BiGGAR Economics

Spittal Battery Energy Storage System (BESS) Socio-Economic Impact Assessment

A report to Field
December 2024

BiGGAR Economics

Contents

1 Executive Summary

This report commissioned by Field to BiGGAR Economics presents the potential socio-economic impacts associated with Spittal Battery Energy Storage System (BESS) site.

The assessment of socio-economic benefits is based on the Proposed Development featuring a maximum export capacity of up to 300 MW, with a 2-hour discharge period.

The Proposed Development will generate economic benefits, during its construction, and during the operation and maintenance phase.

During construction, the total economic benefits (including direct, indirect and induced) that are expected are[1]:

- £7.7 million Gross Value Added (GVA) and 100 years of employment in Highland (50 jobs each year, over a period of two years); and
- £20.0 million GVA and 250 years of employment in Scotland (125 jobs each year, over a period of two years).

The expenditure for the operation and maintenance of the Proposed Development could deliver up to (including direct, indirect and induced):

- £0.8 million GVA and 10 jobs in Highland; and
- £1.7 million GVA and 20 jobs in Scotland.

The Proposed Development will also support the delivery of local services through the annual payment of £0.2 million in non-domestic rates.

For a breakdown of economic impacts in direct, indirect and induced please refer to section 4 in this report.

[1] Figures are rounded to the nearest ten

2 Strategic Context

This section considers national and regional strategies and how the Proposed Development supports their delivery.

2.1 National Strategic Context

2.1.1 National Performance Framework

The National Performance Framework[2] (NPF) sits at the top of the policy hierarchy in Scotland, with all other policies and strategies designed to meet its purpose and outcomes.

The "purpose" of the NPF is:

> **"To focus on creating a more successful country with opportunities for all of Scotland to flourish through increased wellbeing, and sustainable and inclusive economic growth"**

The NPF explicitly includes 'increased wellbeing' as part of its purpose and combines measurement of how well Scotland is doing in economic terms with a broader range of wellbeing measures. The NPF is designed to give a more rounded view of economic performance and progress towards achieving sustainable and inclusive economic growth and wellbeing across Scotland and aims to:

- create a more successful country;
- give opportunities to all people living in Scotland;
- increase the wellbeing of people living in Scotland;
- create sustainable and inclusive growth; and
- reduce inequalities and give equal importance to economic, environmental, and social progress.

The NPF sets out 11 outcomes, underpinned by 81 indicators, that combine to give a better picture of how the country is progressing towards these goals. As

[2] Scottish Government (2018), Scotland's National Performance Framework.

well as Gross Domestic Profit (GDP) and employment measures, the NPF's outcomes reflect the desired fabric of communities and culture, education, the environment, health and wellbeing and measures to help tackle poverty. It is these indicators on which the Scottish Government focuses its activities and spending to help meet the national outcomes.

The 11 national outcomes are:

- children and young people: grow up loved, safe and respected so that they realise their full potential;
- communities: live in communities that are inclusive, empowered, resilient and safe;
- culture: are creative and their vibrant and diverse cultures are expressed and enjoyed widely;
- economy: have a globally competitive, entrepreneurial, inclusive, and sustainable economy;
- education: are well educated, skilled and able to contribute to society;
- environment: value, enjoy, protect, and enhance their environment;
- fair work and business: have thriving and innovative businesses, with quality jobs and fair work for everyone;
- health: are healthy and active;
- human rights: respect, protect and fulfil human rights and live free from discrimination;
- international: are open, connected and make a positive contribution internationally; and
- poverty: tackle poverty by sharing opportunities, wealth, and power more equally.

The Proposed Development will support the decarbonisation of the Scottish economy, while creating high-skilled jobs and supporting the ambitions of local communities. Through these channels, the Proposed Development will make positive contributions towards the economy and communities in achieving these national outcomes.

2.1.2 National Planning Framework 4 (NPF4)

NPF4[3] is Scotland's national spatial strategy, outlining how to improve people's lives through sustainable, liveable, and productive places. NPF4 sets out a national and strategic approach to planning and development in support of achieving net zero in Scotland by 2045.

The Scottish Government identifies net zero energy solutions as a key contributor to net zero emissions by 2045 and includes National Planning Policies to achieve

[3] Scottish Government (2023), Scotland's National Performance Framework 4

this aim, such as a Climate Emergency Policy (1) which encourages and promotes development that addresses the global climate emergency and a Green Energy Policy (11) which encourages and promotes all forms of renewable energy development, both onshore and offshore.

