Kintore Hydrogen Plant

Environmental Impact Assessment Report
Chapter 15: Socio-Economics

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1 Introduction

1.1 Purpose of this chapter

1.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) presents the findings of Environmental Impact Assessment (EIA) work undertaken concerning potential impacts of Kintore Hydrogen Plant on local population and socio-economic receptors.

1.1.2 The consideration of socio-economic conditions of the EIA covers issues such as demographic changes and economic effects, which are generally considered to be medium and long term effects.

1.1.3 This EIAR chapter:

- presents the environmental baseline established from desk studies, surveys and consultation to date;
- presents the potential socio-economic effects arising from Kintore Hydrogen Plant, based on the information gathered and the analysis and assessments undertaken;
- identifies any assumptions and limitations encountered in compiling the environmental information and undertaking the assessment; and
- highlights any necessary monitoring and/or mitigation measures that could prevent, minimise, reduce or offset the possible environmental effects identified in the EIA process.

1.2 Legislative, planning policy context and technical guidance

1.2.1 There is no specific legislation on the methods that should be used to assess the socio-economic effects of the proposed development in EIA.

1.2.2 Kintore Hydrogen Plant has the potential to directly support national and regional economic strategies, where both the Scottish Government and Aberdeenshire Council are committed to supporting the low-carbon / renewable energy sector and the national low-carbon and renewable energy strategies including hydrogen production.

National

1.2.3 The following national policies are relevant to the assessment:

- Scottish Government, National Planning Framework 4, 2023[1]
- Scottish Government, Planning Circular 3/2012: Planning Obligations and Good Neighbour Agreements (revised 2020), 2020[2]
- National Grid Gas Transmission, Project Union Launch Report, May 2022[3]
- Scottish Government, Scotland's National Strategy for Economic Transformation, October 2022[4]
- Scottish Government, Heat in Buildings Delivery Report 2019/20, August 2022[5]
- Scottish Government, Hydrogen Action Plan, December 2022[6]

Scottish Government, National Planning Framework 4, 2023

1.2.4 The National Planning Framework (NPF) 4 was adopted in February 2023, and supersedes Scottish Planning Policy and the NPF 3.

1.2.5 The NPF 4 sets out the Scottish Governments' priorities and policies for the planning system up to 2045 and how planning and development will help to achieve a net zero, sustainable Scotland by 2045. The NPF 4 focuses on delivering a greener, fairer and more inclusive economy and promoting sustainable growth.

1.2.6 The NPF 4 states that the planning system should support all forms of renewable energy development and energy storage. Under Policy 11c, the NPF 4 states that renewable energy development proposals:

"will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities".

Scottish Government, Planning Circular 3/2012: Planning Obligations and Good Neighbour Agreements (revised 2020), 2020

1.2.7 The Planning Circular sets out the process for planning authorities in developing planning obligations and how this can be conducted efficiently. The process should consider the economic viability of proposals and alternative solutions such as phasing or staging payments. This should not delay developments in accordance with policy that brings benefit and add significant costs for developers and infrastructure providers.

National Grid Gas Transmission, Project Union Launch Report, May 2022

1.2.8 The Launch Report sets out how Project Union will enable net zero by 2050 and empower a hydrogen economy in the UK. The project aims to create a 2,000km hydrogen backbone through phased repurposing of existing assets and adding new pipes. This will connect hydrogen production, demand, storage and export centres. Although not in itself a policy document, this indicates one means by which the UK's net zero strategy will be delivered, and is very relevant to the economic and investment context of the proposed development.

Scottish Government, Scotland's National Strategy for Economic Transformation, October 2022

1.2.9 The Strategy aims to strengthen the Scottish economy by securing good, well-paid jobs and to help growing businesses. The national strategy recognises that the next ten years will be a time of change and opportunity for Scotland's economy. The New Markets Programme aims to capitalise opportunities in hydrogen and renewable energy in Scotland.

Scottish Government, Heat in Buildings Delivery Report 2019/20, August 2022

1.2.10 The Delivery Report monitors the aspiration to transform Scotland's buildings to become warmer, greener and more efficient by 2040. This is done by removing poor energy efficiency, reducing greenhouse gas emissions, providing more energy efficient buildings and decarbonising the heat supply.

Scottish Government, Hydrogen Action Plan, December 2022

1.2.11 The Action Plan sets out Scotland's ambition to have 5GW hydrogen capacity by 2030 and 20GW by 2045. £100 million of funding will be made available for renewable hydrogen projects and support the growth of regional hydrogen energy hub. The government should develop a regulatory, planning and consenting framework for renewable developments that supports the scale up of hydrogen at pace while ensuring biodiversity is protected.

Regional and local

1.2.12 The following local policies and strategies are relevant to the assessment:

- Aberdeenshire Council, Aberdeenshire Local Development Plan, January 2023[7]
- Aberdeenshire Council, Aberdeenshire Local Development Plan 2028[8]
- Aberdeenshire Council and Aberdeen City Council, Regional Economic Strategy February 2024[9]

Aberdeenshire Council, Aberdeenshire Local Development Plan, January 2023

1.2.13 The Local Development Plan of Aberdeenshire was created in 2023 and sets out the key priorities for strategic development in Aberdeenshire up to 2031. It aims to balance economic growth with the pressing problems of climate change and sustainable development. There is also a need to address the challenges faced by remote and rural economies of Aberdeenshire, with regards to access to employment opportunities.

1.2.14 Policy C2 Renewable Energy supports renewable energy developments, including hydro-electricity and energy storage projects on appropriate sites. These should have appropriate design and take into account any socio-economic effects.

Aberdeenshire Council, Aberdeenshire Local Development Plan 2028

1.2.15 Aberdeenshire Council is preparing a new Local Development Plan for the period between 2028 and 2038. Topic papers are going to be published in 2025 and the new Local Development Plan is anticipated to be approved in 2028. At this stage there is no specific emerging policy relevant to socio-economics impacts.

Regional Economic Strategy: A sustainable economic future for the North East of Scotland, February 2024

1.2.16 The regional economic strategy is a long-term plan for the North East region of Scotland. It responds to an expected period of change in the regional economy, not least with the energy industry transforming to meet the UK's net zero carbon ambitions, and the need for a just transition. The strategy sets out opportunities in renewable energy, carbon capture and hydrogen – including Aberdeen's status as *"the UK's leading hydrogen city"* (page 7).

1.2.17 Table 1 of the strategy indicates that 'Energy Sector' employment in 2021 was 64,000 direct and indirect jobs, being high proportions of the Scottish and UK totals. This wider direct and indirect employment in the region currently driven by the energy sector should be borne in mind when considering the more narrowly defined ONS employment statistics discussed in the following sections.

1.2.18 The strategy's vision for this region is to be *"a pioneer of the energy transition"*, reducing carbon and maintaining GVA, and supporting the skills needs to deliver a just transition.

Best practice and guidance

1.2.19 The guidance in Scottish Enterprise, Additionality and Economic Impact Assessment Guidance Note, 2008[10] has been used in this assessment. There is no specific legislative requirement with associated technical guidance specific to this area of EIA.

