

Chapter 15

Socio-economics, Tourism and Recreation

Contents

15	Socioeconomics, Tourism and Recreation	1
	Introduction	1
	Scope of the Assessment	1
	Assessment Methodology	2
	Future Baseline in the Absence of Development	7
	Embedded Mitigation	7
	Polquhanity to Glenlee via Kendoon	7
	Carsfad to Kendoon	15
	Earlstoun to Glenlee	21
	BG Route Deviation	26
	Glenlee to Tongland	32
	KTR Project as a Whole: Assessment of Effects	42
	Assessment of Cumulative Effects	46
	Interrelationship between Effects	46
	Summary of Significant Effects	47

Figures

- Figure 15.1: Socio-economic Study Areas
- Figure 15.2: Tourism Study Area and Business Survey Search Area

Appendices

- Appendix 15.1: Socio-Economic Baseline

15 Socioeconomics, Tourism and Recreation

Introduction

- 15.1 This chapter presents the findings of the assessment of the likely significant construction and operational effects of the proposed Kendoon to Tongland 132 kilovolt (kV) Reinforcement Project ('the KTR Project') on socio-economics, tourism and recreation, details of which are provided in **Chapter 4: Development Description** and **Chapter 5: Felling, Construction, Operational Maintenance and Decommissioning**.
- 15.2 The chapter has been prepared by Stantec UK Ltd (Stantec UK) in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the 2017 EIA Regulations' (as amended)).
- 15.3 The assessment presented in this chapter is supported by **Appendix 15.1: Socio-economic Baseline**, which provides more detailed baseline information to characterise the sensitivity of receptors which are subject to the assessment of likely significant effects.
- 15.4 The assessment draws upon relevant conclusions from other technical assessment chapters of this EIA Report, in particular regarding likely 'primary' environmental or physical effects arising from changes in public access, landscape character, visual amenity or the setting of heritage assets which may lead to secondary socio-economic effects on the tourism and recreation sector. Potential effects on other business sectors have also been assessed as noted in **Table 15.1**. This assessment should therefore be read in conjunction with **Chapter 4; Chapter 7: Landscape and Visual Amenity, Chapter 8: Forestry, Chapter 12: Cultural Heritage** and **Chapter 13: Traffic and Transport**.

Scope of the Assessment

- 15.5 All new infrastructure developments have the potential to generate socio-economic effects at the local, regional and/or national level, principally in relation to changes in economic development, employment opportunities and tourism or recreational activities. The assessment considers:
 - Direct effects resulting from investment and expenditure decisions made by SP Energy Networks (SPEN), with associated indirect and induced supply chain effects.
 - Indirect effects resulting from 'secondary' changes in social or economic activities or market behaviour (e.g. changes in visitor attractiveness) catalysed by 'primary' changes in environmental or physical conditions attributable to the construction or operation of the KTR Project (e.g. changes in visual amenity). These indirect effects have the potential to alter the performance of specific components of the economy, each of which can be considered as a potential receptor for the purposes of this assessment. This differs from other impact assessments concerning likely effects on individual environmental assets/features themselves or on the amenity of individual users of such assets (e.g. road users, hill walkers, etc.).
- 15.6 The principal aspects considered within this assessment are those where the KTR Project is potentially likely to result in significant socio-economic effects, defined through the KTR EIA Scoping Report and KTR EIA Scoping Opinion as:
 - Labour market effects, namely employment creation and gross value added (GVA).
 - Effects on relevant business sectors, principally the energy (electricity transmission), forestry, construction, and tourism and recreation sectors. The assessment has considered the potential for the KTR Project to affect the performance of each sector and thus its contribution to the local and wider economy.
- 15.7 To ensure assessment proportionality, likely effects were only assessed for the connection(s) of the KTR Project / KTR Project as a whole at spatial scale at which there is the potential for them to be considered significant within the context of the EIA Regulations. **Table 15.1** below summarises the types of socio-

economic effects assessed for both the KTR Project as a whole and, where appropriate, in relation to individual connections.

- 15.8 Development and implementation of the KTR Green Networks Scheme (GNS) as detailed in **Appendix 5.1: Forestry Design Concept** and discussed in **Chapter 7**. The overall aim will be to promote and secure additional schemes of environmental mitigation within the areas and communities affected by the OHLs, likely to comprise areas within 1-2km of the proposed OHLs, where schemes can be expected to provide landscape mitigation linked to the KTR Project which maximises benefits for communities. As potential measures, which may deliver further mitigation of primary landscape and visual effects, will be devised and developed post-consent no certainty can currently be attached to their potential delivery. As such, no specific mitigation measures which may be proposed and developed through the GNS have been considered in this assessment.

Table 15.1: Summary of Assessment Scope

Element of the KTR Project	Potential Effects Scoped in to Detailed Assessment	Potential Effects Scoped out of Detailed Assessment
KTR Project as a Whole	Construction phase effects on: <ul style="list-style-type: none">• Labour market (employment creation and GVA);• Forestry sector;• Construction sector;• Visitor accommodation occupancy; and• Tourism & recreation sector. Operational phase effects on: <ul style="list-style-type: none">• Energy sector; and,• Tourism and recreation sector (including cumulative effects)	Construction phase effects on: <ul style="list-style-type: none">• Energy sector• Cumulative effects on forestry and construction sectors• Cumulative effects on tourism & recreation sector Operational phase effects on: <ul style="list-style-type: none">• Labour market (employment creation and GVA); and• Other business sectors and land use activities.
Connections: <ul style="list-style-type: none">• Polquharity to Glenlee via Kendoon (P-G via K) including N route removal and R route (north) removal• Carsfad to Kendoon (C-K)• Earlstoun to Glenlee (E-G)• BG route deviation (BG Deviation)• Glenlee to Tongland (G-T) including R route (south) removal	Construction phase effects on: <ul style="list-style-type: none">• Recreational access; and• Tourism & recreation sector Operational phase effects on: <ul style="list-style-type: none">• Tourism & recreation sector	Construction phase effects on: <ul style="list-style-type: none">• Labour market (employment creation and GVA);• Other business sectors (forestry, construction and energy) and land use (including cumulative effects); and,• Visitor accommodation occupancy. Operational phase effects on: <ul style="list-style-type: none">• Recreational access;• Labour market (employment creation and GVA); and• Other business sectors (including Energy) and land use activities.

- 15.9 As per **Table 15.1:**
Effect Types and Phases
 - Effects on the labour market and related effects on affected economic activities (visitor accommodation occupancy and the forestry and construction business sectors) were only assessed during the construction phase and for the KTR Project as a whole, as the relatively modest level and specificity of construction activities required for each individual connection is not itself likely to result in significant effects. The assessment of likely labour market and related effects from the KTR Project as a whole focused on the construction phase only, as offsite manufacturing of infrastructure components and the low levels of operational employment and economic activity required to maintain overhead line (OHL) infrastructure once installed are not likely to result in significant socio-economic effects.

- The KTR Project represents the implementation of a single project within SPEN's business plan and funding commitments agreed with Ofgem, meaning that effects on the energy sector (i.e. provision of new electricity transmission infrastructure by SPEN) need to be assessed at regional and national levels for the KTR Project as a whole rather than for individual connections. The proposed decommissioning of a section of the existing N route and the entire R route would only be undertaken following the commissioning of proposed new infrastructure, such that no significant socio-economic effects related to potential outages are considered likely.
- Effects on public access to recreational routes were assessed during the construction phase only for each connection of the KTR Project, as any such effects would relate to individual recreational routes which intersect with individual KTR Project connection sections during their construction. As detailed below, the assessment of public access 'primary effects' from each connection, in turn supported the assessment of likely wider 'secondary' effects (from each connection and from the KTR Project as a whole) on the performance of key components of the tourism and recreation sector, one of which is tourism associated with designated (recreational) routes. This takes account of potential construction phase recreational impacts arising from the KTR Project as a whole as well as from each connection, meaning that an additional assessment of cumulative public access effects was not required. A separate assessment of construction and operational phase effects on the visual amenity of users of individual recreational routes is provided in **Chapter 7**.
- Effects on the occupancy of visitor accommodation by the construction workforce has been assessed for the KTR Project as a whole, as construction labour requirements only have the potential to be significant in EIA terms on a KTR Project wide basis due to the scale of the overall project. The occupancy of visitor accommodation essentially represents a type of 'primary' effect which could contribute to wider 'secondary' effects on the tourism and recreation sector.
- Effects on the tourism and recreation (business) sector of the economy were assessed for each connection and for the KTR Project as a whole, as the construction and operation of each could generate differential primary environmental effects, resulting in differential secondary effects on visitor numbers and associated expenditure from each connection. The assessments of likely effects from each connection and from the KTR Project as a whole took account of existing primary environmental effects (visual) from the presence of existing nearby wind farms and other infrastructure in the landscape.
- The assessment of effects on the tourism and recreation sector examined six relevant components of the sector as a whole rather than with respect to individual tourism assets: designated routes, hospitality, visitor accommodation, outdoor tourist destinations, recreational activities in the open countryside, and travelling (by road) though the open countryside, (as referred to in the Tourism and Recreation of **Appendix 15.1: Socio-economic Baseline**). This sectoral assessment has been informed by a Tourism Business Survey (as discussed in **Appendix 15.1**) and takes account of predicted likely significant 'primary' effects on individual tourism and recreational assets as assessed in other chapters of the EIA Report, namely **Chapter 7, Chapter 8, Chapter 12** and **Chapter 13**. To remain proportionate the assessment has focused on reported likely significant primary effects as these would be most likely to generate secondary effects on the tourism and recreation sector. However, for completeness all assessed primary landscape and visual effects on individual tourism and recreational assets (i.e. including effects considered not significant within the context of the EIA Regulations) have also been taken into account within the assessment.

Cumulative Effects

- The construction of the KTR Project has the potential to be undertaken in tandem with other construction projects taking place within the assessed Socio-economic Study Areas (refer to paragraph 15.17), including the cumulative developments detailed in **Chapter 3: Approach to the EIA**. However, there is no functional or economic relationship between the KTR Project and any other construction project, as the nature and procurement of some construction activities required for the KTR Project are specific to electricity transmission (e.g. erection of towers and stringing of conductors). There would therefore be no or very limited overlap with construction procurement, activities and labour requirements for other projects (e.g. wind farms). In addition, the assessment of labour market and associated economic effects presented for the KTR Project as a whole took account of additional factors including displacement of existing construction and forestry activities (i.e. other projects undertaken by existing firms and associated labour). This effectively means that whilst the construction of the KTR Project could take place concurrently with other projects, it represents a separate economic activity with its own construction labour requirements. Cumulative

labour market and associated economic effects (e.g. on the construction sector) are therefore not anticipated and have been scoped out of requiring further consideration.

- Development of multiple KTR connections (but not the full KTR Project) or of cumulative developments (e.g. proposed wind farms) in addition to an individual KTR connection, would represent incremental changes to the same primary environmental effects already identified in the tourism assessments presented. Cumulative effects on the tourism and recreation sector from multiple KTR connections and/or in combination with cumulative developments have therefore been scoped out of the assessment as there would be no new or different likely secondary cumulative effects to consider and the rationale for primary effects predicted to occur due to the KTR Project would remain the same.
- A proportionate assessment of likely operational phase cumulative secondary effects on the tourism and recreation sector from the KTR Project as a whole in combination with the operation of identified cumulative developments is reported in the KTR Project as a Whole section. Consistent with **Chapter 7**, this assessment has only been only presented for the operational phase owing to uncertainties regarding construction timescales for identified cumulative developments and on the basis that this represents a 'reasonable worse-case' scenario of likely cumulative primary effects.

15.10 To avoid duplication with other technical assessment chapters and maintain assessment proportionality, the following aspects were scoped out of this assessment based on the professional judgement of the EIA team:

- Visual amenity, traffic and noise effects on local residents, individual tourists and the local community as such effects are already assessed elsewhere in other relevant technical assessment chapters of the EIA Report where relevant.
- Effects on forestry and woodland resources (rather than on the forestry business sector), as these are assessed in **Chapter 8**.
- Demographic and housing effects, as owing to a lack of any predicted need for migration to support, or migration as a consequence of, the KTR Project, there is no potential for such effects to be significant in the context of the EIA Regulations. However, key demographic statistics relating to the assessed Study Areas are reported within **Appendix 15.1** to inform the characterisation of the labour market and thus the assessment of likely effects.

Assessment Methodology

Overall Approach

15.11 Whilst acknowledging that there are no specific methodological guidelines or requirements for socio-economic assessments within the context of EIA, the methodology for this socio-economic assessment has been informed by the principles outlined in HM Treasury's Green Book (2018), which is the authoritative reference source for undertaking economic appraisals across the UK including in Scotland. The assessment has also been informed by the professional judgement of the EIA team, drawing on previous experience of assessing similar infrastructure projects.

15.12 The following activities have been undertaken to complete the assessment:

- EIA Scoping (see above).
- Stakeholder engagement and discussions.
- Reviewing relevant legislation and policies.
- Establishing baseline conditions within relevant Study Areas to identify potential receptors and receptor groupings for consideration in the assessment.
- Defining receptor sensitivity to likely changes (e.g. in employment, business sector performance or visitor attractiveness) resulting from the KTR Project.
- Examining likely socio-economic, tourism and recreation changes from the KTR Project on identified receptors and receptor groupings, with consideration given to the magnitude, duration (e.g. short/long term, temporary/permanent) and nature (i.e. adverse/beneficial) of change. In relation to tourism and recreation, this firstly involved examining 'primary' environmental effects on relevant

tourism assets and receptor groupings before considering resultant effects on tourism and recreation.

- Determining the likely level of socio-economic, tourism and recreation effects from the KTR Project, having regard to both receptor sensitivity and the characteristics of predicted changes.
- Identifying the significance of likely socio-economic, tourism and recreation effects in the context of the EIA Regulations.
- Identifying mitigation measures to address any likely significant and other adverse¹ socio-economic, tourism and recreation effects, and to enhance the performance of the KTR Project in relation to these effects; and,
- Identifying likely residual socio-economic, tourism and recreation effects from the KTR Project taking account of all proposed mitigation measures.

Legislation and Policy Guidance

Legislation

15.13 The overarching legislative framework applicable to this EIA for the KTR Project is outlined in **Chapter 3**. The assessment has been carried out in accordance with methodology aligned with the EIA Regulations. In addition, the assessment has been carried out in accordance with the principles contained within the Land Reform (Scotland) Act 2003 and the Countryside (Scotland) Act 1967 with regards to access rights, including the protection of Core Paths and Public Rights of Way.

Policies and Guidance

15.14 This assessment has been carried out in accordance with relevant principles and requirements contained within the following policy and guidance documents:

- National Planning Framework 3 (NPF3) (2014);
- Scottish Planning Policy (SPP) (2014) (in particular, relevant provisions at paragraph 169 which outlines considerations that must be taken into account for energy infrastructure proposals, including socio-economic factors);
- Scottish Government Economic Strategy (2015);
- Scotland Forestry Strategy 2019-2029;
- Tourism Scotland 2020 and Tourism Development Framework for Scotland Refresh 2016;
- The Dumfries and Galloway Local Development 2 (2019) – in particular policy CF4: Access Routes;
- Dumfries and Galloway Local Development Plan Supplementary Guidance - Forestry and Woodland Strategy (2014)²; and,
- The Dumfries and Galloway Regional Economic Strategy 2016-2020.

15.15 This policy framework highlights the importance of considering net socio-economic effects, including supply chain effects, as valid considerations for this assessment. The provision of upgraded electricity transmission infrastructure to support the transition to a low carbon economy, impacts on communities, impacts on tourism and recreation, growth of the forestry sector, and the delivery of sustainable development are also valid considerations of relevance to this assessment.

Consultation

15.16 This assessment has been informed by the EIA Scoping Report (LUC, April 2017) and the EIA Scoping Opinion issued by the Scottish Government (October 2017) in respect of the EIA for the KTR Project. Pre-application discussions with Scottish Ministers, Local Government, and other statutory consultees including SNH, HES and SEPA have also informed this assessment, including through the Statutory Stakeholder Liaison Group (SSLG), the Community Liaison Group (CLG) and wider consultation (see **Chapter 3**).

15.17 The EIA Scoping Report identified topics where the KTR Project may give rise to likely significant effects and which were therefore proposed for the EIA and for inclusion in this EIA Report. Through the EIA Scoping Opinion and subsequent discussions with the Scottish Government, it was confirmed that the EIA would include an assessment of likely significant socio-economic effects, including specifically effects on tourism and recreation. Following receipt of the EIA Scoping Opinion, a Socio-economic Assessment Method Statement (SAMS) was issued to Dumfries and Galloway Council as the host local planning authority and 22 other interested consultees (as identified through the Scoping process) in Autumn 2018 to seek views on and discuss the proposed scope of and approach to undertaking the assessment. This included confirming the types of socio-economic effects requiring assessment, providing an overview of proposed Study Areas relative to the proposed KTR Project connections and outlining a planned tourism business survey to inform the assessment of effects on tourism and recreation. Building on this, the detailed assessment methodology was refined throughout the impact assessment process, as reported in this chapter of the EIA Report.

15.18 In undertaking the assessment, consideration has been given to the scoping responses and other consultation as undertaken. Responses to issues raised by consultees as summarised in **Table 15.2** have drawn upon a number of other chapters including **Chapter 7**, **Chapter 12** and **Chapter 13** with particular regard to access and the protection of cultural heritage assets.

Table 15.2: Consultation Responses

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Scottish Ministers	Formal Scoping Consultation	Scottish Ministers agree with the proposed scope and approach to assessing likely significant socio-economic, tourism and recreational effects.	Noted and welcomed. This assessment has been prepared based on the approach set out in the Scoping Report.
Dumfries and Galloway Council	Formal Scoping Consultation	Advised that potential effects on transport and other access networks should be assessed. It should be noted that DGC did not provide a further response to the SAMS issued post EIA Scoping.	Chapter 13: Traffic and Transport provides an assessment of likely significant effects on transport networks. Building on this, the assessment of likely tourism and recreational effects provided in this chapter considers: <ul style="list-style-type: none">• Likely direct construction phase 'primary' effects on access to and the amenity of recreational non-vehicular routes for individual users (vehicular routes are assessed elsewhere in Chapter 13).• Likely indirect effects on the visitor attractiveness and tourism potential of designated walking and recreational routes as one of six relevant components of the tourism and recreation sector. This secondary effect results from 'primary' effects including changes in visual amenity and physical access.
Scotways	Formal Scoping Consultation	Advised that potential effects on access networks should be assessed.	
Historic Environment Scotland (HES)	Formal Scoping Consultation	Advised that, in relation to the remit of HES, potential effects on scheduled monuments should be assessed.	Chapter 12 provides an assessment of likely significant effects on heritage assets including scheduled monuments. Building on this, the assessment of likely tourism and recreational effects provided in this chapter considers the likely effect of such 'primary' effects on tourism interests and recreational activities where relevant.
Visit Scotland	Formal Scoping Consultation	Advised that any potential detrimental effect on tourism whether visually, environmentally and	This chapter of the EIA Report provides a detailed assessment of likely significant effects on tourism and recreation, in terms of:

¹ In terms of the obligation within Schedule 9 of the Electricity Act 1989 to mitigate adverse effects

² Following the adoption of the Dumfries and Galloway LDP2, the Forestry and Woodland Strategy Supplementary Guidance originally prepared to accompany the first Dumfries and Galloway LDP is noted as being 'under review' (May 2020).

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		economically should be addressed in the ES.	<ul style="list-style-type: none"> Likely effects on the visitor attractiveness and tourism potential of key relevant components of the business sector (designated routes, hospitality, visitor accommodation, outdoor tourist destinations, recreational activities in the open countryside and travelling (by road) though the open countryside, as referred to in Appendix 15.1). Likely effects on visitor accommodation occupancy.
Mountaineering Scotland	Response to SAMS	Advised that development impacts on hillwalking derive primarily from landscape and visual amenity effects and noted that hillwalkers should be assessed as high sensitivity receptors.	As detailed below, separate assessments of likely effects on recreational access (to individual designated routes) and on the key components of the tourism and recreation business sector have been undertaken.
Galloway & South Ayrshire Biosphere Reserve	SAMS	Provided guidance to inform the tourism business survey, including a request to focus on cumulative landscape impacts between Castle Douglas and Dalmellington and to ensure sufficient coverage of businesses reliant on tourists travelling through the countryside.	This sectoral approach builds upon but avoids duplication with the assessment of 'primary' effects (e.g. changes in visual amenity) on individual environmental receptors as reported in other chapter of the EIA Report. The sectoral assessment has also been informed by the findings of the tourism business survey, which included questions regarding cumulative landscape impacts on tourism and the influence of existing OHL infrastructure on the performance of the tourism and recreation sector.
British Equestrian Society	SAMS	Advised regarding the sensitivity of equestrian users to development impacts and provided general guidance to minimise development impacts on equestrian routes.	
Galloway Activities Centre	SAMS	Raised concerns regarding perceived impacts on tourism from the loss of scenic views and requested consideration be given to undergrounding.	

Study Area

15.19 The following Study Areas have been adopted in this assessment as shown on **Figure 15.1** and **Figure 15.2**:

- Two Socio-economic Study Areas have been adopted to assess likely labour market and associated socio-economic effects on the forestry, energy and construction key business sectors; a Local Socio-economic Study Area comprising 30 minutes' drive-time of the KTR Project (i.e. from the proposed connections) and a Wider Socio-economic Study Area comprising the entire Dumfries and Galloway local authority (see **Figure 15.1**). Beyond this any likely socio-economic effects would be limited, and it is considered that there is no potential for such effects to be significant in the context of the EIA Regulations.
- A 10km Tourism and Recreation Study Area (5km each side of the proposed KTR Project) has been adopted specifically to assess likely effects on the tourism and recreation sector, visitor accommodation occupancy and access to recreational routes. This aligns with the Study Area adopted in the landscape and visual impact assessment and cultural heritage assessment to assess likely 'primary' visual and setting effects from the KTR Project with the potential to generate 'secondary' tourism and recreation effects. Within the Tourism and Recreation Study Area a 4km Business Survey Search Area (2km each side of the proposed KTR Project route) was also used to

identify tourism businesses located closest to the KTR Project and thus most likely to experience potential socio-economic effects (see **Figure 15.2**). As the tourism business survey informed the assessment of likely effects on tourism and recreation, rather than being the assessment itself, 4km was selected as a threshold to ensure that survey effort remained proportionate whilst still capturing the views of local tourism businesses. Promoted walking and driving routes within the Tourism and Recreation Study Area, including Core Paths, are illustrated on **Figure 7.10.1-7.10.3**.

Desk Based Research and Data Sources

- 15.20 A desk-based assessment was undertaken to identify relevant economic indicators, tourist/visitor businesses, destinations, recreational routes and aspects of the local economy which may be impacted (positively or negatively) by the KTR Project. The following socio-economic indicators have been considered in relation to the assessed Study Areas:
- current and projected demographic characteristics, including population and age structure;
 - current and projected labour market characteristics, including working age population profile (level of economic activity, occupational and skills profiles) and the workplace economy profile (employment by industries and earnings);
 - the socio-economic characteristics of settlements within the Local and Wider Socio-economic Study Areas and in the Tourism and Recreation Study Area, including with respect to existing economic uses and activities as these are considered to represent 'clusters' of socio-economic activity; and,
 - the characteristics and performance of relevant key business sectors, including in terms of their strategic importance, employment profile and gross value added (GVA) contribution to the economy.
- 15.21 The data used to prepare the baseline profile reflects the range of publicly available statistics applicable to the Local and Wider Socio-economic Study Areas (including the Tourism and Recreation Study Area). Key data sources used to inform the assessment include the Office for National Statistics, Census Scotland, D&GC publications, Visit Scotland publications and Experian Forecasts³.

Field Survey

- 15.22 A desk study undertaken by Stantec defined a Tourism Business Survey Search Area extending to 2km around the KTR Project connections and the sections of N and R routes proposed to be removed. A site visit was conducted across the Tourism Business Search Area on 26th September 2018, 94 individual tourism businesses with publicly available contact details were identified and the Tourism Business Survey was then conducted by telephone in autumn 2018. Follow-up Surveys were subsequently undertaken with certain tourism businesses within the Tourism Business Search Area which were not originally identified. Relevant findings of the Tourism Business Survey are noted in the Existing Conditions and Assessment sections below.

Modelling

- 15.23 As outlined in the Socio-economic Impact Assessment Method Statement (Stantec, 2018), relevant socio-economic data was inputted to a bespoke economic model developed by Stantec to predict the gross and net socio-economic effects, including with respect to expenditure and employment, from the construction and operation of the KTR Project. As detailed below, this model incorporated construction employment data provided by SPEN and applied economic multipliers and additionality assumptions.

Approach to Assessment

Receptor Identification and assessment of Sensitivity

- 15.24 The desk-based assessment focused on characterising current socio-economic, tourism and recreation baseline conditions within the assessed Socio-economic Study Areas. This led to the identification of relevant receptors or receptor groupings to consider within the assessment. As outlined below, each identified receptor was assigned a sensitivity value (Negligible to High) in relation to likely changes resulting from the KTR Project.

³ Experian Forecasts provide forecasting, analysis and insight into the economic and demographic indicators across the UK.

- 15.25 For employment effects, the availability of labour and skills is critical in accommodating the demands, needs and requirements of the KTR Project. The sensitivity of the labour market, therefore, was defined in relation to:
- the availability of skilled labour in the Local and Wider Socio-economic Study Areas relative to national averages;
 - the proportion of employment in relevant sectors (e.g. construction workers) within the Local and Wider Socio-economic Study Areas;
 - the availability of labour (including the unemployed) within the Local and Wider Socio-economic Study Areas; and,
 - relevant education and training provision, including existing and proposed programmes provided by institutions serving the Local and Wider Socio-economic Study Areas.
- 15.26 Plentiful labour and/or skills availability results in a low sensitivity, whilst limited labour and/or skills availability results in a high sensitivity. The criteria adopted to define the sensitivity of the labour market are shown in **Table 15.3** below.

Table 15.3 Employment Sensitivity

Sensitivity	Example
High	There is a shortfall of appropriate labour with directly relevant and transferable skills. The KTR Project would therefore lead to excessive labour market pressure and substantial distortions (i.e. skills and capacity shortages, import of labour, wage inflation).
Medium	There is a low supply of appropriate labour with directly relevant and transferable skills. The KTR Project may therefore lead to labour market pressure or distortions.
Low	There is a readily available supply of appropriate labour with directly relevant and transferable skills. The KTR Project is therefore unlikely to lead to labour market pressure or distortions.
Negligible	There is an existing surplus of readily available appropriate labour with directly relevant and transferable skills. The KTR Project would therefore not lead to labour market pressure or distortions.

- 15.27 For wider socio-economic effects in terms of economic growth and the performance of key business sectors, sensitivity was determined with reference to the *importance* of receptor(s) likely to be affected and the susceptibility of the receptor or receptor grouping (i.e. the relevant part of the economy) to changes as a result of the KTR Project. The sensitivity (Negligible to High) of relevant receptors was therefore defined on a case by case basis using relevant baseline information, as detailed in **Appendix 15.1**.
- 15.28 As detailed in **Appendix 15.1** the assessment of likely tourism and recreation effects was underpinned by the identification of key components of the tourism and recreation business sector with the potential to be affected by the KTR Project. Notwithstanding the unique characteristics and offering of all individual tourism and recreational assets across the Tourism and Recreation Study Area and in close proximity to this connection, receptors of relevance to this assessment can be categorised under 6 broad groupings, each with different sensitivity to changes in visitor attractiveness as detailed in **Appendix 15.1**:
- Designated walking and recreational routes;
 - Outdoor tourist destinations;
 - Hospitality;
 - Visitor Accommodation;
 - Recreational activities in the open countryside; and,
 - Tourists travelling (by road) through the open countryside.

- 15.29 These receptor groupings have been considered in each of the assessments presented below for each KTR connection and for the KTR Project as a whole. For each connection, relevant individual tourism and recreational assets with the Tourism and Recreation Study Area are listed as part of the description of the baseline conditions.
- 15.30 At the time of writing (August 2020), the tourism and recreation sector has recently been badly impacted by the COVID-19 pandemic, with almost complete lockdown of the sector from March – July 2020. Research jointly commissioned by the UK devolved national tourism agencies⁴ (July 2020) indicates that with the easing of lockdown measures there is evidence of a short term increase in bookings for self-catered accommodation and 'staycation' activities for the remainder of the 2020 season, with particular demand in Scotland, but international tourism remains heavily restricted and the overall level of tourism activity in the UK is likely to remain substantially below pre-pandemic levels for several years. The tourism and recreation sectoral profile presented in **Appendix 15.1** should therefore be considered as representing a 'worst-case' scenario, as in reality the performance of the sector is likely to remain well below normal levels over the medium term.
- 15.31 In relation to the assessment of 'primary' effects on recreational access during the construction phase of the KTR Project, the sensitivity of impacted designated walking routes was assigned based on their recognition in policy terms at the national level (e.g. within NPF3) and the level of statutory protection afforded to them (for example under the Land Reform (Scotland) Act 2003).
- 15.32 In relation to the assessment of wider 'secondary' effects on the identified key components of the tourism and recreation sector, the sensitivity of each receptor grouping was assigned based on both the importance of identified tourism assets within the Tourism and Recreation Study Area *and* the susceptibility of changes in the visitor attractiveness of such assets ultimately catalysing changes in visitor numbers and tourist expenditure. This captures the elasticity of demand of each receptor grouping and the key question to underpin the identification of receptor sensitivity was therefore:
- "To what extent would any change in the visitor attractiveness and tourism potential of this component of the tourism and recreation sector (i.e. this receptor grouping) be likely to result in a change in visitor numbers and expenditure?"*
- 15.33 This socio-economic based sensitivity level differs from user-based landscape, visual, cultural heritage and access sensitivities assigned to individual tourism and recreation related receptors, as identified separately in relevant technical assessment chapters of this EIA Report. Of note, sensitivity ratings assigned to the tourism and recreation sector have not been adjusted in response to the COVID-19 pandemic, as whilst sectoral performance is presently substantially reduced compared with pre-pandemic levels this does not detract from the continued importance of the sector to local, regional and national economies.

Magnitude

- 15.34 The magnitude of change from the construction and/or operation of the KTR Project on identified socio-economic, tourism and recreation receptors were determined using the criteria set out in **Table 15.4**.

Table 15.4: Magnitude of Change Criteria

Magnitude of Change	Type of Change	Criteria
High	Adverse	Employment changes: the number of jobs ⁵⁶ lost in the assessed Study Area would be 250 or greater (based upon the EU definition of small and medium enterprises ⁷). All other socio-economic changes: adverse changes to identified receptors would be observed on an international, national or regional scale. Changes are likely to be experienced over the long term (i.e. 5+ years).
	Beneficial	Employment changes: the number of jobs created in the assessed Study Area would be 250 or greater (based upon EU definition of small and medium enterprises).

⁴ COVID-19 Consumer Tracking Report – Scotland Level Profiling Report (Mid-June to Mid-July Summary): <https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers/weekly-tracker/covid19-consumer-tracking-scotland-mid-june-to-mid-july-monthly.pdf>

⁵ A 7th key component of the tourism and recreation sector, indoor tourism destinations, was scoped out of this assessment on the grounds of having no possibility to experience likely significant 'secondary' effects on visitor attractiveness or tourism potential as a result of 'primary' environmental effects generated by the KTR Project.

⁶ Person Years Equivalent (PYE) jobs over the construction period, as defined in paragraph 15.34.

⁷ http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

Magnitude of Change	Type of Change	Criteria
		All other socio-economic changes: beneficial changes to identified receptors would be observed on an international, national or regional scale. Changes are likely to be experienced over the long term (i.e. 5+ years).
Medium	Adverse	Employment changes: the number of jobs lost in the assessed Study Area would be 50 or greater, but fewer than 250. All other socio-economic changes: noticeable adverse changes, judged to be important at a Local scale, to identified receptors. Changes are likely to be experienced over the medium term (i.e. 3-5 years).
	Beneficial	Employment changes: the number of jobs created in the assessed Study Area would be 50 or greater, but fewer than 250. All other socio-economic changes: noticeable beneficial changes, judged to be important at a Local scale, to identified receptors. Changes are likely to be experienced over the medium term (i.e. 3-5 years).
Low	Adverse	Employment changes: the number of jobs lost in the assessed Study Area would be 10 or greater, but fewer than 50. All other socio-economic changes: small scale adverse changes to identified receptors at the Local level only. Changes are likely to be experienced over the short term (i.e. 1-2 years).
	Beneficial	Employment changes: the number of jobs created in the assessed Study Area would be 10 or greater, but fewer than 50. All other socio-economic changes: small scale beneficial changes to identified receptors at the Local level only. Changes are likely to be experienced over the short term (i.e. 1-2 years).
Negligible	Adverse	Employment changes: the number of jobs lost in the assessed Study Area would be less than 10. All other socio-economic changes: very small-scale adverse changes to identified receptors at the Local level only. Changes are likely to be experienced over the short term (i.e. less than 6 months).
	Beneficial	Employment changes: the number of jobs gained in the assessed Study Area would be less than 10. All other socio-economic changes: very small-scale beneficial changes to identified receptors at the Local level only. Changes are likely to be experienced over the short term (i.e. less than 6 months).
No Change		No change would be perceptible, either beneficial or adverse.