The NPF brings socio-economic impacts to the fore for renewable energy projects. In particular, it highlights the requirement on developers to do what they can to ensure that the benefits of the project are realised locally. What this means in practice has not been explicitly defined, however there is the expectation that developers will be proactive in seeking opportunities to enhance benefits.

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. (NPF4, Policy 11c)

In addition to this, but on a similar theme, the National Planning Framework 4 has also introduced the concept of Community Wealth Building into the planning system. In particular, it highlights the desire for projects to work, where they can, to:

- improve community resilience and reducing inequalities;
- increasing spending within communities;
- ensuring the use of local supply chains and service;
- local job creation;
- supporting community led proposals; and
- enabling community led ownership of buildings and assets.

Development proposals which contribute to local or regional community wealth building strategies and are consistent with local economic priorities will be supported. (NPF4, Policy 25a)

2.1.3 Scotland's National Strategy for Economic Transformation

In March 2022, the Scottish Government released the National Strategy for Economic Transformation[4], which set out its ambition for Scotland's economy over the next 10 years. The Scottish Government's vision is to create a wellbeing economy where society thrives across economic, social and environment dimensions, which delivers prosperity for all Scotland's people and places. Of particular importance is the ambition to be greener, with a just transition to net zero, a nature-positive economy and a rebuilding of natural capital.

A key longer-term challenge identified in the strategy is to address deep-seated regional inequality, including rural and island areas that face problems such as a falling labour supply and poorer access to infrastructure and housing. The transition to net zero presents a further challenge of delivering positive employment, revenue and community benefits.

To deliver its vision and address the economy's challenges, five programmes of action have been identified (with a sixth priority of creating a culture of delivery), including:

- establishing Scotland as a world-class entrepreneurial nation;
- strengthening Scotland's position in new markets and industries, generating new, well-paid jobs from a just transition to net zero;
- making Scotland's businesses, industries, regions, communities and public services more productive and innovative;
- ensuring that people have the skills they need to meet the demands of the economy, and that employers invest in their skilled employees;
- reorienting the economy towards wellbeing and fair work.

The strategy notes that Scotland has substantial energy potential, and that it has developed a growing green industrial base. This provides a strong foundation for securing new market opportunities arising from the transition to net zero, for example in the hydrogen economy and in the decarbonisation of heating systems, where Scotland may be able to secure first-mover advantage and will need continuing investment and support. Renewable energy also has a role to play in supporting productive businesses and regions across Scotland.

The strategy also notes evidence from the country's Regional Economic Partnerships that were used to inform the engagement process for the strategy. It notes that the Highlands and Islands region presents opportunities in the renewables sector and the area aspires to be a 'world renowned net zero' region by 2030 by continuing to develop capabilities in the sector.

[4] Scottish Government (2022), National Strategy for Economic Transformation

2.2 Regional Strategic Context

2.2.1 Highlands and Islands Enterprise 2023-2028 Strategy

The strategy published by the Highlands and Islands Enterprise[5] for the period 2023 to 2028 focuses on achieving net zero, fair and inclusive growth, and regional transformational opportunities. The strategy aims to achieve inclusive growth for all areas in the region.

The renewable energy sector and low carbon economy have been identified as significant economic, social and industrial opportunities for the region, both now and in the future. Highlands and Islands Enterprise is committed to building on the region's international reputation for excellence in energy and low carbon by securing supply chain opportunities from energy developments, including onshore and offshore wind farms, HIE commits to:

- Renewable energy development - support renewable deployment and associated supply chain development, with a particular focus on offshore wind (ScotWind and INTOG), wave and tidal energy (including further technology and commercialisation activity through Wave Energy Scotland), onshore wind (repowering and circular opportunities) and pumped hydro.
- Raise awareness and encourage adoption of the just transition to net zero - develop and deliver net zero and circular economy awareness and training programmes including those targeted at the young workforce;
- Support community wealth building/benefit from net zero – develop awareness of nature-based and circular opportunities for communities and develop and deliver the investment strategies for the Carbon Neutral Islands programme.

