. Chapter 6 of the EIA Report 2019 assessed the Consented Development as having no significant effects on socio-economics, tourism and recreation and land-use receptors.
- 6.7. The principles of the EIA Report 2019 and SI 2019 remain valid and appropriate and therefore, have not been reassessed for this Chapter, unless otherwise stated.
- 6.8. The key conclusions of the EIA Report 2019 and SI 2019 in relation to socio-economics, tourism and recreation and land-use were:
- The total CAPEX cost of the Consented Development is expected to be £23.76m.
 - The OPEX is expected to be £1.06 m per annum, of which £452,594 is estimated to be spent in the local area.
 - Overall, the construction of the Consented Development is expected to create both direct and indirect short-term benefits to the local area through construction activities, and supply chain opportunities. In the long term this will not result in any fundamental change in population, local services, employment or overall structure of the local economy.

- No significant socio-economics, tourism and recreation, and land-use effects are anticipated as a result of the Consented Development.

Legislation, Policy and Guidance

6.9. The has been no change to the Legislation, Planning Policy or Guidance with respect to Socio-Economics, Tourism and Recreation since the EIA Report 2019 and SI 2019 were prepared.

Assessment Methodology and Significance Criteria

6.10. The assessment method and significance criteria are the same as detailed in the EIA Report 2019 and 2019 SEI. Details of the methodology can be found in Chapter 6 of the EIA Report 2019.

6.11. The sources of information/references used in the EIA Report 2019 are still applicable and there are no changes noted.

Responses and Consultation

6.12. A Scoping Report was submitted in September 2020 (the '2020 Scoping Report'). Throughout the scoping process, and subsequently during the ongoing EIA process, relevant organisations were contacted with regards to the Proposed Development. Table 1.1 outlines the consultation responses received in relation to socio-economics, tourism and recreation and land-use.

Table 1.1: Consultation Responses Relating to Socio-Economics, Tourism and Recreation and Land-Use

Consultee	Points Raised	Response
The Highland Council (THC)	It is noted that socio-economic impacts of the development are proposed to be scoped out of further assessment with reliance placed upon the EIAR and SI for the Consented Development. Whist the applicant may consider that the proposed variation in tip heights and turbine design may not give rise to any additional socio-economic effects or alter the findings of the previous assessments, THC consider that the EIAR still contains the following information:	Section 1.35-1.40 of this Chapter assesses the impacts on the additional

Consultee	Points Raised	Response
	<p>- An estimate of any additional people who may be affected by the increased development height, which may require individual households to be identified, local communities or a wider socio economic groupings such as tourists and tourist related businesses, recreational groups, economically active, etc.; and</p> <p>- Updated relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction, operation and decommissioning of the development. This should set out the impact on the regional and local economy, not just the national economy. Any mitigation proposed should also address impacts on the regional and local economy.</p>	<p>tourism and recreation receptors which may be impacted by be increased tip height within the 5 km Study Area. A detailed assessment on the increased visibility on these receptors is detailed in Chapter 9.</p> <p>Section 1.13 to 1.32 of this Chapter updates the relevant economic information at a national, regional and local scale.</p>

Baseline Conditions

6.13. The Study Area for the socio-economics, tourism and recreation and land-use assessment remains unchanged from the EIA Report 2019 and SI 2019 and there have been no changes to the land-use and tourism and recreational receptors in the Study Area. The baseline detailed in the EIA Report 2019 and SI 2019 therefore remains applicable.

Assessment of Potential Effects on Socio-Economics

Local Investment

- 6.14. Given the Proposed Development will maintain the number of turbines; the revenue/local investment will be proportionate to that presented in the SI 2019.
- 6.15. The Lochluichart Community Trust (LCT) was established as a result of the community benefit which flowed from the Operational Schemes and from the Ledgowan hydro scheme.
- 6.16. The Proposed Development will be open to investment from community organisations and social enterprises up to a maximum of 10% of the project most likely via a 'shared revenue' model, one of the options proposed in the "Good Practice Principles" .

Wider Economic Benefits

- 6.17. In terms of potential supply chain benefits, the Proposed Development provides opportunities for the involvement of local, regional and Scottish suppliers in a range of activities, including research and development, design, project management, civil engineering, component fabrication / manufacture, installation and maintenance.
- 6.18. In addition, during the construction process there will be opportunities where those employed will develop skills that will be of benefit to the local economy and to local businesses in the longer term. Furthermore, employment generated through the Proposed Development will contribute to diversifying the local economy and help support the retention in the area of the working age population.
- 6.19. The Proposed Development will not result in a change to the economic benefit on the supply chain at a local, regional or national level to that detailed in the SI 2019 and will remain not significant in terms of the EIA Regulations.