- 15.35
- As detailed in **Table 15.4**, whilst likely employment changes were assessed on a quantitative basis, other likely socio-economic changes (including effects on relevant key business sectors) required to be examined qualitatively on a case by case basis:
- In relation to the forestry, construction and energy sectors, the key question which underpinned the assessment was: *"To what extent would the socio-economic activity or outcome generated by the proposed development be likely to result in a change in the performance of the sector within the assessed Study Area?"*
 - In relation to 'primary' effects on recreational access, the key question which underpinned the assessment was: *"Taking account of proposed embedded mitigation, to what extent would the proposed development necessitate changes in public access and/or infringe upon statutory or policy protections afforded to designated routes?"*
 - In relation to the tourism and recreation sector, having established the sensitivity of the key components of the sector (as detailed in **Appendix 15.1**), the type and level of 'primary' environmental or socio-economic changes generated by the KTR Project which could catalyse 'secondary' changes in visitor attractiveness and tourism potential (and thus visitor numbers and visitor expenditure) was then examined. In doing so, the key question which underpinned the assessment was: *"To what extent would change in landscape character, visual amenity, heritage setting and/or physical access (as assessed in relevant chapters of this EIA Report) be likely to result in a change in the visitor attractiveness and tourism potential of tourism and recreation receptors, in terms of visitor numbers and expenditure?"*

Significance

- 15.36
- A matrix-based approach was adopted to consider the sensitivity of identified receptors in tandem with the likely magnitude of socio-economic change resulting from the KTR Project. This method, informed by the professional judgement of the EIA team, allowed the level and significance in EIA terms of all likely socio-economic effects to be determined on a consistent basis. The EIA significance matrix used in this assessment is shown in **Table 15.5** below.

Table 15.5: Significance Criteria

Sensitivity	Magnitude of Change			
	High	Medium	Low	Negligible
High	Major	Moderate	Minor	Minor
Medium	Major	Moderate	Minor	None
Low	Moderate	Minor	None	None
Negligible	Moderate	Minor	None	None

- 15.37
- For the purposes of this assessment, **major** and **moderate** effects are considered **significant** in the context of the EIA Regulations. Significance of effects assessed as 'none' include likely changes of a low or negligible magnitude of change which, depending on receptor sensitivity, would not be perceptible.

Assumptions and Limitations

- 15.38
- The assessment methodology is underpinned by a series of key assumptions, as detailed below. These assumptions have been adopted in accordance with relevant guidance and best practice for undertaking economic appraisals, meaning that the assessment methodology is considered to be robust.

Gross and Net Employment

- 15.39
- To calculate the magnitude of change of employment effects, all predicted employment effects were assessed as Person Year Equivalent (PYE) jobs. This method allowed the number of people on sites along the KTR Project over the whole construction period to be estimated as annual equivalent full-time posts. There is no standard definition of the quantity of person-hours which constitute a PYE job. For the purposes of this assessment 37.5 hours was assumed to be a standard working week, with employees receiving 5.6 weeks of holiday pay.
- 15.40
- To assess the scale of additional construction jobs supported by the proposed development, additionality factors based on the baseline review of the labour market have been applied to gross employment figures. Relevant economic appraisal guidance and professional judgment based on economic impact assessment experience has been used to estimate values for:
- Deadweight: what would happen in the absence of the proposed development.
 - Leakage: the proportion of employment opportunities accessed by people living outside the Study Area.
 - Displacement: the proportion of proposed development benefit accounted for by a reduction in benefit elsewhere.
 - Multipliers: to estimate further economic activity associated with additional income and supplier purchases.
- 15.41
- Additionality factors have been estimated for each broad employment activity. These are defined and presented as part of the assessment in the **KTR Project as a Whole: Assessment of Effects** section.

Gross Value Added (GVA) Calculations

- 15.42
- GVA resulting from construction activities has been assessed by assigning a GVA per-worker parameter to each broad activity of employment. These parameters are sourced from the Scottish Annual Business Statistics (SABS) published by the Scottish Government. The SABS (2019) presents 2017 data. These values have been uprated to 2020 prices using the GDP deflator. **Table 15.6** below presents the GVA parameters used in the assessment. It has been assumed that the Dumfries and Galloway GVA (i.e. the

Wider Socio-economic Study Area GVA) parameters apply equally to the Local Socio-economic Study Area due to a lack of sub-regional data.

Table 15.6 GVA Parameters

Broad Activity	Parameter Assumed	Source	GVA per worker
Tree Clearance	Primary Industries	2019 Scottish Annual Business Statistics divided by 2019 Business Register and Employment Survey jobs figures	£97,683
Construction	Civil Engineering		£54,333

Future Baseline in the Absence of Development

- 15.43
- In the absence of the KTR Project, operational uses and economic activities within the assessed Local and Wider Socio-economic Study Areas are expected to remain broadly unchanged. However, it is expected that land allocations within the adopted Dumfries and Galloway LDP2 (2019) will be built out over time, with further wind energy development also taking place within identified areas of search for wind farms.
- 15.44
- In relation to climate change, the UKCP18⁸ projects the following for Dumfries and Galloway:
 - an increase in summer and winter temperatures;
 - an increase in dry spells, particularly in summer months;
 - an increase in winter rainfall; and
 - an increase in wind speeds, including an increase in the frequency of winter storms.
- 15.45
- These changes are likely to affect the tourism and recreation sector, in particular by accentuating the existing seasonal nature of outdoor recreational activities and associated visitor accommodation bookings in the summer months (refer to **Appendix 15.1** for details).

Embedded Mitigation

- 15.46
- As detailed in **Chapter 2: The Routeing Process and Design Strategy**, the main strategy for minimising adverse environmental effects of the KTR Project has been avoidance through careful routeing.
- 15.47
- The embedded mitigation measures forming an integral part of the KTR Project are introduced in **Chapter 2: The Routeing Process and Design Strategy**, **Chapter 3**, and **Chapter 5** of the EIA Report. Mitigation measures which will be delivered during the construction process via the Construction and Decommissioning Environmental Management Plan (CDEMP) are set out in **Appendix 5.4** (see **Appendix 5.2: Embedded and Additional Mitigation and Monitoring Measures** and **Appendix 5.4: Example Environmental Management Plan**).
- 15.48
- The following measures to mitigate primary environmental effects which could otherwise generate secondary effects on tourism and recreation are considered 'embedded mitigation' (as discussed in **Chapter 3**) for the purposes of this specific assessment.

Construction Phase

- SPEN (and appointed contractors) will continue ongoing work with DGC and the education sector (primary, secondary and tertiary) within the Wider Socio-economic Study Area to maximise local employment, educational and training opportunities during the construction of the KTR Project.
- Construction activities will be conducted in accordance with the CDEMP and a Construction Traffic Management Plan (CTMP) to minimise temporary primary effects on public access, visual amenity and landscape character during the construction phase of the proposed development.

- Implementation of localised diversions (i.e. avoiding formal closure) and managed crossing points where proposed temporary construction access tracks intersect with existing Core Paths and other recreational routes. It is envisaged that any required localised diversions would be formed within the immediate vicinity of the existing affected route by stripping vegetation to create a passable surface on similar topography, with the length of any required diversions or crossing points kept to a minimum.
- Signage, way markers and, if required, banksmen, would be deployed to assist walkers using any localised diversion or crossing points during intensive periods of construction activity.

15.49 The above mitigation framework has been developed to ensure all recreational routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance) during the construction of the KTR Project. This framework includes undertaking localised measures insofar as required to maintain continuity of access in relation to construction of all KTR connections.

Operational Phase

- Restocking areas of forestry lost due to windthrow in line with the Scottish Government Forestry and Land Management (Scotland) Act 2018 and felling licences determined by Forestry & Land Scotland (FLS) (refer to **Chapter 8** and **Appendix 5.1**). Of note, this restocking has been treated as additional mitigation for the purposes of identifying likely significant landscape and visual effects within **Chapter 7**. As the mitigation informed the assessment of relevant primary effects (landscape and visual) rather than being developed specifically to address secondary effects on the tourism and recreation sector, for the purposes of this specific assessment windthrow restocking is treated as embedded mitigation.
- Maximising the distance of the KTR Project route from businesses and properties (wherever possible).
- With reference to the SHETL 2003 Notes on Rule 7 of the Holford Rules and in light of public engagement feedback, and the emerging findings of the landscape and visual assessment, opportunities to underground existing sections of 11kV and 33kV wood pole distribution OHL within close proximity of the KTR Project route were explored. Of note, the tourism business survey which informed the assessment of likely tourism and recreational effects included questions specifically asking respondents to consider the impact of these existing OHLs on the current performance of their business. This survey was undertaken prior to the development of specific 11kV distribution OHL undergrounding mitigation proposals for the KTR Project, which have since been incorporated as embedded mitigation measures. The alignment of the proposed underground cable routes is shown on **Figure 4.12**. with further details provided in **Chapter 4**. This assessment assumes that proposed undergrounding cable works and any associated reinstatement works will be undertaken as part of the enabling works for the P-G via K connection, largely prior to the main KTR Project construction activities commencing.

Polquhanity to Glenlee via Kendoon

- 15.50
- The Polquhanity to Glenlee via Kendoon (P-G via K) connection is shown in **Figure 4.2**. The connection comprises the erection of a new 132kV double circuit OHL between Polquhanity (situated approximately 3km north of the existing Kendoon substation) and the existing Glenlee substation, via the existing Kendoon substation. This connection extends to approximately 10.1km in length and, will connect to the recently constructed OHL which runs north from Polquhanity to the existing New Cumnock substation located 3km northeast of Dalmellington.
- 15.51
- The assessment of this connection also considers likely effects associated with the removal of the 'N' route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and part of 'R' route between Kendoon and Glenlee (comprising towers R000A-R29). This decommissioning is part of the KTR Project and it is proposed that the decommissioning will be completed within 18 months of commissioning the new OHL components of the KTR Project.

⁸ UK Climate Projections (2019) [online], available at: <http://www.metoffice.gov.uk/research/collaboration/ukcp>

Existing Conditions

- 15.52 Existing settlements in close proximity to the P-G via K connection include the small settlements of Glenlee, Dundough and Kendoon. There are also smaller residential clusters, hamlets and farm buildings in the locality. The area is characterised by forested upland and valley landscapes forming the Upper Dale, Foothills with Forest and Flooded Valley Landscape Character Types, as detailed within **Chapter 7**.
- 15.53 A number of local roads are located in close proximity to this connection, including the A713 Galloway Tourist Route and Scottish Castle Route at Polquhanity, both of which are considered important for tourists travelling through the countryside. As detailed in **Chapter 13**, other roads with the potential to be affected by this connection are:
- A712 (between A75 - A762, A762 - A713, A713 – Corsock, and Corsock - A75);
 - A711 (between A75 - A762);
 - A702 (between A713 – Moniaive, and Moniaive - A76);
 - A762 Scottish Castle Route (between A713 - U2s); and,
 - B741 (between A76 and Gateside Road).
- 15.54 A number of Core Paths intersect with or overlap with proposed public road construction routes for the P-G via K connection of the KTR Project, including:
- the Bardennoch Trail linking Carsphairn to Dundough (Core Path 164);
 - the Glenlee path (Core Path 30);
 - the Mulloch Hill path (Core Path 224); and,
 - The Dalry to New Galloway path (Core Path 21).
- 15.55 As detailed in **Chapter 13**, other recreational routes within the vicinity of the P-G via K connection are:
- National Byway Cycle Route;
 - Southern Upland Way.
- 15.56 As detailed in **Appendix 15.1**, tourism and recreation is recognised as an important component of the economy within Dumfries and Galloway (the Wider Socio-economic Study Area). The tourism and recreation sector is also important within the Local Socio-economic Study Area and the identified Tourism and Recreation Study Area. Aside from the recreational routes noted above, other key tourism assets located within close proximity of the P-G via K connection identified through the Tourism Business Survey or other assessments presented in this EIA Report include⁹:
- Galloway Forest Park and Dark Sky Park;
 - Public footpath and footbridge access to Kendoon (east of A713);
 - Mulloch Hill (170m AOD), situated south-east of St John’s Town of Dalry;
 - 59 heritage assets that have predicted (Bare-Ground) visibility of the P-G via K connection (see **Appendix 12.8**), including six Scheduled Monuments, one Category A Listed Building and one Category B Listed Building; and,
 - Visitor accommodation including Glenhoul Brae Holiday Cottage, Cloud Cuckoo Lodge, Cleughbrae Cottage and 5 Wayside.
- 15.57 As noted above, identified tourism assets of relevance to this assessment, such as those identified above, can be categorised under six broad groupings. As detailed in **Appendix 15.1**, each receptor grouping has a different sensitivity to changes in visitor attractiveness:
- Designated walking and recreational routes: Medium sensitivity;
 - Outdoor tourist destinations: Low – Medium sensitivity;
 - Hospitality: Low sensitivity;
 - Visitor Accommodation: Medium sensitivity;

- Recreational activities in the open countryside: Low – Medium sensitivity; and,
- Tourists travelling (by road) through the open countryside: Low sensitivity.

- 15.58 These receptor groupings and associated sensitivities to changes have been used in the assessments for each connection and for the KTR Project as a whole, presented below. For each connection, relevant individual tourism and recreational assets with the Tourism and Recreation Study Area are listed as part of the description of the baseline conditions.

Construction Effects

Employment and Economic Activity

- 15.59 As detailed in **Chapter 4** and **Chapter 5**, the construction of this connection will require the following main activities, which would give rise to direct and indirect capital expenditure and employment during construction of the P-G via K connection:
- Timber clearance (within wayleave): 29.81ha of timber to be felled, resulting in 4967.5tonnes of timber produced.
 - Timber clearance (windthrow areas): 20.9ha of timber to be felled, resulting in a total of 6237tonnes of timber to be produced.
 - OHL construction.
 - Stringing of conductors and commissioning.
 - Land reinstatement; and,
 - Decommissioning (N and R route (north)): removal of steel towers and conductors.
- 15.60 Associated employment and economic effects are assessed at the KTR Project level in the assessment of effects of the KTR Project as a Whole section below.

Recreational Access

- 15.61 Construction traffic routes and access tracks required to construct the P-G via K connection and complete all associated works would intersect with the following non-vehicular Core Paths and other recreational routes:
- Core Path No. 164 Bardennoch Trail Pack Road; and,
 - Southern Upland Way (Dumfries and Galloway Core Path No. 504).
- 15.62 Individual users of these routes could experience temporary and localised disruption to footpath access during the construction period. To ensure safe construction practices and in accordance with the CDM Regulations 2015 and the Land Reform (Scotland) Act 2003 (as amended), it may be necessary to implement temporary diversions or managed crossing points in respect of these recreational routes, particularly during the undertaking of intensive construction activities. The proposed embedded mitigation set out above will be implemented such that no formal closures of Core Paths are anticipated to be required.
- 15.63 Taking account of proposed mitigation measures it is considered that the magnitude of change in public access (i.e. inconvenience to path users but continuity of access) would be Low. Coupled with the Medium sensitivity of the affected public access receptors, a temporary **Minor Adverse (not significant)** effect in terms of restrictions to recreational public access is predicted. Wider effects on the tourism and recreation sector, including from any change to the visitor attractiveness and tourism potential of designated walking and recreational routes, are examined below.

Tourism and Recreation Sector

- 15.64 In accordance with the methodology detailed above, **Table 15.7** below provides a proportionate assessment of likely construction phase effects on each assessed receptor grouping of the tourism and recreation sector of the P-G via K connection. This assessment considers likely ‘secondary’ effects on the sector as a whole, rather than assessing ‘primary’ effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects

⁹ Note that this is not an exhaustive list.

where relevant, but it applies equally to other receptors of the same grouping. The assessment takes account of likely effects associated with the removal of the N route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and R route (north) between Kendoon and Glenlee (comprising towers R000A-R29).

Table 15.7 Assessment of Construction Phase Effects on Tourism and Recreation Sector (Polquhanity-Glenlee via Kendoon)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
Designated walking and recreational routes	Medium	Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Core Path 164, Bardennoch Trail Pack Road (VP 2: Dundough at access to Polmaddy): Moderate Adverse at VP with Minor Adverse visual effect on overall Core Path. Public footpath and footbridge access to Kendoon (VP 4: Footbridge access to Kendoon): Major Adverse. Southern Upland Way: Moderate Adverse near Waterside Hill (VP 7) and Minor Adverse near St John's Town of Dalry (VP 8), with overall Moderate Adverse visual effect. <p><i>Transport and Access (Primary) Effects – taking account of CTMP (Chapter 13) and Recreational Access Assessment above</i></p> <ul style="list-style-type: none"> Core Path No. 164 Bardennoch Trail Pack Road: Minor Adverse Core Path 504 (the Southern Upland Way), Core Path 30, Core Path 164 and the National Byway Cycling Route: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 7 concludes that the construction of this connection is likely to result in a limited number of significant adverse visual effects along localised sections of designated walking and recreational routes. The assessment provided in Chapter 13 concludes that only Minor effects on physical access to the Core Path network and other designated routes are likely. All effects would be temporary during the construction phase.</p> <p>It is noted that irrespective of temporary and localised changes in visual amenity, all recreational routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance). As detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained, whilst temporary and intermittent visual effects alone would not inhibit access or greatly alter the recreational or experiential value of these routes. As assessed above, temporary changes in public access to the designated routes likely to be affected by the</p>	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<p>construction of this connection is itself considered to represent a temporary Minor adverse 'primary' effect on recreational access.</p> <p>On this basis and taking account of all relevant 'primary' environmental effects, the construction phase of this connection is considered likely to result in temporary low magnitude of change to the visitor attractiveness and tourism potential designated walking and recreational routes. Having regard to the medium sensitivity of this receptor grouping, the construction of this connection is likely to result in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Negligible to Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Multiple effects assessed on areas of the Galloway Forest Park and Galloway Forest Dark Sky Park (including LCTs 165. Upper Dale - Dumfries & Galloway and 176. Foothills with Forest - Dumfries & Galloway) <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none"> No likely significant adverse effects predicted <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Irrespective of temporary changes in visual amenity at outdoor tourist destinations such as the Galloway Forest Park, the destinations will continue to provide the same tourism offering based around localised special features or characteristics. As detailed in Chapter 13 the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Temporary and intermittent visual effects are not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter the recreational or experiential value. On this basis, the construction phase of this connection is considered likely to have at most a temporary Low magnitude of change on this receptor grouping where outdoor tourist destinations experience primary environmental effects, resulting in at most a Minor Adverse effect.</p>	None to Minor Adverse (not significant)
Hospitality	Low	Negligible	<p>Acknowledging the small sample size, the Tourism Business Survey indicates that of the four hospitality receptors which responded to the Tourism Business Survey for the whole of the KTR Project, none anticipate an adverse impact on visitor numbers due to the KTR Project during its construction.</p> <p>No change is predicted on hospitality businesses during the construction period, as the primary draw to such establishments is not visual amenity and on an aggregate level,</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<p>any temporary decline in tourist trade during particularly intensive periods of construction is likely to be offset by increased passing trade from construction workers.</p> <p>It is considered that the construction of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase is considered likely to result in a temporary Negligible magnitude of change for this receptor grouping. Taking account of the low sensitivity of this receptor grouping, the significance of the likely effects is assessed as None.</p>	
Visitor Accommodation	Medium	Low Beneficial	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none"> Glenhoul Brae Holiday Cottage Cloud Cuckoo Lodge Cleughbrae Cottage 5 Wayside <p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Moderate Adverse Foothills with Forest LCT: Minor Adverse Flooded Valley LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The construction of steel lattice towers and OHLs is likely to be visible from visitor accommodation businesses along this connection. Along the P-G via K connection, identified accommodation businesses are small self-catering facilities with low capacity, turnover, and staffing requirements. Any changes to the operation of such businesses during construction of the P-G via K connection are unlikely to induce wider sectoral effects.</p> <p>Temporary changes in visual amenity are unlikely alone to have a significant impact on the functioning of relevant businesses. The findings from the Tourism Business Survey indicate that over 85% of Visitor Accommodation businesses in the Tourism and Recreation Area for the whole KTR Project anticipate either no change or a positive impact from the KTR Project during its construction. Temporary changes in occupancy during the construction period are assessed for KTR Project as a whole below. On this basis, the construction phase of this connection is considered likely to have a temporary Low beneficial magnitude of change on this receptor grouping, resulting in a Minor beneficial temporary effect.</p>	Minor Beneficial (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
Recreational activities in the open countryside	Low to Medium	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Dundeugh at access to Polmaddy (VP 2): Moderate Adverse Polmaddy settlement (VP3): Minor Adverse Mulloch Hill (VP 9 - representative of other hill summits with theoretical visibility): Minor Adverse Upper Dale LCT: Moderate Adverse Foothills with Forest LCT: Minor Adverse Flooded Valley LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside, including walking, cycling, hillwalking and horse-riding.</p> <p>It is acknowledged that the construction of this connection would result in some temporary adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, it is not considered that any such effects would result in any associated adverse effects on recreational activities taking place in the Tourism and Recreation Study Area. Irrespective of temporary changes in visual amenity, land outwith construction working areas and associated compounds will continue to remain available for recreational use, and as detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Taking account of the temporary nature of construction and all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, the construction phase of this connection is not likely to have a discernible impact on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None.</p>	None (not significant)
Tourists travelling (by road) through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> A713 Galloway Tourist Route (VP1 – Layby near Polquhanity): Major Adverse Upper Dale LCT: Moderate Adverse Foothills with Forest LCT: Minor Adverse 	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<ul style="list-style-type: none"> Flooded Valley LCT: Minor Adverse B7000 west of Glenhoul Hill (VP 5): Moderate Adverse) A762 north of Glenlee (VP 10): Moderate Adverse <p><i>Transport and Access Driver Delay Effects on Classified Roads - taking account of CTMP (Chapter 13)</i></p> <ul style="list-style-type: none"> 59,190 movements, of which 33,934 movements will be HGV movements over the 51 months construction period. A713 Galloway Tourist Route: Minor Adverse between A702 and A712, A712 and B795 and between B795 and A75. A711: Minor Adverse between A75 and A762. A762: Minor Adverse between A713 and U2s. B741: Minor Adverse between New Cumnock and Dalmellington. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 13 concludes that with the implementation of measures in a CTMP, only Minor temporary effects would occur on the local road network in relation to driver delay. Whilst the assessment in Chapter 7 – LVIA concludes that the construction phase would generate a limited number of temporary significant landscape and visual effects on individual road users, these would be experienced within the context of a longer travel journey over a varied landscape setting that may also include other construction related activities. Additionally, the primary focus of drivers would be on the road rather than surrounding landscapes.</p> <p>Taking the above factors into account and the temporary nature of the construction phase, it is considered that whilst visibility of construction activities could momentarily affect the experience of tourists travelling in the open countryside, this would be insufficient to materially affect the overall tourism experience and thus the attractiveness of Dumfries and Galloway as a tourist destination, including for repeat visits. The construction phase of the P-G via K connection is therefore not likely to have a discernible effect on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None.</p>	

are likely to experience effects in relation to their visitor attractiveness and tourism potential which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on tourism and recreation are likely to occur as a result of the construction of this connection. As per **Table 15.1**, construction phase effects on the forestry, construction and energy sectors have been scoped out of the assessment for individual connections as any potential effects are unlikely to be significant in the context of the EIA Regulations.

Proposed Mitigation

- 15.66 Beyond the public access mitigation framework outlined in the 'Embedded Mitigation' section (**paragraph 15.46**), no additional mitigation measures are proposed or considered necessary to address the assessed likely effects from the P-G via K connection.

Residual Construction Effects

- 15.67 As no additional mitigation measures are proposed, there is no change to likely effects on receptor groups as assessed in above. There are no likely significant residual effects "primary" effects on recreational access, or likely significant residual effects of construction of the P-G via K connection on the tourism and recreational sector.

Operational Effects

- 15.68 **Table 15.8** provides a proportionate assessment of likely effects on each tourism and recreation sector receptor group during the operational phase of the P-G via K connection of the KTR Project. This assessment considers likely 'secondary' effects on the sector as a whole, rather than assessing 'primary' effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects where possible, but it applies equally to other receptors of the same grouping. As noted above, this assessment takes account of likely effects associated with the removal of the 'N' route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and R route (north) between Kendoon and Glenlee (comprising towers R000A-R29), and assumes these lines have been removed. In other words, the KTR Project will effectively replace the OHL network in this section, albeit with different locational and physical characteristics, rather than constitute an addition of a second OHL to the landscape.

Table 15.8 Assessment of Operational Effects on Tourism and Recreation Sector (Polquhanity-Glenlee via Kendoon)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
Designated walking and recreational routes	Medium	Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Core Path 164, Bardennoch Trail Pack Road (VP 2: Dundough at access to Polmaddy): Minor Adverse at VP and Minor Adverse visual effect on overall Core Path Public footpath and footbridge access to Kendoon (VP 4: Footbridge access to Kendoon): Moderate Adverse Southern Upland Way: Moderate Adverse near Waterside Hill (VP 7) and Moderate Adverse near St John's Town of Dalry (VP 8), with overall Moderate Adverse visual effect. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 7 concludes that this connection is likely to result in a limited number of significant adverse operational visual effects along</p>	<p>Minor Adverse (not significant)</p>

- 15.65 The assessment detailed above indicates that no designated routes are likely to experience effects which would be considered significant in the context of the EIA Regulations. Similarly, the assessment provided in **Table 15.7** indicates that none of the identified key components of the tourism and recreation sector

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<p>localised sections of designated walking and recreational routes. However, it must also be noted that the construction of this connection would see the removal of the 'N' route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and part of 'R' route between Kendoon and Glenlee (comprising towers R000A-R29), such that the new connection would not represent a second infrastructure feature in the landscape once operational.</p> <p>Irrespective of localised changes in visual amenity, the designated walking and recreational access routes will continue to fulfil their designated purpose of providing countryside access (whether local or long distance). Intermittent visual effects alone would not inhibit access or greatly alter the recreational or experiential value of these routes. It is further observed that existing wind farms and other infrastructure is present along some sections of affected routes, such that energy development is not unfamiliar. At the local level, evidence from the consenting of nearby developments (e.g. Mochrum Fell Wind Farm and the single turbine at Little Sypland [see Figure 3.1]) similarly indicates that where 'primary' effects on landscape character and quality have been found to be acceptable by the decision makers (regardless of their significance in EIA terms), the conclusion was reached that there is no evidence available to indicate that a significant adverse effect on visitor attractiveness (and thus visitor numbers) would be likely to occur.</p> <p>In summary, it is likely that the recreational purpose of designated routes would be unaffected and there is no conclusive evidence to suggest changes in visual amenity would materially alter the experiential value of using affected recreational routes. On this basis, it is considered that the presence of this connection is likely to have a Low magnitude of change on this receptor grouping, resulting in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Minor Adverse effects assessed on areas of the Galloway Forest Park and Galloway Forest Dark Sky Park (including LCTs 165. Upper Dale - Dumfries & Galloway and 176. Foothills with Forest - Dumfries & Galloway) Flooded Valley LCT: Minor Adverse <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none"> No likely significant adverse effects predicted 	None to Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The Galloway Forest Park consists of approximately 300 square miles of forestry and wider landscape within Dumfries and Galloway. Managed by Forestry and Land Scotland, it is Britain's largest forest park. The focus of the Galloway Forest Park on woodland as a landscape and recreational resource means that within the park, views are inherently dominated by forestry. However, the Park is an active commercial forest with regular felling operations and already hosts overhead electricity transmission infrastructure and associated wayleave corridors.</p> <p>This connection would see the removal of the 'N' route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and part of 'R' route between Kendoon and Glenlee (comprising towers R000A-R29), such that the new connection would not represent a second infrastructure feature in the landscape. 69% of respondents to the Tourism Business Survey felt there would be no impact on the performance of their business once the KTR Project is operational, with 15% of businesses expecting a beneficial impact and 15% reporting an expected negative effect. The main reason cited for the perceived lack of impact was that for businesses close to or with visibility of the existing OHL, the new line would represent replacement rather than additional infrastructure and this would be unlikely to alter the visitor attractiveness of tourist destinations (and associated visitor accommodation).</p> <p>Irrespective of changes in visual amenity at outdoor tourist destinations such as the Galloway Forest Park, these destinations will continue to provide the same tourism offering based around localised special features or characteristics. Visitors are likely to come into the Park to appreciate its introspective scenic qualities or, in the case of the Dark Sky Park therein, to benefit from the absence of artificial light for astronomy. In both cases, the addition of unlit transmission infrastructure and intermittent visibility of this amongst forestry would be unlikely to detract from the purpose of tourist visits.</p> <p>More widely, whilst the P-G via K connection may be visible from some outdoor tourist destinations and result in limited impacts on landscape character, evidence from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experiential value of visiting a destination with its own special features. <i>disadvantages as they perceive them</i>". It can therefore be concluded that intermittent visual effects alone are not likely to detract from the purpose of visits to specific outdoor</p>	

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			tourist destinations and thus to alter the recreational or experiential value. On this basis, it is considered that the presence of this connection would be likely to generate a Low magnitude of change on this receptor grouping, resulting in a Minor adverse effect.	
Hospitality	Low	Negligible	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse Foothills with Forest LCT: Minor Adverse Flooded Valley LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The presence of this connection is not considered likely to materially alter the customer appeal of this receptor grouping, as the main draw to hospitality establishments is their food, drink and entertainment offering, which would be unaffected by the proposed development, rather than visual amenity per se or localised changes to the landscape character (in any case, only minor effects on landscape character are predicted from this connection). It should also be noted that delivery of this connection would see the removal of the ‘N’ route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and part of ‘R’ route between Kendoon and Glenlee (comprising towers R000A-R29), such that the new connection would not represent a second infrastructure feature in the landscape.</p> <p>Acknowledging the small sample size, the Tourism Business Survey indicates that of the four hospitality receptors which responded to the business survey for the whole of the KTR Project, none anticipate an adverse impact on visitor numbers due to the KTR Project during its operation.</p> <p>It is considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect (‘None’).</p>	None (not significant)
Visitor Accommodation	Medium	Low	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none"> Glenhoul Brae Holiday Cottage Cloud Cuckoo Lodge Cleughbrae Cottage 5 Wayside <p>‘Primary’ Environmental Effects on Tourism Assets</p>	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse Foothills with Forest LCT: Minor Adverse Flooded Valley LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>Tourist accommodation businesses within the assessed Study Area largely comprise small self-catering and B&B facilities with low capacity, turnover, and staffing requirements. Any potential changes to the visitor attractiveness and operation of individual businesses would therefore be unlikely to induce wider socio-economic effects across the tourism sector or the wider regional economy. The receptor grouping has however been assigned a Medium sensitivity rating as scenic landscapes and visual amenity contribute to the experiential value of tourist accommodation stays.</p> <p>The assessment presented in Chapter 7 concludes that only Minor adverse visual effects are predicted as likely on the host LCT.</p> <p>Evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists staying in the area because of its landscape qualities, such that changes in visual amenity are unlikely alone to have a significant effect on the functioning of visitor accommodation businesses. On this basis, it is considered that the presence of this connection would have a Low magnitude of change on this receptor grouping where primary effects are experienced. Taking account of receptor sensitivity, this results in a Minor adverse effect.</p>	
Recreational activities in the open countryside	Low to Medium	Negligible to Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Dundeugh at access to Polmaddy (VP 2): Moderate Adverse Polmaddy settlement (VP3): Minor Adverse Mulloch Hill (VP 9): Minor Adverse Upper Dale LCT: Minor Adverse Foothills with Forest LCT: Minor Adverse Flooded Valley LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside including walking, cycling, hillwalking and horse-riding.</p>	None to Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<p>It is acknowledged that the presence of this connection would result in some adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, only Minor adverse visual effects are predicted in the main areas identified as being where recreational activities are likely to be undertaken. It must also be noted that the construction of this connection would see the removal of the 'N' route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and part of 'R' route between Kendoon and Glenlee (comprising towers R000A-R29), such that the new connection would not represent a second infrastructure feature in the landscape.</p> <p>The evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish recreational experience. Taking account of all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities.</p> <p>On this basis, depending on recreational activity type and the extent of infrastructure visibility, the presence of this connection is considered likely to generate at most a Low magnitude of change on this receptor grouping where primary environmental effects are experienced, resulting in at most a Minor Adverse effect.</p>	
Tourists travelling (by road) through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> A713 Galloway Tourist Route (VP1 – Layby near Polquhanity): Minor Adverse Upper Dale LCT: Minor Adverse Foothills with Forest LCT: Minor Adverse Flooded Valley LCT: Minor Adverse B7000 west of Glenhoul Hill (VP 5): Minor Adverse A762 north of Glenlee (VP 10): Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Limited likely landscape and visual effects on individual road users from this connection (as assessed in Chapter 7), including one significant effect at a specific layby on the A713, would be experienced within the context of a longer travel journey over a varied landscape setting likely to include other infrastructure and built form. It must</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Assessment rationale	Significance of Effect
			<p>also be noted that the construction of this connection would see the removal of the 'N' route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and part of 'R' route between Kendoon and Glenlee (comprising towers R000A-R29), such that the new connection would not represent a second infrastructure feature in the landscape.</p> <p>Any assessment of impacts on the experience of tourists travelling through the open countryside must firstly account for the fact that the primary focus of drivers would be on the road rather than surrounding landscapes. Furthermore, the evidence discussed above from international literature and the consenting of nearby wind farms also indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists travelling through scenic landscapes for the purpose of reaching specific destinations.</p> <p>Taking the above factors into account, whilst visibility of OHL infrastructure from the P-G via K connection route could momentarily affect the experience of tourists travelling (by road) in the open countryside, any such perception would be insufficient to materially affect the overall tourism experience and thus the attractiveness of the Tourism and Recreation Study Area as an overall tourist destination, including for repeat visits.</p> <p>It is therefore considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the P-G via K connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect ('None').</p>	

- 15.69 The assessment provided in **Table 15.8** above indicates that no relevant receptor groupings of the tourism and recreation sector are likely to experience effects which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on the tourism and recreation sector are likely to occur as a result of the operation of the P-G via K connection. As per **Table 15.1**, operational phase effects on other business sectors and 'primary' effects on recreational access have been scoped out of the assessment for individual connections as there is no potential for such effects to be considered significant in the context of the EIA Regulations.