2.2.2 Community Wealth Building Strategy 2024-2027

The Highland Council is committed to embedding a Community Wealth Building approach within the Highlands. Community Wealth Building provides a recognised, alternative approach to economic development and a practical response that aims to keep wealth within a local area.

The Council developed a strategy for the next 3 years to integrate these principles into Council services and communities. The strategy aims to retain wealth within the Highlands, focusing on the five key objectives of community wealth building. These are;

- Spending – using public spend to deliver community benefit, fair work and build local supply chains;

[5] Highlands and Islands Enterprise (2023), Highlands and Islands Enterprise 2023-2028 Strategy

- Fair employment – creating fair and meaningful employment opportunities by recruiting from priority groups, paying the living wage and building progression routes for workers;
- Land and property – seeking to support equitable land development and ownership models, including the imaginative use of assets for community and wider social and economic use;
- Financial power – by increasing flows of investment within local economies to harness the wealth that exists locally; and
- Ownership – to advance inclusive economic ownership models such as local SMEs, employee-owned businesses, social enterprises and mutually owned companies and thus enable more wealth generated locally to stay within the community.

The strategy highlights specific objectives and initiatives that can support each of these objectives across the Highland Council area.

2.3 Summary of Strategic Context

The Proposed Development is expected to have various socio-economic benefits in line with national and regional strategic policy documents and deliver on some of the issues covered by Scotland's NPF, including the economy, communities, and the environment.

The Proposed Development will also create employment opportunities, further diversifying the region's economic base and generating spend in the local economy and support for local businesses. The sector provides a substantial opportunity for economic growth, with the Proposed Development supporting these objectives in Highland.

3 Socio-Economic Context

This section discusses the socio-economic context of the Proposed Development.

3.1 Study Areas

The socio-economic baseline for the Proposed Development focuses on the following study areas:

- Local Area (defined as the electoral wards of Thurso and Northwest Caithness, and Wick and East Caithness);
- Highland; and
- Scotland.

3.2 Demographics

3.2.1 Population Estimates

In 2022, the Local Area had a population of 25,300, representing 10.6% of the population in Highland (238,100), and 0.5% of Scotland's total population of 5,479,900.

In the Local Area, the working-age population (aged 16 to 64) accounted for 59.7% of the population in the region, relatively smaller than the overall population distribution in both Highland (60.8%) and Scotland (63.8%).

In the same year, the proportion of the population over the age of 65 in the Local Area was 24.3%, greater than that of Highland (23.2%) and Scotland (19.6%).

Table 3.1 Population Estimates, 2022

	Local Area	Highland	Scotland
Aged 0-15	16.0%	16.0%	16.6%
Aged 16-64	59.7%	60.8%	63.8%
Aged 65+	24.3%	23.2%	19.6%
Total	**25,300**	**238,100**	**5,479,900**

Source: Population estimates - local authority based by five year age band - Data for 2022

3.2.2 Population Projections

National Records of Scotland provides population projections at the local authority and Scottish geographic levels. While information is not available at the electoral ward level, current population estimates and future trends at the local authority level can be used to form a view of more localised trends.

Over the period of 2022 to 2043, the population of Highland is expected to decrease by 2.0%. During the same period, the population of Scotland is expected to increase by 1.7% to approximately 5.6 million.

Over the same period, the share of the working-age population in Highland is projected to fall 4.8 percentage points, from 60.8% to 56.0% (equivalent to a reduction of 14,150 people), whilst the share of the population aged 65+ is projected to rise from 23.2% to 29.8%.

Scotland is predicted to follow a similar but less marked trend. In Scotland, the share of the population aged 16-64 is projected to fall from 63.8% to 60.3% and the share of the population aged 65 and over is projected to increase from 19.6% to 24.9%.

These demographic trends suggest that a declining working-age population will have to support an increasingly ageing population. For this reason, it will be increasingly important for Highland to attract and retain people of working age.

Table 3.2 Population Projections, 2022 - 2043

	Highland		Scotland	
Year	2022	2043	2022	2043
Total	**238,100**	**233,250**	**5,479,900**	**5,574,819**
Aged 0-15	16.0%	14.3%	16.6%	14.8%
Aged 16-64	60.8%	56.0%	63.8%	60.3%
Aged 65+	23.2%	29.8%	19.6%	24.9%

Source: Population projections - local authority based by single year of age; Scotland, National Records of Scotland (2020), Population Projections for Scottish Areas (2018-based)

3.3 Industrial Structure

As shown in Table 3.3, in 2022 the highest proportions of employment in the Local Area were in wholesale and retail trade, human health and social work activities, and water supply, each accounting for 14.0% of employment in the region.