1.3 Consultation

1.3.1 A request for a scoping opinion was submitted by the Applicant to Aberdeenshire Council in September 2023. A scoping opinion was issued by Aberdeenshire Council on 1st November 2023. The scope of the EIA outlined in the request, including that proposed for socio-economics, was agreed to by the Council. No further comments were raised by Aberdeenshire Council or consultees of relevance specifically to socio-economics.

1.3.2 During pre-application public consultation and engagement with stakeholders including the Local Area Committee, support has been expressed for creation of skilled jobs that assist in the energy sector transition in Aberdeenshire towards renewables and the ‘green economy’ alongside the existing oil and gas industry and its legacy.

2 Assessment Approach

2.1 Assessment methodology

2.1.1 There is no specific legislation or guidance on the methods that should be used to assess the socio-economic effects of the proposed development.

2.1.2 Socio-economic effects have an inter-relationship with wider population and health effects. This chapter focuses on direct employment, and indirect supply chain and investment effects (economic effects) of the proposed development, and the resulting significance for socio-economic status. The social effects of beneficial or adverse health and wellbeing impacts are assessed in Chapter 14: Population and Health, which draws information about employment and skills from this chapter.

2.1.3 Quantitative assessment is used where possible and significance criteria are defined to ensure that there is a consistent identification of effects applied during the assessment. Due to the complexity of socio-economic issues and the numerous interactions that can occur with neighbouring and more distant communities, it is not always possible to predict the precise nature or scale of each impact. Qualitative assessment supported by professional judgement is therefore also used where necessary and justified.

2.1.4 The methodology for assessing economic impacts involves the following key stages.

- Firstly, an analysis is made of the current state of the local economy including unemployment, skills and occupation profile of residents.
- Secondly, the forecast of number of jobs anticipated to be generated on site during the construction and operational phases commissioned by the applicant is provided. This includes detail on the direct and indirect number of jobs generated and safeguarded in a range of industries and associated skillsets (Appendix 15.1). This work informs the assessment for the EIAR..
- Assumptions are applied to these employment generation estimations to account for leakage, displacement and multiplier effects.
- A judgement of significance of effects is reached, and further mitigation or enhancement measures are recommended where applicable.

2.1.5 The proposed method is based on current best practice, including published industry reports on the economic benefit of the low-carbon gas supply in providing a fair energy transition for the UK as noted in Section 1.2.19.

2.2 Study area

2.2.1 The principal study area for the purpose of this chapter is defined as the local authority area of Aberdeenshire. In Savills' experience, this is the appropriate scale to assess effects on the economy and employment. However, it is anticipated that a proportion of employees with specialist skills would also be drawn from outside the Aberdeenshire area.

2.3 Baseline study

2.3.1 The baseline conditions consider recent and future trends for socio-economic indicators including population, age profile, qualifications, occupation, employment status, employment structure and deprivation. This assessment draws from the listed existing datasets to inform the baseline conditions. As such, no surveys have been required.

- Office for National Statistics (ONS) Annual Population Survey[11]
- ONS Business Register and Employment Survey[12]
- ONS Population Estimates[13]
- Oxford Economics Population and Employment Forecast[14]
- Scotland's Census[15]
- Scottish Government Statistics
- Scottish Annual Business Statistics[16]
- The Scottish Index of Multiple Deprivation[17]
- Relevant policy and evidence base documents from Aberdeenshire Council

2.3.2 These provide a broad quantitative 'baseline' of socio-economic conditions. It should be stressed that many social and community effects are by definition complex, interrelated, and difficult to characterise or measure in a precise way. As a result, some judgements are necessarily subjective.

2.4 Uncertainties and/or data limitations

2.4.1 By the nature of the methodology, estimates of change in the socio-economic elements such as economic and employment effects are subject to uncertainty. The estimates in the chapter was based on good practice, but there would likely be a degree of uncertainty around estimates. This chapter's estimated effects are likely to be in a range of +/- 20% of figures given to account for this uncertainty, as is standard practice with this type of estimates.

2.4.2 The economic analysis and conclusions presented in this assessment assume that there are no major macro-economic shocks to the UK economy. Ongoing issues include the Russo-Ukrainian War, and high costs of living. The potential impact of such external factors means that socio-economic figures may change in the future.

2.4.3 The uncertainty range has been presented in the EIAR, and EIAR conclusions are based on the lower end of the likely range in regards to the conclusions of any socio-economic benefits.

2.5 Impact assessment criteria

2.5.1 The significance of an effect is determined by the magnitude of each impact and the sensitivity of its receptor. This section describes the criteria applied in this chapter to characterise the magnitude of potential impacts and sensitivity of receptors. The terms used to define magnitude and sensitivity is in line with those used in the DMRB methodology, which is described in further detail in Chapter 4: Environmental Impact Assessment Methodology.

2.5.2 Potential effects upon socio-economic receptors will be assessed in relation to temporary and permanent effects. As a general rule, temporary effects relate to construction phases of development and permanent effects relate to the operational phase.

2.5.3 Magnitude of impact, based on the change that the proposed development would have upon the resource/receptor, is considered within the range of major, moderate, minor and negligible. Consideration is given to scale, duration and frequency of impact, and reversibility with reference to the definitions in Table 2.1.

Table 2.1: Criteria for magnitude of impact

Magnitude	Evidence for magnitude assessment
Major	The impact will dominate over baseline conditions, or will be highly likely to affect very large numbers of people and/or businesses over the long term. The impact is considered to be a very important consideration, and likely to be material in the decision-making process.
Moderate	The impact will result in significant changes to baseline conditions, or will be highly likely to affect large numbers of people and/or businesses over the long term. Considered to be an important consideration, and likely to be material in the decision-making process.
Minor	The impact will result in some changes to baseline conditions, and is likely to affect a moderate number of people and/or businesses over a medium duration. The change may be important, but is not likely to be a key decision-making factor unless the cumulative effects of such factors lead to an increase in the overall effect on a particular socioeconomic resource or receptor.
Negligible	The impact will result in a perceptible difference from baseline conditions, and is likely to affect to a small number of people and/or businesses over a short duration. The impact is unlikely to be critical in decision-making process.
No Change	The impact does not result in variation beyond baseline conditions and is unlikely to measurably affect people and/or businesses.

2.5.4 The criteria for defining sensitivity in this chapter are described in Table 2.2.

Table 2.2: Criteria for receptor sensitivity

Sensitivity	Evidence for sensitivity assessment
Very High	Strong evidence of direct and significant socio-economic challenges relating to receptor, with receptors accorded a very high priority in local, regional or national economic and regeneration policy. Receptors are of high importance with a high susceptibility to change and limited potential for substitution or replacement.
High	Evidence of direct and significant socio-economic challenges relating to receptor. A high priority in local and regional economic and regeneration policy.
Medium	Some evidence of socio-economic challenges relating to receptor. Receptors with medium importance and priority in local and regional economic and regeneration policy, and with a medium sensitivity to change.
Low	Very little evidence of socio-economic challenges relating to receptor. Receptors with low importance and priority in local economic and regeneration policy, and with a low sensitivity to change.
Negligible	No evidence of socio-economic challenges relating to receptor. Receptor is not a priority in economic and regeneration policy. The receptor is not sensitive to change.

2.5.5 Sensitive receptors are:

- residents of Aberdeenshire who could be employed during the construction or operation of the proposed development.