Proposed Mitigation

- 15.70 No additional mitigation measures are proposed or considered necessary to address the assessed likely effects from the operation of the P-G via K connection.

Residual Operational Effects

- 15.71 As no additional mitigation measures are proposed there is no change to likely effects on receptor groups as assessed in **Table 15.8** above. There are no likely significant residual effects of operation of the P-G via K connection on the tourism and recreation sector.

Monitoring

- 15.72 No monitoring is considered to be required specifically in relation to the predicted residual (**not significant**) construction and operational effects of the P-G via K connection.

Summary of Effects

- 15.73 The summary of effects likely to result from the construction and operational phase of the P-G via K connection is detailed **Table 15.9** below.

Table 15.9 Summary of likely effects (Polquhanity-Glenlee via Kendoon)

Phase	Receptor		Additional Mitigation	Assessment of likely Residual Effect
Construction	Recreational Access		None identified	Minor Adverse
	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor accommodation	None identified	Minor Beneficial (not significant)
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Recreational activities in the open countryside	None identified	None (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)
Operation	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Minor Adverse (not significant)
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor Accommodation	None identified	Minor Adverse (not significant)
		Recreational activities in the open countryside	None identified	None to Minor Adverse (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)

Carsfad to Kendoon

- 15.74 The Carsfad to Kendoon (C-K) connection of the KTR Project is shown in **Figure 4.3**. The connection comprises the erection of a new 132kV single circuit OHL, of approximately 2.6km in length, between the hydroelectric power station at Carsfad and the existing substation at Kendoon.

Existing Conditions

- 15.75 Existing settlements in close proximity to this connection include the small settlements of Kendoon, Carsfad, Dundough and Knocknalling. There are also smaller residential clusters, hamlets and farm buildings in the locality. The area is characterised by forested upland and valley landscapes forming the Upper Dale Landscape Character Type, as detailed within **Chapter 7**.
- 15.76 A number of local roads are located in close proximity to this connection, including multiple stretches of the A713 Galloway Tourist Route and Scottish Castle Route. As detailed in **Chapter 13**, other key roads with the potential to be affected by this connection are:
- A712 (between A75 - A762, A762 - A713, A713 - Corsock, and Corsock - A75);
 - A711 (between A75 and A762);
 - A702 (between A713 - Moniaive, and Moniaive - A76);
 - B741 (between A76 - Gateside Road); and
 - B7000 (VP5, west of Glenhoul Hill).
- 15.77 A number of Core Paths intersect with or overlap with proposed public road construction routes for the C-K connection of the KTR Project as shown on **Figure 7.10.1**, including:
- National Byway Cycling Route;
 - Mulloch Hill path (Core Path 224); and,
 - Dalry to New Galloway path (Core Path 21).
- 15.78 As detailed in **Chapter 13**, other recreational routes within the vicinity of this connection include the National Byway Cycle Route.
- 15.79 As detailed in **Appendix 15.1**, tourism and recreation is recognised as an important component of the economy at the national level and within Dumfries and Galloway (the Wider Socio-economic Study Area). In consequence, the tourism and recreation sector is also important within the Local Socio-economic Study Area and the identified Tourism and Recreation Study Area. Aside from the recreational routes noted above, other key tourism assets located within close proximity of this connection which were identified through the Tourism Business Survey or other assessments presented in this EIA Report include¹⁰:
- Glenhoul Hill;
 - Public footpath and footbridge access to Kendoon (east of A713);
 - 22 heritage assets that have predicted visibility of the Carsfad to Kendoon connection (see **Appendix 12.8**), including Carsfad Power Station Category B Listed Buildings and 3 Scheduled Monuments;
 - Visitor accommodation including Glenhoul Brae Holiday Cottage, Cloud Cuckoo Lodge, Cleughbrae Cottage, 5 Wayside and The Clahchan Inn.

Construction Effects

Employment and Economic Activity

- 15.80 As detailed in **Chapter 4** and **Chapter 5**, the construction of this connection will require the following main activities, which would give rise to direct and indirect capital expenditure and employment:
- Timber clearance (within wayleave): 0.98ha of timber to be felled resulting in a total of 204 tonnes of timber to be produced.
 - OHL construction.
 - Stringing of conductors and commissioning; and,
 - Land reinstatement.

¹⁰ Note that this is not an exhaustive list.

15.81 Associated employment and economic effects are assessed at the KTR Project level in the assessment of effects for the **KTR Project as a Whole** section below.

Recreational Access

15.82 No identified non-vehicular recreational routes would overlap with *new* access tracks required to construct this connection and complete all associated works. As such, whilst it may be necessary in accordance with statutory requirements to implement temporary land closures around construction activities, no direct effects on public access to non-vehicular recreational routes are considered likely.

Tourism and Recreation Sector

15.83 In accordance with the methodology detailed above, **Table 15.10** below provides a proportionate assessment of likely construction phase effects on each assessed receptor grouping of the tourism and recreation sector of the C-K connection. This assessment considers likely ‘secondary’ effects on the sector as a whole, rather than assessing ‘primary’ effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects where possible, but it applies equally to other potential receptors of the same grouping.

Table 15.10 Predicted Construction Phase Effects on Tourism and Recreation Sector (Carsfad-Kendoon)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Core Path 164, Bardennoch Trail Pack Road (VP 2: Dundough at access to Polmaddy): Minor AdversePublic footpath and footbridge access to Kendoon (VP 4: Footbridge access to Kendoon): Moderate Adverse <p><i>Transport and Access (Primary) Effects – taking account of CTMP (Chapter 13) and Recreational Access Assessment above:</i></p> <ul style="list-style-type: none">National Byway Cycling Route, Core Path 21 and Core Path 224: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>A single likely significant visual effect is predicted to affect this receptor grouping (at VP4) owing to the scale of construction activities required, although the effect would be temporary and localised. Additionally, all recreational routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance). As detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained, whilst temporary and intermittent visual effects alone would not inhibit access or greatly alter the recreational or experiential value of these routes.</p> <p>On this basis and taking account of all relevant ‘primary’ environmental effects, the construction phase of this connection is considered likely to result in temporary low magnitude of change to the visitor attractiveness and tourism potential designated</p>	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			walking and recreational routes. Having regard to the medium sensitivity of this receptor grouping, the construction of this connection is likely to result in a Minor adverse effect.	
Outdoor tourist destinations	Low to Medium	Negligible to Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Upper Dale LCT: Minor Adverse <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none">No likely significant adverse effects predicted <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>No outdoor tourist destinations close to this connection have been identified. Irrespective of temporary changes in visual amenity at outdoor tourist destinations across the assessed Study Area, the destinations will continue to provide the same tourism offering based around localised special features or characteristics. As detailed in Chapter 13 the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Temporary and intermittent visual effects are not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter the recreational or experiential value. On this basis, the construction phase of this connection is considered likely to have at most a temporary Low magnitude of change on this receptor grouping where outdoor tourist destinations experience primary environmental effects, resulting in at most a Minor adverse effect on visitor attractiveness.</p>	None to Minor Adverse (not significant)
Hospitality	Low	Negligible	<p>Establishments identified from Tourism Business Survey</p> <ul style="list-style-type: none">The Clahchan Inn <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>No change is predicted on hospitality businesses during the construction period, as the primary draw to such establishments is not visual amenity and on an aggregate level, any temporary decline in tourist trade during particularly intensive periods of construction is likely to be offset by increased passing trade from construction workers.</p> <p>It is considered that the construction of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase of this connection is considered likely to result in a temporary Negligible magnitude of change for this receptor grouping. Taking account of the low sensitivity of this receptor grouping, the significance of the likely effects is assessed as None.</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Visitor Accommodation	Medium	Low Beneficial	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none">Glenhoul Brae Holiday CottageCloud Cuckoo LodgeCleughbrae Cottage5 WaysideThe Clahchan Inn <p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Upper Dale LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>Temporary changes in visual amenity are unlikely alone to have a significant impact on the functioning of relevant businesses. The findings from the Tourism Business Survey indicate that over 85% of Visitor Accommodation businesses in the Tourism and Recreation Area for the whole KTR Project anticipate either no change or a positive impact from the KTR Project during its construction. Temporary changes in occupancy during the construction period are assessed for KTR Project as a whole below.</p> <p>On this basis, the construction phase of this connection is considered likely to have a temporary Low beneficial magnitude of change on this receptor grouping, resulting in a Minor beneficial temporary effect.</p>	Minor Beneficial (not significant)
Recreational activities in the open countryside	Low to Medium	Negligible	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Dundeugh at access to Polmaddy (VP 2): Moderate AdverseUpper Dale LCT: Moderate Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside, including walking, cycling, hillwalking and horse-riding.</p> <p>Irrespective of likely temporary changes in visual amenity (refer to Chapter 7), land outwith construction working areas and associated compounds will continue to remain available for recreational use, and as detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Taking account of the temporary nature of construction and all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, the construction phase of this connection is not likely to have a discernible impact on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None .	
Tourists travelling through the open countryside	Low	Negligible	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">B7000 west of Glenhoul Hill: Minor Adverse (Barely Perceptible)A713 Galloway Tourist Route: Minor AdverseUpper Dale LCT: Minor Adverse <p><i>Transport and Access Driver Delay Effects on Classified Roads - taking account of CTMP (Chapter 13)</i></p> <ul style="list-style-type: none">7,214 movements, of which 3,450 movements will be HGV movements over 24 months construction periodA713 Galloway Tourist Route: Minor Adverse between Dalmellington and Carsphairn, Carsphairn and A762, A762 and A702, A702 and A712, A712 and B795, and between B795 and A75.B741: Minor Adverse between New Cumnock and Dalmellington <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 13 concludes that with the implementation of measures in a CTMP, only Minor temporary effects would occur on the local road network in relation to driver delay.</p> <p>The assessment in Chapter 7 – LVIA concludes that the construction phase would generate only a limited number of temporary and not significant landscape and visual effects on individual road users. Such effects would be experienced within the context of a longer travel journey over a varied landscape setting that may also include other construction related activities. Additionally, the primary focus of drivers would be on the road rather than surrounding landscapes.</p> <p>Taking the above factors into account it is considered that whilst visibility of construction activities could momentarily affect the experience of tourists travelling in the open countryside, this would be insufficient to materially affect the overall tourism experience and thus the attractiveness of Dumfries and Galloway as a tourist destination. On this basis the construction phase of this connection is not likely to have a discernible effect on this receptor grouping. The predicted negligible</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			magnitude of change results in the level of effect on this receptor grouping being assessed as None .	

- 15.84 The assessment detailed above indicates that no designated routes are likely to experience effects which would be considered significant in the context of the EIA Regulations. Similarly, the assessment provided in **Table 15.10** indicates that none of the identified key components of the tourism and recreation sector are likely to experience effects in relation to their visitor attractiveness and tourism potential which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on tourism and recreation are likely to occur as a result of the construction of this connection. As per **Table 15.1**, construction phase effects on the forestry, construction and energy sectors have been scoped out of the assessment for individual connections as any potential effects are unlikely to be significant in the context of the EIA Regulations.

Proposed Mitigation

- 15.85 Beyond the public access mitigation framework outlined in the 'Embedded Mitigation' section, no additional mitigation measures are proposed or considered necessary to address the assessed likely effects from the C connection.

Residual Construction Effects

- 15.86 As no further mitigation measures are proposed there is no change to the likely effects assessed above. There are no likely significant residual effects of construction of the C-K connection on recreational access or on the tourism and recreation sector.

Operational Effects

- 15.87 **Table 15.11** below provides a proportionate assessment of likely effects on each assessed receptor group during the operational phase of C-K connection of the KTR Project. This assessment considers likely 'secondary' effects on the sector as a whole, rather than assessing 'primary' effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects where possible, but it applies equally to other potential receptors of the same grouping.

Table 15.11 Predicted Operational Phase Effects on Tourism and Recreation Sector (Carsfad-Kendoon)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Public footpath and footbridge access to Kendoon (VP 4: Footbridge access to Kendoon): Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 7 concludes that this connection would not result in any likely significant landscape or visual effects. In addition, all designated routes will continue to remain open and fulfil their purpose</p>	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>of providing countryside access (whether local or long distance).</p> <p>Intermittent visual effects alone would not inhibit access or greatly alter the recreational or experiential value of these routes. It is further observed that existing wind farms and other infrastructure is present along some sections of affected routes, such that energy development is not unfamiliar. At the local level, evidence from the consenting of nearby developments (e.g. Mochrum Fell Wind Farm and the single turbine at Little Sypland [see Figure 3.1]) indicates that where 'primary' effects on landscape character and quality have been found to be acceptable by the decision makers (regardless of their significance in EIA terms), the conclusion was reached that there is no evidence available to indicate that a significant adverse effect on visitor attractiveness (and thus visitor numbers) would be likely to occur.</p> <p>In summary, it is likely that the recreational purpose of designated routes would be unaffected and there is no conclusive evidence to suggest changes in visual amenity would materially alter the experiential value of using affected recreational routes. On this basis, it is considered that the presence of this connection is likely to have a Low magnitude of change on this receptor grouping, resulting in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Negligible to Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none"> No likely significant adverse effects predicted <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>No outdoor tourist destinations close to this connection have been identified.</p> <p>Irrespective of potential changes in visual amenity at outdoor tourist destinations across the assessed Study Area, these destinations will continue to provide the same tourism offering based around localised special features or characteristics. Whilst the C-K connection may be visible from some outdoor tourist destinations and result in limited impacts on landscape character, evidence from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experiential value of visiting a destination with its own special features. This conclusion was reached in the Report of a Public Local Inquiry (PLI) held regarding Benbrack Wind Farm near Carsphairn, where</p>	None to Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>the Scottish Ministers adopted the conclusions of the PLI Report as their own.</p> <p>Intermittent visual effects alone are therefore not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter their recreational or experiential value. On this basis, the presence of this connection would be likely to generate at most a Low magnitude of change on the visitor attractiveness of this receptor grouping where primary environmental effects are experienced. Taking account of receptor sensitivity, this results in at most a Minor Adverse effect on the receptor grouping.</p>	
Hospitality	Low	Negligible	<p>Establishments identified from Tourism Business Survey</p> <ul style="list-style-type: none">The Clahchan Inn <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The presence of this connection is not considered likely to materially alter the customer appeal of this receptor grouping, as the main draw to hospitality establishments is their food, drink and entertainment offering, which would be unaffected by the proposed development, rather than visual amenity per se or localised changes to the landscape character (in any case, only minor effects on landscape character are predicted from this connection).</p> <p>Acknowledging the small sample size, the Tourism Business Survey indicates that of the four hospitality receptors which responded to the business survey for the whole of the KTR Project, none anticipate an adverse impact on visitor numbers due to the KTR Project during its operation.</p> <p>It is considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase of this connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect (‘None’).</p>	None (not significant)
Visitor Accommodation	Medium	Low	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none">Glenhoul Brae Holiday CottageCloud Cuckoo LodgeCleughbrae Cottage5 WaysideThe Clahchan Inn <p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Upper Dale LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p>	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>Tourist accommodation businesses within the assessed Study Area largely comprise small self-catering and B&B facilities with low capacity, turnover, and staffing requirements. Any potential changes to the visitor attractiveness and operation of individual businesses would therefore be unlikely to induce wider socio-economic effects across the tourism sector or the wider regional economy. The receptor grouping has however been assigned a Medium sensitivity rating as scenic landscapes and visual amenity contribute to the experiential value of tourist accommodation stays.</p> <p>The assessment presented in Chapter 7 concludes that only Minor adverse visual effects are predicted as likely on the host LCT.</p> <p>Evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists staying in the area because of its landscape qualities, such that changes in visual amenity are unlikely alone to have a significant effect on the functioning of visitor accommodation businesses. On this basis, it is considered that the presence of this connection would have a Low magnitude of change on this receptor grouping where primary effects are experienced. Taking account of receptor sensitivity, this results in a Minor adverse effect.</p>	
Recreational activities in the open countryside	Low to Medium	Negligible to Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Dundeugh at access to Polmaddy (VP 2): Minor AdverseUpper Dale LCT: Moderate Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside including walking, cycling, hillwalking and horse-riding.</p> <p>It is acknowledged that the presence of this connection would result in some adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, only Minor adverse visual effects are predicted in the main areas identified as being where recreational activities are likely to be undertaken.</p> <p>The evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish recreational experience. Taking account of all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions),</p>	None to Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, depending on recreational activity type and the extent of infrastructure visibility, the presence of this connection is considered likely to generate at most a Low magnitude of change on this receptor grouping where primary environmental effects are experienced, resulting in at most a Minor Adverse effect.	
Tourists travelling through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> B7000 west of Glenhoul Hill: Minor Adverse A713 Galloway Tourist Route: Moderate Adverse Upper Dale LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Limited likely landscape and visual effects on individual road users from this connection (as assessed in Chapter 7) may be experienced within the context of a longer travel journey over a varied landscape setting, likely to include other infrastructure and built form.</p> <p>Any assessment of impacts on the experience of tourists travelling through the open countryside must firstly account for the fact that the primary focus of drivers would be on the road rather than surrounding landscapes. Furthermore, the evidence discussed above from international literature and the consenting of nearby wind farms also indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists travelling through scenic landscapes for the purpose of reaching specific destinations.</p> <p>Taking the above factors into account, whilst visibility of OHL infrastructure from the C-K connection route could momentarily affect the experience of tourists travelling (by road) in the open countryside, any such perception would be insufficient to materially affect the overall tourism experience and thus the attractiveness of the Tourism and Recreation Study Area as an overall tourist destination, including for repeat visits.</p> <p>It is therefore considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the C-K connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect ('None').</p>	None (not significant)

- 15.88 The assessment provided in **Table 15.11** above indicates that no relevant components of the tourism and recreation sector are likely to experience effects which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on the tourism and recreation sector are likely to occur as a result of the construction of the C-K connection.

Proposed Mitigation

- 15.89 No further mitigation measures are proposed or otherwise considered necessary to address likely socio-economic, tourism and recreation effects from the C-K connection.

Residual Operational Effects

- 15.90 As no further mitigation measures are proposed there is no change to the likely effects assessed above. There are no likely significant residual effects from the operation of the C-K connection on recreational access or on the tourism and recreation sector.

Monitoring

- 15.91 No monitoring is considered to be required specifically in relation to the predicted residual (**not significant**) effects.

Summary of Effects

- 15.92 The summary of effects resulting from the construction and operational phase of the proposed development is detailed **Table 15.12** below.

Table 15.12: Summary of Effects (Carsfad-Kendoon)

Phase	Receptor	Mitigation	Assessment of Residual Effect
Construction	Recreational Access	Implementation of recreational access good practise measures.	None (not significant)
	Tourism and Recreation Sector	Designated walking and recreational routes	Minor Adverse (not significant)
		Outdoor tourist destinations	None identified
		Hospitality	None identified
		Visitor accommodation	None identified
		Recreational activities in the open countryside	None identified
		Tourists travelling (by road) through the open countryside	None identified
Operation	Tourism and Recreation Sector	Designated walking and recreational routes	Minor Adverse (not significant)
		Outdoor tourist destinations	None identified
		Hospitality	None identified
		Visitor Accommodation	None identified
		Recreational activities in the open countryside	None identified
		Tourists travelling (by road) through the open countryside	None identified

Earlstoun to Glenlee

15.93 The Earlstoun to Glenlee (E-G) connection of the KTR Project is shown in **Figure 4.4**. The connection comprises the erection of a new 132kV single circuit OHL, of approximately 1.6km in length, between the hydroelectric power station at Earlstoun and the existing substation at Glenlee.

Existing Conditions

- 15.94 Existing settlements in close proximity to this connection include the small settlements of Earlstoun, St Johns Town of Dalry and Glenlee. There are also smaller residential clusters, hamlets and farm buildings in the locality. The area is characterised by forested upland and valley landscapes forming the Upper Dale and Flooded Valley Landscape Character Types, as detailed within **Chapter 7**.
- 15.95 A number of local roads are located in close proximity to this connection, including multiple stretches of the A713 Galloway Tourist Route and Scottish Castle Route and the A762 Scottish Castle Route. As detailed in **Chapter 13**, other key roads with the potential to be affected by this connection are:
- A712 (between A75 - A762, A762 - A713, A713 – Corsock, and Corsock - A75);
 - A711 (between A75 and A762);
 - A702 (between A713 – Moniaive, and Moniaive - A76);
 - A762 (between A713 - U2s); and,
 - B741 (between A76 - Gateside Road).
- 15.96 A number of Core Paths intersect with or overlap with proposed public road construction routes for the E-G connection of the KTR Project, including:
- Bardennoch Trail linking Carsphairn to Dundegh (Core Path 164);
 - Glenlee path (Core Path 30);
 - Mulloch Hill path (Core Path 224); and,
 - Dalry to New Galloway path (Core Path 21).
- 15.97 As detailed in **Chapter 13**, other recreational routes within the vicinity of this connection are:
- Southern Upland Way at St. John’s Town of Dalry; and,
 - National Byway Cycle Route.
- 15.98 As detailed in **Appendix 15.1**, tourism and recreation is recognised as an important component of the economy at the national level and within Dumfries and Galloway (the Wider Socio-economic Study Area). In consequence, the tourism and recreation sector is also important within the Local Socio-economic Study Area and the identified Tourism and Recreation Study Area). Aside from the recreational routes noted above, other key tourism assets located within close proximity of this connection which were identified through the Tourism Business Survey or other assessments presented in this EIA Report include¹¹:
- Mulloch Hill (170m AOD), situated south-east of St John’s Town of Dalry;
 - Hospitality businesses including The Cross Keys and Kitty’s Tearooms;
 - CatStrand Arts and Visitor Centre;
 - 28 heritage assets that have predicted (‘Bare-Ground’) visibility of the Earlstoun to Glenlee connection (see **Appendix 12.8**), including 4 Scheduled Monuments; and,
 - Visitor accommodation including 5 Wayside, The Clachan Inn and Lochinvar Hotel.

Construction Effects

Employment and Economic Activity

- 15.99 As detailed in **Chapter 4** and **Chapter 5**, the construction of this connection will require the following main activities, which would give rise to direct and indirect capital expenditure and employment:
- Timber clearance (within wayleave): 1.90ha of timber to be felled, resulting in a total of 349 tonnes of timber to be produced.
 - Timber clearance (windthrow areas): 0.68ha of timber to be felled, resulting in a total of 227 tonnes of timber to be produced.
 - OHL construction;
 - Stringing of conductors and commissioning; and,
 - Land reinstatement.
- 15.100 Associated employment and economic effects are assessed at the KTR Project level in the assessment of effects of the KTR Project as a Whole section below.

Recreational Access

- 15.101 Construction traffic routes and access tracks required to construct this connection and complete all associated works would intersect the Southern Upland Way (Dumfries and Galloway Core Path No. 504).
- 15.102 To ensure safe construction practices and in accordance with the CDM Regulations 2015 and the Land Reform (Scotland) Act 2003 (as amended) it may be necessary to implement temporary diversions or managed crossing points in respect of these recreational routes, particularly during the undertaking of intensive construction activities. The embedded mitigation measures set out above will be implemented such that no formal closures of Core Paths are anticipated to be required.
- 15.103 Taking account of proposed mitigation measures it is considered that the magnitude of change in public access (i.e. inconvenience to path users but continuity of access) would be Low. Coupled with the Medium sensitivity of the affected public access receptors, a temporary **Minor Adverse (not significant)** effect in terms of restricted public access is predicted. Wider effects on the tourism and recreation sector, including from any change to the visitor attractiveness and tourism potential of designated walking and recreational routes, are examined below.

Tourism and Recreation Sector

- 15.104 In accordance with the methodology detailed above, **Table 15.13** below provides a proportionate assessment of likely construction phase effects on each assessed receptor grouping. This assessment considers likely ‘secondary’ effects on the sector as a whole, rather than assessing ‘primary’ effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects where possible, but it applies equally to other potential receptors of the same grouping.

Table 15.13: Predicted Construction Phase Effects on Tourism and Recreation Sector (Earlstoun-Glenlee)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Low	‘Primary’ Environmental Effects on Tourism Assets <i>Landscape and Visual Effects (Chapter 7)</i> <ul style="list-style-type: none">• Southern Upland Way: Minor Adverse near Waterside Hill (VP 7), near St John’s Town of Dalry (VP 8) and for overall route	Minor Adverse (not significant)

¹¹ Note that this is not an exhaustive list.
The Kendoon to Tongland 132kV Reinforcement Project

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p><i>Transport and Access (Primary) Effects – taking account of CTMP (Chapter 13) and Recreational Access Assessment above:</i></p> <ul style="list-style-type: none"> Southern Upland Way (Core Path 504), National Byway Cycling Route and Glenlee path (Core Path 30): Minor Adverse Bardennoch Trail linking Carsphairn to Dundough (Core Path 164): Minor Adverse Mulloch Hill path (Core Path 224): Minor Adverse Dalry to New Galloway path (Core Path 21): Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The construction of this connection would not result in any likely significant landscape or visual effects and all recreational routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance). The length of Core Path 224 and the visibility of wind farm developments at Mulloch Hill suggests that additional temporary visibility of construction work is unlikely to greatly reduce its attractiveness to visitors.</p> <p>As detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained, whilst temporary and intermittent visual effects alone would not inhibit access or greatly alter the recreational or experiential value of these routes.</p> <p>On this basis and taking account of all relevant ‘primary’ environmental effects, the construction phase of this connection is considered likely to result in temporary low magnitude of change to the visitor attractiveness and tourism potential designated walking and recreational routes. Having regard to the medium sensitivity of this receptor grouping, the construction of this connection is likely to result in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Low	<p>Identified Tourism Assets</p> <ul style="list-style-type: none"> Kenmure Castle <p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>Irrespective of temporary changes in visual amenity at outdoor tourist destinations, the destinations will continue to provide the same tourism offering based around localised special features or characteristics. As detailed</p>	<p>None to Minor Adverse (not significant)</p>

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>in Chapter 13 the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Temporary and intermittent visual effects are not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter the recreational or experiential value. On this basis, the construction phase of this connection is considered likely to have at most a temporary Low magnitude of change on this receptor grouping where outdoor tourist destinations experience primary environmental effects, resulting in at most a Minor adverse effect on visitor attractiveness.</p>	
Hospitality	Low	Negligible	<p>Establishments identified from Tourism Business Survey</p> <ul style="list-style-type: none"> The Cross Keys Kitty’s Tearooms The Clahchan Inn <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>No change is predicted on hospitality businesses during the construction period, as the primary draw to such establishments is not visual amenity and on an aggregate level, any temporary decline in tourist trade during particularly intensive periods of construction is likely to be offset by increased passing trade from construction workers.</p> <p>It is considered that the construction of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase of this connection is considered likely to result in a temporary Negligible magnitude of change for this receptor grouping. Taking account of the low sensitivity of this receptor grouping, the significance of the likely effects is assessed as None.</p>	<p>None (not significant)</p>
Visitor Accommodation	Medium	Low Beneficial	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none"> 5 Wayside The Clahchan Inn Lochinvar Hotel <p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The Clachan Inn is a 6-room B&B located in St John’s Town of Dalry and is representative of visitor accommodation receptors identified along the E-G connection, i.e. small capacity, turnover and staffing.</p>	<p>Minor Beneficial (not significant)</p>

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>Temporary changes in visual amenity are unlikely alone to have a significant impact on the functioning of relevant businesses. The findings from the Tourism Business Survey indicate that over 85% of Visitor Accommodation businesses in the Tourism and Recreation Area for the whole KTR Project anticipate either no change or a positive impact from the KTR Project during its construction. Temporary changes in occupancy during the construction period are assessed for KTR Project as a whole below.</p> <p>On this basis, the construction phase of this connection is considered likely to have a temporary Low beneficial magnitude of change on this receptor grouping, resulting in a Minor beneficial temporary effect.</p>	
Recreational activities in the open countryside	Low to Medium	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Mulloch Hill (VP 9 - representative of other hill summits with theoretical visibility): Minor Adverse Upper Dale LCT: Minor Adverse Flooded Valley LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside, including walking, cycling, hillwalking and horse-riding.</p> <p>It is acknowledged that the construction of this connection would result in some temporary adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, it is not considered that any such effects would result in any associated adverse effects on recreational activities taking place in the Tourism and Recreation Study Area. Irrespective of temporary changes in visual amenity, land outwith construction working areas and associated compounds will continue to remain available for recreational use, and as detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Taking account of the temporary nature of construction and all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, the construction phase of this connection is not likely to have a discernible impact on this receptor grouping. The predicted negligible magnitude of change results in the level of</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			effect on this receptor grouping being assessed as None .	
Tourists travelling through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> A762 Scottish Castle Route: Minor Adverse Upper Dale LCT: Minor Adverse <p><i>Transport and Access Driver Delay Effects on Classified Roads - taking account of CTMP (Chapter 13)</i></p> <ul style="list-style-type: none"> 6,242 movements, of which 3,030 movements will HGV movements, over 19 months construction period A762 Scottish Castle Route: Minor Adverse between A713 and U2s <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 13 concludes that with the implementation of measures in a CTMP, only Minor temporary effects would occur on the local road network in relation to driver delay.</p> <p>The assessment in Chapter 7 – LVIA concludes that the construction phase would generate only a limited number of temporary and not significant landscape and visual effects on individual road users. Such effects would be experienced within the context of a longer travel journey over a varied landscape setting that may also include other construction related activities. Additionally, the primary focus of drivers would be on the road rather than surrounding landscapes.</p> <p>Taking the above factors into account it is considered that whilst visibility of construction activities could momentarily affect the experience of tourists travelling in the open countryside, this would be insufficient to materially affect the overall tourism experience and thus the attractiveness of Dumfries and Galloway as a tourist destination. On this basis the construction phase of this connection is not likely to have a discernible effect on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None.</p>	None (not significant)

15.105 The assessment detailed above indicates that no designated routes are likely to experience effects which would be considered significant in the context of the EIA Regulations. Similarly, the assessment provided in **Table 15.13** indicates that none of the identified key components of the tourism and recreation sector are likely to experience effects in relation to their visitor attractiveness and tourism potential which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on tourism and recreation are likely to occur as a result of the construction of this connection. As per **Table 15.1**, construction phase effects on the forestry, construction and energy

sectors have been scoped out of the assessment for individual connections as any potential effects are unlikely to be significant in the context of the EIA Regulations.

Proposed Mitigation

15.106 Beyond the public access mitigation framework outlined in the ‘Embedded Mitigation’ section, no additional mitigation measures are proposed or considered necessary to address the assessed likely effects from the E-G connection.

Residual Construction Effects

15.107 As no further mitigation measures are proposed there is no change to the likely effects assessed above. There are no likely significant residual effects of construction of the E-G connection on recreational access or on the tourism and recreation sector.

Operational Effects

15.108 **Table 15.14** below provides a proportionate assessment of likely effects on each assessed receptor group in the recreation and tourism sector during the operational phase of this route phase of the KTR Project. This assessment considers likely ‘secondary’ effects on the sector as a whole, rather than assessing ‘primary’ effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects where possible, but it applies equally to other potential receptors of the same grouping.