Of those working in the Local Area, 6.6% were employed in the construction industry, compared to 6.7% in Highland, and the Scottish average of 5.6%. This sector is one of the primary areas of opportunity for contracts associated with the construction phase of the Proposed Development.

Table 3.3 Industrial Structure

	Local Area	Highland	Scotland
Wholesale and retail trade	14.0%	13.4%	12.8%
Human health and social work activities	14.0%	15.3%	15.1%
Water supply; sewerage, waste management and remediation activities	14.0%	1.8%	0.7%
Accommodation and food service activities	8.8%	12.2%	8.2%
Education	8.4%	7.1%	8.4%
Professional, scientific and technical activities	7.0%	4.7%	7.4%
Construction	6.6%	6.7%	5.6%
Manufacturing	6.2%	4.7%	6.6%
Public administration and defence	4.9%	4.7%	6.2%
Transportation and storage	3.0%	3.7%	4.0%
Information and communication	2.7%	2.0%	3.1%
Administrative and support service activities	2.5%	5.1%	7.8%
Arts, entertainment and recreation	2.4%	3.3%	2.9%
Other service activities	1.7%	1.2%	1.7%
Agriculture, forestry and fishing	1.1%	11.0%	3.4%
Financial and insurance activities	0.8%	0.7%	3.1%
Real estate activities	0.7%	1.2%	1.4%
Mining and quarrying	0.6%	0.3%	1.0%
Electricity, gas, steam and air conditioning supply	0.5%	0.8%	0.7%

Source: ONS (2023), Business Register and Employment Survey, 2022

3.4 Economic Activity

The unemployment rate in Highland was 2.7%, lower than the Scottish average (3.4%). Highland also had a higher rate of economic activity (78.8%) compared to Scotland as a whole (77.9%).

However, Table 3.4 also shows that the median annual gross wage for residents in Highland (£29,049) was 2.7% less than that of the Scottish average (£29,842).

Table 3.4 Labour Market Indicators

	Highland	Scotland
Economic Activity Rate	78.8%	77.9%
Unemployment Rate (%)	2.7%	3.4%
Median Annual Gross Income (All Residents)	£29,049	£29,842

Source: Annual Population Survey - Data for Oct 2022-Sep 2023 and the annual survey of hours and earnings - resident analysis data for - 2023

3.5 Education

The population of Highland has lower levels of qualifications on average than that of Scotland as a whole. In Highland, 44.9% of those aged 16-64 hold NVQ4+ qualifications compared to the Scottish average of 50.0%.

There are also fewer residents in Highland (62.3%) that hold NVQ3+ qualifications compared to the entirety of Scotland (64.8%). A higher proportion of those aged 16-64 hold an NVQ2+ qualification in Highland (83.8%), compared to 79.6% in Scotland as a whole.

Highland has a lower proportion of residents aged 16-64 years old who do not hold any qualification (5.4%) compared to the national average (7.8%).

Table 3.5 Education Levels

	Highland	Scotland
NVQ4+	44.9%	50.0%
NVQ3+	62.3%	64.8%
NVQ2+	83.8%	79.6%
NVQ1+	91.2%	86.4%
Other Qualifications	3.5%	5.8%
No Qualifications	5.4%	7.8%