2.5.6 The significance of the effect is determined based on the magnitude of the impact and the sensitivity of the receptor, as shown in significance matrix based on DMRB LA 104 as set out in Chapter 4: Environmental Impact Assessment Methodology. The resilience to change and the receptors ability to adapt to the new circumstances as a result of the development effects are also considered. Where a range of significance of effect is presented, the final assessment for each effect is based upon expert judgement.

2.5.7 The definitions for each of the significance levels are those shown in Chapter 4: Environmental Impact Assessment Methodology. Effects of significance that is **moderate** and higher will be defined as significant effects.

2.6 Maximum design envelope parameters for assessment

2.6.1 The maximum design envelope parameters identified in Table 2.3 have been selected as those having the potential to result in the greatest effect on an identified receptors or receptor groups. These parameters have been identified based on the overview description of the development provided in Chapter 2: Project Description and Site Setting.

Table 2.3: Maximum design envelope parameters assessed

Potential impact	Maximum design parameter	Justification
Construction phase		
Socio-economic effects due to employment generation	857 FTE equivalent construction workforce on average.	Reasonable estimate of average direct employment generation.
Operation phase		
Socio-economic effects due to employment generation	192 FTE equivalent operational workforce for full development (all phases complete).	Reasonable estimate of average direct employment generation.

2.7 Impacts scoped out of the assessment

2.7.1 The impacts listed in Table 2.4 have been scoped out of the assessment for socio-economics as agreed through the EIA scoping process detailed in Chapter 5: Scoping and Consultation.

Table 2.4: Impacts scoped out of the assessment

Potential impact	Justification
Construction phase	
Disruption to local businesses and residents (not elsewhere assessed)	Disruption during construction will be controlled and managed through implementation of the CEMP and a CTMP. This is assessed in Chapter 9: Transport & Access and Chapter 14: Population & Health where impact pathways are applicable.
Operation phase	
Tourism attractions and accommodation	Due to the location and scale of the proposed development and there being no identified tourist attractions near the site, within the zone of influence for impacts such as traffic or noise impacts. Potential visual effects on the setting of heritage assets (that may also in some cases be tourist attractions) are assessed in Chapter 7: Archaeology and Cultural Heritage.

2.8 Mitigation measures adopted as part of Kintore Hydrogen Plant

2.8.1 Measures have been designed in to Kintore Hydrogen Plant to reduce the potential for impacts on socio-economics. These are listed in Table 2.5.

Table 2.5: Designed-in mitigation measures

Measures adopted as part of Kintore Hydrogen Plant	Justification
Construction Environment Management Plan (CEMP) Construction Traffic Management Plan (CTMP)	Good practice measures specified in the CEMP and CTMP are anticipated to control and manage disruption during construction where impact pathways are applicable.

2.9 Inter-related effects

2.9.1 There is the potential for interaction between socioeconomics and the following other topic areas:

- Transport and Access (Chapter 9); and
- Population and Health (Chapter 14).

2.10 Cumulative effects

2.10.1 Assessment of the cumulative schemes will be undertaken within the identified ZoI of 5 km. This distance is estimated to represent an appropriate catchment for the assessment of cumulative employment effects for Aberdeenshire residents. Given their proximity to the Kintore site, other cumulative developments are likely to be impacting similar receptors. A full list of schemes can be found in Chapter 16: Summary of Inter-related Effects.

2.10.2 All cumulative schemes are considered in this assessment. However, due to the lack of detailed information on the cumulative schemes, it is not feasible to make detailed construction employment projections for all schemes. As such, a high-level qualitative analysis is performed to understand the cumulative effects based on available information.

3 Baseline environment

3.1 Current baseline

Population and age structure

3.1.1 The population of Aberdeenshire was circa 262,700 in 2021 based on data in Scotland's Census 2022[13]. Table 3.1 below shows that Aberdeenshire had a lower proportion of people of working age (aged 16-64) at 61.1% than in Scotland (63.8%) and Great Britain (62.9%). Aberdeenshire had a higher proportion of population younger than 16 (18.5%) than in Scotland (16.6%) and Great Britain (18.3%). The proportion of people over 65 in Aberdeenshire (20.4%) was also greater than in Scotland (19.6%) and Great Britain (18.7%).

Table 3.1: Population and age structure by location

	Aberdeenshire	Scotland	Great Britain
Total	262,700	5,479,900	65,121,700
0-15	49,000 (18.5%)	911,500 (16.6%)	11,926,400 (18.3%)
16-64	160,500 (61.1%)	3,494,500 (63.8%)	40,987,500 (62.9%)
65+	53,600 (20.4%)	1,073,900 (19.6%)	12,207,800 (18.7%)

Source: Scotland's Census 2022, ONS Population Estimate 2021. Figures may not sum due to rounding.

Qualifications

3.1.2 Table 3.2 shows the qualification levels of working age population (16-64 years old) by area[11]. This shows that Aberdeenshire had a greater proportion of people with National Vocational Qualification (NVQ) level 1 or higher (90.1%) compared to both Scotland (86.4%) and Great Britain (87.5%). The proportion of the people in Aberdeenshire with NVQ4 or higher (49.7%) was higher than the Great Britain (43.6%) and slightly lower than Scotland (50%).

Table 3.2: Qualification by location

Qualification Level	Aberdeenshire	Scotland	Great Britain
NVQ4+	82,000 (49.7%)	1,707,000 (50.0%)	17,477,600 (43.6%)
NVQ3+	103,800 (62.7%)	2,212,400 (64.8%)	24,668,600 (61.5%)
NVQ2+	137,700 (83.2%)	2,715,000 (79.6%)	31,355,800 (78.1%)
NVQ1+	149,000 (90.1%)	2,949,100 (86.4%)	35,091,900 (87.5%)
Other qualifications	5,600 (3.4%)	197,100 (5.8%)	2,362,800 (5.9%)
No other qualification	10,800 (6.5%)	266,100 (7.8%)	2,652,900 (6.6%)

Source: Annual Population Survey December 2022. Figures may not sum due to rounding.

Employment status

3.1.3 Table 3.3 shows key economic indicators by location[11]. This shows that

3.1.4 This shows that 82.3% of Aberdeenshire's working age population (16-64 years old) was economically active, while 78.1% was in employment. This compares to 77.1% of economically active people and 74.4% of employed people in Scotland, and 78.5% and 75.6% respectively in Great Britain. The unemployment rate (as a proportion of economically active residents aged 16-64) in Aberdeenshire (5.1%) was higher than Scotland (3.4%) and Great Britain (3.6%). The rate of economically inactive people (aged 16-64) who want a job in Aberdeenshire (21.5%) was higher than that of Scotland (20.2%) and Great Britain (18.1%).

Table 3.3: Economic indicators by location

	Aberdeenshire	Scotland	Great Britain
Employment rate, % of aged 16-64	78.1%	74.4%	75.6%
Economically active, % of aged 16-64	82.3%	77.1%	78.5%
Unemployment rate, % of economically active & aged 16-64	5.1%	3.4%	3.6%
Economically inactive, % of aged 16-64	17.7%	22.9%	21.5%
Economically inactive who want a job	21.5%	20.2%	18.1%
Economically inactive who do not want a job	78.5%	79.8%	81.9%

Source: Annual Population Survey December 2022.