Table 15.14 Predicted Operational Phase Effects on Tourism and Recreation Sector (Earlstoun-Glenlee)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Southern Upland Way: Minor Adverse near Waterside Hill (VP 7), Barely Perceptible near St John’s Town of Dalry (VP 8) and Minor for overall route <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 7 concludes that this connection would not result in any likely significant landscape or visual effects. In addition, all designated routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance).</p> <p>Intermittent visual effects alone would not inhibit access or greatly alter the recreational or experiential value of these routes. The length of the Southern Upland Way and the visibility of wind farm developments along it suggests that additional visibility of utilities infrastructure is unlikely to greatly reduce its attractiveness to visitors. At the local level, evidence from the consenting of nearby developments (e.g. Mochrum Fell Wind Farm and the single turbine at Little Sypland [see Figure 3.1]) indicates that where ‘primary’ effects on landscape character and quality have been found to be acceptable by the decision makers (regardless of their significance in EIA terms), the conclusion was reached that there is no evidence available to indicate that a significant adverse effect on</p>	<p>Minor Adverse (not significant)</p>

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>visitor attractiveness (and thus visitor numbers) would be likely to occur.</p> <p>In summary, it is likely that the recreational purpose of designated routes would be unaffected and there is no conclusive evidence to suggest changes in visual amenity would materially alter the experiential value of using affected recreational routes. On this basis, it is considered that the presence of this connection is likely to have a Low magnitude of change on this receptor grouping, resulting in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Upper Dale LCT: Minor Adverse <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>No outdoor tourist destinations close to this connection have been identified.</p> <p>Irrespective of potential changes in visual amenity at outdoor tourist destinations across the assessed Study Area, these destinations will continue to provide the same tourism offering based around localised special features or characteristics. Whilst the E-G connection may be visible from some outdoor tourist destinations and result in limited impacts on landscape character, evidence from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experiential value of visiting a destination with its own special features. This conclusion was reached in the Report of a Public Local Inquiry (PLI) held regarding Benbrack Wind Farm near Carsphairn, where the Scottish Ministers adopted the conclusions of the PLI Report as their own.</p> <p>Intermittent visual effects alone are therefore not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter their recreational or experiential value. On this basis, the presence of this connection would be likely to generate at most a Low magnitude of change on the visitor attractiveness of this receptor grouping where primary environmental effects are experienced. Taking account of receptor sensitivity, this results in at most a Minor Adverse effect on the receptor grouping.</p>	<p>None to Minor Adverse (not significant)</p>
Hospitality	Low	Negligible	<p>Establishments identified from Tourism Business Survey</p> <ul style="list-style-type: none">The Cross KeysKitty’s TearoomsThe Clahchan Inn <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p>	<p>None (not significant)</p>

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>The presence of this connection is not considered likely to materially alter the customer appeal of this receptor grouping, as the main draw to hospitality establishments is their food, drink and entertainment offering, which would be unaffected by the proposed development, rather than visual amenity per se or localised changes to the landscape character (in any case, only minor effects on landscape character are predicted from this connection).</p> <p>Acknowledging the small sample size, the Tourism Business Survey indicates that of the four hospitality receptors which responded to the business survey for the whole of the KTR Project, none anticipate an adverse impact on visitor numbers due to the KTR Project during its operation.</p> <p>It is considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase of this connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect ('None').</p>	
Visitor Accommodation	Medium	Low	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none"> 5 Wayside The Clahchan Inn Lochinvar Hotel <p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The Clachan Inn is a 6-room B&B located in St John's Town of Dalry and is representative of Visitor Accommodation receptors identified along the E-G connection and across the assessed Study Area more widely. These largely comprise small self-catering and B&B facilities with low capacity, turnover, and staffing requirements. Any potential changes to the visitor attractiveness and operation of individual businesses would therefore be unlikely to induce wider socio-economic effects across the tourism sector or the wider regional economy. The receptor grouping has however been assigned a Medium sensitivity rating as scenic landscapes and visual amenity contribute to the experiential value of tourist accommodation stays.</p> <p>The assessment presented in Chapter 7 concludes that only Minor adverse visual effects are predicted as likely on the host LCT.</p> <p>Evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists staying in the area</p>	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			because of its landscape qualities, such that changes in visual amenity are unlikely alone to have a significant effect on the functioning of visitor accommodation businesses. On this basis, it is considered that the presence of this connection would have a Low magnitude of change on this receptor grouping where primary effects are experienced. Taking account of receptor sensitivity, this results in a Minor adverse effect.	
Recreational activities in the open countryside	Low to Medium	Negligible to Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Mulloch Hill (VP 9 - representative of other hill summits with theoretical visibility): Minor Adverse (Barely Perceptible) Upper Dale LCT: Minor Adverse Flooded Valley LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside including walking, cycling, hillwalking and horse-riding.</p> <p>It is acknowledged that the presence of this connection would result in some adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, only Minor adverse visual effects are predicted in the main areas identified as being where recreational activities are likely to be undertaken.</p> <p>The evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish recreational experience. Taking account of all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, depending on recreational activity type and the extent of infrastructure visibility, the presence of this connection is considered likely to generate at most a Low magnitude of change on this receptor grouping where primary environmental effects are experienced, resulting in at most a Minor adverse effect.</p>	None to Minor Adverse (not significant)
Tourists travelling through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> A762 Scottish Castle Route: Minor Adverse A762 north of Glenlee (VP 10): Minor Adverse Upper Dale LCT: Minor Adverse 	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<ul style="list-style-type: none"> Flooded Valley LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Limited likely landscape and visual effects on individual road users from this connection (as assessed in Chapter 7) would be experienced within the context of a longer travel journey over a varied landscape setting, likely to include other infrastructure and built form.</p> <p>Any assessment of impacts on the experience of tourists travelling through the open countryside must firstly account for the fact that the primary focus of drivers would be on the road rather than surrounding landscapes. Furthermore, the evidence discussed above from international literature and the consenting of nearby wind farms also indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists travelling through scenic landscapes for the purpose of reaching specific destinations.</p> <p>Taking the above factors into account, whilst visibility of OHL infrastructure from the E-G connection route could momentarily affect the experience of tourists travelling (by road) in the open countryside, any such perception would be insufficient to materially affect the overall tourism experience and thus the attractiveness of the Tourism and Recreation Study Area as an overall tourist destination, including for repeat visits.</p> <p>It is therefore considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the E-G connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect ('None').</p>	

15.109 The assessment provided in **Table 15.14** above indicates that no relevant components of the tourism and recreation sector are likely to experience effects which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on the tourism and recreation sector are likely to occur as a result of the introduction and operation of this connection. As per **Table 15.1**, operational phase effects on other business sectors have been scoped out of the assessment for individual connections as there is no potential for such effects to be considered significant in the context of the EIA Regulations.

Proposed Mitigation

15.110 No further mitigation measures are proposed or otherwise considered necessary to address likely socio-economic, tourism and recreation effects during operation of the E-G connection of the KTR Project.

Residual Operational Effects

15.111 As no further mitigation measures are proposed there is no change to the likely effects assessed above. There are no likely significant residual effects from the operation of the E-G connection on recreational access or on the tourism and recreation sector.

Monitoring

15.112 No monitoring is considered to be proportionate or required specifically in relation to the predicted residual (**not significant**) effects.

Summary of Effects

15.113 The summary of effects resulting from the construction and operational phase of the proposed development is detailed **Table 15.15** below.

Table 15.15: Summary of Effects (Earlstoun – Glenlee)

Phase	Receptor		Mitigation	Assessment of Residual Effect
Construction	Recreational Access		Implementation of recreational access good practise measures.	Minor Adverse (not significant)
	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Minor Adverse (not significant)
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor accommodation	None identified	Minor Beneficial (not significant)
		Recreational activities in the open countryside	None identified	None (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)
Operation	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Minor Adverse (not significant)
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor Accommodation	None identified	Minor Adverse (not significant)
		Recreational activities in the open countryside	None identified	None to Minor Adverse (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)

BG Route Deviation

15.114 The BG route comprises the relocation of an existing OHL between the existing Glenlee substation and the existing substation at Newton Stewart, as shown in **Figure 4.5**. To facilitate construction and operation of the proposed G-T connection, the first five existing towers of the BG route (BG098-BG102) are proposed to be moved approximately 40m north, with tower BG097 remaining in its existing location and replaced with a new L4 tower. The relocation of these towers will result in a 1.2km deviation of the existing BG OHL which will connect into the proposed extension to the Glenlee substation. The existing towers which are currently part of the BG route will then form part of the proposed new Glenlee to Tongland circuit which will terminate within the proposed substation extension at Glenlee. The proposed

configuration for both the BG route realignment and proposed Glenlee to Tongland routes into Glenlee are shown in **Figure 4.7.4** and **4.7.5**.

Existing Conditions

- 15.115 Existing settlements in close proximity to this connection include the small settlements of Earlstoun, St. John’s Town of Dalry and Garroch. There are also smaller residential clusters, hamlets and farm buildings in the locality. The area is characterised by forested upland and valley landscapes forming the Upper Dale, Forest with Foothills and Flooded Valley Landscape Character Types, as detailed within **Chapter 7**.
- 15.116 A number of local roads are located in close proximity to this connection, including multiple stretches of the A713 Galloway Tourist Route and Scottish Castle Route. As detailed in **Chapter 13**, other key roads with the potential to be affected by this connection are:
 - A712 (between A75 - A762, A762 - A713, A713 – Corsock, and Corsock - A75);
 - A711 (between A75 and A762);
 - A702 (between A713 – Moniaive and Moniaive - A76); and
 - B741 (between A76 - Gateside Road).
- 15.117 A number of Core Paths intersect with or overlap with proposed public road construction routes for the BG deviation connection of the KTR Project, including:
 - Glenlee path (Core Path 30);
 - Mulloch Hill path (Core Path 224); and
 - Dalry to New Galloway path (Core Path 21).
- 15.118 As detailed in **Chapter 13**, other recreational routes within the vicinity of this connection are:
 - Southern Upland Way at St John’s Town of Dalry; and,
 - National Byway Cycle Route.
- 15.119 As detailed in **Appendix 15.1**, tourism and recreation is recognised as an important component of the economy at the national level and within Dumfries and Galloway (the Wider Socio-economic Study Area). In consequence, the tourism and recreation sector is also important within the Local Socio-economic Study Area and the identified Tourism and Recreation Study Area). Aside from the recreational routes noted above, other key tourism assets located within close proximity of this connection which were identified through the Tourism Business Survey or other assessments presented in this EIA Report include¹²:
 - Mulloch Hill (170m AOD), situated south-east of St John’s Town of Dalry;
 - 35 heritage assets that have predicted (‘Bare-Ground’) visibility of the BG Deviation (**Appendix 12.8**) including 3 Scheduled Monuments; and,
 - Visitor accommodation including 5 Wayside.

Construction Effects

Employment and Economic Activity

- 15.120 As detailed in **Chapter 4** and **Chapter 5**, the construction of this connection will require the following main activities, which would give rise to direct and indirect capital expenditure and employment:
 - Timber clearance (within wayleave): 2.12ha of timber to be felled, resulting in a total of 209 tonnes of timber to be produced;
 - OHL construction;
 - Stringing of conductors and commissioning; and,
 - Land reinstatement.

- 15.121 Associated employment and economic effects are assessed at the KTR Project level in the assessment of the KTR Project as a Whole section below.

Recreational Access

- 15.122 No identified recreational routes would overlap with new access tracks required to construct this connection and complete all associated works. As such, whilst it may be necessary in accordance with statutory requirements to implement temporary land closures around construction activities, no direct effects on public access to recreational routes are considered likely.

Tourism and Recreation Sector

- 15.123 In accordance with the methodology detailed above, **Table 15.16** below provides a proportionate assessment of likely construction phase effects on each assessed receptor grouping.

Table 15.16: Predicted Construction Phase Effects on Tourism and Recreation Sector (BG Deviation)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Southern Upland Way: Minor Adverse near Waterside Hill (VP 7) and Barely Perceptible near St John’s Town of Dalry (VP 8);Core Path 516 south-west of Glenlee (VP 12): Minor Adverse <p><i>Transport and Access Effects – taking account of CTMP (Chapter 13)</i></p> <p>Southern Upland Way (Core Path 504), Glenlee Path (Core Path 30), Core Path 516 and the National Byway cycling route: Minor Adverse</p> <ul style="list-style-type: none">Mulloch Hill path (Core Path 224): Minor Adverse and,Dalry to New Galloway path (Core Path 21): Minor Adverse. <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The construction of this connection would not result in any likely significant landscape or visual effects and all recreational routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance). The length of Core Path 516 and the visibility of wind farm developments (including Blackcraig Hill and Wether Hill) at Sheil Hill suggests that additional visibility of construction work is unlikely to greatly reduce its attractiveness s to visitors.</p> <p>As detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained, whilst temporary and intermittent visual effects alone would not inhibit access or greatly alter</p>	Minor Adverse (not significant)

¹² Note that this is not an exhaustive list.
The Kendoon to Tongland 132kV Reinforcement Project

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>the recreational or experiential value of these routes.</p> <p>On this basis and taking account of all relevant 'primary' environmental effects, the construction phase of this connection is considered likely to result in temporary low magnitude of change to the visitor attractiveness and tourism potential designated walking and recreational routes. Having regard to the medium sensitivity of this receptor grouping, the construction of this connection is likely to result in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Negligible to Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Upper Dale LCT: Minor AdverseFoothills with Forestry LCT: Minor Adverse <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none">No likely significant adverse effects predicted <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>No outdoor tourist destinations close to this connection have been identified. Irrespective of temporary changes in visual amenity at outdoor tourist destinations across the assessed Study Area, the destinations will continue to provide the same tourism offering based around localised special features or characteristics. As detailed in Chapter 13 the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Temporary and intermittent visual effects are not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter the recreational or experiential value. On this basis, the construction phase of this connection is considered likely to have at most a temporary Low magnitude of change on this receptor grouping where outdoor tourist destinations experience primary environmental effects, resulting in at most a Minor adverse effect.</p>	None to Minor Adverse (not significant)
Hospitality	Low	Negligible	<p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>No change is predicted on hospitality businesses during the construction period, as the primary draw to such establishments is not visual amenity and on an aggregate level, any temporary decline in tourist trade during particularly intensive periods of construction is likely to be offset by increased passing trade from construction workers.</p> <p>It is considered that the construction of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase of this</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>connection is considered likely to result in a temporary Negligible magnitude of change for this receptor grouping. Taking account of the low sensitivity of this receptor grouping, the significance of the likely effects is assessed as None.</p>	
Visitor Accommodation	Medium	Low Beneficial	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none">5 Wayside <p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Upper Dale LCT: Minor AdverseFoothills with Forestry LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Temporary changes in visual amenity are unlikely alone to have a significant impact on the functioning of relevant businesses. The findings from the Tourism Business Survey indicate that over 85% of Visitor Accommodation businesses in the Tourism and Recreation Area for the whole KTR Project anticipate either no change or a positive impact from the KTR Project during its construction. Temporary changes in occupancy during the construction period are assessed for KTR Project as a whole below.</p> <p>On this basis, the construction phase of this connection is considered likely to have a temporary Low beneficial magnitude of change on this receptor grouping, resulting in a Minor beneficial temporary effect.</p>	Minor Beneficial (not significant)
Recreational activities in the open countryside	Low to Medium	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">Mulloch Hill (VP 9 - representative of other hill summits with theoretical visibility): Minor AdverseUpper Dale LCT: Minor Adverse; and,Foothills with Forestry LCT: Minor Adverse. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside, including walking, cycling, hillwalking and horse-riding.</p> <p>It is acknowledged that the construction of this connection would result in some temporary adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, it is not considered that any such effects would result in any associated adverse effects on recreational activities taking place in the</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>Tourism and Recreation Study Area. Irrespective of temporary changes in visual amenity, land outwith construction working areas and associated compounds will continue to remain available for recreational use, and as detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Taking account of the temporary nature of construction and all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, the construction phase of this connection is not likely to have a discernible impact on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None.</p>	
Tourists travelling through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> A762 Scottish Castle Route: Negligible Adverse (Barely Perceptible); A762 north of Glenlee: Negligible Adverse (Barely Perceptible); Upper Dale LCT: Minor Adverse Foothills with Forestry LCT: Minor Adverse <p><i>Transport and Access Driver Delay Effects on Classified Roads - taking account of CTMP (Chapter 13)</i></p> <ul style="list-style-type: none"> 6,242 movements, of which 3,030 movements will be HGV movements over the 42-month construction period. Southern Upland Way, Core Paths 21, 30 and 224 and the National Byway cycling route: Minor Adverse. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 13 concludes that with the implementation of measures in a CTMP, only Minor temporary effects would occur on the local road network in relation to driver delay.</p> <p>The assessment in Chapter 7 – LVIA concludes that the construction phase would generate only a limited number of temporary and not significant landscape and visual effects on individual road users. Such effects would be experienced within the context of a longer travel journey over a varied landscape setting that may also include other construction related activities. Additionally,</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>the primary focus of drivers would be on the road rather than surrounding landscapes.</p> <p>Taking the above factors into account it is considered that whilst visibility of construction activities could momentarily affect the experience of tourists travelling in the open countryside, this would be insufficient to materially affect the overall tourism experience and thus the attractiveness of Dumfries and Galloway as a tourist destination. On this basis the construction phase of this connection is not likely to have a discernible effect on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None.</p>	

- 15.124 The assessment detailed above indicates that no designated routes are likely to experience effects which would be considered significant in the context of the EIA Regulations. Similarly, the assessment provided in **Table 15.16** indicates that none of the identified key components of the tourism and recreation sector are likely to experience effects in relation to their visitor attractiveness and tourism potential which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on tourism and recreation are likely to occur as a result of the construction of this connection. As per **Table 15.1**, construction phase effects on the forestry, construction and energy sectors have been scoped out of the assessment for individual connections as any potential effects are unlikely to be significant in the context of the EIA Regulations.

Proposed Mitigation

- 15.125 Beyond the public access mitigation framework outlined in the 'Embedded Mitigation' section, no additional mitigation measures are proposed or considered necessary to address the assessed likely effects from the BG deviation.

Residual Construction Effects

- 15.126 As no further mitigation measures are proposed there is no change to the likely effects assessed above. There are no likely significant residual effects of construction of the BG connection on recreational access or on the tourism and recreation sector.

Operational Effects

- 15.127 **Table 15.17** below provides a proportionate assessment of likely effects on visitor attractiveness and the tourism potential of each assessed receptor group during the operational phase of the KTR Project. The assessment considers likely 'secondary' effects on the sector as a whole, taking account of likely 'primary' environmental effects. Reference is made to individual identified receptors where possible but the assessment applies equally to other potential receptors of the same grouping.

Table 15.17: Predicted Operational Phase Effects on Tourism and Recreation Sector (BG Deviation)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Southern Upland Way: Minor Adverse near Waterside Hill (VP 7); 	Minor Adverse

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<ul style="list-style-type: none"> Core Path 516 south-west of Glenlee (VP 12): Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 7 concludes that this connection would not result in any likely significant landscape or visual effects. In addition, all designated routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance).</p> <p>Intermittent visual effects alone would not inhibit access or greatly alter the recreational or experiential value of these routes. The length of Core Path 516 and the visibility of wind farm developments (including Blackcraig Hill and Wether Hill) at Sheil Hill suggests that additional visibility of utilities infrastructure is unlikely to greatly reduce its attractiveness to visitors.</p> <p>At the local level, evidence from the consenting of nearby developments (e.g. Mochrum Fell Wind Farm and the single turbine at Little Sypland [see Figure 3.1]) indicates that where 'primary' effects on landscape character and quality have been found to be acceptable by the decision makers (regardless of their significance in EIA terms), the conclusion was reached that there is no evidence available to indicate that a significant adverse effect on visitor attractiveness (and thus visitor numbers) would be likely to occur.</p> <p>In summary, it is likely that the recreational purpose of designated routes would be unaffected and there is no conclusive evidence to suggest changes in visual amenity would materially alter the experiential value of using affected recreational routes. On this basis, it is considered that the presence of this connection is likely to have a Low magnitude of change on this receptor grouping, resulting in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Negligible Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse Foothills with Forestry LCT: Minor Adverse <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none"> No likely significant adverse effects predicted <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>No outdoor tourist destinations close to this connection have been identified.</p>	None to Minor Adverse

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>Irrespective of potential changes in visual amenity at outdoor tourist destinations across the assessed Study Area, these destinations will continue to provide the same tourism offering based around localised special features or characteristics. Whilst the BG Deviation connection may be visible from some outdoor tourist destinations and result in limited impacts on landscape character, evidence from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experiential value of visiting a destination with its own special features. This conclusion was reached in the Report of a Public Local Inquiry (PLI) held regarding Benbrack Wind Farm near Carsphairn, where the Scottish Ministers adopted the conclusions of the PLI Report as their own.</p> <p>Intermittent visual effects alone are therefore not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter their recreational or experiential value. On this basis, the presence of this connection would be likely to generate at most a Low magnitude of change on the visitor attractiveness of this receptor grouping where primary environmental effects are experienced. Taking account of receptor sensitivity, this results in at most a Minor Adverse effect on the receptor grouping.</p>	
Hospitality	Low	Negligible	<p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The presence of this connection is not considered likely to materially alter the customer appeal of this receptor grouping, as the main draw to hospitality establishments is their food, drink and entertainment offering, which would be unaffected by the proposed development, rather than visual amenity per se or localised changes to the landscape character (in any case, only minor effects on landscape character are predicted from this connection). It should also be noted that this connection would see the removal of the 'N' route towers and 132kV OHL between Polquhanity and Kendoon (the removal of towers N230 to N240) and part of 'R' route between Kendoon and Glenlee (comprising towers R000A-R29), such that the new connection would not represent a second infrastructure feature in the landscape.</p> <p>Acknowledging the small sample size, the Tourism Business Survey indicates that of the four hospitality receptors which responded to the business survey for the whole of the KTR Project, none anticipate an adverse impact on visitor numbers due to the KTR Project during its operation.</p> <p>It is considered that the presence of this connection is not likely to have a discernible</p>	None

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			effect on this receptor grouping. On this basis, the construction phase of this connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect ('None').	
Visitor Accommodation	Medium	Low	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none"> 5 Wayside <p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse Foothills with Forestry LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Tourist accommodation businesses within the assessed Study Area largely comprise small self-catering and B&B facilities with low capacity, turnover, and staffing requirements. Any potential changes to the visitor attractiveness and operation of individual businesses would therefore be unlikely to induce wider socio-economic effects across the tourism sector or the wider regional economy. The receptor grouping has however been assigned a Medium sensitivity rating as scenic landscapes and visual amenity contribute to the experiential value of tourist accommodation stays.</p> <p>The assessment presented in Chapter 7 concludes that only Minor adverse visual effects are predicted as likely on the host LCT.</p> <p>Evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists staying in the area because of its landscape qualities, such that changes in visual amenity are unlikely alone to have a significant effect on the functioning of visitor accommodation businesses. On this basis, it is considered that the presence of this connection would have a Low magnitude of change on this receptor grouping where primary effects are experienced. Taking account of receptor sensitivity, this results in a Minor adverse effect.</p>	Minor
Recreational activities in the open countryside	Low to Medium	Negligible to Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Mulloch Hill (VP 9 - representative of other hill summits with theoretical visibility): Minor Adverse 	None to Minor Adverse

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse Foothills with Forestry LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside including walking, cycling, hillwalking and horse-riding.</p> <p>It is acknowledged that the presence of this connection would result in some adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, only Minor adverse visual effects are predicted in the main areas identified as being where recreational activities are likely to be undertaken.</p> <p>The evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish recreational experience. Taking account of all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, depending on recreational activity type and the extent of infrastructure visibility, the presence of this connection is considered likely to generate at most a Low magnitude of change on this receptor grouping where primary environmental effects are experienced, resulting in at most a Minor Adverse effect.</p>	
Tourists travelling through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse Foothills with Forestry LCT: Minor Adverse <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Limited likely landscape and visual effects on individual road users from this connection (as assessed in Chapter 7) would be experienced within the context of a longer travel journey over a varied landscape setting, likely to include other infrastructure and built form.</p> <p>Any assessment of impacts on the experience of tourists travelling through the open countryside must firstly account for the fact that the primary focus of drivers would be on the road rather than surrounding landscapes. Furthermore, the evidence discussed above from international</p>	None

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>literature and the consenting of nearby wind farms also indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists travelling through scenic landscapes for the purpose of reaching specific destinations.</p> <p>Taking the above factors into account, whilst visibility of OHL infrastructure from the BG connection could momentarily affect the experience of tourists travelling (by road) in the open countryside, any such perception would be insufficient to materially affect the overall tourism experience and thus the attractiveness of the Tourism and Recreation Study Area as an overall tourist destination, including for repeat visits.</p> <p>It is therefore considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the BG Deviation connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect ('None').</p>	

15.128 The assessment provided in **Table 15.17** above indicates that no relevant components of the tourism and recreation sector are likely to experience effects on visitor attractiveness which would be considered significant in the context of the EIA Regulations. On this basis, **no significant** effects on the tourism and recreation sector are likely to occur as a result of the introduction and operation of the BG deviation. As per **Table 15.1**, operational phase effects on other business sectors have been scoped out of the assessment for individual connections as there is no potential for such effects to be considered significant in the context of the EIA Regulations.

Proposed Mitigation

15.129 No further mitigation measures are proposed or otherwise considered necessary to address likely socio-economic, tourism and recreation effects from this connection.

Residual Operational Effects

15.130 As no further mitigation measures are proposed there is no change to the likely effects assessed above. There are no likely significant residual effects from the operation of the BG deviation on recreational access or on the tourism and recreation sector.

Monitoring

15.131 No monitoring is considered to be required specifically in relation to the predicted residual (**not significant**) effects.

Summary of Effects

15.132 The summary of effects resulting from the construction and operational phase of the proposed development is detailed **Table 15.18** below.

Table 15.18: Summary of Effects (BG Deviation)

Phase	Receptor	Mitigation	Assessment of Residual Effect
Construction	Recreational Access	Implementation of recreational access good practise measures.	None (not significant)

Phase	Receptor		Mitigation	Assessment of Residual Effect
	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Minor Adverse (not significant)
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor accommodation	None identified	Minor Beneficial (not significant)
		Recreational activities in the open countryside	None identified	None (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)
Operation	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Minor Adverse
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor Accommodation	None identified	Minor Adverse (not significant)
		Recreational activities in the open countryside	None identified	None to Minor Adverse (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)

Glenlee to Tongland

15.133 The Glenlee to Tongland (G-T) connection is shown in **Figure 4.6**. The connection comprises the erection of new 132kV double circuit OHL, of approximately 32.3km in length, between the existing/extended Glenlee substation and the existing Tongland substation. The OHL will be supported on L4 lattice steel towers, which have six cross-arms (three on each side) and have a standard design height of 26m.

15.134 The assessment of this connection also considers likely effects associated with the removal of the 'R' route (south) between Glenlee and Tongland (comprising towers R30 – R153). Decommissioning will be completed within 18 months of commissioning the new OHL.

Existing Conditions

15.135 Existing settlements in close proximity to the G-T connection include the town of Kirkcudbright and the small settlements of New Galloway, Balmaclellan, Mossdale, Slogarie, Laurieston, Garroch, Ringford, Barcaple, Twynholm and Tongland. There are also smaller residential clusters, hamlets and farm buildings in the locality. The length of the connection and surrounding area is characterised by a varied collection of upland, valley, forestry and lowland agricultural landscapes across the Upper Dale, Foothills with Forest, Flooded Valley, Rugged Uplands with Forest, Drumlin Pastures and Peninsula Landscape Character Types, as detailed within **Chapter 7**.

15.136 A number of local roads are located in close proximity to this connection, including multiple stretches of the A713 Galloway Tourist Route and the A762 Scottish Castle Route. As detailed in **Chapter 13**, other key roads with the potential to be affected by this connection are:

- A713 Galloway Tourist Route (between A77 – Dalmellington, Dalmellington – Carsphairn, Carsphairn – A762, A762 – A702, A702 – A712, A712 – B795 and between B795 – A75);
- A712 (between A75 – A762, A762 – A713, A713 – Corsock and between Corsock – A75). The Queen’s Way is a scenic 17-mile section of the A712 which includes part of the Galloway Red Kite Trail and Robert the Bruce Trail;
- A711 (between A75 – A762);
- A702 (between A713 – Moniaive and Moniaive – A76);
- A762 Scottish Castle Route (between A713 – U2s, A712 – B795 and between B795 – A75);
- B741 (between A76 – Gateside Road); and,
- B795 (between A713 – A762).

15.137 A number of Core Paths intersect with or overlap with proposed public road construction routes for the G-T connection of the KTR Project, including:

- Glenlee path (Core Path 30);
- Mulloch Hill path (Core Path 224);
- Dalry to New Galloway path (Core Path 21);
- Raiders Road to Kenmuir Link (Core Path 142);
- Cairn Edward Hill path (Core Path 177);
- Arie path, near Mossdale (Core Path 153);
- Glengap and Laurieston Forest (Core Path 28);
- Kenick Burn Walk (Core Path 200);
- Retreat Wood, Laurieston (Core Path 144); and
- The New Galloway West path (Core Path 516).

15.138 As detailed in **Chapter 13**, other recreational routes within the vicinity of this connection are:

- Southern Upland Way at St. John’s Town of Dalry;
- National Byway Cycle Route;
- National Cycle Route 7;
- Raider’s Road forest road in Galloway Forest Park; and,
- Mossdale to Gatehouse Station Railway Walk.

15.139 As detailed in **Appendix 15.1**, tourism and recreation is recognised as an important component of the economy at the national level and within Dumfries and Galloway (the Wider Socio-economic Study Area). In consequence, the tourism and recreation sector is also important within the Local Socio-economic Study Area and the identified Tourism and Recreation Study Area). Aside from the recreational routes noted above, other key tourism assets located within close proximity of this connection which were identified through the Tourism Business Survey or other assessments presented in this EIA Report include¹³:

- Mulloch Hill (170m AOD), situated south-east of St John’s Town of Dalry.
- Loch Ken (including Marina and Waterski School).
- Robert the Bruce Trail and Galloway Red Kite Trail.

- 371 heritage assets that have predicted (‘Bare-Ground’) visibility of the G-T connection (see **Appendix 12.8**) including 20 Scheduled Monuments, three Category A Listed Buildings, three Category B Listed Buildings and other heritage based outdoor visitor attractions.
- Other outdoor tourist destinations and visitor attractions: Galloway Activity Centre, Broughton House, Galloway Kite Trail, Kirkcudbright Golf Club, Park of Tongland Family Golf Centre, New Galloway Golf Club, Lochhill Equestrian and Trekking Centre, Loch Ken Holiday Park, Silvercraight Caravan Park, The Otter Pools.
- Indoor tourism destinations and visitor attractions: The Gallery at Laurieston, The Cocoabeen Company, Barstobrick Visitors Centre, The Smithy, Stewartry Museum, MacLellan’s Castle, Tolbooth Art Centre, Catstrand Arts and Visitors Centre.
- Hospitality businesses: Auld Alliance Restaurant, The Schoolhouse, Harbour Lights, The Castle, Mullberries, Kitty’s Tearooms, Station House Café & Cookery School, Solway Tide Tearoom, The Belfry Café.
- Visitor Accommodation businesses (focused around Kirkcudbright) including: Arden House Hotel, The Tides Inn, Steam Packet Inn, Masonic Arms, Castle Crevie Hay Barn Hostel, Kirkcudbright High Street Holiday Houses, Wellspring Holiday House, The Dairy House, Baytree Garden Studio, Old Fish House, 9 Castle Gardens, 57 High Street, Millstones House, Janevale, The Yellow Door, Begali Holiday Cottage, Rowan Cottage (part of Kenbridge Hotels), , Jings B&B, Glehnolme Country House B&B, Baytree House, Gladstone House B&B, Fludha Guest House, Blaven B&B, Brookford B&B, The Star Hotel, Burnbank Hotel, Kenbridge Hotel, The Cross Keys, Meiklewood Hotel, Number One B&B, Anchorlee Guesthouse, Glenholme Country B&B; 5 Wayside, Lochinvar Hotel, Cruachan House, Lochenbreck Byre, Rose Haugh, Rivergarth B&B, The Town House, Arden House Hotel, Kirkcudbright Bay Hotel, Selkirk Arms Hotel, Royal Hotel, The Coach House, Mews Lane Cottage and Dee View B&B.

Construction Effects

Employment and Economic Activity

15.140 As detailed in **Chapter 4** and **Chapter 5**, the construction the G-T connection will require the following main activities, which would give rise to direct and indirect capital expenditure and employment:

- Timber clearance (within wayleave): 207.97ha of timber to be felled, resulting in a total of 18,262.3tonnes of timber to be produced.
- Timber clearance (windthrow areas): 91.94ha of timber to be felled, resulting in a total of 22,920.2 tonnes of timber to be produced.
- OHL construction.
- Stringing of conductors and commissioning; and,
- Land reinstatement.

15.141 Associated employment and economic effects are assessed at the KTR Project level in the assessment of effects of the KTR Project as a Whole below.

Recreational Access

15.142 Construction traffic routes and access tracks required to construct this connection and complete all associated works would intersect with the following non-vehicular Core Paths and other recreational routes (refer to **Chapter 13** for an assessment of impacts on vehicular Core Paths):

- Core Path No. 164 Bardennoch Trail Pack Road;
- Southern Upland Way (Dumfries and Galloway Core Path No. 504);
- Core Path No. 143 Raiders Road;
- Core Path No. 205 Mossdale Kite Walk, Red Kite Trail;
- Core Path No. 142 Raiders Road to Kenmuir Link;

¹³ Note that this is not an exhaustive list.

- Core Path No. 177 Cairn Edward Hill;
- Core Path No. 153 Airie near Mossdale; and,
- Core Path No. 485 Mossdale to Gatehouse Station Railway Walk.

- 15.143 Individual users of these routes could experience temporary and localised disruption to footpath access during the construction period. To ensure safe construction practices and in accordance with the CDM Regulations 2015 and the Land Reform (Scotland) Act 2003 (as amended), it may be necessary to implement temporary diversions or managed crossing points in respect of these recreational routes, particularly during the undertaking of intensive construction activities. The proposed Embedded Mitigation Measures set out above will be implemented such that no formal closures of Core Paths are anticipated to be required.
- 15.144 Whilst no formal path closures are envisaged, owing to the number of Core Paths and thus the extent of the public access network likely to be temporarily disrupted, it is considered that the construction of this connection would represent a Medium magnitude of change in public access. Combined with the Medium sensitivity of the affected public access receptors, a temporary **Moderate** Adverse and therefore significant direct effect on recreational access is predicted. Wider effects on the tourism and recreation sector, including from any change to the visitor attractiveness and tourism potential of designated walking and recreational routes (rather than solely in terms of public access), are examined below.

Tourism and Recreation Sector

- 15.145 In accordance with the methodology detailed above, **Table 15.19** below provides a proportionate assessment of likely construction phase effects on each assessed receptor grouping. This assessment considers likely 'secondary' effects on the sector as a whole, rather than assessing 'primary' effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects where possible, but it applies equally to other potential receptors of the same grouping. The assessment takes account of likely effects associated with the removal of the R (south) route between Glenlee and Tongland (comprising towers R30 – R153).