Construction Effects

- 6.20. Based on the BiGGAR Economics report commissioned by RenewableUK , onshore wind Capital Expenditure (CAPEX) is £1.32 per MegaWatt (MW) on average. This includes the following elements:
- Turbine: Tower; Blades; and Nacelle.
 - Balance of Plant: Civil and Project Management; Roads; Substation Buildings; Turbine foundation and hardstanding; Landscaping/forestry/fencing; Mechanical and electrical installation.
 - Grid Connection: Engineering services; construction; electrical components; and industrial equipment and machinery.
- 6.21. The SI 2019 stated the CAPEX for the Consented Development would be £23.76 m; however, the Proposed Development will result in an increase in MW from 18MW to 24MW. The Proposed Development will therefore result in a positive increase in CAPEX from £23.76 m to £31.68 m.
- 6.22. The EIA Report 2019 and SI 2019 estimated that the Consented Development could potentially support an average of 30 staff on-site per day, during peak construction periods. The Proposed Development will not result in a reduced number of staff on-site however, may result in a shorter construction period.

- 6.23. The construction of the Proposed Development is considered to have a short term, beneficial, direct and indirect effects to the area, through the increase of employment.
- 6.24. Overall, the Proposed Development is not expected to result in any fundamental or long-term change to population, local services employment or overall structure of the community, but the effects will be of medium magnitude at the local level (of low sensitivity). This would not be significant under the EIA regulations.

Induced Effects

- 6.25. Induced effects will occur when the earnings of workers supplying services to the Proposed Development are spent both locally and elsewhere in Scotland. For example, local shops, cafes, accommodation providers and hotels often experience an increase in turnover during the construction phase as they have opportunities to provide additional services to the Developer and their contractors.
- 6.26. The Proposed Development will result in a change in construction programme compared to that detailed in the SI 2019.
- 6.27. Overall, the construction of the Proposed Development will bring short-term, beneficial, induced effects to the area, through the increase in employment. This will not result in any fundamental or long-term change to population, local services, employment or overall structure of the community, but effects will be of medium magnitude at the local level (of low sensitivity). This would not be significant under the EIA regulations.

Operational Effects

- 6.28. In the 2015 BiGGAR report on the economic benefits of the UK onshore wind industry, the average cost of an onshore wind farm was £59,867 per MW installed per annum. Due to the increase in MW proposed as part of the Proposed Development (24 MW) compared to the Consented Development (18MW), and the proposed increased operational lifetime from 25 years to 40 years, the Proposed Development will result in an increased Operational Expenditure (OPEX).
- 6.29. The OPEX is estimated to increase by £359,202 per annum as a result of the Proposed Development, resulting in an OPEX of £1.4 m per annum, based on the Renewables UK (2015) report detailed in the EIA Report 2019. This results in an OPEX of £57.5 m over the proposed 40 year operational lifetime of the Proposed Development.
- 6.30. Of this total spend, the BiGGAR report estimates 42% will be spent in the local area, which would include business rates and land agreements with the local landowner, as well as a proportion of the maintenance costs. 87% of the total operation and maintenance expenditure will likely be within the UK.
- 6.31. This will conclude in a positive, negligible effect, which would be not significant in terms of the EIA Regulations.

- 6.32. It is still considered that the Proposed Development would lead to a positive, negligible effect on employment and business opportunities, and would not be significant in terms of the EIA Regulations.

Community Fund

- 6.33. The Applicant is proposing a community benefit package of £5,000 per MW per annum as noted in the EIA Report 2019, to the Lochluichart Community Trust (LCT). The Consented Development proposed a community benefit of £2.25 m over the lifetime of the Consented Development based on its 18 MW capacity. Considering the Proposed Development results in an increased capacity (24 MW) compared to that of the Consented Development, an increased community benefit contribution of £4.8 m over the lifetime of the Proposed Development is anticipated, equating to £120,000 per annum. This is an overall increase of £2.5m.

- 6.34. This constitutes a minor, positive effect, although this is not significant in terms of the EIA Regulations and not a planning consideration.

Decommissioning

- 6.35. Impacts on socio-economic impacts during decommissioning are anticipated to be similar to that of construction effects thereby representing short-term, positive effect acting at a local level due to increased employment

Assessment of Potential Effects on Tourism and Recreation

- 6.36. Due to the increased in tip height proposed as part of the Proposed Development, the Proposed Development is expected to have increased indirect effects due to the increased visual effects on tourism and recreational resources. The visual effects of the Proposed Development on tourism and recreational resources such as the NC500 are assessed in Chapter 9 of this EIA Report.

Construction Effects

- 6.37. The EIA Report 2019 and SI 2019 concluded that the construction of the Consented Development would not result in any significant effects on tourism and recreation. The Proposed Development will not result in any changes to the construction effects presented in the EIA Report and SI 2019.

Operational Effects

- 6.38. Visual effects associated with the Proposed Development may occur at receptor locations, when people are looking towards the Proposed Development and from locations where clear views of the turbines are available.

- 6.39. The EIA Report 2019 and SI 2019 concluded that the operational phase of the Consented Development would not result in any significant effects on tourism and recreation.