Source: ONS, 2022

3.6 Scottish Index of Multiple Deprivation

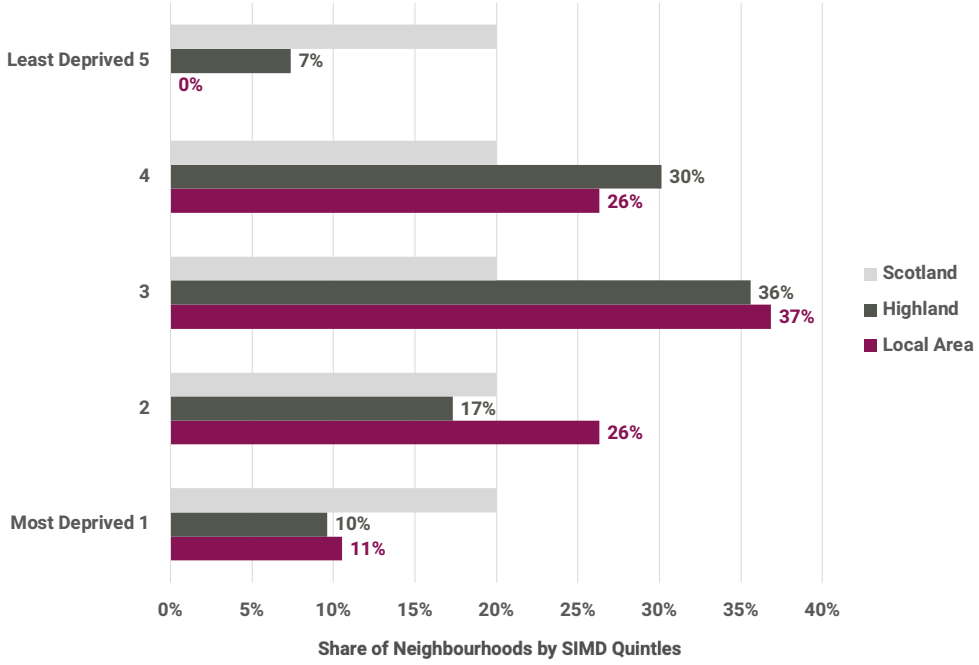
The Scottish Index of Multiple Deprivation (SIMD) is a relative measure of deprivation which ranks small areas across seven dimensions: income, employment, education, health, access to services, crime and housing. These areas can be ranked based on which quintile (fifth of the distribution) they belong to, with a small area in the first quintile being in the 20% most deprived areas in Scotland.

The Local Area is made up of 38 small areas, of which 11% are in the most deprived quintile, and 0% are in the least deprived quintile. Highland as a whole has 312 small areas, of which 10% are in the most deprived quintile, and 7% are in the least deprived quintile.

Most of the small areas in Highland are clustered in the middle of the distribution, with 36% in the third quintile, and 30% in the fourth. The remaining 17% are within the second quintile. Similarly in the Local Area, most of the small areas are clustered in the middle of the distribution, with 26% being within the second quintile, 37% being in the third, and 26% in the fourth.

Given that 11% of the small areas in the Local Area are in the most deprived quintile, and none are in the least deprived quintile, the Proposed Development will be important for generating economic activity and social benefits. The positive impacts of the Proposed Development will contribute to inclusive and equitable growth within the Local Area.

Figure 3-1 SIMD distribution of study areas



Source: Scottish Government (2020), Scottish Index of Multiple Deprivation 2020.

3.7 Summary of Local Economic Context

As Highland faces a projected rise in its ageing population over the next two decades, the Proposed Development's focus on creating local employment opportunities becomes even more important. The Proposed Development will help to increase employment in the local area through direct economic activities and through initiatives to raise awareness of careers in renewable energy. Therefore, the Proposed Development will play a key role in attracting and retaining a working-age population.

Employment in construction in the area is slightly overrepresented in the Local Area compared to Scotland as a whole. This presents a valuable opportunity for local employment within the sector, as the area is well-positioned to secure contracts of the Proposed Development. The region is likely to benefit from these construction contracts, furthering the Proposed Development's positive economic impact. High-quality and well-paid jobs would also likely benefit the median annual income in the region, which is slightly lower than the Scottish average.

There are also neighbourhoods in the Local Area that are deprived and could benefit from increased economic activity and support.

4 Economic Impacts

This section presents the economic impacts generated during the construction, operation and maintenance phases of the Proposed Development in 2024 prices[6].

4.1 Construction

4.1.1 CAPEX Costs

The Proposed Development will have a maximum export capacity of up to 300 MW. The project has been designed with a 2-hour discharge period. Using information from Field and the Industry, the average expenditure on construction of battery storage sites can be estimated based on the average spend per MW. Industry data suggests that this may be expected to cost around £500,000 per MW.

On the basis of this methodology, the total construction cost for the Proposed Development was estimated to be approximately £136 million at 2024 prices.

The expenditure was split into six main categories of contract. As shown in Table 4.1, it was assumed that 65% of capital expenditure would be on battery unit contracts, 14% of spending will be on engineering, procurement, and construction (EPC) costs (which include pre-construction, civil works, design works and preliminary project management), 10% on electrical balance of plant (BoP), 4% on grid connection, 3% on other, and 4% on contingency.