Table 15.19: Predicted Construction Phase Effects on Tourism and Recreation Sector (Glenlee-Tongland)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Low	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">• Southern Upland Way: Minor Adverse near Waterside Hill (VP 7);• Core Path 516 south-west of Glenlee (VP 12): Major Adverse;• Core Path near Tannoch Flow (VP16): Moderate Adverse;• Core Path 177 near Bennan Moss (VP 18) Minor Adverse;• Core Path No. 142 Raiders Road to Kenmuir Link: Moderate Adverse;• Core Path 143 Raiders' Road (north of Stroan Loch – VP 20): Minor Adverse;• Core Path 485 at Mossdale and Stroan Viaduct (VPs 21, 22): Moderate Adverse and (VP 23): Minor Adverse;• Core Path 205 Mossdale Kite Walk, Red Kite Trail: Moderate Adverse overall;	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<ul style="list-style-type: none">• Core Path 153 Airie near Mossdale: Major Adverse overall; and,• Core Path No. 485 Mossdale to Gatehouse Station Railway Walk; <p><i>Transport and Access (Primary) Effects – taking account of CTMP (Chapter 13) and Recreational Access Assessment above:</i></p> <ul style="list-style-type: none">• Non-vehicular routes (see above): Core Path No. 164 Bardennoch Trail Pack Road; Southern Upland Way (Dumfries and Galloway Core Path No. 504); Core Path No. 143 Raiders Road; Core Path No. 205 Mossdale Kite Walk, Red Kite Trail; Core Path No. 177 Cairn Edward Hill; Core Path No. 153 Airie near Mossdale; and, Core Path No. 485 Mossdale to Gatehouse Station Railway Walk: Minor Adverse effects on all individual receptors, Moderate Adverse recreational access effect on route network.• Vehicular routes overlapping with construction access tracks (refer to Chapter 13): New Galloway West path (Core Path 516); Raiders Road to Kenmuir Link (Core Path 142); Raiders Road East (Core Path 141) and Cairn Edward Hill path (Core Path 177); Arie path, near Mossdale (Core Path 153); Glengap and Laurieston Forest (Core Path 28) and Retreat Wood, Laurieston (Core Path 144); The Gunney, Parton (Core Path 29) and Livingston Hill (Core Path 208): Minor Adverse effects on all individual receptors.• Vehicular routes overlapping with construction access routes (refer to Chapter 13): section of A762 between A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route; section of A713 between A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way); section of C13s intersects the Kenick Burn Walk (Core Path 200); and section of A712 between the A75 and the A762 intersects the National Cycle Route 7: Minor Adverse effects on all individual receptors. <p>As per paragraphs 15.141 – 15.142 above, whilst effects on access to individual routes are assessed as Minor Adverse, owing to the number of Core Paths and thus the extent of the public access network likely to be temporarily disrupted, it is considered that the construction of this connection would result in a temporary Moderate Adverse direct effect on public access to the network of recreational routes across the Tourism and Recreational Study Area.</p> <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Notwithstanding the above identified Moderate Adverse direct effect on recreational access, the adoption of proposed embedded mitigation</p>	

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>measures and the temporary duration of potential disruption during construction means that all recreational routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance).</p> <p>On this basis and taking account of all relevant 'primary' environmental effects, the construction phase of this connection is considered likely to result in temporary low magnitude of change to the visitor attractiveness and tourism potential designated walking and recreational routes. Having regard to the medium sensitivity of this receptor grouping, the construction of this connection is likely to result in a Minor adverse effect.</p>	
Outdoor tourist destinations	Low to Medium	Low	<p>Identified Tourism Assets</p> <ul style="list-style-type: none"> Heritage based outdoor tourist destinations and visitor attractions including: Park Stone Circle Scheduled Monument at Park of Tongland; Pre-historic Forts Scheduled Monuments, (including Carse Mote, Kirland, Miekle Sypland and Craig Hill), Threave Castle Scheduled Monument, Threave House Listed Building and Garden Designed Landscape and Neilson's Monument at Barstobrick Hill (VP 29) - other designated heritage assets also located within 10km Tourism and Recreation Study Area. Other outdoor tourist destinations and visitor attractions including: Galloway Activity Centre, Broughton House, Galloway Kite Trail, Kirkcudbright Golf Club, Park of Tongland Family Golf Centre, New Galloway Golf Club, Lochhill Equestrian and Trekking Centre, Loch Ken Holiday Park, Silvercraight Caravan Park, and The Otter Pools. <p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse; Foothills with Forest LCT: Minor Adverse; Rugged Uplands with Forest LCT: Minor Adverse; and, Drumlin Pastures LCT: Minor Adverse. <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none"> No likely significant adverse primary effects predicted <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Acknowledging the small sample size of responses, findings from the tourism business survey indicated that 2/3 of Outdoor Tourist Destinations and Visitor Attractions along the entire route of the KTR project anticipated a no impact (construction or operation).</p> <p>Irrespective of temporary changes in visual amenity at outdoor tourist destinations across</p>	<p>None to Minor Adverse (not significant)</p>

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>the assessed Study Area, the destinations will continue to provide the same tourism offering based around localised special features or characteristics. As detailed in Chapter 13 the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Temporary and intermittent visual effects are not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter the recreational or experiential value. On this basis, the construction phase of this connection is considered likely to have at most a temporary Low magnitude of change on this receptor grouping where outdoor tourist destinations experience primary environmental effects, resulting in at most a Minor adverse effect.</p>	
Hospitality	Low	Negligible	<p>Establishments identified from Tourism Business Survey</p> <ul style="list-style-type: none"> Auld Alliance Restaurant, The Schoolhouse, Harbour Lights, The Castle, Mullberries, Kitty's Tearooms, Station House Café & Cookery School, Solway Tide Tearoom and The Belfry Café. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>No change is predicted on hospitality businesses during the construction period, as the primary draw to such establishments is not visual amenity and on an aggregate level, any temporary decline in tourist trade during particularly intensive periods of construction is likely to be offset by increased passing trade from construction workers.</p> <p>It is considered that the construction of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase of this connection is considered likely to result in a temporary Negligible magnitude of change for this receptor grouping. Taking account of the low sensitivity of this receptor grouping, the significance of the likely effects is assessed as None.</p>	<p>None (not significant)</p>
Visitor Accommodation	Medium	Low Beneficial	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none"> Businesses (focused around Kirkcudbright) including: Arden House Hotel, The Tides Inn, Steam Packet Inn, Masonic Arms, Castle Crevie Hay Barn Hostel, Kirkcudbright High Street Holiday Houses, Wellspring Holiday House, The Dairy House, Baytree Garden Studio, Old Fish House, 9 Castle Gardens, 57 High Street, Millstones House, Janevale, The Yellow Door, Begali Holiday Cottage, Rowan Cottage (part of Kenbridge Hotels), Jings B&B, Glehnolme Country House B&B, Baytree House, Gladstone House B&B, Fludha Guest House, Blaven B&B, Brookford B&B, The Star Hotel, Burnbank Hotel, Kenbridge Hotel, The Cross Keys, Meiklewood Hotel, Number One B&B, Anchorlee Guesthouse, Glenholme Country 	<p>Minor Beneficial (not significant)</p>

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>B&B; 5 Wayside, Lochinvar Hotel, Cruachan House, Lochenbreck Byre, Rose Haugh, Rivergarth B&B, The Town House, Arden House Hotel, Kirkcudbright Bay Hotel, Selkirk Arms Hotel, Royal Hotel, The Coach House, Mews Lane Cottage and Dee View B&B.</p> <p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse; Foothills with Forest LCT: Minor Adverse; Rugged Uplands with Forest LCT: Minor Adverse; and, Drumlin Pastures LCT: Minor Adverse. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>Temporary changes in visual amenity alone are unlikely to have a significant impact on the functioning of relevant businesses. The findings from the Tourism Business Survey indicate that over 85% of Visitor Accommodation businesses in the Tourism and Recreation Area for the whole KTR Project anticipate either no change or a positive impact from the KTR Project during its construction. Temporary changes in occupancy during the construction period are assessed for KTR Project as a whole below.</p> <p>On this basis, the construction phase of this connection is considered likely to have a temporary Low beneficial magnitude of change on this receptor grouping, resulting in a Minor beneficial temporary effect.</p>	
Recreational activities in the open countryside	Low to Medium	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Mulloch Hill (VP 9 – representative of other hill summits with theoretical visibility): Minor Adverse The Otter Pool (VP 17): Barely Perceptible; Kennick Burn Picnic Area (VP 26): Moderate Adverse; Upper Dale LCT: Minor Adverse; Foothills with Forest LCT: Minor Adverse; Rugged Uplands with Forest LCT: Minor Adverse; and, Drumlin Pastures LCT: Minor Adverse. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside, including walking, cycling, hillwalking and horse-riding.</p>	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>It is acknowledged that the construction of this connection would result in some temporary adverse landscape and visual effects on areas of open countryside, as detailed in Chapter 7. However, it is not considered that any such effects would result in any associated adverse effects on recreational activities taking place in the Tourism and Recreation Study Area. Irrespective of temporary changes in visual amenity, land outwith construction working areas and associated compounds will continue to remain available for recreational use, and as detailed in Chapter 13, the development and implementation of a CTMP will ensure continuity of access is maintained.</p> <p>Taking account of the temporary nature of construction and all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities. On this basis, the construction phase of this connection is not likely to have a discernible impact on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None.</p>	
Tourists travelling through the open countryside	Low	Negligible	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> A762 Scottish Castle Route: Minor Adverse A712 Queens Way and Scottish Castle Route (VP14): Moderate Adverse; A75 South West Coastal Route 300, Burns Heritage Trail and Scottish Castle Route: Moderate Adverse; A711: Moderate r Adverse; Raiders Road Forest Drive and Raiders' Road north of Stroan Loch (VP 20): Minor Adverse; A762 east of Woodhall Loch (VP 24): Minor Adverse); A75 at junction with unclassified road (VP 30): Moderate Adverse; Unclassified road (U43S) near Argrennan Mains (VP31): Major adverse; A711 north of Tongland substation (VP 32): Moderate Adverse; Upper Dale LCT: Minor Adverse; Foothills with Forest LCT: Moderate Adverse; Rugged Uplands with Forest LCT: Moderate Adverse; and, Drumlin Pastures LCT: Moderate Adverse. 	None (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p><i>Transport and Access Driver Delay Effects on Classified Roads – taking account of CTMP (Chapter 13)</i></p> <ul style="list-style-type: none"> 171,297 movements, of which 78,434 movements will be HGV movements over the 58 months construction period. Felling and construction traffic estimated at an average of 164 vehicle movements per day over entire construction period, with a maximum of 234 vehicle movements per day from December 2025 to December 2026 ('the peak period'). A713 – between Carsphairn and Parton (part of the Galloway Tourist Route, the Scottish Castle Route and Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route): None. A712: Moderate Adverse between A75 and A762 and between A762 and A713); A711: Moderate Adverse between A75 and A762; A762 Scottish Castle Route: Minor Adverse between A712 and B795 and between B795 and A75; and, B741 (between New Cumnock and Dalmellington). <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment provided in Chapter 13 concludes that with the implementation of measures in a CTMP, only Minor temporary effects would occur on the local road network in relation to driver delay.</p> <p>The assessment in Chapter 7: LVIA concludes that the construction phase would generate only a limited number of temporary landscape and visual effects on individual road users. Such effects would be experienced within the context of a longer travel journey over a varied landscape setting that may also include other construction related activities. Additionally, the primary focus of drivers would be on the road rather than surrounding landscapes.</p> <p>Taking the above factors into account it is considered that whilst visibility of construction activities could momentarily affect the experience of tourists travelling in the open countryside, this would be insufficient to materially affect the overall tourism experience and thus the attractiveness of Dumfries and Galloway as a tourist destination. On this basis the construction phase of this connection is not likely to have a discernible effect on this receptor grouping. The predicted negligible magnitude of change results in the level of effect on this receptor grouping being assessed as None.</p>	

- 15.146 The assessment provided above indicates that owing to the number of Core Paths, and thus the extent of the public access network, likely to be temporarily disrupted, the construction of this connection would result in a temporary **Moderate**, and therefore **significant**, adverse 'primary' effect on public access.

The assessment provided in **Table 15.19** however concludes that no relevant components of the tourism and recreation sector are likely to experience 'secondary' effects (in relation to visitor attractiveness and tourism potential) which would be considered significant in the context of the EIA Regulations.

- 15.147 As per **Table 15.1**, construction phase effects on the forestry, construction and energy sectors have been scoped out of the assessment for individual connection as there is no potential for such effects to be considered significant in the context of the EIA Regulations.

Proposed Mitigation

- 15.148 Beyond the public access mitigation framework outlined in the 'Embedded Mitigation' section, no additional mitigation measures are proposed or considered necessary to address the assessed likely effects from the G-T connection.

Residual Construction Effects

- 15.149 As no further mitigation measures are proposed there is no change to the likely effects assessed above. The predicted temporary **Moderate Adverse** direct effect on recreational access therefore remains the only likely **significant** construction phase effect from this connection. For the avoidance of doubt, no likely significant secondary effects on the tourism and recreation sector have been identified.

Operational Effects

- 15.150 **Table 15.20** below provides a proportionate assessment of likely effects on each assessed receptor group in the tourism and recreation sector during the operational phase of the G-T connection. This assessment considers likely 'secondary' effects on the sector as a whole, rather than assessing 'primary' effects on individual tourism assets. The assessment makes reference to individual identified receptors and associated likely primary environmental effects where possible, but it applies equally to other potential receptors of the same grouping. As noted above, this assessment takes account of likely effects associated with the removal of the 'R' route between Glenlee and Tongland (towers R30–R153).

Table 15.20: Predicted Operational Phase Effects on Tourism and Recreation Sector (Glenlee-Tongland)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
Designated walking and recreational routes	Medium	Medium	<p>'Primary' Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Southern Upland Way: Minor Adverse near Waterside Hill (VP 7) and for overall route; Core Path 516 south-west of Glenlee (VP 12): Major Adverse; Core Path near Tannoch Flow (VP16): Moderate Adverse; Core Path 177 near Bennan Moss (VP 18) Minor Adverse; Core Path 143 Raiders' Road (north of Stroan Loch – VP 20): Minor Adverse; Core Path 485 at Mossdale and Stroan Viaduct (VPs 21, 22): Moderate Adverse and (VP 23): Minor Adverse; Core Path 205 Mossdale Kite Walk, Red Kite Trail: Moderate Adverse overall; and, Core Path 153 Airie near Mossdale: Moderate Adverse overall. 	Moderate Adverse (significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The construction and operation of this G-T connection would enable the removal of the R route (south) between Glenlee and Tongland (comprising towers R30 – R153), such that from many locations the new G-T connection would not represent a second infrastructure feature in the landscape.</p> <p>There is limited evidence available regarding impacts of transmission infrastructure on tourism and recreation, and in particular on the use of designated routes. However, a study by Munro and Ross (2011) regarding the Beaulay-Denny 400kV transmission line found that whilst perceived to have a negative impact, there is little evidence to show causal effects between the introduction of OHL and visitor numbers to recreational routes (Munro and Ross, 2011). Evidence from international literature regarding the acceptability of grid and renewable energy infrastructure, in particular onshore wind turbines (i.e. similar tall structures in the landscape) also indicates that whilst visual impacts are often a key source of concern at the consenting stage, there is no conclusive evidence that the introduction of such infrastructure subsequently discourages visitors (Welsh Government, 2014; Eirgrid, 2015).</p> <p>From the Tourism Business Survey, three respondents situated to the south and west of Loch Ken (i.e. closer to the G-T connection than the existing R route (south)) raised concerns that the relocation of OHL infrastructure would spoil natural beauty and cause landscape impacts which, in the respondents’ view, could have a negative impact on tourism and recreation. Whilst these views have been taken account of in the assessment, it should be noted that they are not based on an objective impact assessment, as is presented for the KTR Project in Chapter 7: LVIA. The LVIA concludes that this connection would result in only a limited number of likely significant landscape or visual effects on relevant receptors. Furthermore, delivering this connection would enable the removal of the R route (south) between Glenlee and Tongland (comprising towers R30 – R153), such that from many locations the new connection would not represent a second infrastructure feature in the landscape. It must also be noted that all designated routes will continue to remain open and fulfil their purpose of providing countryside access (whether local or long distance).</p> <p>Owing to the extent and significance of visual amenity effects likely to be experienced on relevant recreational routes and across the Core Path network from the G-T connection (i.e. more impacted receptors and at a greater magnitude compared with likely</p>	

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			effects from other connections), based on professional judgement a slightly increased magnitude of change in the visitor attractiveness of this receptor grouping is considered likely. A Medium magnitude of change is therefore predicted. Taking account of the identified Medium sensitivity of the receptor grouping, this results in a Moderate Adverse (significant) effect on this component of the tourism and recreation sector from the G-T connection.	
Outdoor tourist destinations	Low to Medium	Low	<p>Identified Tourism Assets</p> <ul style="list-style-type: none"> Heritage based outdoor tourist destinations and visitor attractions including: Park Stone Circle Scheduled Monument at Park of Tongland; Pre-historic Forts Scheduled Monuments, (including Carse Mote, Kirland, Miekle Sypland and Craig Hill), Threave Castle Scheduled Monument, Threave House Listed Building and Garden Designed Landscape and Neilson’s Monument at Barstobrick Hill (VP 29) – other designated heritage assets also located within 10km Tourism and Recreation Study Area. Other outdoor tourist destinations and visitor attractions including: Galloway Activity Centre, Broughton House, Galloway Kite Trail, Kirkcudbright Golf Club, Park of Tongland Family Golf Centre, New Galloway Golf Club, Lochhill Equestrian and Trekking Centre, Loch Ken Holiday Park, Silvercraight Caravan Park, The Otter Pool. <p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> Upper Dale LCT: Minor Adverse; Foothills with Forest LCT: Moderate Adverse; Rugged Uplands with Forest LCT: Moderate Adverse; and, Drumlin Pastures LCT: Moderate Adverse. <p><i>Cultural Heritage Setting Effects (Chapter 12)</i></p> <ul style="list-style-type: none"> Moderate Adverse (significant) effect predicted on setting of Stroan, settlement (MDG8225). Minor adverse (not significant) effects identified on 26 heritage assets <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The Galloway Activity Centre is a large outdoor adventure centre on the shore of Loch Ken which offers a number of outdoor recreational activities, many of them focused upon Loch Ken itself. Recreational activities and special interests (e.g. heritage</p>	<p>None to Minor Adverse (not significant)</p>

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>appreciation) are the main draws for destinations in this receptor grouping. Therefore, whilst scenic landscapes may contribute to their experiential value, they are not the primary rationale for visits to outdoor tourist destinations.</p> <p>The construction of this connection would enable the removal of the R route (south) between Glenlee and Tongland (comprising towers R30 – R153), such that from many locations the new connection would not represent a second infrastructure feature in the landscape. 69% of respondents to the Tourism Business Survey felt there would be no impact on the performance of their business once the KTR Project is operational, with 15% of businesses expecting a beneficial impact and 15% reporting an expected negative effect. The main reason cited for the perceived lack of impact was that for businesses close to or with visibility of the existing OHL, the new line would represent replacement rather than additional infrastructure and this would be unlikely to alter the visitor attractiveness of tourist destinations (and associated visitor accommodation).</p> <p>Irrespective of potential changes in visual amenity at outdoor tourist destinations across the assessed Study Area, these destinations will continue to provide the same tourism offering based around localised special features or characteristics. Whilst the G-T connection may be visible from some outdoor tourist destinations and result in limited impacts on landscape character, evidence from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experiential value of visiting a destination with its own special features. This conclusion was succinctly articulated in the Report of a Public Local Inquiry (PLI) held regarding Benbrack Wind Farm near Carsphairn, where in relation to potential tourism impacts the Reporter concluded: <i>“it is wrong to solely isolate the presence of wind farms as any particular factor in influencing (tourism) behaviour. Given the broad range of tourism and recreation activities and the complexity of human behaviour, the studies show to me that it is most likely that individuals make their choices based on a whole range of inter-related factors, balancing advantages against disadvantages as they perceive them”</i>. The findings of the Benbrack PLI Report were adopted by the Scottish Ministers as their own without qualification and Benbrack Wind Farm was consented by the Scottish Ministers in September 2017.</p> <p>Intermittent visual effects alone are therefore not likely to detract from the purpose of visits to specific outdoor tourist destinations and thus to alter their recreational or experiential</p>	

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			value. On this basis, the presence of this connection would be likely to generate at most a Low magnitude of change on the visitor attractiveness of this receptor grouping where primary environmental effects are experienced. Taking account of receptor sensitivity, this results in at most a Minor Adverse effect on the receptor grouping.	
Hospitality	Low	Negligible	<p>Establishments identified from Tourism Business Survey</p> <ul style="list-style-type: none"> Auld Alliance Restaurant, The Schoolhouse, Harbour Lights, The Castle, Mullberries, Kitty’s Tearooms, Station House Café & Cookery School, Solway Tide Tearoom and The Belfry Café. <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>The presence of this connection is not considered likely to materially alter the customer appeal of this receptor grouping, as the main draw to hospitality establishments is their food, drink and entertainment offering, which would be unaffected by the proposed development, rather than visual amenity per se or localised changes to the landscape character (in any case, only minor effects on landscape character are predicted from this connection). It should also be noted that the construction of this connection would enable the removal of the ‘R’ route (south) between Glenlee and Tongland (comprising towers R30 – R153), such that from many locations the new connection would not represent a second infrastructure feature in the landscape</p> <p>Acknowledging the small sample size, the Tourism Business Survey indicates that of the four hospitality receptors which responded to the business survey for the whole of the KTR Project, none anticipate an adverse impact on visitor numbers due to the KTR Project during its operation.</p> <p>It is considered that the presence of this new connection is not likely to have a discernible effect on this receptor grouping. On this basis, the construction phase of this connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect (‘None’).</p>	None (not significant)
Visitor Accommodation	Medium	Low	<p>Accommodation identified from Tourism Business Survey</p> <ul style="list-style-type: none"> Businesses (focused around Kirkcudbright) including: Arden House Hotel, The Tides Inn, Steam Packet Inn, Masonic Arms, Castle Crevie Hay Barn Hostel, Kirkcudbright High Street Holiday Houses, Wellspring Holiday House, The Dairy House, Baytree Garden Studio, Old Fish House, 9 Castle Gardens, 57 High Street, Millstones House, Janevale, The Yellow Door, Begali Holiday Cottage, Rowan Cottage (part of Kenbridge 	Minor Adverse (not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>Hotels), Jings B&B, Glehnolme Country House B&B, Baytree House, Gladstone House B&B, Fludha Guest House, Blaven B&B, Brookford B&B, The Star Hotel, Burnbank Hotel, Kenbridge Hotel, The Cross Keys, Meiklewood Hotel, Number One B&B, Anchorlee Guesthouse, Glenholme Country B&B; 5 Wayside, Lochinvar Hotel, Cruachan House, Lochenbreck Byre, Rose Haugh, Rivergarth B&B, The Town House, Arden House Hotel, Kirkcudbright Bay Hotel, Selkirk Arms Hotel, Royal Hotel, The Coach House, Mews Lane Cottage and Dee View B&B.</p> <p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">• Upper Dale LCT: Minor Adverse;• Foothills with Forest LCT: Minor Adverse;• Rugged Uplands with Forest LCT: Minor Adverse;• Drumlin Pastures LCT: Minor Adverse. <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>Tourist accommodation businesses located within proximity of the G-T connection are predominantly clustered in and around the Kirkcudbright urban area, with a limited number of businesses dispersed in more rural locations. Identified businesses largely comprise small self-catering and B&B facilities with low capacity, turnover, and staffing requirements. Any potential changes to the visitor attractiveness and operation of individual businesses would therefore be unlikely to induce wider socio-economic effects across the tourism sector or the wider regional economy. The receptor grouping has however been assigned a Medium sensitivity rating as scenic landscapes and visual amenity contribute to the experiential value of tourist accommodation stays.</p> <p>The assessment presented in Chapter 7 concludes that only Minor adverse visual effects are predicted as likely on the host LCT.</p> <p>Evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists staying in the area because of its landscape qualities, such that changes in visual amenity are unlikely alone to have a significant effect on the functioning of visitor accommodation businesses. On this basis, it is considered that the presence of this connection would have a Low magnitude of change on this receptor grouping where primary effects are experienced. Taking</p>	

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			account of receptor sensitivity, this results in a Minor adverse effect.	
Recreational activities in the open countryside	Low to Medium	Negligible to Low	<p>‘Primary’ Environmental Effects on Tourism Assets</p> <p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none">• Mulloch Hill (VP 9 - representative of other hill summits with theoretical visibility): Minor Adverse• The Otter Pool (VP 17): Barely Perceptible;• Kennick Burn Picnic Area (VP 26): Moderate Adverse;• Upper Dale LCT: Minor Adverse;• Foothills with Forest LCT: Minor Adverse;• Rugged Uplands with Forest LCT: MinorAdverse• Drumlin Pastures LCT: Minor Adverse. <p>‘Secondary’ Effects on Visitor Attractiveness and Tourism Experience</p> <p>This receptor grouping encompasses a broad range of recreational activities which may be undertaken in the countryside including walking, cycling, hillwalking and horse-riding.</p> <p>It is acknowledged that the presence of this connection would result in some adverse landscape and visual effects on areas of open countryside where recreational activities may be undertaken, as detailed in Chapter 7. It should also be noted that the construction and operation of this connection would enable the removal of the ‘R’ route (south) between Glenlee and Tongland (comprising towers R30 – R153), such that from many locations the new connection would not represent a second infrastructure feature in the landscape.</p> <p>Evidence discussed above from international literature and the consenting of nearby wind farms indicates that visibility of infrastructure alone would be unlikely to diminish recreational experience. Taking account of all aspects of recreational activities including the experiential value of the activity itself (i.e. not merely views from hill summits or other locations in good weather conditions), there is no quantifiable evidence available to indicate that this would be likely to impact on the undertaking of recreational activities.</p> <p>On this basis, depending on recreational activity type and the extent of infrastructure visibility, the presence of this connection is considered likely to generate at most a Low magnitude of change on this receptor grouping where primary environmental effects are experienced, resulting in at most a Minor Adverse effect.</p>	None to Minor Adverse (not significant)
Tourists travelling	Low	Negligible	‘Primary’ Environmental Effects on Tourism Assets	None

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
through the open countryside			<p><i>Landscape and Visual Effects (Chapter 7)</i></p> <ul style="list-style-type: none"> A762 Scottish Castle Route: Moderate Adverse A713 Galloway Tourist Route: Barely Perceptible; A712 Queens Way and Scottish Castle Route (VP14): Moderate Adverse; A75 South West Coastal Route 300, Burns Heritage Trail and Scottish Castle Route: Minor Adverse; A711: Moderate Adverse; B795: None; Raiders Road Forest Drive and Raiders' Road north of Stroan Loch (VP 20): Minor Adverse; A762 east of Woodhall Loch (VP 24): Barely Perceptible); A75 at junction with unclassified road (VP 30): Moderate Adverse; A711 north of Tongland substation (VP 32): Moderate Adverse; Upper Dale LCT: Minor Adverse; Foothills with Forest LCT: Minor Adverse; Rugged Uplands with Forest LCT: Minor Adverse; and, Drumlin Pastures LCT: Minor Adverse. <p>'Secondary' Effects on Visitor Attractiveness and Tourism Experience</p> <p>The assessment presented in Chapter 7 indicates that the majority of identified landscape and visual receptors are only likely to experience minor adverse (not significant) effects from the G-T connection, although a limited number of significant effects at specific locations are also experienced.</p> <p>Any landscape and visual effects experienced by individual road users would be experienced within the context of a longer travel journey over a varied landscape setting, likely to include other infrastructure and built form. It must also be noted that the construction of this connection would enable the removal of the 'R' route (south) between Glenlee and Tongland (comprising towers R30 – R153), such that from many locations the new connection would not represent a second infrastructure feature in the landscape.</p> <p>Any assessment of impacts on the experience of tourists travelling through the open countryside must firstly account for the fact that the primary focus of drivers would be on the road rather than surrounding landscapes. Furthermore, the evidence discussed above from international literature and the consenting of nearby wind farms also</p>	(not significant)

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change – Visitor Attractiveness and Tourism Potential	Rationale	Potential Effect
			<p>indicates that visibility of infrastructure alone would be unlikely to diminish the experience of tourists travelling through scenic landscapes for the purpose of reaching specific destinations.</p> <p>Taking the above factors into account, whilst visibility of OHL infrastructure from the G-T connection could momentarily affect the experience of tourists travelling (by road) in the open countryside, any such perception would be insufficient to materially affect the overall tourism experience and thus the attractiveness of the Tourism and Recreation Study Area as an overall tourist destination, including for repeat visits.</p> <p>It is therefore considered that the presence of this connection is not likely to have a discernible effect on this receptor grouping. On this basis, the G-T connection is not likely to generate a discernible magnitude of change on this receptor grouping, resulting in no perceptible adverse effect ('None').</p>	

15.151 As stated in **Table 15.20**, the G-T connection is likely to result in a **Moderate Adverse** effect on the Designated Walking and Recreational Routes component of the tourism and recreation sector in terms affecting the visitor attractiveness and tourism potential of this recreational resource. This is considered **significant** in the context of the EIA Regulations. As this receptor grouping is an important component of the overall tourism and recreation sector and indeed supports other components (e.g. visitor accommodation and hospitality), on the basis of professional judgement it is considered that a **Moderate Adverse** effect on the overall tourism and recreation sector is likely to occur from the operation of the G-T connection.

15.152 It is important to note that the assessment conclusion reached above has been reached based on professional judgement and reflects the sensitivity of designated walking and recreational routes as an important tourism receptor grouping, combined with the predicted magnitude of change on the visitor attractiveness of such routes across the assessed Study Area. This change in visitor attractiveness could be expected to result in a reduction in visitor numbers along affected sections of specific designated walking and recreational routes, and an associated reduction in tourism related expenditure locally. However, there is no evidence available to indicate that even if this was to occur locally, it would necessarily impact upon other key components of the tourism and recreation section or on tourism expenditure across the assessed Study Area.

15.153 As per **Table 15.1**, operational phase effects on other business sectors have been scoped out of the assessment for individual connection as there is no potential for such effects to be considered significant in the context of the EIA Regulations.

Proposed Additional Mitigation

15.154 Beyond the measures identified in the Embedded Mitigation section of this chapter, no further mitigation is proposed or otherwise considered necessary specifically to address likely socio-economic, tourism and recreation effects from this connection.

Residual Operational Effects

15.155 As no additional mitigation measures are proposed there is no change to the likely effects assessed above. The predicted **Moderate Adverse** secondary effect on the designated walking and recreational routes component of the tourism and recreation sector therefore remains the only likely **significant** operational phase effect from this connection.

Monitoring

15.156 No monitoring is considered to be required specifically in relation to the predicted residual effects.

Summary of Effects

15.157 The summary of effects resulting from the construction and operational phase of the proposed development is detailed **Table 15.21** below.

Table 15.21: Summary of Effects (Glenlee-Tongland)

Phase	Receptor		Mitigation	Assessment of Residual Effect
Construction	Recreational Access		Implementation of recreational access good practise measures.	Moderate Adverse (significant)
	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Minor Adverse (not significant)
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor accommodation	None identified	Minor Beneficial (not significant)
		Recreational activities in the open countryside	None identified	None (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)
Operation	Tourism and Recreation Sector	Designated walking and recreational routes	None identified	Moderate Adverse (significant)
		Outdoor tourist destinations	None identified	None to Minor Adverse (not significant)
		Hospitality	None identified	None (not significant)
		Visitor Accommodation	None identified	Minor Adverse (not significant)
		Recreational activities in the open countryside	None identified	None to Minor Adverse (not significant)
		Tourists travelling (by road) through the open countryside	None identified	None (not significant)

KTR Project as a Whole: Assessment of Effects

Construction Effects

Employment Effects

- 15.158 As detailed in **Chapter 4** and **Chapter 5**, the construction of the overall KTR Project will require the following main activities, which would give rise to direct and indirect capital expenditure and employment:
- Timber clearance (within wayleave): 242.5 ha of forestry to be felled, with the majority of the trees proposed for felling comprising Sitka spruce, the dominant species in Scottish commercial forestry;
 - Timber clearance (windthrow areas): 113.52 ha of timber to be felled;
 - OHL construction;
 - Stringing of conductors and commissioning;
 - Land reinstatement; and,

- Decommissioning of N and R routes: removal of steel towers and conductors.

15.159 Based on empirical data from the construction of the recently completed South West Scotland Renewables Connection Project, construction labour requirements (at supervisor and operational staff level) for the KTR Project have been estimated by SPEN. As detailed in **Table 15.22** below these estimates were provided for each connection based on the number of poles or towers per connection. It important to note these estimates only capture likely gross direct construction employment per connection rather than considering net additional employment, which can only be assessed for the KTR Project as a Whole due to the influence of additionality factors (deadweight, displacement, leakage and multiplier effects – see below) and the need to assess employment changes across identified Study Areas.