Occupational and employment structure

3.1.5 Table 3.4 shows the occupation structure (Standard Occupational Classification 2010) by area[11]. SOC groups 1-3 represent high-skilled occupations, 4-5 medium-skilled occupations and 6-9 lower-skilled occupations. SOC major group 1-3, which consists of managerial and professional occupations, hosted 50.6% of total jobs in Aberdeenshire. This was lower than the rate in Great Britain (52.6%) but higher than that in Scotland (50.4%). Aberdeenshire has a higher proportion of people in SOC groups 4-5 (24.9%), which includes administrative and skilled trades occupations, compared to Scotland (18.9%) and Great Britain (18.4%). Aberdeenshire has a lower proportion (24.5%) of people employed in SOC major groups 6-9 than Scotland and Great Britain. Overall this demonstrates that the Aberdeenshire workforce is higher skilled than the national average.

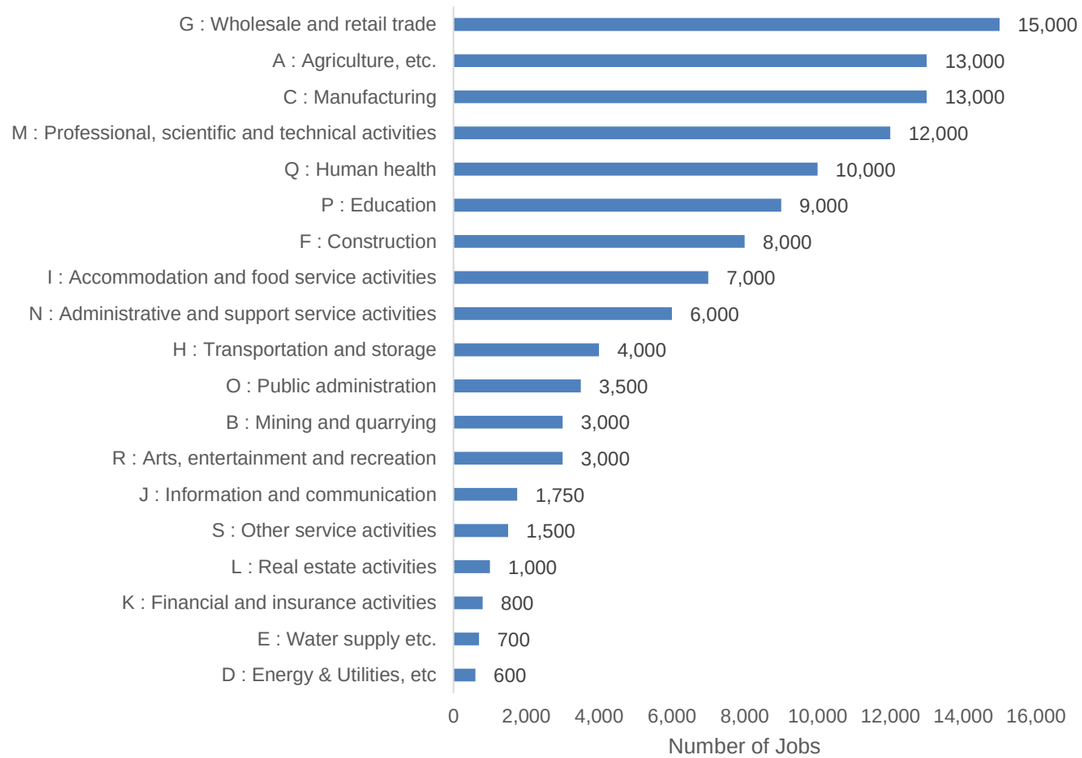
Table 3.4: Occupation structure by location

	Aberdeenshire	Scotland	Great Britain
SOC major group 1-3 (managers, directors and senior officials; professional occupations; associate professional occupations)	56,800 (50.6%)	0 (50.4%)	0 (52.6%)
SOC major group 4-5 (administrative and secretarial occupations; skilled trades occupations)	36,100 (24.9%)	472,400 (18.9%)	5,918,300 (18.4%)
SOC major group 6-7 (caring, leisure and other service occupations; sales and customer service occupations)	21,700 (11.1%)	424,700 (15.4%)	4,707,600 (14.1%)
SOC major group 8-9 (process, plant and machine operatives; elementary occupations)	0 (13.4%)	435,500 (15.3%)	4,855,300 (14.9%)

Source: Annual Population Survey December 2022. Figures may not sum due to rounding.

3.1.6 Figure 3.1 shows the number of employee jobs in Aberdeenshire[12], by sector as defined by the ONS. This shows the largest sector in Aberdeenshire was 'Wholesale and Retail Trade'. Sector F (construction) jobs in Aberdeenshire (8,000 jobs) had a higher proportion of employees (7.1%) compared to Scotland at 5.6% and Great Britain at 5.0%. Sector C (manufacturing) jobs in Aberdeenshire (13,000 jobs) had a higher proportion of jobs (10.6%) than in Scotland (7.4%) and than in Great Britain (9.1%). There is also a higher proportion of jobs in the 'Professional, scientific, and technical activities' (M) sector in Aberdeenshire (10.6%) than in Scotland (7.4%) and Great Britain (9.1%). Although the ONS 'Energy & utilities' sector category is shown as employing the least people (600), in reality additional employment in the wider Aberdeenshire energy industry is also categorised under other ONS sectors, such as 'Mining and quarrying' (i.e. for extraction), 'Professional' activities (i.e. for prospection), or also 'Manufacturing' (i.e. for refining).

Figure 3.1: Number of employee jobs by sector in Aberdeenshire



Source: Business Register & Employment Survey 2022.

Deprivation

3.1.7 The Scottish Index of Multiple Deprivation (SIMD) is a standard tool used to compare deprivation across Scotland. It splits the country up into 6,976 different data zones of which 340 represent Aberdeenshire. When using 2020 SIMD report, out of the 32 Scottish Local Authorities, Aberdeenshire has no data zones which are within the 5% most deprived areas. Within the 20% most deprived areas in Scotland, there are nine data zones found in Aberdeenshire. This represents 0.6% of the national share. All of these data zones can be found around the settlements of Fraserburgh and Peterhead.

3.1.8 The proposed development sits within the data zone of Kintore (S01006922). It has an overall rank of 5,449 out of 6,976 data zones in Scotland (where 1st is the most deprived). This shows that this data zone is less deprived than the regional average[17].

Summary of current baseline

3.1.9 Given Aberdeenshire's higher proportion of young people (0-15 years) relative to Scotland, there is an opportunity for the local economy to create new employment opportunities for future workers.

3.1.10 Aberdeenshire currently benefits from a pool of highly qualified and skilled residents relative to Great Britain, with 82.3% of residents aged 16-64 being economically active. Aberdeenshire has a higher employment rate than Scotland and Great Britain (as a proportion of residents aged 16-64). However, Aberdeenshire's unemployment rate is also higher than Scotland or Great Britain (as a proportion of economically active residents aged 16-64). Finally, the proportion of economically inactive residents (aged 16-64) who do want a job is higher in Aberdeenshire. This provides opportunities for creating new employment in Aberdeenshire to bring people back into the labour force.