[6] Note the total figures in this chapter are rounded at the nearest 10.

Table 4.1: Construction Spend by Expenditure Type

	%
BESS	65%
Electrical BoP	10%
EPC costs	14%
Grid	4%
Other	3%
Contingency (15%)	4%
Total	**100%**

BiGGAR Economics Analysis. *Totals may not add up due to rounding

4.1.2 Local Content

The economic impact of the construction phase was estimated for Highland and Scotland as a whole. In order to do this, it was necessary to estimate the proportion of each type of contract that might be secured in each of the study areas. The assumptions were based on BiGGAR Economics' previous experience in other energy developments and information received by Field.

To estimate the expenditure for each contract in each of the study areas, the proportions of contract type that might be secured in each area were multiplied by the estimated expenditure on each of the construction contracts.

It was estimated that Highland could secure contracts worth up to £16.7 million, equivalent to 12% of total capital expenditure. The largest opportunities would be the contracts related to EPC, as companies in the area could secure up to 41% of contracts, worth £7.7 million.

Scotland (including Highland) was estimated to secure £30.7 million, equivalent to 23% of total capital expenditure. The largest opportunity would be EPC, worth around £16.2 million.

Table 4.2: Construction Spend by Study Area

	Highland		Scotland	
	%	£m	%	£m
BESS	0%	-	0%	-
Electrical BoP	35%	4.9	50%	7.0
EPC	41%	7.7	86%	16.2
Grid	40%	2.0	100%	5.0
Other	43%	1.8	43%	1.8
Contingency (15%)	5%	0.2	10%	0.5
Total	**12%**	**16.7**	**23%**	**30.7**

BiGGAR Economics Analysis. *Totals may not add up due to rounding.

4.1.3 Economic Impacts

To estimate the direct GVA from each of the main contract categories, each contract was split into sub-contracts. Using industry-specific data on turnover and GVA from the Scottish Annual Business Statistics[7], turnover/GVA ratios were adjusted to 2024 prices and applied to each specific sub-contract in order to estimate GVA.

In this way, it was estimated that construction contracts could directly generate £5.6 million GVA in Highland and £10.9 million GVA in Scotland, as shown in Table 4.3.

Table 4.3: Direct GVA by Contract Type and Study Area (£m)

	Highland	Scotland
BESS	-	-
Electrical BoP	1.5	2.1
EPC	2.8	6.0
Grid	0.9	2.2
Other	0.3	0.3
Contingency (15%)	0.1	0.2
Total	**5.6**	**10.9**

BiGGAR Economics Analysis. *Totals may not add up due to rounding

Similarly, the contract values potentially awarded in each area would support employment. Turnover per job for each of the industries involved is also given by

[7] Scottish Government (2022), Scottish Annual Business Statistics

the Scottish Annual Business Statistics and adjusted to 2024 prices which allows the employment from any increase in turnover to be estimated.

In this way, it was estimated that the Proposed Development could support 70 direct years of employment in Highland, and 140 direct years of employment in Scotland.

Table 4.4: Construction Employment by Contract Type and Study Area (Years of Employment)

	Highland	Scotland
BESS	-	-
Electrical BoP	19	27
EPC	30	65
Grid	14	34
Other	4	4
Contingency (15%)	6	12
Total	**70**	**140**

BiGGAR Economics Analysis. *Totals may not add up due to rounding

There would also be multiplier effects associated with spending in the supply chain and from spending by employees in the local economy. These effects are estimated by applying Type I (indirect) and Type II (indirect and induced) GVA and employment multipliers to the direct GVA and employment impacts.

Indirect effect refers to the impact associated with spending in the supply chain of Tier 1 suppliers. This is captured by applying Type 1 multiplier to the direct economic impact. The induced effect is the impact associated with staff spending their wages in the wider economy and is captured by subtracting Type 1 multipliers from Type II multipliers, and applying this to the direct impact.

In order to adjust these multipliers, which consider the national economy, for the economy of Highland it was assumed that indirect multiplier effects would be 33% of the national impact, and induced multiplier effects, which consider the effect of local spending, would be 70% of the national impact.