Table 15.22: Gross Person Years Employment (PYE) Employment

Connection	Person-Hours	PYE
Polquhanity to Glenlee (via Kendoon)	206,120	118
Carsfad to Kendoon	11,008	6
Earlstoun to Glenlee	9,008	5
BG Route Deviation	37,112	21
Glenlee to Tongland	653,360	375
Removal of N and R Routes	63,624	37
Total	980,232	562

- 15.160 **Table 15.22** indicates that the construction of the KTR project is likely to require approximately 980,232 person-hours to undertake tree clearance activities, construction of OHL and decommissioning works. The estimates were provided in person-hours and converted to person years employment (PYE) to allow the number of people on sites along the KTR Project over the whole construction period to be estimated as annual full-time equivalent posts.
- 15.161 The estimated 562 PYE positions above will differ from the number employed along the KTR Project at any given time, due to variance across construction periods and the potential use of part-time or temporary staff. At the height of construction, when foundation work, tower/pole erection and stringing could all be occurring concurrently, SPEN estimates a peak of 550 construction personnel employed on site (this has been taken into account in the assessment of likely construction traffic effects provided in **Chapter 13**).
- 15.162 To enable gross PYE positions to be converted into net additional employment, it was first necessary to consider the proportion of employment on site that would be related to either tree clearance or construction activities (incorporating decommissioning and reinstatement where applicable). Taking account of the extent of felling required (i.e. wayleave corridor clearance) or otherwise proposed (i.e. windthrow mitigation) and the likely duration of these works, felling was assumed to account for 60% of activity with construction accounting for 40%. **Table 15.23** below identifies predicted gross PYE by broad activity for each connection.

Table 15.23: Gross PYE Employment by Broad Activity

Connection	Felling	Construction
Polquhanity to Glenlee (via Kendoon)	71	47
Carsfad to Kendoon	4	2
Earlstoun to Glenlee	3	2
BG Route Deviation	13	8
Glenlee to Tongland	225	150
Removal of N and R Routes	22	15
Sub Total	337	225
Total	562	

Net Employment

15.163 As outlined in **Table 15.23** construction of the KTR Project is estimated to support 562 PYE jobs over the construction period. However, only a proportion of total construction phase employment would support resident employment in the Local and Wider Socio-economic Study Areas¹⁴. To estimate likely net employment, the additionality assumptions detailed in **Tables 15.24** and **15.25** below have been applied to gross employment values.

Table 15.24: Tree-Clearance Activities Employment Additionality Factors

Additionality Factor	Local Study Area	Wider Study Area	Rationale
Deadweight	0%	0%	As detailed above, in the absence of the KTR Project being constructed, operational uses and economic activities along the proposed KTR Project area and within the assessed Local and Wider Socio-economic Study Areas are expected to remain broadly unchanged. No deadweight employment on the sites along the KTR Project route is anticipated.
Leakage	35%	30%	It is anticipated that due to the extensive felling requirements of the KTR Project, the principal contractor is likely to utilise the existing workforce to perform tree-clearance activities. A significant proportion of such employees may be resident in relevant study areas. As detailed in Appendix 15.1 , there are 700 Forestry jobs across the Wider Socio-economic Study Area, representing 15.5% of the total across Scotland. This suggests a developed sectoral labour market.
Displacement	75%	75%	The tree-clearance activities of the KTR Project is largely anticipated to displace felling managed through existing Forestry Management Plans overseen by Forest and Land Scotland (FLS) ¹⁵ . Planned removal of trees is likely to be adjusted in light of the KTR Project, leading to a temporary delay in planned tree-clearance activities elsewhere within the Local and Wider Socio-economic Study Areas. In economic terms, this means a relatively high proportion of the total felling activity and employment now predicted from the KTR Project may otherwise have occurred due to planned felling over the period of the construction programme. This felling (not linked to the KTR Project) will however still need to take place in future years.
Multiplier	1.51	1.54	Linked to predicted employment leakage, the multiplier has been assumed at 65% of the Type II Employment Multiplier for the Scottish Forestry Harvesting Industry at the Local Socio-economic Study Area level and 70% at the Wider Socio-economic Study Area level. This reflects the relatively developed forestry supply chain across both study areas, including sawmills at Dalbeattie; Castle Douglas; Minnigaff; and Lagrae.

Table 15.25: Construction Employment Additionality Factors

Additionality Factor	Local Study Area	Wider Study Area	Rationale
Deadweight	0%	0%	As per rationale in Table 15.24 .
Leakage	90%	85%	Construction employment is anticipated to exhibit high specialist skills requirements and draw on an established labour supply likely employed by the principal contractor. As a result, the proportion of jobs occupied by residents across both the Local and Wider Socio-economic Study Area is likely to be minimal. There may be some scope for study area employment in temporary or contracted roles.
Displacement	20%	25%	The specialist nature of the KTR Project is unlikely to displace typical construction schemes across the Local and Wider Socio-economic Study Areas. The construction labour market of the relevant study areas is structured primarily around the residential market, with only 6.3% of construction employment concentrated in civil engineering ¹⁶ . The Wider Socio-economic Study Area was home to 65 Civil Engineering firms in 2016 ¹⁷ , indicating a lack of a market for major infrastructure works such as the KTR Project.
Multiplier	1.08	1.13	Linked to predicted employment leakage, the multiplier has been assumed at 10% of the Type II Employment Multiplier for the Scottish Construction Industry at the Local Study Area level and 15% at the Wider Socio-economic Study Area

Additionality Factor	Local Study Area	Wider Study Area	Rationale
			level. This is to reflect the geographic distribution of the construction sector supply chain, which in the case of major infrastructure development is largely concentrated in the Central Belt.

15.164 Taking account of the additionality assumptions detailed in **Tables 15.24** and **15.25**, the construction phase of the KTR Project is anticipated to generate or support 102 temporary net additional PYE jobs in the Local Socio-economic Study Area and 120 temporary net additional PYE jobs in the Wider Socio-economic Study Area over the construction period. The total breakdown of jobs by sector and Study Area is presented in **Table 15.26** below.

Table 15.26: Net PYE Construction Jobs

Broad Activity	Local Socio-economic Study Area	Wider Socio-economic Study Area
Felling (Wayleave corridor + Windthrow)	82	91
Construction	20	29
Total	102	120

15.165 In accordance with the methodology detailed above, net employment associated with the KTR Project across both the construction and forestry sectors would therefore represent a medium magnitude of change on the labour market (a low sensitivity receptor) across both the Local and Wider Socio-economic Study Areas, resulting in short-term **Minor beneficial (not significant)** effects at both spatial scales.

Economic Activity

15.166 As detailed in **Table 15.27** below, the net additional temporary felling and construction activities associated with the KTR Project are expected to contribute £9.1 million and £10.4 million GVA to the economy in the Local and Wider Socio-economic Study Area respectively. These figures have been calculated by applying the GVA Parameters listed in **Table 15.8** to net additional employment in each sector.

Table 15.27: GVA Contribution of KTR Project to the Economy

Broad Activity	Local Socio-economic Study Area	Wider Socio-economic Study Area
Felling	£8.1m	£8.9m
Construction	£1.1m	£1.5m
Total	£9.1m	£10.4m

Effects on Key Business Sectors: Forestry

15.167 Forestry covers approximately 211,000 hectares of the Wider Socio-economic Study Area (Dumfries and Galloway), comprising 31% of the total land area. In terms of employment, the forestry sector supports some 700 workforce jobs across the Wider Socio-economic Study Area, which accounts for 15.5% of all forestry employment in Scotland despite the area containing only 2.7% of Scotland’s population¹⁸.

- 15.168 As detailed in **Chapter 5**, construction of the KTR Project will require wayleave and windthrow felling:
- A 80m/70m wayleave or servitude right (i.e. 40 m either side of the centre line for the steel tower and 35m either side for the wood pole respectively) will be required to safely construct and maintain the overhead lines forming part of the KTR Project. To achieve this, the minimum clearance corridor (wayleave) required through commercial forestry is 80m/70m, but where an overhead line is proposed to go through other woodland areas such as broadleaf, the extent of tree clearance within the wayleave is determined based on a detailed assessment of the type, age and condition of trees in that location to minimise loss of trees (and is therefore likely to be less than 40m/35m).

¹⁴ Resident employment refers to jobs occupied by residents of the relevant study area.

¹⁵ Previously Forest Enterprise Scotland.

¹⁶ ONS, Business Register and Employment Survey, 2019.

¹⁷ Scottish Government, SABS, 2019.

¹⁸ ONS (2019). *Business Register and Employment Survey*; ONS (2019). *Population Estimates – local authority based by five-year age band*.

- Windthrow mitigation felling is also proposed in some areas where wayleave felling is likely to reduce the stability of remaining trees in affected forest compartments.

- 15.169 As detailed in **Chapter 5**, total wayleave felling of 242.5 hectares (ha) is required for the KTR Project in its entirety, with the majority of the trees proposed for felling comprising Sitka spruce, the dominant species in Scottish commercial forestry. Windthrow mitigation felling amounting to 113.52 ha is also proposed.
- 15.170 Forestry restocking (i.e. to compensate for wayleave and windthrow felling in accordance with national policy requirements) will also occur in specific areas as a consequence of the KTR Project. However, this would be delivered by impacted landowners and represents an acceleration of pre-existing forestry management plans rather than necessarily resulting in new economic activities. Adopting a conservative approach, forestry restocking as an economic activity in itself has therefore been excluded from the scope of this assessment and has instead been considered only as environmental mitigation.
- 15.171 The 91 predicted net additional temporary jobs supported by tree-clearance activities required to deliver the KTR Project represents, for a single scheme, a relatively high proportion (13.0%) of existing forestry employment across the Wider Socio-economic Study Area. This suggests that the KTR Project is likely to generate a noticeable uplift in sectoral activity and employment during the construction programme.
- 15.172 Whilst the uplift attributed to the KTR Project would be temporary and is likely to displace some planned felling (from long-term forest management), the increase in sectoral activity is still likely to catalyse investment (e.g. new plant and machinery) which would improve productivity and increase capacity in the long term. On this basis, the temporary predicted uplift to the forestry sector (Medium sensitivity) represents a Medium magnitude of change on the sector as per the criteria detailed in **Table 15.4**, resulting in a **Moderate beneficial (significant)** short term sectoral effect.

Effects on Key Business Sectors: Construction

- 15.173 The construction sector employs some 700 people across the Local Socio-economic Study Area and 5,800 across the Wider Socio-economic Study Area. However, the level of construction activity undertaken is inherently dependent upon fluctuating demand for short term projects and changes in the pipeline for larger and longer-term projects, such that construction employment is likely to fluctuate. As detailed in **Appendix 15.1**, the construction sector is considered to have medium sensitivity to changes in the pipeline of construction activities occurring within the Wider Study Area.
- 15.174 The 29 predicted net additional temporary jobs supported by the construction of the KTR Project represents, for a single scheme, a very low proportion (0.05%) of total construction employment in the Wider Socio-economic Study Area. Likewise, the GVA contribution of construction activity from the KTR Project in the Wider Socio-economic Study Area (**Table 15.27**) represents only 0.96% of total construction GVA generated across Dumfries and Galloway (i.e. the Wider Socio-economic Study Area) 2016 (in 2019 prices). This is considered to be a low magnitude of change in terms of the additional construction sector activity generated by the proposed development.
- 15.175 On this basis, and as the Principal Contractor appointed by SPEN may be based outwith the Wider Socio-economic Study Area, the KTR Project is likely to generate a **Minor beneficial (not significant)** temporary effect on the construction sector across both assessed Study Areas, largely through sub-contracting and supply chain activities.

Effects on Key Business Sectors: Tourism and Recreation

- 15.176 As noted in **Table 15.1**, construction phase effects on the tourism and recreation sector have been assessed both for each individual KTR Project connection and for the KTR Project as a Whole. The assessment examined six relevant components of the sector as a whole rather than with respect to individual tourism assets: designated routes, hospitality, visitor accommodation, outdoor tourist destinations, recreational activities in the open countryside, and travelling (by road) though the open countryside (as referred to in Tourism and Recreation **Appendix 15.1**). This sectoral assessment has been informed by a Tourism Business Survey (as discussed in **Appendix 15.1**) and takes account of all predicted likely 'primary' effects on individual tourism and recreational assets as assessed in other chapters of the EIA Report. The assessment has also taken account of the currently known impacts of the COVID-19 pandemic on the tourism and recreation sector (as of July 2020).
- 15.177 Effects on the occupancy of visitor accommodation by the construction workforce can only be assessed for the KTR Project as a whole, for the same reasons that construction labour requirements would only

be significant in EIA terms and have only been assessed on a KTR Project wide basis. As with the assessments of other effects on tourism and recreation, the occupancy of visitor accommodation essentially represents a type of 'primary' effect which could contribute to wider 'secondary' effects on the tourism and recreation sector.

- 15.178 The highest monthly occupancy and conversely lowest month vacancy rates observed across the Wider Socio-economic Study Area in 2018 (see Table 9 in **Appendix 15.1**) indicates that if similar levels of demand for visitor accommodation occurred during the construction phase, there would remain sufficient capacity available locally to accommodate construction workers (assumed to be supervisory staff and managers) for overnight stays without distorting the visitor accommodation market, even in peak season. However, in the wake of the COVID-19 pandemic, tourism activity and associated demands for visitor accommodation are projected to remain substantially below previously observed levels for several years. Accommodation bookings by construction workers over the construction programme therefore now represent a potentially important boost which could help sustain some visitor accommodation businesses within the assessed Tourism and Recreation Study Area, albeit uncertainties remain regarding which individual businesses may benefit. Temporary use of visitor accommodation by construction workers is therefore considered to represent a Low Beneficial effect on a Medium sensitivity receptor, resulting in a **Minor Beneficial (not significant)** effect.
- 15.179 Likely effects from the construction of each connection on each key component of the tourism and recreation sector are set out in the individual connection assessments detailed above. These indicate **no significant** adverse effects are considered likely to occur from the construction of each individual connection, owing to a range of inter-related factors including:
- The temporary and intermittent nature of proposed construction activities.
 - The proposed development and implementation of a CDEMP and CTMP, ensuring all recreational routes will remain open and delays on the local road network will be minimised.
 - No or limited relationships between external changes in visual amenity and the visitor attractiveness of indoor tourist destinations and hospitality establishments.
 - Opportunities for hospitality establishments to benefit from increased passing trade from construction workers (offsetting any temporary decline in tourist trade during intensive construction periods).
 - The vast majority of visitor accommodation within the Tourism and Recreation Study Area comprises self-catering facilities with low capacity, turnover, and staffing requirements. Any changes to the operation of such businesses are unlikely to induce wider sectoral effects.
 - The experiential value of outdoor tourist destinations and recreational activities themselves, rather than simply their landscape setting, coupled with the temporary, localised and transient nature of construction activities; and,
 - The limited influence of momentary construction visibility when undertaking a longer travel journey to wider tourism experiences.
- 15.180 Assessed construction phase effects on the visitor attractiveness and tourism potential of each key component of the tourism and recreation sector (i.e. each receptor grouping) are considered to be the same for the KTR Project as a Whole as the assessed likely effects on individual connections (assessed above). The assessment has been undertaken on a sectoral basis across the Tourism and Recreation Study Area (i.e. the identified 6 relevant components of the tourism sector across 5km each side of proposed KTR Project infrastructure), rather than focusing only on individual tourism assets.
- 15.181 On this basis, and taking account of all the evidence provided above, the same level and significance of effect on each assessed receptor grouping is likely to be generated from the construction of the KTR Project as a whole across the Tourism and Recreation Study Area. This is the case as the construction of each individual connection is predicted to generate the same set of effects on the key components of the tourism and recreation sector. **Table 15.28** below provides a summary of these likely overall temporary construction effects by receptor grouping, none of which would be significant in the context of the EIA Regulations.

Table 15.28: Assessment of Construction Effects (KTR Project as a whole) on Tourism and Recreation Sector

Key Component of Tourism & Recreation Sector	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Potential Effect
Designated walking and recreational routes	Medium	Low	Minor Adverse (not significant)
Outdoor tourist destinations	Low to Medium	Negligible to Low	None to Minor Adverse (not significant)
Hospitality	Low	Negligible	None (not significant)
Visitor Accommodation	Medium	Low Beneficial	Minor Beneficial (not significant)
Recreational activities in the open countryside	Low to Medium	Negligible	None (not significant)
Tourists travelling through the open countryside	Low	Negligible	None (not significant)

15.182 **Table 15.26** above confirms that no relevant receptor grouping of the tourism and recreation sector is likely to experience construction phase effects which would be considered significant in the context of the EIA Regulations. As all receptor groupings make important contributions to the tourism and recreation sector as a whole, the sector is likely to experience a temporary **Minor adverse** effect from the construction of the KTR Project as a whole. This would be considered **not significant** in the context of the EIA Regulations.

Proposed Mitigation

15.183 No additional mitigation measures are proposed to address likely socio-economic, tourism and recreation effects during the construction of the KTR Project as a whole.

Residual Effects

15.184 As no additional mitigation measures are proposed there is no change to likely socio-economic effects, including effects on tourism and recreation, from the construction of the KTR Project as a Whole as assessed above. Following from this, the only likely construction phase socio-economic effect which would be considered **significant** in the context of the EIA Regulations is the likely **Moderate beneficial (significant)** short term sectoral effect on the Forestry sector across the Wider Socio-Economic Study Area.

Monitoring

15.185 No monitoring is considered to be required specifically in relation to the likely residual effects.

Operational Effects

15.186 Once commissioned, the KTR Project has the potential to affect two key business sectors: energy (electricity transmission) and tourism and recreation, each of which is considered below.

Effects on Key Business Sectors: Energy (Electricity Transmission)

15.187 Under the Electricity Act 1989, SPEN has statutory duties to make sure supplies are secure and reliable for users, and to provide capacity to connect new sources of electricity. To maintain and enhance the performance of the transmission network, in January 2012 an agreement was reached with Ofgem to fund an investment plan totalling £2.6 billion pounds over the 8-year period 2013-2021. 65% of this investment is aimed at accommodating a large increase in wind generation and 35% required to modernise the network to protect security of supply and reliability. This investment is being targeted at an ageing asset base where the majority of the 275kV network is over 40 years old and significant sections of the 132kV network are over 60 years old. By 2021, the current SPEN Business Plan will:

- create up to 1,500 new jobs in the SP Transmission’s licence area;
- connect approximately 11GW wind generation in Scotland (estimated to be enough to power over 6 million homes);

- reduce carbon emissions by the equivalent of 45 million tonnes CO2;
- increase export capacity from Scotland to England from 3.3 GW to at least 7GW; and,
- modernise the transmission network to maintain security of supply continues.

15.188 The KTR Project directly aligns with and indeed forms a core component of the current SPEN Business Plan covering all of Central and Southern Scotland, as it is designed to modernise the transmission network to maintain security of supply and reliability. By increasing system resilience, this would also indirectly support efforts to increase export capacity from Scotland and connect additional renewable energy generation installations across Dumfries and Galloway. It is also pertinent to note that the KTR Project is a National Development under the terms of NPF3 (2014), meaning that the need for the development has been established. The introduction of KTR Project infrastructure would therefore make an important contribution to the continued growth of the energy sector (High sensitivity) and represents a Medium magnitude of change on the sector, resulting in a **Moderate Beneficial (significant)** long term effect.

Effects on Key Business Sectors: Tourism and Recreation

15.189 Assessed operational phase effects on the visitor attractiveness and tourism potential of each key component of the tourism and recreation sector (i.e. each receptor grouping) are considered to be the same for the KTR Project as a Whole as the assessed likely effects on individual connections (assessed above). The assessment has been undertaken on a sectoral basis across the Tourism and Recreation Study Area (i.e. the identified six relevant components of the tourism sector across 5km each side of proposed KTR Project infrastructure), rather than focusing only on individual tourism assets (which, as detailed in **Chapter 7**, could experience different visual effects from different KTR connections individually or in combination).

15.190 As assessed in **Table 15.17**, the G-T connection is likely to result in an overall **Moderate Adverse** effect on the Designated Walking and Recreational Routes component of the tourism and recreation sector due to effects experienced across the route network, whereas only a **Minor Adverse** effect is likely on this receptor grouping from all other connections. As assessed above, all other receptor groupings forming key components of the tourism and recreation sector are also likely to experience only **Minor Adverse** effects.

15.191 Reflecting the sectoral focus of the assessment:

- The identified **Minor Adverse** effects from each connection on all receptor groupings other than Designated Walking and Recreational Routes (see below) would result in similar **Minor Adverse** effects on these receptor groupings when the KTR Project is assessed as a whole. There is no evidence available to indicate that, taken together, multiple connections would generate different (i.e. synergistic) secondary effects from those already assessed in relation to individual connections; and,
- As the G-T connection forms a substantial proportion of the KTR Project (by length of proposed new overhead line infrastructure), it is considered that the Designated Walking and Recreational Routes receptor grouping of the tourism and recreation sector would be likely to experience a **Moderate Adverse** (and thus **significant**) effect from the KTR Project as a whole in relation to visitor attractiveness, but only on account of effects from the G-T connection. It is important to note that this conclusion reflects the sensitivity of designated walking and recreational routes as a tourism and recreation receptor grouping combined with the likely magnitude of change on the visitor attractiveness of such routes and the prevalence of recreational routes close to the G-T connection. For the avoidance of doubt, this does not necessarily mean either that specific designated routes, or the wider tourism and recreation sector, would be likely to experience a significant reduction in visitor numbers or expenditure as a result of the KTR Project.

15.192 **Table 15.29** below therefore provides a summary of likely overall effects from operation of the KTR Project on each identified key receptor grouping of the tourism and recreation sector within the assessed Study Area.

Table 15.29: Predicted Operational Effects (KTR Project as a whole) on Tourism and Recreation Sector

Receptor Group	Sensitivity (refer to Appendix 15.1)	Magnitude of Change - Visitor Attractiveness and Tourism Potential	Potential Effect
Designated walking and recreational routes	Medium	Medium	Moderate Adverse (significant)
Outdoor tourist destinations	Low to Medium	Low	None to Minor Adverse (not significant)
Indoor tourist destinations	Low	No Change	None (not significant)
Hospitality	Low	Negligible	None (not significant)
Visitor Accommodation	Medium	Low	Minor Adverse (not significant)
Recreational activities in the open countryside	Low to Medium	Negligible to Low	None to Minor Adverse (not significant)
Tourists travelling through the open countryside	Low	Negligible	None (not significant)
Tourism and Recreation Sector		Minor Adverse (not significant)	

15.193 In terms of likely overall impacts from the operation of the KTR Project as a whole on the tourism and recreation sector, **Table 15.29** demonstrates that, with one exception (related to one connection), all assessed receptor groupings are not likely to experience significant effects. All receptor groupings make important contributions to the tourism and recreation sector as a whole. However, taking account of the evidence presented in **Table 15.8** regarding the absence of any clear empirical link between the visibility of energy infrastructure and a reduction in visitor numbers to tourist areas, and notwithstanding the local importance of individual designated walking and recreational routes likely to be impacted by the G-T connection, on balance it is considered that the operation of the KTR Project as a whole is likely to result in a **Minor Adverse (not significant)** long term effect on the tourism and recreational sector across the assessed Tourism and Recreation Study Area.

Proposed Mitigation

15.194 No additional mitigation measures are proposed for the KTR Project beyond what has been discussed in the individual assessments.

Residual Effects

15.195 As no additional mitigation measures are proposed there is no change to the likely effects assessed above. Operation of the KRT Project is not likely to have any significant effects on socio economic, tourism and recreation receptors.

Monitoring

15.196 No monitoring is considered to be required specifically in relation to the predicted residual effects.

Assessment of Cumulative Effects

Construction Effects

15.197 The assessment presented above indicates that the only likely construction phase socio-economic effect which would be considered significant in the context of the EIA Regulations is a predicted **Moderate beneficial (significant)** short term sectoral effect on the forestry sector across the Wider Socio-Economic Study Area. This takes account of likely displacement effects from felling associated with the KTR Project on planned felling for long-term forest management, such that it effectively represents the likely net cumulative socio-economic effect of the KTR Project as a Whole in combination with other relevant developments on the forestry sector.

15.198 For the reasons detailed in **paragraph 15.7**, wider cumulative effects on the labour market or and associated socio-economic effects (e.g. on the construction sector) are not anticipated and have been scoped out of this assessment. Construction phase cumulative effects on the tourism and recreation sector have also been scoped out owing to uncertainties regarding construction timescales for identified cumulative developments.

Operational Effects

15.199 The assessment presented above indicates that the only likely operational phase socio-economic effect which would be considered significant in the context of the EIA Regulations is a predicted **Moderate Beneficial (significant)** long term sectoral effect on the Energy (Electricity Transmission) sector across the Wider Socio-Economic Study Area. This takes account of the need for and importance of the KTR Project as a core component of SPEN’s Business Plans (i.e. taking account of all other projects planned by SPEN) and a National Development as identified within NPF3. On this basis no new or different likely cumulative effects on the Energy (Electricity Transmission) sector would occur.

15.200 The operational phase assessment of likely tourism and recreation effects from individual connections and from the KTR Project as a whole has already taken account of the presence of existing nearby wind farms and other infrastructure in the landscape. The assessment has examined likely primary environmental effects from the introduction of the KTR Project to this baseline, as assessed elsewhere in this EIA Report, and then considered the extent to which such likely primary effects would catalyse secondary effects on the tourism and recreation sector.

15.201 The KTR Project in combination with the introduction of further proposed electricity infrastructure (including transmission OHLs and wind farms) or other cumulative development proposal would also generate a range of cumulative ‘primary’ effects (e.g. landscape, visual, heritage setting, etc), as assessed elsewhere in this EIA Report. In particular, the assessment provided in **Chapter 7** concludes that a relatively limited set (nine) of likely significant cumulative landscape and visual effects would occur, in all cases except one¹⁹ due largely to interactions between KTR connections rather than with other cumulative developments (e.g. wind farms). Of the nine predicted likely significant cumulative effects, four are in respect of discrete viewpoints whilst two are confined to local LCTs. This follows from the KTR Project being sited within the Glenkens Valley corridor, thereby avoiding more exposed upland areas with wind farm development but instead requiring multiple KTR connections to be located in close proximity to each other.

15.202 Given that likely **significant** cumulative landscape and visual effects are largely attributed to interactions between KTR connections rather than with ‘external’ cumulative developments, this simply represents a potential incremental change to the same primary environmental effects already assessed above for the KTR Project as a Whole. The influence of the KTR Project on likely cumulative secondary effects and the rationale for the absence of any likely significant effects on each assessed key component of the tourism and recreation sector therefore remain unchanged. On this basis, there would be no new or different likely cumulative effects on the tourism and recreation sector from the KTR Project in combination with other relevant developments.

Interrelationship between Effects

15.203 As detailed in **Chapter 5**, the construction of the KTR Project will require substantial timber clearance activities (within wayleave and windthrow areas). This would result in effects on forestry resources (as assessed in **Chapter 8**) and associated socio-economic effects on the labour market (from felling activities) and forestry business sector.

15.204 The visitor attractiveness and tourism potential of identified assessed tourism and recreation receptor groupings could be affected by environmental changes (i.e. ‘primary effects’), including likely effects from the construction or operation of the KTR Project as assessed in other technical assessment chapters of this EIA report. The assessment of likely effects on visitor attractiveness and tourism potential has therefore necessarily been informed by assessments of likely significant landscape and visual (**Chapter 7**), cultural heritage (**Chapter 12**) and traffic and transport (**Chapter 13**) effects. However, the tourism

¹⁹ Interactions between the proposed Glenlee Substation Extension and the proposed BG Deviation and G-T connections of the KTR Project.
The Kendoon to Tongland 132kV Reinforcement Project

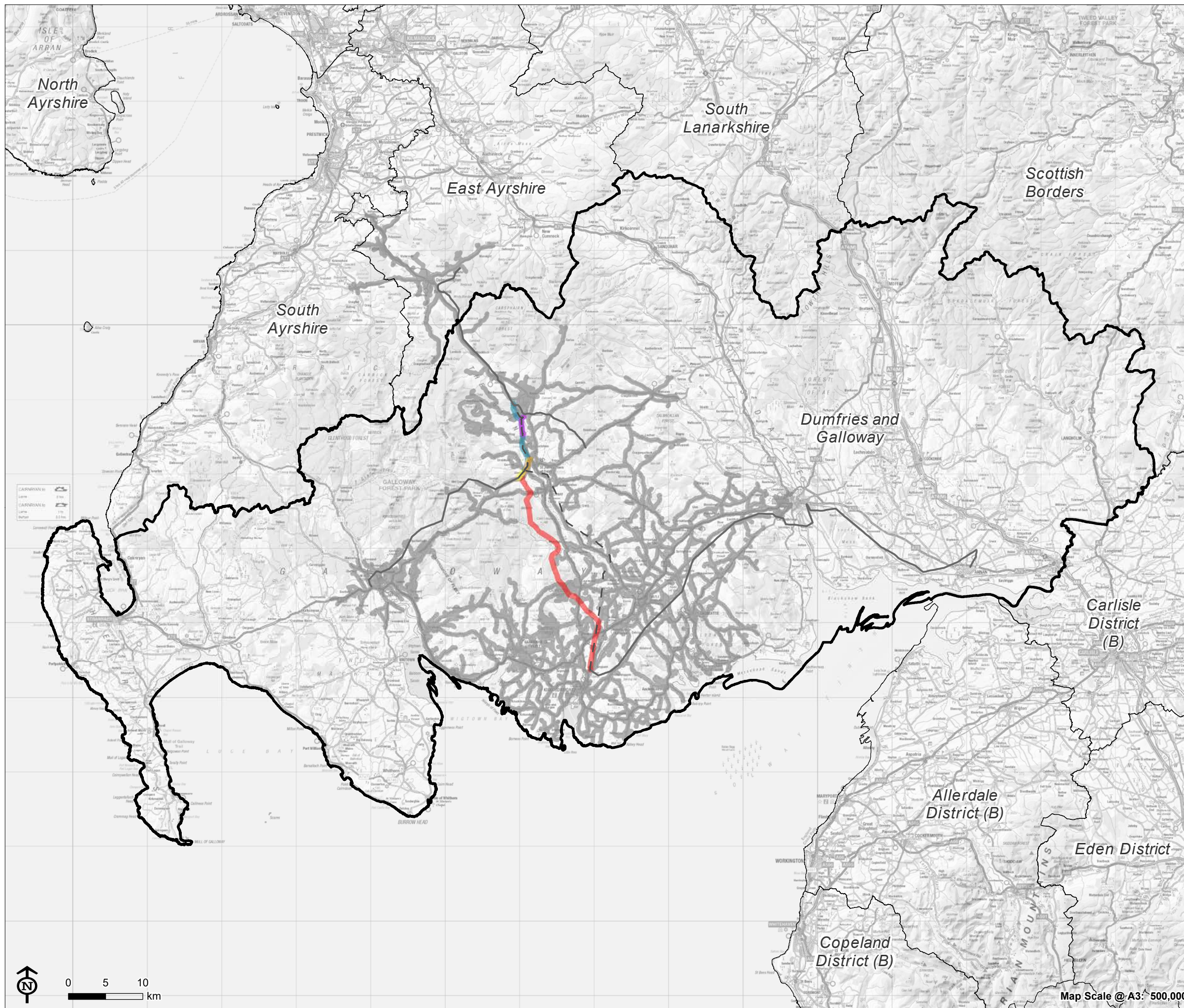
and recreation effects assessed in this chapter flow from these identified ‘primary’ environmental effects rather than interacting with or contributing to them, such that no synergistic effects would occur.

Summary of Significant Effects

15.205 **Table 15.30** below provides a summary of the limited number of significant socio-economic, tourism and recreation effects likely to arise from the KTR Project. All such effects would occur during the operational phase only.