3.1.11 Although the 'Energy & utilities' sector employs the least people, additional sectors employing high numbers of people support the wider energy sector in Aberdeenshire, such manufacturing (third largest sector in Aberdeenshire in terms of jobs), mining or professional activities (fourth largest sector). Overall this indicates that the Kintore Hydrogen Plant will be able to benefit from a skilled labour pool from Aberdeenshire over the long-term. There are also opportunities for re-skilling and training of workers in related industries and of economically inactive residents wanting a job.

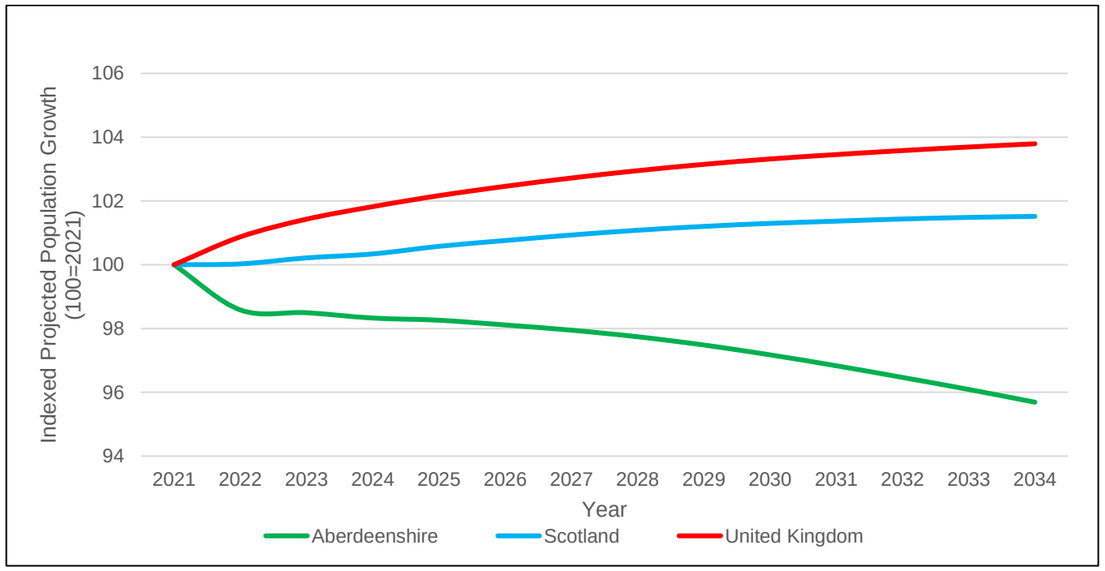
3.2 Future baseline

Population and age structure

3.2.1 By 2028 when the first phase of the proposed development is anticipated to be complete and enter commissioning, Oxford Economics forecasts the population in Aberdeenshire to decline to 256,710. This is equivalent to a decrease of 2.3% between 2021 and 2028, while the population is projected to increase in Scotland by 1.1% and in Great Britain 2.9% over the same period. This is shown in Figure 3.2.

3.2.2 The working age population (aged 16 to 64) in Aberdeenshire is expected to decrease by around 2,990 people to reach 157,510 in 2028. This corresponds to a decrease of around 1.9%. In comparison, Scotland and the United Kingdom are predicted to experience growth in the working age population, by 0.5% and 1.9% respectively.

Figure 3.2: Indexed projected population trend (100=2021)



Source: Oxford Economics

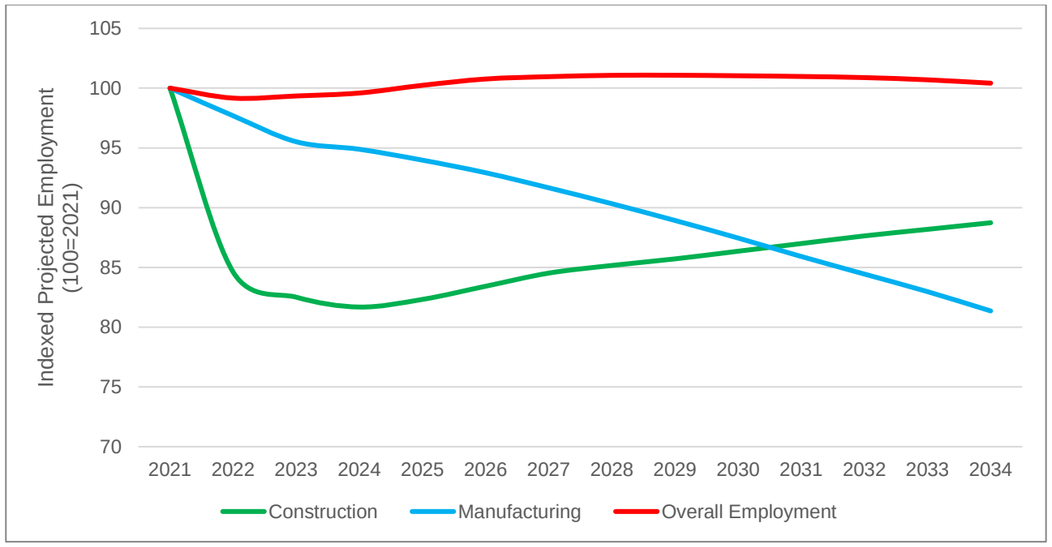
Employment structure

3.2.3 Oxford Economics data projects that there will be an overall increase in employment between 2021 and 2028 in Aberdeenshire. This is shown in Figure 3.3. A 1.1% increase will mean that there will be around 118,940 jobs across all sectors in the county. In comparison, by 2028 it is predicted that the number of employee jobs in Scotland and Great Britain will increase by 5.2% and 10.4% respectively.

3.2.4 The number of construction (Sector F) jobs in Aberdeenshire is expected to decrease by 18% (1,930 jobs) between 2021 and 2025, when construction of the proposed development is assumed to begin. This downward trend is also expected in Scotland, but the latter has a lower decline rate of 5% over the same period. In contrast, the number of construction sector jobs is predicted to grow by 2% in the UK.

3.2.5 Sector C represents the 'manufacturing' industry. In Aberdeenshire, this sector is predicted to decline by 9.7% (1,380 jobs) by 2028. This rate of decline is higher than that in Scotland (9.3%) and the UK (3.1%). In contrast, the 'Professional, scientific, and tech' sector in Aberdeenshire is anticipated to grow by 2.9% over the period (410 jobs). Employment in the 'Energy & utilities' sector is estimated to decline by 8% by 2028, losing circa 50 jobs.

Figure 3.3: Indexed projected employment trend (100=2021) in Aberdeenshire



Source: Oxford Economics

Gross Value Added

3.2.6 Oxford Economics also provides forecasts on employment and Gross Value Added (GVA) per sector. This data can be used to calculate labour productivity (GVA per worker) for each industrial sector.

3.2.7 Total Gross Value Added in Aberdeenshire is estimated to be £6.28bn in 2024, and forecast to increase to £6.78bn by 2032, which is when the scheme is planned to be fully operational. Average worker productivity therefore amounts to around £53,580 in 2024 rising to £57,150 in 2032.

3.2.8 Labour productivity in the construction sector is estimated to increase from £46,240 in 2025 to £46,930 in 2032 during the construction period, with total GVA rising from £415.7m to £449.1m over the same period.