Adding together direct, indirect impacts, it was estimated that the Proposed Development could generate a total £6.5 million GVA and support 85 years of employment in Highland and £16.0 million GVA and 213 years of employment in Scotland.

In total (including induced), the Proposed Development could generate £7.7 million GVA and support 100 years of employment in Highland and £20.0 million GVA and 250 years of employment in Scotland.

The construction phase is expected to take approximately two years and the impacts will occur during this time period. Therefore, it is expected that the Proposed Development generates 50 jobs in Highland each year of the construction phase and 125 jobs in Scotland.

Table 4.5: Construction GVA Impacts by Study Area (£m)

	Highland	Scotland
Direct	5.6	10.9
Indirect	0.9	5.2
Induced	1.1	3.1
Total	**7.7**	**20.0**

BiGGAR Economics Analysis. *Totals may not add up due to rounding

Table 4.6: Construction Employment Impacts by Study Area (Years of Employment)

	Highland	Scotland
Direct Jobs	72	142
Indirect Jobs	13	71
Induced Jobs	13	35
Total (included induced)	**100**	**250**

BiGGAR Economics Analysis. *Totals may not add up due to rounding

4.2 Operation and Maintenance (O&M)

4.2.1 O&M Costs

The operation and maintenance impact of the Proposed Development was estimated as the impact that would persist throughout the lifespan of the Proposed Development (30 years).

Annual expenditure on operations and maintenance was estimated based on Industry data. It was estimated that the annual operations and maintenance

expenditure associated with the Proposed Development could be up to approximately £9.6 million[8] (excluding non-domestic rates).

4.2.2 Local Content

In order to estimate the economic impact of the operation and maintenance expenditure in Highland and Scotland, it was first necessary to estimate the proportion of contracts that could be secured in each of these areas. These assumptions were based on the analysis of the industries present in each of the study areas, as well as BiGGAR Economics' previous experience on other energy developments and information provided by Field.

On this basis it was estimated that Highland could benefit from £1.2 million in operations and maintenance contracts, with Scottish businesses potentially benefitting from £2.2 million.

Table 4.7: Operations and Maintenance Spending by Study Area

	Highland	Scotland
Turnover (£m)	1.2	2.2
Share (%)	13%	23%

BiGGAR Economics Analysis. *Totals may not add up due to rounding.

4.2.3 Economic Impacts

As with the construction phase, the contract values awarded in each of the study areas represent an increase in turnover in those areas. The economic impact of the increase in turnover on GVA and employment was estimated in the same way as the construction expenditure.

Therefore, it was estimated that turnover generated by the operation and maintenance of the Proposed Development could support £0.6 million GVA and 10 jobs in Highland, and £1.3 million GVA and 20 jobs in Scotland.

Table 4.8: Annual Operations and Maintenance Direct Impact by Study Area

	Highland	Scotland
GVA (£m)	0.6	1.3
Jobs	10	20

BiGGAR Economics Analysis. *Totals may not add up due to rounding.

[8] This OPEX cost included annualised costs for repowering and cell replacement.

There would also be indirect and induced impacts during the operation and maintenance of the Proposed Development, which were estimated using the same method as for the construction phase.

By applying indirect economic multipliers, it was estimated that each year the spending required for the operation and maintenance of the Proposed Development could support £0.1 million GVA in Highland, and £0.1million GVA in Scotland.

Total impacts in Highland were estimated at £0.8 million GVA and 10 jobs, and £1.7 million GVA and 20 jobs in Scotland.

Table 4.9: Total Annual Economic Impact during Operations and Maintenance by Study Area

	Highland	Scotland
GVA (£m)	0.8	1.7
Jobs	10	20

BiGGAR Economics Analysis. *Totals may not add up due to rounding.

The Proposed Development would be liable for non-domestic rates, the payment of which would contribute directly to public sector finances. It has been estimated that the Proposed Development would contribute £0.2 million annually through the payment of non-domestic rates.

Additionally, decommissioning activities are expected to generate economic activity in Highland and require a similar scope of activities to the construction phase.

5 Local Impacts

This section sets out the potential positive impact of the project for the local area.

Field recognises its part in supporting communities to thrive. Alongside its core economic activities, Field will engage with local communities and is helping to design a school programme to equip young people to explore a diverse range of careers in renewable energy.