Table 15.30: Summary of Significant Effects

Receptor	Predicted Significant Effect	Mitigation Proposed	Significance of Residual Likely Effect
G-T			
Tourism and recreation sector - designated walking and recreational routes (operational phase only)	Moderate adverse	None	Moderate adverse
KTR as a whole			
Forestry sector	Moderate beneficial	None	Moderate Beneficial
Energy (Electricity Transmission) sector	Moderate beneficial	None	Moderate Beneficial

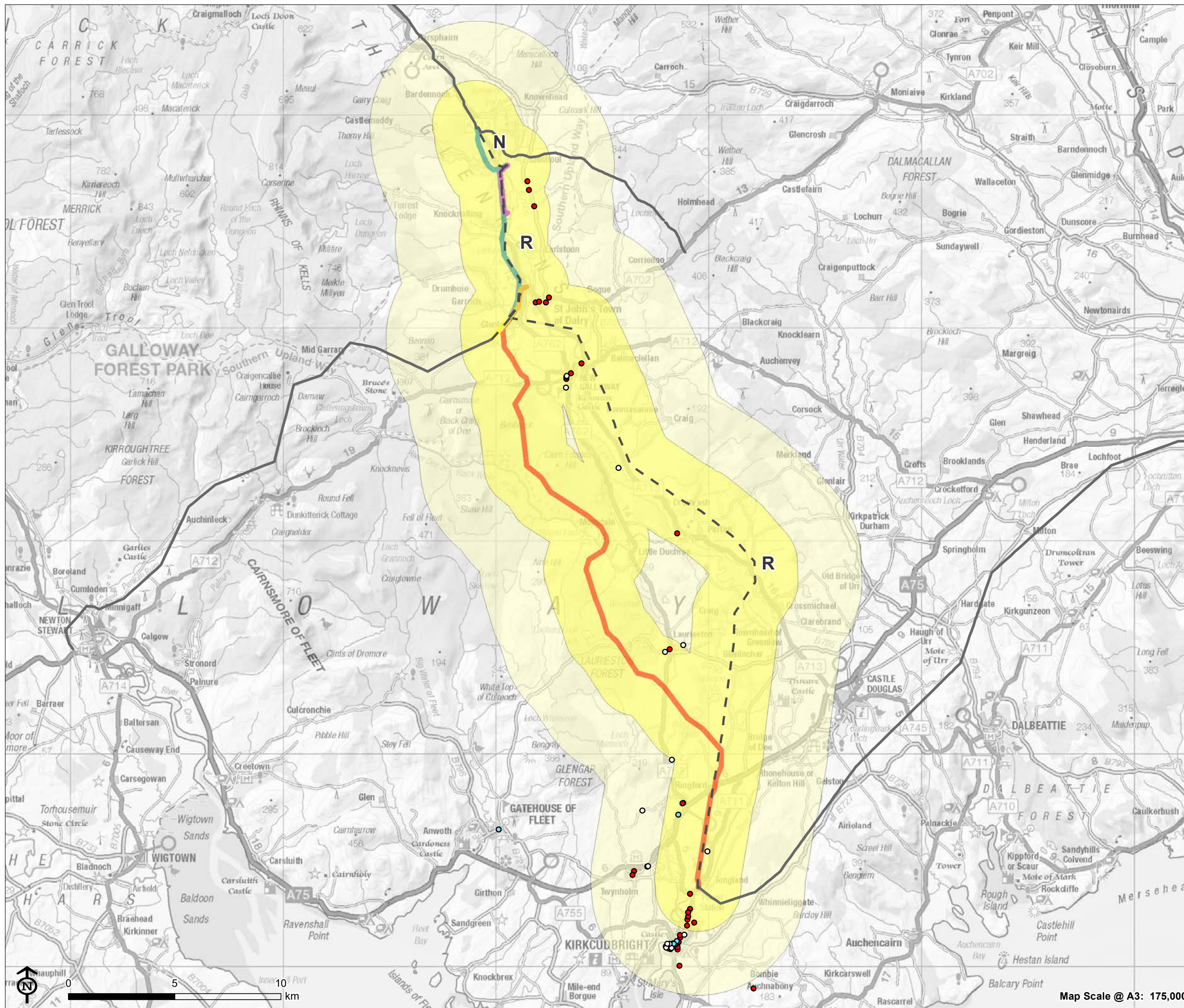


KTR Project EIA Report

Figure 15.1: Socio-economic Study Areas

- Polquharity to Glenlee via Kendoon
 - Carsfad to Kendoon
 - Earlstoun to Glenlee
 - BG route deviation
 - Glenlee to Tongland
 - Existing 132kV overhead line to be removed (following construction of the KTR Project)
 - Existing network
- Socio-economic study areas**
- Local study area (30 minutes drive-time)
 - Wider study area - Dumfries and Galloway





KTR Project EIA Report

**Figure 15.2: Tourism Study Area and
Business Survey Search Area**

- Polquhanny to Glenlee via Kendoon
- Carsfad to Kendoon
- Earlstoun to Glenlee
- BG route deviation
- Glenlee to Tongland
- Existing 132kV overhead line to be removed (following construction of the KTR Project)
- Existing network

Identified Businesses

- Visitor Attraction
- Hospitality
- Visitor Accommodation
- Business Survey Search Area (2km)
- Tourism Study Area (5km)

Refer to Figure 13.2 for existing recreational routes.

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**SP ENERGY
NETWORKS**

Kendoon to Tongland 132kV Reinforcement Project

Appendix 15.1: Socio-economic Baseline

On behalf of **SP Energy Networks**



Contents

1 Introduction..... Error! Bookmark not defined.

1.1 Role of this Document **Error! Bookmark not defined.**

1.2 Study Areas 2

1.3 Receptors Assessed..... 2

1.4 Structure of the Document 3

2 Land Use 3

2.1 Site Location..... 3

2.2 Infrastructure in Adopted Study Areas 3

3 Labour Market..... 4

3.1 Introduction..... **Error! Bookmark not defined.**

3.2 Demographics 4

3.3 Labour Force Participation 4

3.4 Occupations, Skills, and Jobs 5

3.5 Income and Earnings 6

3.6 Summary of Receptor Sensitivity 7

4 Key Business Sectors..... 7

4.1 Forestry 7

4.2 Construction 7

4.3 Energy 8

5 Tourism and Recreation 8

5.1 Economic Importance of Tourism..... 8

5.2 KTR Project Business Survey 9

5.3 Characteristics and Assets 9

5.4 Receptor Sensitivity..... 11

6 Summary of Receptor Sensitivity 12

Table 6: Businesses Identified by Receptor Grouping..... 9

Table 7: Most Frequently Visited Attractions, Dumfries and Galloway, 2016..... 9

Table 8: Overnight Visitor Summary, Dumfries and Galloway, 2015-17 annual average 10

Table 9: Accommodation Sector Occupancy, Dumfries and Galloway, 2016 10

Table 10: Sensitivity of Tourism and Recreation Receptor Groupings 11

Table 11: Summary of Receptor Sensitivity 12

Figures

Figure 1: Population Projections 2020 – 20384

Figure 2: Age Profile, 2020.....4

Figure 3: Full- and Part-time Employment.....5

Figure 4: Employment by Skill Level5

Figure 5: Resident Population by Highest SVQ Level Held6

Figure 6: Mean Gross Annual Full-time Pay, 2008 – 20197

Tables

Table 1: Wider Socio-economic Study Area: Urban Rural Classification.....3

Table 2: Dependency Ratio, 2020.....4

Table 3: Economic Activity, 20205

Table 4: Employment by SOC Major Group.....5

Table 5: Employment by SIC Sector6

15 Socio-economic Baseline

15.1 Introduction

- 15.1.1 This appendix has been prepared on behalf of SP Energy Networks (SPEN) by Stantec UK Ltd¹. It supports the assessment of likely significant socio-economic, tourism and recreation effects from the Kendoon to Tongland 132 kilovolt (kV) Reinforcement Project ('the KTR Project') in accordance with a methodology based on the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) ('the EIA Regulations').
- 15.1.2 This purpose of this appendix is to characterise socio-economic, tourism, and recreation baseline conditions to identify the sensitivity of relevant receptors likely to be impacted by the KTR Project during its construction and operational phases.

15.2 Approach

Study Areas

- 15.2.1 To provide a proportionate assessment, the baseline analysis has been undertaken with reference to the three study areas adopted to underpin the assessment.

Tourism and Recreation Study Area

- 15.2.2 A 10km Tourism and Recreation Study Area (5km each side of the proposed KTR Project) has been adopted specifically to assess likely effects on the tourism and recreation sector, visitor accommodation occupancy and access to recreational routes.
- 15.2.3 This aligns with the Study Area adopted in the landscape and visual impact assessment and cultural heritage assessment to assess likely 'primary' visual and setting effects from the KTR Project with the potential to generate 'secondary' tourism and recreation effects.
- 15.2.4 Within the Tourism and Recreation Study Area a 4km Business Survey Search Area (2km each side of the proposed KTR Project route) was also used to identify tourism businesses located closest to the KTR Project and thus most likely to experience potential socio-economic effects (see Figure 15.2). As the tourism business survey informed the assessment of likely effects on tourism and recreation, rather than being the assessment itself, 4km was selected as a threshold to ensure that survey effort remained proportionate whilst still capturing the views of local tourism businesses.

Socio-economic Study Areas

- 15.2.5 Two study areas have been adopted to assess likely socio-economic effects including the:
- **Local Study Socio-economic Study Area:** comprising a 30 minutes' drive time from the KTR Project; and
 - **Wider Socio-economic Study Area:** comprising the Dumfries and Galloway local authority area.
- 15.2.6 Beyond this any likely socio-economic effects would be limited, and it is considered that there is no potential for such effects to be significant in the context of the EIA Regulations.

Key Receptors

Labour Market

- 15.2.7 For employment effects, the availability of labour and skills is critical in accommodating the demands, needs and requirements of the KTR Project. This appendix therefore reviews the following to define the sensitivity of the labour market:
- The absolute size of the labour market of the Local and Wider Socio-economic Study Areas and levels of participation within these;
 - The availability of skilled and unskilled labour in the Local and Wider Socio-economic Study Areas relative to national averages;
 - The proportion of employment in relevant sectors (e.g. construction workers) within the Local and Wider Socio-economic Study Areas; and
 - Average levels of remuneration associated with participation in the labour market of the Wider Socio-economic Study Area.

Key Business Sectors

- 15.2.8 The following key business sectors are relevant to the KTR Project and have therefore been considered as receptors in the assessment of likely socio-economic effects: construction, forestry, energy and tourism & recreation. The sensitivity of these sectoral receptors has been determined with reference to their importance to each Socio-economic Study Area and susceptibility to potential changes as a result of the KTR Project. Receptor sensitivity (Negligible to High) of relevant receptors was therefore defined on a case by case basis using the baseline information presented below.

Tourism and Recreation

- 15.2.9 This appendix identifies key components of the tourism and recreation business sector with the potential to be affected by the KTR Project, as well as considering impacts on the sector as a whole. Notwithstanding the unique characteristics and offering of all individual tourism and recreational assets across the Tourism and Recreation Study Area, receptors of relevance to this assessment can be categorised under seven broad groupings, each with different sensitivity to changes in visitor attractiveness:
- Designated walking and recreational routes;
 - Indoor tourist destinations;
 - Outdoor tourist destinations;
 - Hospitality;
 - Visitor Accommodation;
 - Recreational activities in the open countryside; and
 - Tourists travelling (by road) through the open countryside.
- 15.2.10 The baseline information below identifies relevant tourism assets within the assessed Tourism & Recreation Study Area and characterises both the importance and susceptibility of each sectoral component to potential changes in terms of visitor attractiveness, numbers and expenditure. This underpins the sensitivity ratings assigned to each key component of the tourism and recreation sector in **Section 15.6**. This *sectoral* approach to defining receptor sensitivity differs from individual *user-based*

¹ On 1st January 2020, Peter Brett Associates LLP formally became part of a new entity, Stantec UK Ltd.

landscape, visual, cultural heritage and access sensitivities assigned to individual tourism and recreation related receptors, as identified separately in relevant technical assessment chapters of the EIA Report.

15.2.11 At the time of writing the tourism and recreation sector has recently been badly impacted by the COVID-19 pandemic, with almost complete lockdown of the sector from March – July 2020. Research jointly commissioned by the UK devolved national tourism agencies (July 2020) indicates that with the easing of lockdown measures there is evidence of a short term increase in bookings for self-catered accommodation and ‘staycation’ activities for the remainder of the 2020 season, with particular demand in Scotland, but international tourism remains heavily restricted and the overall level of tourism activity in the UK is likely to remain substantially below pre-pandemic levels for several years. The tourism and recreation sectoral profile presented below should therefore be considered as representing a ‘worst-case’ scenario, as in reality the performance of the sector is likely to remain well below normal levels over the medium term.

Structure of the Document

15.2.12 This appendix is structured to provide a general overview of the site of the KTR Project and each adopted study area, before providing baseline information related to each assessed receptor and receptor grouping:

- **Section 15.2 – Land Use:** discusses the infrastructure and facilities present in each study area;
- **Section 15.3 – Labour Market:** summarises the key determinants of labour market sensitivity;
- **Section 15.4 – Key Business Sectors:** provides an overview of performance and relative importance of key business sector receptors;
- **Section 15.5 – Tourism and Recreation:** outlines the sensitivity of identified tourism receptor groupings; and

15.2.13 Section 6 concludes the appendix, reporting the identified sensitivity of each receptor following the baseline analysis of preceding sections.

15.3 Land Use

Site Location

15.3.1 The KTR Project is situated within the central area of Dumfries and Galloway and covers a linear area, running broadly north to south from Polquhanity (approximately 3.0 km to the north of the existing Kendoon substation), to the existing substation at Tongland (approximately 1.5 km to the north of Kirkcudbright).

15.3.2 This area is predominantly agricultural, covering the Glen Kens Valley, east of the Galloway Hills. Within the vicinity of the KTR Project there are several local communities, including New Galloway, Kirkcudbright, St John’s Town of Dalry, Mossdale, Glenlee, Kendoon, and Laurieston. There are also several small clusters of properties, and some isolated, residential properties and farm buildings. These communities and individual properties are served by A classification roads, including the A711, A712, A713 and A762, along with ‘B’ classification roads which include the B795.

Infrastructure in Adopted Study Areas

Tourism and Recreation

15.3.3 The Tourism and Recreation Study Area possesses existing energy infrastructure including reservoirs, dams, power stations. and several high and low voltage existing overhead lines including the 132kV network running from Polquhanity to Tongland via Glenlee (the N and R routes).

15.3.4 The western side of the Tourism and Recreation Study Area is sparsely populated, largely comprising upland areas with dense commercial forestry.

Socio-economic Study Areas

15.3.5 Dumfries and Galloway is characterised by small settlements spread across a large area (642,620 ha.).² The largest town is Dumfries (population 33,440), followed by Stranraer (10,320) and Annan (8,780). All other settlements have populations of less than 4,000 people.³ These settlements include Castle Douglas, Dalbeattie, Gatehouse of Fleet, Gretna, Isle of Whithorn, Kirkcudbright, Kirkpatrick Durham, Langholm, Lochmaben, Lockerbie, Millhousebridge, New Galloway, Newton Stewart, Sanquhar, St Johns Town of Dalry, Thornhill, Whithorn, and Wigtown.

15.3.6 The Dumfries & Galloway Regional Economic Strategy (2016-2020) states that over 22% of the region is classed as rural or remote rural, as defined within the strategy.⁴ Table 1 below presents the total land area of the Wider Socio-economic Study Area by the Scottish Government’s six-fold Urban Rural Classification.

Table 1: Wider Socio-economic Study Area: Urban Rural Classification

Urban Rural Classification	Land Area (ha.)	Proportion of total
1: Large Urban Areas	-	-
2: Other Urban Areas	8,409	1.3%
3: Accessible Small Towns	1,506	0.2%
4: Remote Small Towns	1,415	0.2%
5: Accessible Rural Settlements	207,344	32.3%
6: Remote Rural Settlements	423,944	66.0%

Source: Scottish Government (2018). *Urban Rural Classification*.

15.3.7 Close to a third (32.3%) of the area is defined as ‘Accessible Rural’, settlements of less than 3,000 people and within a 30-minute drive of a settlement of 10,000 or more. A further 66.0% is ‘Remote Rural’; settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more. Just 1.3% of the local authority area is classified as ‘Other Urban Areas’; settlements of 10,000 to 125,000 people and relating to Dumfries and Stranraer.

15.3.8 There are currently several key investments being made in Dumfries and Galloway including the Dumfries Learning Town which seeks to encourage collaboration between the towns’ schools, colleges, universities and local businesses to deliver positive outcomes for local children. The Regional Economic Strategy identifies a need for infrastructure investment to enhance regional connectivity, remove barriers to business competitiveness and improve access to economic opportunities for individuals and businesses.

² Scottish Government (2019). *Land Area*.

³ Scottish Government (2018). *Settlement and Localities Population*.

⁴ Dumfries and Galloway Council (2017). *Regional Economic Strategy (2016-2020)*. Available at: http://www.dumgal.gov.uk/media/18717/Regional-Economic-Strategy-2016-20/pdf/Regional_Economic_Strategy_2016_-_2020.pdf

15.4 Labour Market

Overview

15.4.1 The supply of appropriate labour and the availability of businesses to support the construction and operation of a development proposal is a key factor in ensuring socio-economic benefits are realised by local communities. The characteristics of the labour market and local economy also determine its wider direct, indirect, and induced socio-economic effects. The key factors which determine the sensitivity of the labour market include:

- Demographics;
- Labour force participation;
- Occupation, skills, and jobs; and
- Income and earnings.

15.4.2 These factors are discussed for each socio-economic study area below. All statistics in this section have been sourced from Experian © unless stated otherwise. This data utilises projections based on the 2011 Census.

Demographics

Population Decline

15.4.3 The Local Socio-economic Study Area has an estimated population of 18,096 and the Wider Socio-economic Study Area has an estimated population of 154,186. While this population has increased since the 2011 census (by 0.8% and 1.9% respectively), long-term projections estimate that these will decrease over the next 18 years (see Figure 1 below).

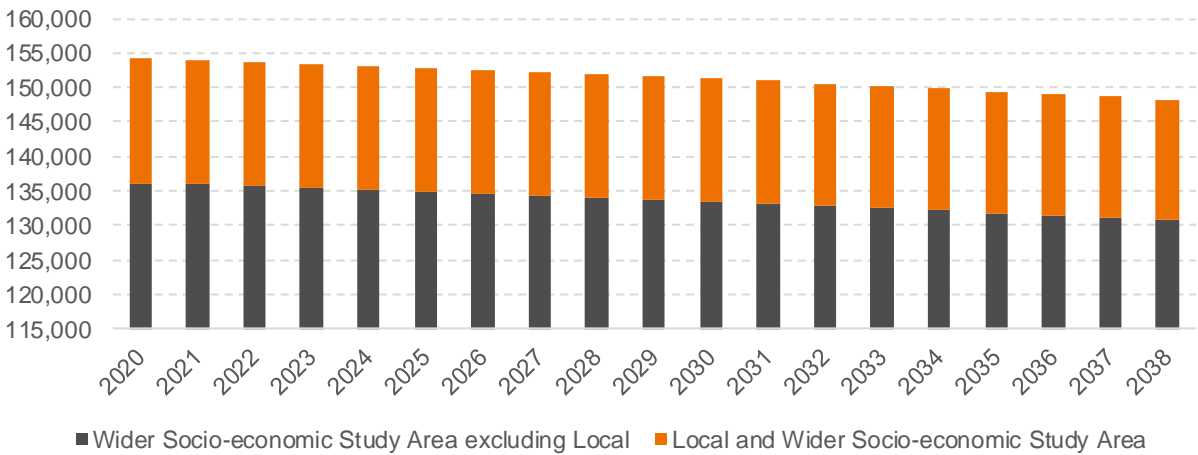


Figure 1: Population Projections 2020 – 2038

15.4.4 It is anticipated that the population of the Local Socio-economic Study Area will decrease 3.1% to 17,552 by 2038. The population of the Wider Socio-economic Study Area is anticipated to decrease 4.1% to 130,689 by 2038. Note that as these study areas are nested, the population of the Local Socio-economic Study Area is contained within the Wider Socio-economic Study Area.

Ageing Population

15.4.5 Figure 2 below presents the age profile across each socio-economic study area and Scotland as a comparator.

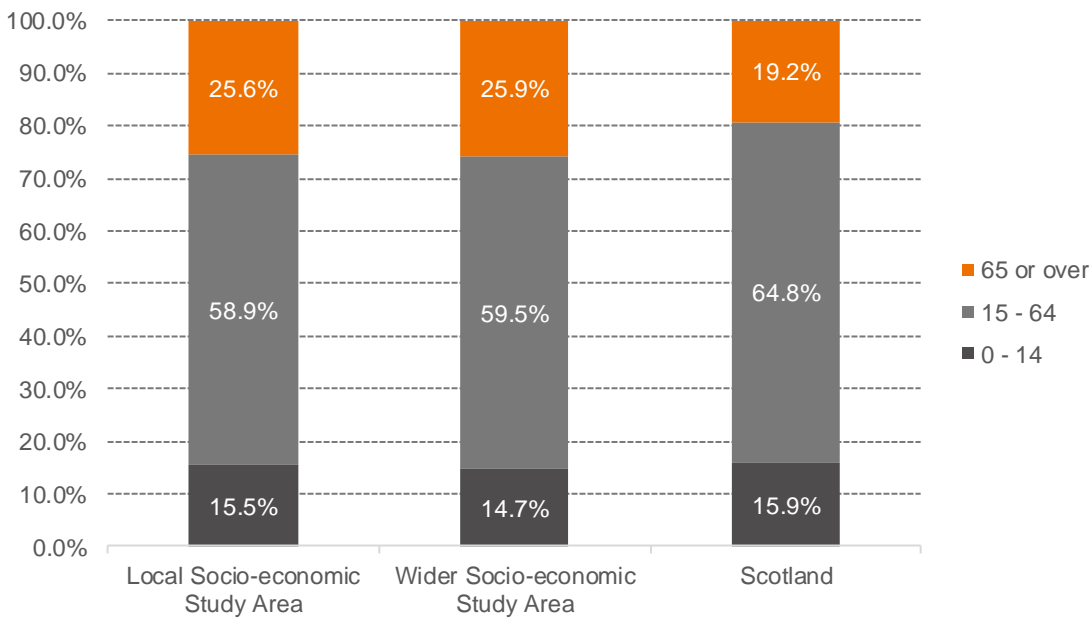


Figure 2: Age Profile, 2020

15.4.6 The proportion of the population aged 15 – 64 in both the Local (58.9%) and Wider Socio-economic Study Area (59.5%) is smaller than Scotland as a whole (64.8%). This suggests the productive population, i.e. those in the labour force, may be under relative pressure. Table 2 below presents various dependency ratios for each of these geographies.

Table 2: Dependency Ratio, 2020

	Local Socio-economic Study Area	Wider Socio-economic Study Area	Scotland
Child dependency ratio	26.4	24.7	24.6
Aged dependency ratio	43.5	43.5	29.7
Total dependency ratio	69.9	68.2	54.3

15.4.7 Both the Local (69.9) and Wider Socio-economic Study Areas (68.2) have a higher dependency ratio than Scotland as a whole (54.3). As the proportion of those aged 0 – 15 in all three geographies is similar, with just 0.4 percentage points difference from Scotland in the Local Socio-economic Study Area and 1.2 percentage points in the Wider Socio-economic Study Area, this is primarily accounted for by a larger aged population. The aged dependency ratio is considerably higher in the Local Socio-economic Study Area (43.5) and Wider Socio-economic Study Area (43.5) than Scotland (29.7)

15.4.8 The population of both the Local and Wider Socio-economic Study Area is aging, with the proportion of the population aged 65 or over projected to grow by 20.7% and 24.3% by 2038 respectively. However, this is a slower rate of growth than Scotland where the proportion of the population aged 65 or over is anticipated to increase 35.0% to 26.0% over this time period.

15.4.9 The evidence presented above suggests that the overall population of each socio-economic study area, and by extension the possible labour force that the KTR Project may employ in its construction phase, is small relative to the national comparator and dense urban settlements in the Central Belt.

Labour Force Participation

15.4.10 Labour force participation is a key metric when defining the sensitivity of the labour market receptor. New job creation is likely to induce larger distortionary effects in a labour market with high levels of economic activity and employment.

Economic Activity

15.4.11 A person is economically active if they participate in the labour market including those in employment and that are self-employed, and those who are unemployed but seeking work and in full-time education. Table 3 below presents economic activity rates across each of the socio-economic study areas.

Table 3: Economic Activity, 2020

	Local Socio-economic Study Area	Wider Socio-economic Study Area	Scotland
In employment	70.2%	70.7%	72.7%
Self-employed	6.0%	6.8%	4.6%
Unemployed (seeking work)	1.3%	1.3%	1.4%
Full-time student	1.3%	1.2%	2.2%
Economically active	78.8%	79.9%	80.9%
Economically inactive	21.2%	20.1%	19.1%

15.4.12 Economic activity rates are slightly lower in the Local (70.2%) and the Wider Socio-economic Study Area (70.7%) than Scotland as a whole (72.7%). Rates of those in employment are lower than the national average, however this is largely offset by increased rates of self-employment. Owing to the concentration of further and higher education facilities in the Central Belt, the rates of those in full time education (1.3% and 1.2% respectively) are lower than the national average (2.2%).

Working Patterns

15.4.13 Figure 3 below presents the proportion of total employment and self-employment that is full- and part-time in each socio-economic study area.

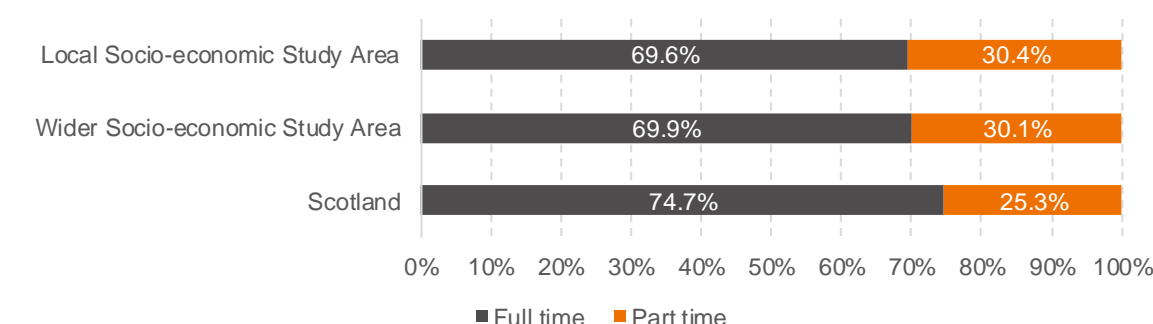


Figure 3: Full- and Part-time Employment

15.4.14 Levels of part-time employment in the Local (30.4%) and WSA (30.1%) are greater than the Scottish average (25.3%). This may suggest underemployment in the labour market of each socio-economic study area.

Occupations, Skills, and Jobs

Occupation

Table 4 below presents the workforce of each socio-economic study area by Standard Occupational Classification (SOC) major groups. Major groups bring together roles which are similar in terms of the qualifications, training, skills and experience commonly associated.

Table 4: Employment by SOC Major Group

SOC Major Group	Local Socio-economic Study Area	Wider Socio-economic Study Area	Scotland
1: Managers, directors and senior officials	8.9%	8.6%	8.8%
2: Professional occupations	14.0%	13.3%	17.5%
3: Associate professional and technical occupations	9.6%	9.0%	12.8%
4: Administrative and secretarial occupations	9.1%	9.7%	11.4%
5: Skilled trades occupations	16.2%	17.4%	12.4%
6: Caring, leisure and other service occupations	12.7%	10.4%	9.1%
7: Sales and customer service occupations	7.6%	8.3%	9.1%
8: Process, plant and machine operatives	8.7%	9.9%	7.4%
9: Elementary occupations	13.2%	13.4%	11.5%

15.4.15 Figure 4 below aggregates these groups into three skill levels: highly-skilled, representing groups 1 – 3; semi-skilled, representing groups 4 – 6; and low skilled representing groups 7 – 9.

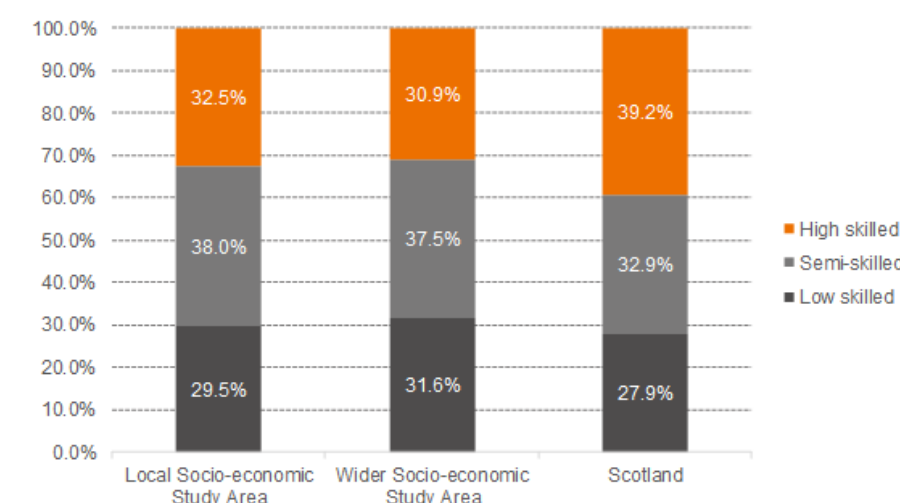


Figure 4: Employment by Skill Level

15.4.16 Both the Local and Wider Socio-economic Study Area exhibits lower rates of highly skilled employment (32.5% and 30.9% respectively) than the Scottish average (39.2%). The higher rates of low skilled employment (29.5% and 31.6% compared to 27.9%) suggest an appropriately skilled labour force for the construction and felling associated with the KTR Project to access.

Skills and Training

15.4.17 The skills profile of a given labour market helps to identify the sensitivity of the labour market receptor by indicating how specialised the labour supply is. It is assumed that lower skilled workforces may transition between elementary and process, plant and machine operating occupations, such as those associated with the construction of the KTR Project, more easily.

15.4.18 Figure 5 below presents qualifications held by all residents of each socio-economic study area aged 16 and other by Scottish Vocational Qualification (SVQ) level.

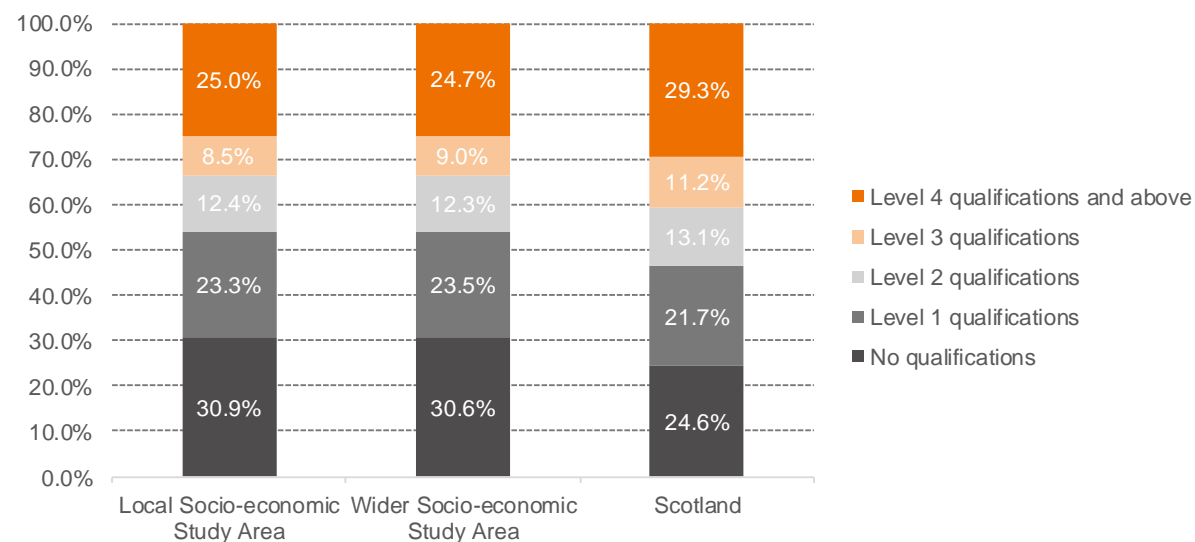


Figure 5: Resident Population by Highest SVQ Level Held

15.4.19 The labour force in both the Local and Wider Socio-economic Study Area proportionately hold fewer qualifications than the Scottish average. The proportion that hold no qualifications is greatest in the Local Socio-economic Study Area (30.9%), followed by the Wider Socio-economic Study Area (30.6%) and Scotland as a whole (24.6%).

15.4.20 These findings are reflective of the occupational profile presented above, which indicated that a greater proportion of the labour force are employed in relatively less skilled roles. These factors are likely interdependent; skilled workers may move to other areas of the UK to find employment which matches their qualifications.⁵

15.4.21 As the likely significant employment effects associated with the KTR Project will be in its construction phase, this relatively low skilled labour market suggests a wide availability of the type of labour required to undertake construction and felling.

Industry of Employment

15.4.22 Table 5 below presents employment in each socio-economic study area by Standard Industrial Classification (SIC) sector. The balance of existing workforce jobs indicates the existing skill levels and relative performance of each industry sector in both study areas.

Table 5: Employment by SIC Sector

	Local Socio-economic Study Area		Wider Socio-economic Study Area		Scotland	
	Count	%	Count	%	Count	%
Agriculture, forestry and fishing	600	7.5%	7,300	10.3%	63,000	2.4%
Mining and quarrying	100	1.3%	300	0.4%	39,000	1.5%
Manufacturing	550	6.9%	5,500	7.7%	191,500	7.2%
Electricity, gas, steam and air conditioning supply	50	0.6%	500	0.7%	20,500	0.8%
Water supply; sewerage, waste mgt. and remediation	100	1.3%	800	1.1%	19,500	0.7%
Construction	700	8.8%	5,800	8.2%	203,000	7.7%

	Local Socio-economic Study Area		Wider Socio-economic Study Area		Scotland	
	Count	%	Count	%	Count	%
Wholesale and retail; repair of motorcycles and vehicles	1,150	14.5%	10,700	15.1%	382,500	14.4%
Transport and storage	350	4.4%	4,000	5.6%	145,000	5.5%
Accommodation and food service activities	600	7.5%	5,100	7.2%	180,500	6.8%
Information and communication	100	1.3%	1,000	1.4%	92,500	3.5%
Financial and insurance activities	100	1.3%	900	1.3%	109,000	4.1%
Real estate activities	100	1.3%	900	1.3%	35,500	1.3%
Professional, scientific and technical activities	250	3.1%	2,100	3.0%	128,500	4.8%
Administrative and support service activities	250	3.1%	2,300	3.2%	113,000	4.3%
Public administration, defence, compulsory social security	500	6.3%	4,300	6.1%	184,500	7.0%
Education	500	6.3%	4,600	6.5%	203,000	7.7%
Human health and social work activities	1,550	19.5%	11,400	16.1%	394,000	14.8%
Other	400	5.0%	3,500	4.9%	149,000	5.6%
Total	7,950	100.0%	71,000	100.0%	2,653,500	100.0%

15.4.23 Both the Local and Wider Socio-economic Study Area exhibits disproportionate employment in agriculture, forestry and fishing (+5.2% and +7.9% relative to Scotland respectively). The Local Socio-economic Study Area also exhibits disproportionate employment in human health and social work activities (+4.6%). Employment is disproportionately lower in information and communication and financial and insurance activities (-5.1% and -4.9% relative to Scotland respectively).

15.4.24 These differentials reflect the above findings, namely that the socio-economic study areas exhibit:

- relatively high levels of employment in elementary and process, plant and machine operating occupations; and
- relatively low qualifications, with a plurality of persons holding at most SVQ level 1 or below.