3.2.9 By 2032, GVA in the manufacturing sector is projected to amount to £989m, with a labour productivity of £82,100.

Summary of future baseline

3.2.10 The Aberdeenshire working age population is anticipated to decrease by 2% (2,990 people) by 2028. Employment in the manufacturing sector is forecasted to decline by 2028. Creating new employment opportunities, such as through the proposed development, is therefore beneficial to support the sector and provide long-term jobs to existing workers.

4 Assessment of Effects

4.1.1 This section describes the potential socio-economic effects that could arise from the proposed development during the construction and operational phases. There is opportunity for additional indirect benefits to arise during each phase. These additional benefits are known as 'additionality effects'. The employment additionality effects of each phase have been estimated in the study area only, to be conservative. The steps taken to estimate additionality are outlined below.

4.2 Construction phase

Employment

Net additional construction employment

4.2.1 An estimate of construction phase employment generated by the proposed development has been prepared by ERM, laid out in in the Technical Note in Appendix 15.1.

4.2.2 It is estimated that the construction of the proposed development would generate a total of 6,857 direct on-site job-years over the construction period for the full 3 GW scale development. Based on an assumed phasing of works over around eight years, this would be equivalent to an average of 857 FTE jobs per annum. The peak and average employment at different times would vary depending on the phasing of construction and the stages of work. Peak on-site employment is estimated at circa 1,400 FTE jobs in 2030.

4.2.3 In line with the Scottish Enterprise Additionality Guidance Note, the assessment estimates how many jobs are taken up by residents in Aberdeenshire and also how many additional off-site jobs are generated in the supply chains, by accounting for leakage, displacement and multiplier effects.

4.2.4 It is assumed that 25% of the construction workforce will live outside Aberdeenshire. This is estimated using National Records of Scotland data from Scotland's Census 2011[18] on distance travelled to work. The data provides a breakdown of worker numbers by commute distances between their place of residence and work (e.g. 2-5km, 5-10km, etc.). From the location of the proposed development to the border of Aberdeenshire, the analysis finds that on average 84,690 out of 112,899 people working all across Aberdeenshire would be travelling from within Aberdeenshire (and 25% commuting from outside).

4.2.5 A low level of displacement (25%) from existing construction projects is assumed, based on the Scottish Enterprise Guidance Note recommendations and market reports[19]. With regard to multiplier effects, ERM estimated that the construction phase of the proposed development would also generate 1,847 FTE indirect off-site jobs on average per annum in suppliers down the supply.

4.2.6 Table 4.1 estimates the total on-site and off-site construction jobs created by the proposed development for local residents in Aberdeenshire. The proposed development is expected to support, on average, around 1,520 FTE on-site and off-site construction industry jobs for Aberdeenshire residents during the construction period.

Table 4.1: Average construction employment per annum

	Calculation steps	Average FTE jobs
A	Construction workers on-site (gross, direct, annual)	857
B	Leakage to workers from outside the study area (25%) (A * 25%)	-214
C	On-site jobs (direct, for Aberdeenshire residents) (A - B)	643
D	Displacement of other activities (25%) (C * 25%)	-161
E	Multiplier effects: indirect off-site jobs for local residents, net of leakage and displacement (1,847 * (1 - 25%) * (1 - 25%))	1,039
F	Net additional construction employment for local residents (C + E)	1,521

Source: Savills, 2024. Figures may not sum due to rounding.

Magnitude of impact

4.2.7 Construction of the proposed development is expected to draw in workers from a range of industrial sectors, not only the construction sector, but also the 'manufacturing' and 'professional, scientific and technical activities' sectors. The average 1,520 FTE on-site and off-site construction-phase jobs generated by the proposed development per annum represent the equivalent of 4.6% of combined employment in Aberdeenshire in 2022 across these three sectors (33,000 jobs). Oxford Economics forecasts the construction sector in Aberdeenshire to have a labour productivity (average Gross Value Added per worker) of £46,240 per worker in 2025 when the construction starts, compared to £67,820 per worker in Manufacturing and £57,250 per worker in Professional activities. Accounting for labour productivity in the construction sector as a minimum, the construction phase would therefore generate at least £70m per annum in GVA, or 1.1% of total Aberdeenshire GVA. This is considered to have a short-term beneficial impact.

4.2.8 The magnitude of impact is therefore considered to be **moderate,** thanks to the benefits this would provide to the Aberdeenshire construction labour force and sector.

Sensitivity of the receptor

4.2.9 Residents of Aberdeenshire who could be employed during the construction of the proposed development are identified as a receptor for construction-phase employment. Section 3.1.3 highlights that the unemployment rate in Aberdeenshire (5.1%) is higher than that in Scotland (3.4%) and Great Britain (3.6%). Section 3.1.6 shows that the proportion of 'construction', 'manufacturing', and 'professional, scientific and technical' jobs is higher in Aberdeenshire than Scotland and Great Britain. Section 3.2 explains construction and manufacturing jobs in Aberdeenshire are expected to decline between 2021 and 2025 (a period during which construction of the proposed development is assumed to begin).

4.2.10 The residents of Aberdeenshire who could be employed during the construction of the proposed development are therefore considered to be of **medium** sensitivity to the creation of employment opportunities.

Significance of effect

4.2.11 Overall, it is predicted that the **moderate** impact on the **medium** sensitivity receptor would result in a **moderate** beneficial effect, which is significant.

Further mitigation or enhancement

4.2.12 No significant adverse effects have been predicted and no further mitigation is considered to be required.

Residual effect

4.2.13 The residual effect is predicted to be **moderate** beneficial, which is significant.

Future monitoring

4.2.14 No significant adverse effects have been predicted and no future monitoring is proposed.

4.3 Operational phase

Employment

Net additional operational employment

4.3.1 The assessment of employment generated by the proposed development prepared by ERM (Technical Note in Appendix 15.1) provides estimates of operational-phase jobs.

4.3.2 The maximum design envelope of the proposed development when completed and entering commissioning identifies the peak operational workforce to be around 192 FTE from 2032 onwards. This represents employment opportunities created by Kintore Hydrogen Ltd as the operator of the development.

4.3.3 In line with the Scottish Enterprise Guidance Note, the assessment estimates how many jobs are taken up by residents in Aberdeenshire and how many off-site jobs are generated in the supply chains, by accounting for leakage, displacement and multiplier effects.

4.3.4 In line with the approach laid out above for construction-phase employment in paragraph 4.2.4 and Aberdeenshire commuting patterns (distance travelled to work by Aberdeenshire workers), it is assumed that 25% of the operational workforce will live outside Aberdeenshire[20]. No displacement (0%) is assumed, given the nature of the proposed development and its significance for Scotland's economic and energy strategy. With regard to multiplier effects, ERM estimated that the operational phase of the proposed development would also generate a maximum of 227 FTE indirect off-site jobs from 2032 onwards.

4.3.5 Table 4.2 estimates the total on-site and off-site operational jobs created for Aberdeenshire residents by the proposed development when completed and operational. The proposed development is expected to support, on average, around 315 operational jobs for Aberdeenshire residents.