- 6.40. It is anticipated that there will be increased visibility of the Proposed Development along the A835, which is part of the popular tourist route North Coast 500 and the Right of Way HR46 which starts at the A835 at Loch Glascarnoch and visitors of the Aultguish Inn. The visibility effects of the Proposed Development on tourism and recreation resources are assessed in

Chapter 9 of this EIA Report. It should be noted that there is a distinction between a visual effect and a recreational amenity effect. Recreational amenity effects are described as effects that would influence the recreational value e.g. use or enjoyment of an asset such as a walking route.

- 6.41. As detailed in the EIA Report 2019, evidence suggests that walkers are currently utilising the tracks associated within the Operational Wind Farm and they are likely to do so in the future. It is still anticipated that the tracks associated with the Proposed Development would also be utilised for access, but is unlikely to result in an increase in on site recreation.
- 6.42. It is considered that the Proposed Development will result in a negligible change to the baseline when considering the Operational Wind Farm with regards to tourism and recreation. Whilst receptors would be of medium sensitivity, effects are not anticipated to be significant due to negligible magnitude of the impact.
- 6.43. As stated throughout this Section and within the EIA Report 2019 and SI 2019, the effects of the operational phase of the Proposed Development will not have a significant effect on tourism and recreation receptors in accordance with the EIA Regulations.

Public Attitudes to Wind Farms

- 6.44. No change to effects based on the Proposed Development.

Decommissioning Effects

- 6.45. Direct effects on tourism and recreation are anticipated to be similar to that of construction effects, thereby remaining not significant.

Assessment of Potential Effects on Land-Use

- 6.46. A full Description of the Proposed Development is provided in Chapter 3 of this EIA Report. The increase in crane hardstanding area from 1,100 m² to 1,850 m² is of relevance to this assessment.
- 6.47. All other infrastructure remains the same as the SI 2019.

Construction Effects

- 6.48. Despite the increase in crane hardstanding area, construction effects on land-use are expected to remain unchanged from the Consented Development; they will be limited and temporary in nature, the magnitude of effects are considered low and therefore, not significant in terms of the EIA Regulations.

Operational Effects

- 6.49. The Proposed Development will result in an increased overall land-take to that proposed as part of the Consented Development due to the increased crane hardstanding areas. This increase equates to an additional 750 m² land-take on a low sensitivity receptor.
- 6.50. The land-take is on a low sensitivity receptor is a long-term, negligible effect on land-use, which is considered to be not significant in terms of the EIA Regulations.

Decommissioning

- 6.51. The effects on land-use of the Proposed Development during the decommissioning phase is expected to be similar to that during construction, with a temporary cessation of agricultural activities in the vicinity of the Proposed Development while turbine removal is undertaken. This effect will be short-term and of negligible significance, which is considered to be not significant in terms of EIA Regulations.

Assessment of Cumulative Effects

- 6.52. No large-scale construction projects have been identified within the Study Area since the submission of the EIA Report 2019 and SI 2019.
- 6.53. The conclusion of the cumulative assessment presented within the EIA Report and the SI 2019, which stated that there would be no significant effects remains valid.
- 6.54. As detailed in Sections 1.28, the Proposed Development will contribute £5,000 per MW installed capacity to the LCT. This will result in an annual value of £120,000 per year in addition to the £2,750 per MW installed capacity for the Operational Wind Farm.
- 6.55. This cumulative effect will represent a medium magnitude effect for the local community, a direct, positive, long-term effect acting at a local scale and therefore constituting a minor beneficial effect, although this is not significant in terms of the EIA Regulations. The Proposed Development will contribute to the minor beneficial effect.

Mitigation and Residual Effects

- 6.56. There are no significant socio-economics, tourism and recreation, and land-use effects predicted during the construction, operational or decommissioning phases of the Proposed Development. Therefore, no additional mitigation beyond that considered as embedded within the design of the Proposed Development, is required.
- 6.56. No significant residual effects are predicted as a result of any phase of the Proposed Development.

Summary

- 6.57. The total CAPEX cost of the Proposed Development is expected to be £31.68 m.
- 6.58. The OPEX is expected to be £1.4 m per annum, of which approximately £588,000 is estimated to be spent in the local area.
- 6.59. Overall, the construction of the Proposed Development is expected to create both direct and indirect short-term benefits to the local area through construction activities, and supply chain opportunities. In the long term this will not result in any fundamental change in population, local services, employment or overall structure of the local economy.
- 6.60. The Proposed Development will result in increased visual effects on surrounding recreational receptors (for example, the Right of Way HR46), and therefore will have an increased effect on recreational amenity.

- 6.61. No significant socio-economics, tourism and recreation, and land-use effects are anticipated as a result of the Proposed Development.

References

Scottish Government (2019) Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments [Online] Available at: <https://www.gov.scot/publications/scottish-government-good-practice-principles-community-benefits-onshore-renewable-energy-developments/pages/2/> (Accessed 28/01/2021)

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BiGGAR Economics (2016) Wind Farms and Tourism Trends in Scotland [Online] Available at: <http://www.biggareconomics.co.uk/wp-content/uploads/2016/07/Research-Report-on-Wind-Farms-and-Tourism-in-Scotland-July-16.pdf> (Accessed 18/01/2021)