Income and Earnings

15.4.25 Income and earnings information also enables identification of labour market sensitivity. Relatively high remuneration in a labour market may suggest a shortage of skills or tight availability of labour itself. Due to data limitations at a local level, this section focuses on the Wider Socio-economic Study Area only.

15.4.26 Figure 6 below plots a time series of the gross annual pay for full-time workers across the Wider Socio-economic Study Area and Scotland as a whole.

⁵ The analysis report on the consultation process for creating the South of Scotland Enterprise Agency found that many respondents were concerned regarding this phenomenon. See: Scottish Government (2018). South of Scotland Enterprise Agency: consultation report. p.15. Available at: <https://www.gov.scot/publications/south-scotland-enterprise-agency-consultation-analysis-report/>

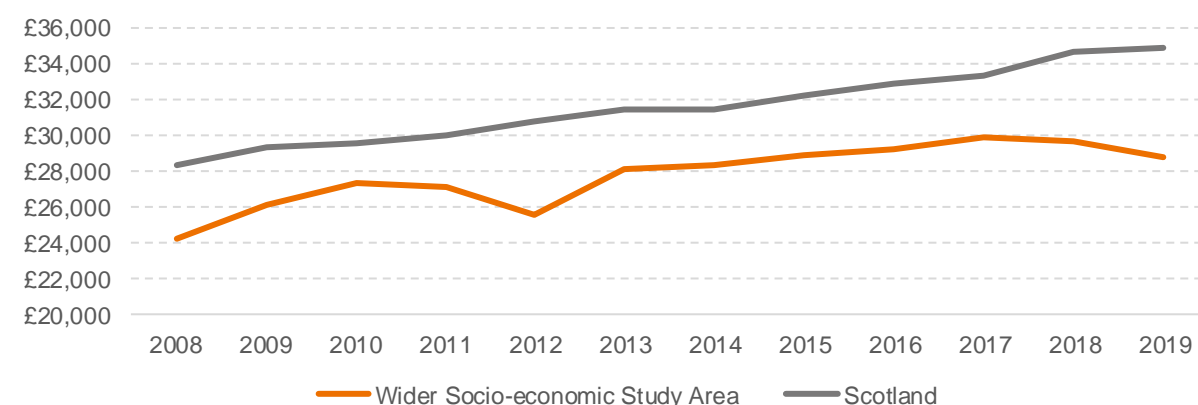


Figure 6: Mean Gross Annual Full-time Pay, 2008 – 2019
Source: ONS (2019). *Annual Survey of Hours and Earnings*.

15.4.27 Mean gross full-time earnings in the Wider Socio-economic Study Area have been consistently below the Scottish average. The mean gross annual full-time pay in the Wider Socio-economic Study Area was £28,738 in 2019, 21.5% below the Scottish average of £34,916.⁶

15.4.28 Once the distribution of full- and part-time work (see Figure 3) has been considered, average earnings in the Wider Socio-economic Study Area decrease to £23,754. Despite the higher proportion of part-time work in the Wider Socio-economic Study Area (30.1%) than the Scottish average (25.3%), the earnings differential decreases to 20.5% between full- and part-time workers.⁷ This is accounted for by the lower pay differential between part-time workers in the Wider Socio-economic Study Area and Scotland (1.4%).

15.4.29 Lower earnings across the labour market of the Wider Socio-economic Study Area suggests that labour may be relatively elastic and less prone to distortionary effects. Part-time work may be higher skilled or in shorter supply, explaining the higher earnings.

Summary of Receptor Sensitivity

15.4.30 Having considered the key determinants of labour market sensitivity described above, the sensitivity of the labour market receptor has been determined as **low**:

- Labour force participation levels are relatively consistent with the national average, with slight differentials likely explained by the concentration of further and higher education facilities outside of the socio-economic study areas.
- The presence of a relatively large, but well-paid part-time labour force suggests that there is scope for this existing labour supply to work additional hours to accommodate new employment opportunities during the construction of the KTR Project.
- Relatively low skill levels and the concentration of employment in elementary and process, plant and machine operating occupations suggests a wide availability of the type of labour required to undertake construction and felling.

- Lower than average income and earnings indicate that new employment is unlikely to have distortionary wage effects.

15.5 Key Business Sectors

Forestry

15.5.1 Forestry makes a substantial contribution to the Scottish economy at national, regional and local levels and is recognised in the National Planning Framework (NPF3) as being both an important environmental asset and economic resource.⁸ The Scottish Government has defined a 50-year vision for Scotland's forests and woodlands and has set out a 10-year framework for action focused around three objectives:

- *"Increase the contribution of forests and woodlands to Scotland's sustainable and inclusive economic growth;*
- *Improve the resilience of Scotland's forests and woodlands and increase their contribution to a healthy and high quality environment; and,*
- *Increase the use of Scotland's forest and woodland resources to enable more people to improve their health, well-being and life chances."*⁹

15.5.2 Independent research has suggested total employment supported by the sector – including supply chain effects – totalled 19,555 full-time equivalent jobs (FTEs) in 2012/13. Recent policy documents such as Scotland's Forestry Strategy (2019) claiming over 25,000 FTEs are supported by the sector. This figure relates to both forestry and timber processing activities (19,555 FTEs) and recreation and tourism generated by forests themselves (6,312 FTEs).¹⁰

15.5.3 At the regional level, the Dumfries and Galloway Forestry and Woodland Strategy (2014), supplementary planning guidance to the local development plan, highlights the importance of forestry across the Wider Socio-economic Study Area. Forestry covers approximately 211,000 hectares, comprising 31% of the total land area of the study area. In terms of employment, the forestry sector supports some 700 workforce jobs across the Wider Socio-economic Study Area and employment in the sector is predominately full-time (84.2%).¹¹ This Study Area accounts for 15.5% of all forestry employment in Scotland and only 2.7% of the total population.¹²

15.5.4 The forestry sector is demand-driven and timber production is relatively sensitive to developments in other sectors, namely construction. At the same time, lead-in times for the production of mature commercial timber and the training of skilled forestry operatives, combined with the finite capacity of processing facilities (i.e. sawmills) means that commercial forests need to be managed through long term plans, with relatively stable levels of felling normally occurring on a continuous basis. Any change to felling requirements in one part of a forest estate may therefore trigger a need to review forest management plans so that a relatively stable output of timber production is maintained. On this basis and taking account of the recognised importance of the forestry sector at regional and national levels, the forestry sector is considered to have **Medium** sensitivity.

Construction

15.5.5 The construction sector employs some 700 people across the Local Socio-economic Study Area and 5,800 across the Wider Socio-economic Study Area (see Table 5). Construction output and employment in

⁶ ONS (2019). *Annual Survey of Hours and Earnings*.

⁷ The 2019 Scottish average for all workers, full- and part-time, is £28,626 per annum.

⁸ Scottish Government (2014). *National Planning Framework 3*.

⁹ Scottish Government (2019). *Scotland's Forestry Strategy 2019-2029*. Available at: <https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/>

¹⁰ The strategy cites: Scottish Forestry (2015). *The economic contribution of the forestry sector in Scotland*. Available at: <https://forestry.gov.scot/forestry-business/economic-contribution-of-forestry>.

¹¹ ONS (2018). *Business Register and Employment Survey*.

¹² ONS (2019). *Business Register and Employment Survey*; ONS (2019). *Population Estimates – local authority based by five-year age band*.

the Wider Socio-economic Study Area has remained relatively consistent since 2014.¹³ The level of construction activity undertaken is inherently dependent upon fluctuating demand for short term projects and changes in the pipeline for larger and longer-term projects, such that construction employment is likely to fluctuate, and labour shortages may occur in periods of high demand. On this basis, the sector is considered to have **Medium** sensitivity.

Energy

- 15.5.6 At the national level, employment in the energy sector stood at 70,000 in 2016, accounting for 2.7% of employment in Scotland.¹⁴ Gross value added (GVA) for the sector totalled £16.4 billion in 2016.
- 15.5.7 Average annual household consumption of electricity and gas in the Wider Socio-economic Study Area was 4,774kWh and 13,516GWh respectively in 2016. Approximately 9.8% of the total electricity generation in the Wider Socio-economic Study Area was renewable energy in 2017, with several major energy generation players present in the region.
- 15.5.8 At the national level, Scotland accounts for 23.7% of UK renewable electricity generation (2018) and 69% of gross energy consumption came from renewable sources in 2017; up 15% from 2016.
- 15.5.9 The high-voltage electric power transmission network serving Great Britain, connects power stations and major substations and ensures that electricity generated in any location can be used to satisfy demand elsewhere. The network covers the great majority of Great Britain and several of the surrounding islands.
- 15.5.10 In Scotland, the electricity grid is operated by two separate entities, one for southern and central Scotland and the other for northern Scotland, connected by interconnectors. SP Transmission (SPT), a wholly owned subsidiary of SPEN, is responsible for the transmission of electricity in central and southern Scotland. Electricity generated from power stations, windfarms and various other generating stations is transported through the transmission network, consisting of over 4000 km of overhead and 320 km of underground lines. The transmission network area also utilises 132 substations to convert electricity to lower voltages suitable for use on the distribution network.
- 15.5.11 Under the Electricity Act 1989, SPEN is subject to statutory duties to make sure supplies are secure and reliable for users, and to provide capacity to connect new sources of electricity. To maintain and enhance the performance of the electricity transmission network, in January 2012 an agreement was reached with Ofgem to fund an investment plan totalling £2.6 billion pounds over the eight year period 2013 – 2021. 65% of this investment is aimed at accommodating a large increase in wind generation and 35% is required to modernise the network to protect security of supply and reliability. This investment is being targeted at an ageing asset base where the majority of the 275kV network is over 40 years old and significant sections of the 132kV network are over 60 years old. By 2021, the current SP Energy Networks Business Plan will:
- Create up to 1,500 new jobs in the SPT licence area;
 - Provide connections for approximately 11GW of wind generating stations in Scotland (estimated to be enough to power over 6 million homes);

- Reduce carbon emissions by the equivalent of 45 million tonnes CO₂;
- Increase export capacity from Scotland to England from 3.3 GW to at least 7GW; and
- Modernise the transmission network to maintain security of supply.

15.5.12 In 2013, a course in the construction and refurbishment of overhead line infrastructure was launched by Dumfries & Galloway College in conjunction with locally based CIET (UK) Ltd, a contractor of SPEN.¹⁵ The partnership was developed in response to an anticipated shortage of skilled electrical workers over the next fifteen years. In addition, Dumfries & Galloway College offers approximately 13 courses in electrical engineering and other related skills, contributing to the growth of the energy sector within the region.¹⁶

15.5.13 Taking account of statutory duties placed on SPEN under the Electricity Act 1989, the substantial capacity of renewable energy generation in the Wider Socio-economic Study Area requiring to be connected to the electricity transmission network and the importance of the energy sector for employment and economic growth, the energy sector is considered to have **High** sensitivity.

15.6 Tourism and Recreation

Economic Importance of Tourism

- 15.6.1 At the national level, the tourism sector is recognised by the Scottish Government as being an important component of the Scottish economy, supporting business activity and employment opportunities¹⁷. The importance of tourism is demonstrated in its status as one of the Scottish Government's six Growth Sectors and through the publication of the Tourism Development Framework for Scotland seeks to assist and promote growth in Scotland's visitor economy to 2020¹⁸. This status is reflected regionally, with tourism also identified as a key business sector by Dumfries and Galloway Council (D&GC) in its Regional Economic Strategy¹⁹. The sector is valued at £320 million and supports an estimated 7,105 direct and indirect jobs²⁰.
- 15.6.2 The Dumfries & Galloway Regional Tourism Strategy aims to increase the value of tourism to £330 million by 2020 and increase the volume, length of stay and extend the season from 2.4 million visitors to 2.6 million visitors. However, at the time of writing, the tourism and recreation sector has recently been badly impacted by the COVID-19 pandemic, with almost complete lockdown of the sector from March – July 2020. Research jointly commissioned by the UK devolved national tourism agencies (July 2020) indicates that with the easing of lockdown measures there is evidence of a short term increase in bookings for self-catered accommodation and 'staycation' activities for the remainder of the 2020 season, with particular demand in Scotland, but international tourism remains heavily restricted and the overall level of tourism activity in the UK is likely to remain substantially below pre-pandemic levels for several years. The tourism and recreation sectoral profile presented below should therefore be considered as representing a 'worst-case' scenario, as in reality the performance of the sector is likely to remain well below normal levels over the medium term.
- 15.6.3 Visitor satisfaction in Dumfries and Galloway is high, with 95% giving a satisfaction rating of 7 or more out of 10. Three-fifths of visitors gave the highest ratings of 9 or 10 for their trip to Dumfries and Galloway. These top 2 scores (9 or 10) show strong levels of visitor satisfaction which can foster loyalty. This is reflected in return visits, of which Dumfries and Galloway has the highest proportion of return visits across

¹³ ONS (2018). *Business Register and Employment Survey*.

¹⁴ Scottish Government (2018). *Energy in Scotland* <https://www2.gov.scot/Resource/0054/00541605.pdf>

¹⁵ See: Scottish Power. *Unique Partnership at Dumfries & Galloway College creates local jobs in the energy industry*. Available at: https://www.scottishpower.com/news/pages/unique_partnership_at_dumfries_and_galloway_college_creates_local_jobs_in_the_energy_industry.aspx

¹⁶ See: <https://www.dumgal.ac.uk/dumgalportal/index.php?coursepostback=true&coursesearch=true&keyword=&moa=0&aoi=600&location=>

¹⁷ Scottish Government (2015). *Scotland's Economic Strategy*. Available at: <https://www.gov.scot/publications/scotlands-economic-strategy/>

¹⁸ Visit Scotland (2016). *Tourism Development Framework*. Available at: <https://www.visitscotland.org/about-us/what-we-do/our-plans/tourism-development-framework>

¹⁹ Dumfries and Galloway Council (2017). *Regional Economic Strategy (2016-2020)*. p.8. See also: Dumfries and Galloway Council (2017). *Regional Tourism Strategy 2016 – 2020*. Available at: <https://scottishtourismalliance.co.uk/wp-content/uploads/2019/03/Dumfries-and-Galloway-Regional-Tourism-Strategy-2016-2020-Final.pdf>

²⁰ Dumfries and Galloway Council (2016). *Scottish Tourism Economic Activity Monitor (STEAM) report*.

Scotland. A high proposition of visitors (95%) also stated that they would recommend the area as a holiday destination to friends and family demonstrating the areas potential for continued growth in the tourism.

KTR Project Business Survey

15.6.4 Stantec conducted a tourism business survey in Autumn 2018, targeting 94 tourism businesses within the Business Survey Search Area.²¹ Of these, 75 businesses were identified within the Business Survey Search Area around proposed new KTR Project OHL infrastructure whilst 19 were identified within the Business Survey Search Area around the N and R OHLs which is proposed for removal. A breakdown of identified businesses by receptor grouping is presented in Table 6 below.

Table 6: Businesses Identified by Receptor Grouping

Receptor Grouping	Proportion of total
Visitor Accommodation	64%
Hospitality	16%
Outdoor Tourist Destinations	14%
Indoor Tourist Destinations	6%

15.6.5 Each business was contacted by telephone and of these, 26 businesses took part in the survey (28% response rate). Multiple attempts were made to contact all identified businesses. The highest proportion of respondents were based within Kirkcudbright (42%) followed by Laurieston (19%), Castle Douglas/Twynholm (16%) and New Galloway (8%), St Johns Town of Dalry (8%), Ringford (4%) and Glenhoul (4%).

15.6.6 The scale of businesses surveyed ranged from single employees to businesses with 40 employees, many of which also employed seasonal staff. Most respondents reported a stable business performance over the last three years and believe that business would remain stable or experience growth in future years.

15.6.7 Respondents to the Tourism Business Survey reported that tourists represented 78% of their average customer base, with the balance comprising business visitors and local trade. When asked which activities their customers partake in when visiting the area, most respondents identified outdoor activities such as walking, hiking and watching wildlife as the most popular activities, followed by heritage-based tourism. Data provided by Forestry and Land Scotland²² regarding the usage of car parks across the 2018 season indicates that popular outdoor activities close to the KTR Project include Raiders Road (12,600 visitors), Glengap (1,360 visitors) and Kennick Burn (1,426 visitors).

Characteristics and Assets

Visitor Attractions

15.6.8 The scenery and landscape of Dumfries and Galloway is reported as the area's top tourism asset, with 63% of respondents to the Scotland Visitor Survey stating this as their top motivation for visiting.²³

15.6.9 Dumfries and Galloway has three National Scenic Areas considered to be nationally important for their outstanding scenery: the Nith Estuary; the East Stewartry Coast; and the Fleet Valley. However, none of these lie within the 10km Tourism and Recreation Study Area adopted in this assessment.

15.6.10 Dumfries and Galloway benefits from two international designations in the Galloway Biosphere and the Dark Sky Park, itself being located in the Galloway Forest Park. The Dark Sky Park is the fourth established in the world and the first in the UK, demonstrating a unique tourism and ecological value for the region. The Galloway Forest Park is Britain's largest forest park, established in 1947 and now attracting approximately 800,000 thousand visitors each year.²⁴

15.6.11 The value of scenery and landscape is further reflected in the activities undertaken by visitors including sightseeing (70%), short walks (61%) and visiting historic assets (48%). When exploring the rationale for a visit to the region, a significant number of visitors stated that coming to the area to 'get away from it all' (41%) and explore the area's history and culture (35%), highlighting the value of the natural environment.

15.6.12 Tourist attractions often utilise the scenic and landscape value of the region, including the award winning 7Stanes mountain biking centres, of which there are five in Dumfries and Galloway at Dalbeattie; Mabie; Ae; Glentrool; and Kirroughtree.²⁵

15.6.13 Table 7 below presents the most visited attractions across Dumfries and Galloway in 2016.

Table 7: Most Frequently Visited Attractions, Dumfries and Galloway, 2016

Rank	Attraction	Visitor Numbers
1	Gretna Green Famous Blacksmith's Shop	794,543
2	Galloway Forest Park	433,640
3	Mabie Farm Park	76,500
4	Threave Garden	73,595
5	Mabie Forest	68,442

Source: Visit Scotland (2017). Tourism in Scotland's Regions 2016

15.6.14 It should be noted that some of the attractions identified below are outwith the Tourism and Recreation Study Area adopted in this assessment and thus are not likely to experience significant effects from the KTR Project, but nonetheless it is useful to note that they make an important contribution to the tourism and recreation sector across Dumfries and Galloway.

15.6.15 In addition to walking and heritage-based tourism, golf tourism is also important to the region. There are approximately 32 golf courses in Dumfries and Galloway. Golf tourism is valued at £6.3 million to the economy of the South of Scotland and supports an estimated 173 jobs.²⁶ The highest proportion of visitors to the region's golf courses are likely to be from Scotland (60%) or from the rest of the UK (39%), compared to visitors to golf courses in Scotland as a whole (50% from Scotland, 19% rest of UK).

Designated Walking and Recreational Routes

Recreational Resource

15.6.16 The rural setting and upland topography of the Tourism and Recreation Study Area offers the ability to undertake a range of recreational pursuits in the open countryside and on designated or otherwise promoted recreational routes. Such activities may include walking, running, horse riding, mountain biking, orienteering and camping. As noted below in relation to the wider tourism and recreation sector across the Tourism and Recreation Study Area, the latest available evidence from the Scotland Visitor Survey indicates that the scenic and landscape value of Dumfries and Galloway is the region's key tourism attribute, with 61% of respondents undertaking short walks in the region.

²¹ This area comprised a 4km of the proposed KTR Project route and the 'N' and 'R' routes where removal of the existing infrastructure is proposed.

²² Formerly Forestry Commission Scotland.

²³ Visit Scotland (2017). *Scottish Visitor Survey 2015/16*. Available at: <https://www.visitscotland.org/research-insights/about-our-visitors/visitor-journey>

²⁴ See: Visit Scotland. *Galloway Forest Park*: <https://www.visitscotland.com/info/towns-villages/galloway-forest-park-p249171>

²⁵ See: <https://forestryandland.gov.scot/visit/activities/mountain-biking/7stanes>

²⁶ Visit Scotland (2016). *Scotland Golf Visitor Survey 2016 Regional Report - South Scotland*. Available at: <https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers/golf-south-scotland-2016.pdf>

15.6.17 Chapter 7: Landscape and Visual Amenity of the EIA report identifies all Core Paths and other promoted recreational routes, including the Southern Upland Way, within the Tourism and Recreation Study Area and with visibility of the KTR Project. Multiple recreational routes are located close to the KTR Project, including a number which intersect with proposed construction access tracks and working areas. These are identified with reference to each KTR Project route section within the assessment presented in Chapter 15: Socio-economics, Tourism and Recreation.

15.6.18 The Land Reform (Scotland) Act 2003 establishes a statutory right of responsible access to land and inland waters for outdoor recreation and crossing land. Under Section 13(1) of the Act, local authorities have a duty to “*assert, protect and keep open and free from obstruction or encroachment any route, waterway or other means by which access rights may reasonably be exercised*”. This emphasises the importance afforded to maintaining continuity of public access to recreational routes in the countryside.

15.6.19 Limited exceptions to this statutory right of access are set out within section 6 of the Act, with section 6(g)(i) specifically excluding access to land where “*building, civil engineering or demolition works*” are being carried out, and section 6(g)(ii) specifically excluding access to land where “*works being carried out by a statutory undertaker for the purposes of the undertaking*” are being carried out. However, Section 7(i) of the Act confirms that this restriction does not apply to Core Paths, which in the absence of a formal closure order must be kept open. Similarly, defined Public Rights of Way are legally considered to be roads, regardless of their current state and usage. Consequently, to temporarily or permanently close or divert a Public Right of Way it is necessary to promote a formal order under the Countryside (Scotland) Act 1967.

15.6.20 In relation to the assessment of ‘primary’ effects on recreational access during the construction phase of the KTR Project, the sensitivity of impacted designated walking routes was assigned based on their recognition in policy terms at the national level (e.g. within NPF3) and the level of statutory protection afforded to them.

Visitor Accommodation

15.6.21 The economic contribution of the tourism sector is underpinned by visitor accommodation. Table 8 below presents a summary of the tourism sector across Dumfries and Galloway.

Table 8: Overnight Visitor Summary, Dumfries and Galloway, 2015-17 annual average

	Visits (,000s)	Nights (,000s)	Spend (£m)
Domestic			
Scotland	253	727	42
Rest of Great Britain	420	1,651	89
Total	673	2,378	131
International			
Europe	22	127	14
North America	8	62	4
Rest of World	8	61	5
Total	38	250	23

Source: Visit Scotland (2019). *Dumfries and Galloway Factsheet 2018*

15.6.22 Most overnight visits to Dumfries and Galloway over this period were domestic (95%). This region therefore has the highest proportion of domestic tourism across all of Scotland.²⁷ This reinforces the importance of the scenery and landscape of the area. Internationally renowned assets are not driving the sector.

15.6.23 The Average Daily Rate (ADR) for visitor accommodation across Dumfries & Galloway was £59.96 in March 2018, increase of 12.7% from the same time in the previous year²⁸. This has remained largely stable with an ADR of £59.50 in March 2016.

15.6.24 Table 9 below presents occupancy rates for hotels, B&Bs and self-catered accommodation across Dumfries and Galloway in 2018, as recorded by Visit Scotland. Hotel occupancy peaked in August at 75% whilst B&B and self-catered occupancy both peaked in August at 76% and 74% respectively. This indicates that even during the high season, the visitor accommodation sector across the region exhibits excess capacity. As the Tourism and Recreation Study Area includes a range of visitor accommodation businesses similar to the wider local authority area, there is no evidence available to indicate that occupancy levels would differ within the assessed Study Area.

Table 9: Accommodation Sector Occupancy, Dumfries and Galloway, 2018

Month	% Occupancy		
	Hotel	B&B	Self-Catered
January	26	17	19
February	38	21	24
March	39	21	38
April	52	35	51
May	79	64	47
June	76	78	49
July	67	74	57
August	75	76	74
September	74	63	61
October	59	66	45
November	40	18	58
December	29	23	43
Annual Average	54	39	46

Source: Visit Scotland (2019). *Dumfries and Galloway Factsheet 2018*

15.6.25 Approximately 156 visitor accommodation businesses in Dumfries and Galloway participated in the Scotland Visitor Survey carried out for Visit Scotland between January 2015 and March 2018 to assess the performance of the sector across the local authority area. Participants in the survey included Dumfries & Galloway-based hoteliers, B&Bs, self-catering cottages / apartments, guest houses, holiday parks, caravan and camping sites.

15.6.26 Whilst the survey has not captured all visitor accommodation businesses in Dumfries and Galloway, it does indicate that the local authority area and the Tourism and Recreation Study Area contained within it includes a substantial concentration and range of visitor accommodation businesses.

15.6.27 At the local level, the Tourism Business Survey undertaken to inform this assessment identified 41 visitor accommodation businesses with publicly available contact details located within 2km radius of the KTR Project and the ‘N’ and ‘R’ route sections proposed for removal. As with the 2015 – 2018 local authority wide survey, this does not provide an exhaustive list of visitor accommodation businesses with the potential to be impacted by the KTR Project; other businesses will be located between 4 – 10km of and within theoretical visibility of the KTR Project.

15.6.28 To ensure the assessment remained robust and proportionate, the assessment in Chapter 15 of the EIA Report therefore assessed likely effects on the visitor accommodation component of the tourism and recreation sector rather than attempting to identify likely effects on all individual visitor accommodation businesses located within the Tourism and Recreation Study Area, many of which are likely to experience

²⁷ Visit Scotland (2019). *Dumfries and Galloway Factsheet 2018*. p.4. Available at: <https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/regional-factsheets/dumfries-and-galloway-factsheet-2018.pdf>

²⁸ Dumfries & Galloway Accommodation Performance <http://www.ljresearch.co.uk/dumfries-galloway-accommodation-performance/>

no effects due to a lack of theoretical visibility and separation distances from roads likely to be used during construction.

Receptor Sensitivity

15.6.29 As stated in the introduction of this appendix, the key components of the tourism and recreation sector can be categorised into 7 broad groupings:

- Designated walking and other recreational routes;
- Outdoor tourist destinations;
- Indoor tourist destinations;
- Hospitality;
- Visitor Accommodation;
- Recreational activities in the open countryside; and
- Tourists travelling (by road) through the open countryside.

15.6.30 Of these, indoor tourist destinations are not likely to experience a significant effect on their visitor attractiveness or tourism potential and thus can be scoped out from further consideration. This is owing to the main features of such destination being experienced indoors, often on a localised or special interest basis, and therefore being unrelated to the surrounding landscape. Findings from the Tourism Business Survey indicates mixed responses from indoor tourist destinations within the Tourism and Recreation Study Area, although their indoor focus inherently means that any change in external visual amenity would be unlikely to result in a change in the visitor attractiveness of such destinations.

15.6.31 The visitor attractiveness and tourism potential of each of the remaining (six) receptor grouping could be affected by environmental or socio-economic changes (i.e. 'primary effects'), including likely effects from the construction or operation of the KTR Project as assessed in other technical assessment chapters of the EIA Report. To assess likely 'secondary' effects on the identified key components of the tourism and recreation sector, the sensitivity of each receptor grouping was assigned based on both the *importance* of identified tourism assets within the Tourism and Recreation Study Area and the *susceptibility* of changes in the visitor attractiveness of such assets ultimately catalysing changes in visitor numbers and tourist expenditure. This captures the elasticity of demand of each receptor grouping and the key question to underpin the identification of receptor sensitivity was therefore:

"To what extent would any change in the visitor attractiveness and tourism potential of this component of the tourism and recreation sector (i.e. this receptor grouping) be likely to result in a change in visitor numbers and expenditure?"

15.6.32 This socio-economic based sensitivity level differs from user-based landscape, visual, cultural heritage and access sensitivities assigned to individual tourism and recreation related receptors, as identified separately in relevant technical assessment chapters of this EIA Report. Of note, sensitivity ratings assigned to the tourism and recreation sector have not been adjusted in response to the COVID-19 pandemic, as whilst sectoral performance is presently substantially reduced compared with pre-pandemic levels this does not detract from the continued importance of the sector to local, regional and national economies.

15.6.33 Taking account of the importance of identified tourism assets within the Tourism and Recreation Study Area and the susceptibility to changes in visitor attractiveness and tourism potential catalysing changes in visitor numbers and expenditure, the sensitivity of each reception grouping is identified in Table 10 below.

Table 10: Sensitivity of Tourism and Recreation Receptor Groupings

Receptor Grouping	Sensitivity	Rationale
Designated walking and recreational routes	Medium	These routes, including but not limited to Core Paths and long-distance walking trails, are recognised in policy terms at the national level (e.g. within NPF3) and are awarded a level of legal protection (for example under the Land Reform (Scotland) Act 2003) as being important tourism and recreational assets. They enable access to a range of visitor attractions and themselves provide opportunities for recreational activities including walking, cycling and horse-riding. However, any change in the amenity value (i.e. visitor attractiveness) of an individual route is not itself likely to catalyse a major change in overall visitor numbers and associated expenditure across the Tourism and Recreation Study Area.
Outdoor tourist destinations	Low - Medium	These destinations form a core offering of the tourism and recreation sector, i.e. they are established attractions which tourists choose to visit owing to their special features or characteristics. The importance, scale and type of destination varies considerably, but the common element is that the destination is experienced outdoors in the context of the surrounding landscape (i.e. including the existing 'R' and 'N' OHLs). Owing to the heterogeneous nature of these assets and since each destination provides a specific tourist offering, any change in the visitor attractiveness of an individual destination is not itself likely to catalyse a major change in overall visitor numbers and associated expenditure across the Tourism and Recreation Study Area.
Hospitality	Low	Similar to indoor tourist destinations, bars and restaurants are likely to be largely experienced indoors and focused on the quality of the hospitality offering, although establishments with an attractive landscape setting may use this to differentiate themselves from competitors. Owing to the heterogeneous nature of these assets, any change in the visitor attractiveness of an individual hospitality establishment is not itself likely to catalyse a major change in overall visitor numbers and associated expenditure across the Tourism and Recreation Study Area.
Visitor Accommodation	Medium	Similar to outdoor tourist destinations, visitor accommodation (hotels, guest houses, B&Bs and campsites) form a core offering of the tourism and recreation sector, i.e. tourists stay in short term accommodation either to visit local destinations or simply to relax by making use of on-site amenities. As with hospitality assets, visitor accommodation is likely to be largely experienced indoors and focused on the quality of the accommodation itself (and associated amenities), although establishments with an attractive landscape setting may use this to differentiate themselves from competitors. The setting, quality, scale and type of accommodation within the Tourism and Recreation Study Area varies considerably, but one common element is that the accommodation is situated within the landscape (i.e. including the existing 'R' and 'N' OHLs). Owing to the heterogeneous nature and offering of visitor accommodation, any change in the visitor attractiveness of an individual destination is not itself likely to catalyse a major change in overall visitor numbers and associated expenditure across the Tourism and Recreation Study Area.
Recreational activities in the open countryside	Low - Medium	Similar to designated routes and outdoor tourist destinations, areas of open countryside (land and water) form a core offering of the tourism and recreation sector as they provide (outdoor) opportunities for undertaking specific recreational activities, with access for recreational purposes guaranteed under the Land Reform (Scotland) Act 2003. The type of activity undertaken varies considerably and may be terrestrial or water based, with experiential value generated largely by participating in the activity itself. However, recreational activities undertaken outdoors are experienced in the context of the surrounding landscape (i.e. including the existing 'R' and 'N' OHLs) and an attractive landscape setting may contribute to experiential value. Owing to the heterogeneous nature of recreational activities and their landscape settings, any change in the attractiveness of undertaking an individual activity is not itself likely to catalyse a major change in overall visitor numbers and associated expenditure across the Tourism and Recreation Study Area.

Receptor Grouping	Sensitivity	Rationale
Tourists travelling (by road) through the open countryside	Low	<p>Travelling to, from or between tourist destinations, recreational activities or hospitality/accommodation itself forms part of the overall tourism experience. Tourists may select particular accommodation or destinations owing to their accessibility (amongst other factors), and any unexpected disruption to journeys may detract from their enjoyment of the experience. Changes in visual amenity would only be experienced momentarily throughout a journey and thus are less likely to detract from the overall experience.</p> <p>Beyond potentially impacting on individual tourism experiences, any change in the amenity of tourists whilst travelling through the open countryside is not itself likely to catalyse a major change in overall visitor numbers and associated expenditure across the Tourism and Recreation Study Area.</p>

15.7 Summary of Receptor Sensitivity

15.7.1 Table 11 below summarises the sensitivity of socio-economic, tourism and recreation receptors likely to experience effects from the KTR project and thus requiring to be considered within the impact assessment presented in Chapter 15 of the EIA Report.

Table 11: Summary of Receptor Sensitivity

Receptor	Type of Effect	Sensitivity	Phase of likely effect(s)
Labour Market			
Labour market	Changes in employment	Low	Construction
Key Business Sectors			
Forestry	Changes in sectoral activity and performance	Medium	Construction
Construction		Medium	Construction
Energy		High	Operation
Tourism and Recreation			
Designated walking and recreational routes	Changes in visitor attractiveness and tourism potential (visitor numbers and expenditure)	Medium	Construction and operation
Outdoor tourist destinations		Low - Medium	Construction and operation
Hospitality		Low	Construction and operation
Visitor Accommodation		Medium	Construction and operation
Recreational activities in the open countryside		Low - Medium	Construction and operation
Tourist travelling through the open countryside		Low	Construction and operation