Table 4.2: Maximum operational employment per annum

	Calculation steps	Maximum FTE jobs
A	Operational workers on-site (gross, direct, annual)	192
B	Leakage to workers from outside the study area (25%) (A * 25%)	-48
C	On-site jobs (direct, for Aberdeenshire residents) (A - B)	144
D	Displacement of other activities (0%) (C * 0%)	-0
E	Multiplier effects: indirect off-site jobs for local residents (227 * (1 - 25%)	170
F	Net additional operational employment (C + E)	314

Source: Savills, 2024. Figures may not sum due to rounding.

Magnitude of impact

4.3.6 ERM estimated that the operation of the proposed development will draw in workers from the 'manufacturing' sector (such as the for manufacture of industrial gases, for operations and for maintenance). The 315 on-site and off-site operational jobs generated by the proposed development represent 2.4% of total manufacturing sector employment in Aberdeenshire in 2022 (13,000 jobs). This is considered as a long-term beneficial impact.

4.3.7 The creation of these jobs could benefit Scotland and Aberdeenshire's economy, by creating new employment opportunities in a strategic industry, in line with national strategic and economic policy, as introduced in Section 1.2. The creation of employment, at varied skill and education levels, in the hydrogen sector, will support the Scottish Government's ambition for the renewable energy transition, while providing opportunities for the re-skilling of Aberdeenshire's active and inactive labour force. Oxford Economics forecasts that by 2032 the average labour productivity (GVA per worker) in the manufacturing sector will amount to around £82,100 per worker. The creation of 315 jobs in the manufacturing sector would generate a Gross Value Added of £25.8m per annum from 2032 onwards. This represents 0.4% of Aberdeenshire's total GVA in 2032, as projected by Oxford Economics (£6.8bn).

4.3.8 The job creation resulting from the proposed development would result in benefits to the Aberdeenshire economy, while supporting long-term employment in the manufacturing sector which is forecasted to decline. Opportunities for re-skilling would also help prevent a rise in unemployment if the Aberdeenshire oil and gas extraction activities were to decline. The magnitude of beneficial impact is therefore considered to be **moderate** once the quantitative and qualitative evidence is taken into account.

Sensitivity of the receptor

4.3.9 Residents of Aberdeenshire who could be employed during the operation of the proposed development are identified as a receptor for operational employment. Section 3.1.3 highlights that the unemployment rate in Aberdeenshire (5.1%) is higher than that in Scotland (3.4%) and Great Britain (3.6%). Section 3.1.6 shows that the proportion of manufacturing jobs in Aberdeenshire (10.6%) is higher than in Scotland (7.4%) and than in Great Britain (9.1%). Section 3.2 explains that manufacturing sector jobs in Aberdeenshire are expected to decline by 9.7% (1,380 jobs) between 2021 and 2028 (when the first phase of the proposed development is anticipated to be complete and enter commissioning).

4.3.10 The residents of Aberdeenshire who could be employed during the operation of the proposed development are therefore considered to be of **medium** sensitivity to the creation of employment opportunities.

Significance of effect

4.3.11 Overall, it is predicted that the **moderate** impact on the **medium** sensitivity receptor would result in a **moderate** beneficial effect, which is significant.

Further mitigation or enhancement

4.3.12 No significant adverse effects have been predicted and no further mitigation is considered to be required. To maximise long-term employment benefits and up-skilling opportunities for the local population, an Employment and Skills Plan could be prepared.

Residual effect

4.3.13 The residual effect is predicted to be **moderate** beneficial, which is significant.

Future monitoring

4.3.14 No significant adverse effects have been predicted and no future monitoring is proposed.

4.4 Inter-related effects

4.4.1 Inter-relationships are considered to be the impacts and associated effects of different aspects of the construction or operation of Kintore Hydrogen Plant on the same receptor.

Project lifetime effects

4.4.2 This section provides the assessment of the potential for effects that occur during more than one stage of the development's lifetime (such as phases of construction, operation or decommissioning) to interact such that they may create a more significant effect on a receptor than when assessed in isolation for each stage.

4.4.3 Employment effects are assessed during the construction and operational phases in this assessment. It is anticipated that there is no likely increased significance of project lifetime inter-related effects, given that the nature of jobs is expected to be different. It is predicted that the construction phase will generate jobs in the construction, manufacturing and professional, technical and scientific sectors, and the operational phase will generate jobs in the manufacturing jobs. The additional indirect benefits across the project lifetime are limited and not likely to be adverse.

Receptor-led effects

4.4.4 This section provides the assessment of the potential for effects via multiple environmental or social pathways to interact, spatially and temporally, to create a greater inter-related effect on a receptor than is predicted for each pathway (in its respective topic chapter) individually.

4.4.5 Employment effects are assessed during the construction and operational phases in this assessment. There is the potential for interaction between socioeconomics and the following other topic areas:

- Transport and Access (Chapter 9); and
- Population and Health (Chapter 14).

4.4.6 For transport and access, the modelling of the assessment in Chapter 9 has taken into account the effect of employment-induced traffic during the construction and operational phases. Table 2.5 highlights that CEMP and CTMP would implement good practice measures, which are anticipated to control and manage disruption during construction and operational phases where impact pathways are applicable. The additional direct and indirect employment benefits resulting from transport are anticipated to be negligible.

4.4.7 For population and health, employment effects assessed in this assessment are expected to be beneficial and have been taken into account in Chapter 14.

4.4.8 As such, there is no likely increased significance of receptor-led inter-related effects identified.

5 Cumulative Effects Assessment

5.1 Construction phase

Employment

Net additional construction employment

5.1.1 The construction of the cumulative developments could help support construction firms operating in the area and provide jobs in a range of industries, including the construction sector but also the manufacturing, professional & scientific, or energy & utilities sectors. This can sustain the capacity level of the industry (beneficial to the proposed development) but also limit the availability of workers in case of overlapping construction periods.

5.1.2 Due to the lack of detailed information on the cumulative schemes, it is not feasible to make detailed construction employment projections for all schemes. Table 5.1 summarises construction employment information available submitted as part of the cumulative schemes' planning applications, which is only available for one scheme. Other cumulative schemes are also likely to generate some construction employment opportunities for Aberdeenshire residents, though on varying scales, with some likely to generate few opportunities.

Table 5.1: Cumulative construction employment

ID	Construction employment
9	Planning Statement states that the proposed development is expected to create 35 full-time equivalent jobs over the construction period within the construction sector and the renewable energy industry supply chain.

Source: Aberdeenshire Council Planning Portal

Magnitude of impact

5.1.3 Cumulative developments combined with the proposed development are likely to generate more net additional construction employment for the local construction, manufacturing, professional & scientific, and energy & utilities sectors than the proposed development on its own. Moreover, it is anticipated that some of the construction phases of identified cumulative schemes listed will overlap with the proposed development's construction phase, providing further employment opportunities for local workers during those timeframes. This is considered to have a short-term beneficial impact, subject to the local capacity of these sectors, which is considered sufficiently high as identified in the baseline section.

5.1.4 To be conservative, the magnitude of impact is considered to remain **moderate**.

Sensitivity of the receptor

5.1.5 As explained in paragraph 4.2.9, the residents of Aberdeenshire who could be employed during the construction of the proposed development are considered to be of **medium** sensitivity.

Significance of effect

5.1.6 Overall, it is predicted that the **moderate** impact on the **medium** sensitivity receptor would result in a **moderate** beneficial effect, which is significant.