5.1 Engaging with Local Communities

Field is committed to engaging with the local community throughout the planning and decision-making process of the Proposed Development, with the intention of fostering long standing relationships with the host communities.

By cultivating open communication and collaboration between stakeholders, Field can gain a better understanding of the priorities of local residents, and take the appropriate action to maximise the benefits most important to the local community.

5.2 Promoting Local Supply Chain Opportunities

The main driver of the economic activity associated with renewable energy projects, such as the Proposed Development, is the expenditure during the construction, and operations and maintenance phases. The more expenditure that can be secured by local businesses, the greater the economic impact will be for the community.

Field will undertake several initiatives to help local businesses compete successfully for these contracts. These include:

- establishing a clear and accessible framework to promote supply chain opportunities in the local area;
- organising and participating in supply chain events;
- having a dedicated portal on the project website for supply chain impacts; and
- promoting tendering opportunities through Chambers of Commerce, industry bodies, and wider frameworks/portals;
- engaging directly with competent local contractors with a view to developing long term partnerships across Field's portfolio of sites in the North of Scotland;

- including local content considerations within the procurement evaluation criteria across both construction and operational contracts; and
- monitoring the local content of sub-contracts and encouraging main contractors to utilise local resources where possible.

These initiatives enable local businesses to engage early with Field and prepare for these opportunities. This involves ensuring that they understand the contract requirements, can navigate the procurement process effectively, and invest in preparing for the available contracts.

Similarly, by continually monitoring the level of local content in the contracts over the project's lifetime, Field can identify areas for improvement and increase local procurement over time. This approach will not only help boost local expenditures but also provide important data on procurement for future BESS facilities.

5.3 Corporate Social Responsibility (CSR)

To ensure the most meaningful impact, Field will continue to work closely with residents and key stakeholders to understand the specific needs and priorities of the community. By aligning their CSR efforts with the local context, Field can deliver targeted support that addresses the unique challenges and opportunities present in each community and which align with the Company's values.

CSR funding can take various forms, such as:

- Funding community infrastructure projects;
- Contributing to local environmental conservation efforts;
- Sponsoring cultural events and festivals;
- Providing grants for small businesses and entrepreneurship
- Sponsoring strategic partners[9]; and
- Providing Community Benefit Funds (CBF).

5.3.1 Schools Programme

In alignment with the Highland Council developing a strategy to enable a future workforce to support the energy transition[10], Field has collaborated with the National Schools Partnership to design a school-based education programme for the schools surrounding the Proposed Development. The programme will support educators to offer secondary school students essential information about the

[9] Field is currently sponsoring Highland Renewable.
[10] Highland Council (2023). Developing a Strategy to Enable a Future Workforce – A Strong and Fair Economy for All

various job opportunities available in the energy sector, the required training for these positions, and the pathways to follow for pursuing these careers.

This collaboration will help increase employment in the region by raising awareness of job opportunities for young people. Additionally, it will benefit not only the communities near the Proposed Development, but also developers in the long-term by helping to address the anticipated skill shortage resulting from the rapid shift towards renewable energy necessary to achieve net zero emissions.

Therefore, this initiative will help deliver key outcomes prioritised by the Highland Council in its strategy to enable a Future Workforce, including inclusive growth with access to well-paying jobs and the development of thriving, sustainable neighbourhoods.

Field will continue to work closely with residents and its key stakeholders to understand the specific needs and priorities of the community in relation to skills and education to ensure the schools programme is meaningful, impactful and relevant to the local community.

6 Conclusion

In summary, this report presents the potential socio-economic impacts associated with Spittal Battery Energy Storage System (BESS) site.

The Proposed Development will generate economic benefits, during its construction, and during the operation and maintenance phase.

During construction, the total economic benefits (including direct, indirect and induced) that are expected are[11]:

- £7.7 million Gross Value Added (GVA) and 100 years of employment in Highland (50 jobs each year, over a period of two years); and
- £20 million GVA and 250 years of employment in Scotland (125 jobs each year, over a period of two years).

The expenditure for the operation and maintenance of the Proposed Development could deliver up to (including direct, indirect and induced):

- £0.8 million GVA and 10 jobs in Highland; and
- £1.7 million GVA and 20 jobs in Scotland.

The Proposed Development will also support the delivery of local services through the annual payment of £0.2 million in non-domestic rates.

[11] Figures are rounded to the nearest ten

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