Further mitigation or enhancement

5.1.7 No significant adverse effects have been predicted and no further mitigation is considered to be required.

Residual effect

5.1.8 The residual effect is predicted to be **moderate** beneficial, which is significant.

Further monitoring

5.1.9 No significant adverse effects have been predicted and no future monitoring is proposed.

5.2 Operational phase

Employment

Net additional operational employment

5.2.1 The cumulative schemes are expected to generate additional employment opportunities in the economic impact area, either through employment floorspace or homeworkers in residential developments. Due to the lack of detailed information on the cumulative schemes, it is not feasible to make detailed construction employment projections for all schemes. Table 5.2 summarises operational employment information available, submitted as part of the planning applications, which is only available for one scheme. Other cumulative schemes are also likely to generate some operational employment opportunities for Aberdeenshire residents, though on varying scales.

Table 5.2: Cumulative operational employment

ID	Operational employment
9	Planning Statement states that the proposed development is expected to create around 15 full-time equivalent operational jobs including security and maintenance.

Source: Aberdeenshire Council Planning Portal

Magnitude of impact

5.2.2 Cumulative developments combined with the proposed development are likely to generate more net additional operational employment for the local workers than the proposed development on its own. Moreover, it is anticipated that some of the jobs generated will span across multiple sectors, which would create indirect additional benefits to the supply chain in the local area, providing further employment opportunities for local workers. This is considered to have a long-term beneficial impact.

5.2.3 To be conservative, the magnitude of impact is considered to remain **moderate**, given the likely variety of industrial sectors impacted by the cumulative schemes.

Sensitivity of the receptor

5.2.4 As explained in paragraph 4.3.9, the residents of Aberdeenshire who could be employed during the operation of the proposed development are considered to be of **medium** sensitivity.

Significance of effect

5.2.5 Overall, it is predicted that the **moderate** impact on the **medium** sensitivity receptor would result in a **moderate** beneficial effect, which is significant.

Further mitigation or enhancement

5.2.6 No significant adverse effects have been predicted and no further mitigation is considered to be required.

Residual effect

5.2.7 The residual effect is predicted to be **moderate** beneficial, which is significant.

Further monitoring

5.2.8 No significant adverse effects have been predicted and no future monitoring is proposed.

6 Conclusion and Summary

6.1.1 This chapter of the EIAR presents the findings of EIA work undertaken concerning potential impacts of Kintore Hydrogen Plant on socio-economics, focusing on employment effects. Population and health effects have been assessed in Chapter 14.

6.1.2 The baseline data shows the population of Aberdeenshire was around 262,700 in 2021. Aberdeenshire had a lower proportion of working age residents aged 16-64 (at 61.1%) than in Scotland (63.8%) and Great Britain (62.9%). This is projected to decrease by around 2,990 people to reach 157,510 in 2028 when the first phase of the proposed development is anticipated to be complete and enter commissioning. The unemployment rate in 2022 in Aberdeenshire (5.1%) was higher than Scotland (3.4%) and Great Britain (3.6%).

6.1.3 The 'construction' sector (Sector F) in Aberdeenshire (8,000 jobs) had a higher proportion of employees (7.1%) compared to Scotland (5.6%) and Great Britain at (5.0%). This is expected to decrease by 18% by 2025, when construction of the proposed development is assumed to begin.

6.1.4 The 'manufacturing' sector (Sector C) in Aberdeenshire (13,000 jobs) had a higher proportion of jobs (10.6%) than in Scotland (7.4%) and Great Britain (9.1%). The sector is expected to decrease by 1,380 jobs in Aberdeenshire by 2028 (9.7% decrease).

6.1.5 Given Aberdeenshire's higher proportion of young people (0-15 years) relative to Scotland, there is an opportunity for the local economy to create new employment opportunities for future workers. Aberdeenshire currently benefits from a pool of highly qualified and skilled residents relative to Great Britain, with 82.3% of residents aged 16-64 being economically active. Aberdeenshire has a higher employment rate than Scotland and Great Britain (as a proportion of residents aged 16-64). However, Aberdeenshire's unemployment rate is also higher than Scotland or Great Britain (as a proportion of economically active residents aged 16-64). Finally, the proportion of economically inactive residents (aged 16-64) who do want a job is higher in Aberdeenshire. This provides opportunities for creating new employment in Aberdeenshire to bring people back into the labour force.

6.1.6 Although the ONS statistics suggest that the 'Energy & utilities' sector employs the least people, additional sectors employing high numbers of people support the wider energy sector in Aberdeenshire, such manufacturing (third largest sector in Aberdeenshire in terms of jobs), mining or professional activities (fourth largest sector). Overall this indicates that the Kintore Hydrogen Plant will be able to benefit from a skilled labour pool from Aberdeenshire over the long-term. There are also opportunities for re-skilling and training of workers in related industries and of economically inactive residents wanting a job.

6.1.7 The Aberdeenshire working age population is anticipated to decrease by 2% (2,990 people) by 2028. Employment in the manufacturing sector is forecasted to decline by 2028. Creating new employment opportunities, such as through the proposed development, is therefore beneficial to support the sector and provide long-term jobs to existing workers.

6.1.8 As noted in the Regional Economic Strategy (2024), direct and indirect energy-sector-driven in the region is substantial (around 64,000 jobs) and the strategy plans for an expected period of change in the regional economy, with the energy industry transforming to meet the UK's net zero carbon ambitions and the need for a just transition. The strategy sets out opportunities in renewable energy, carbon capture and hydrogen – including Aberdeen's status as *"the UK's leading hydrogen city"* – and the desire to be *"a pioneer of the energy transition"*, reducing carbon and maintaining GVA, and supporting the skills needed to deliver a just transition. These are objectives that would be supported by the proposed development.

6.1.9 Table 6.1 summarises the potential socio-economic effects, mitigation and enhancement, and any monitoring required.

6.1.10 The construction of the proposed development is expected to generate 1,520 net additional on-site and off-site construction jobs per annum over the construction period for Aberdeenshire residents. This is estimated to have a **moderate** beneficial impact on the **medium** sensitivity residents of Aberdeenshire who could be employed during the construction of the proposed development, resulting in a **moderate** beneficial effect, which is significant.

6.1.11 Once complete and having entered commissioning, the proposed development is expected to generate around 315 net additional on-site and off-site operational jobs in the energy sector. This is estimated to have a **moderate** beneficial impact on the **medium** sensitivity residents of Aberdeenshire who could be employed during the operation of the proposed development, resulting in a **moderate** beneficial effect, which is significant.

6.1.12 The long-term beneficial effects could potentially be further enhanced through an Employment and Skills plan, to help target employment opportunities at local residents (including those who have been in longer-term unemployment) and provide training and apprenticeship opportunities.

Table 6.1: Summary of potential environment effects, mitigation and monitoring

Description of impact	Measures adopted as part of the project	Magnitude of impact	Sensitivity of receptor	Significance of effect	Additional mitigation measures	Residual effect	Proposed monitoring
Construction phase							
Employment	None	Moderate	Medium	Moderate beneficial: significant	None	Moderate beneficial: significant	None
Operation phase							
Employment	None	Moderate	Medium	Moderate beneficial: significant	Employment and Skills Plan could be prepared	Moderate beneficial: significant	None

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