AESC UK Plant 3
Social Value Statement

AESC UK Plant 3 Limited

22 April 2024

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Contents

1.0 Introduction

1.1 This Social Value Statement has been prepared by Lichfields on behalf of our client, AESC UK Limited ('The Applicant'). Its purpose is to accompany a full planning application for the following development on land to the west of International Drive and north of the A1290 at the International Advanced Manufacturing Park ('IAMP'), Washington ('the Application Site'):

"Erection of a building to be used for the manufacture of batteries for electric vehicles, an assembly & warehousing building, an office building, sub-stations, gatehouse, ancillary compounds / structures and associated infrastructure provision, access, parking, drainage, landscaping and engineering operations, with temporary site compounds and parking associated with construction of the development."

1.2 This Statement has been prepared in response to Sunderland City Council's ('SCC') validation requirement that major applications should submit '*a statement demonstrating the social values, this requires increasing consideration of how development can unlock social, economic and environmental benefits for different groups of society*'.

1.3 This Statement is structed as follows:

- Chapter 2: The Site;
- Chapter 3: The Proposed Development;
- Chapter 4: Baseline Conditions;
- Chapter 5: Social Benefits;
- Chapter 6: Economic Benefits;
- Chapter 7: Environmental Benefits; and
- Chapter 8: Conclusions.

2.0 The Site

The Site

2.1 The Application Site comprises approximately 42.39 hectares of land and lies at the south-western side of IAMP and to the west of AESC Plant 2 (which is currently under construction). The redline boundary of the Application Site is shown on Figure 2.1, with the location of AESC Plants 1 and 2 also identified. The AESC Plant 3 application boundary overlaps with the application boundary for AESC Plant 2, as illustrated below.

Figure 2.1 The AESC Plant 3 Application Site and AESC Plant 2

Source: © Google Earth

2.2 The majority of the Application Site comprises an area of former agricultural land which has been brought forward as part of the IAMP ONE Ecological and Landscape Mitigation Area 'ELMA'. The Application Site is currently accessed via International Drive along a track which lies opposite Faltec. The land is largely level, with only minor variations in elevation. The Application Site was occupied by North Moor Farm until its demolition in late March / early April 2024[1].

[1] Planning permission reference 23/02611/FUL

Surrounding Area

2.3 The immediate surrounding area is defined by a mix of industrial and agricultural uses. Established and emerging industrial areas lie to the south and east of the Application Site, with the agricultural landscape still evident to the north and west.

2.4 The Application Site is bounded by the A1290 to the south with a dense tree belt partially screening the Nissan complex that lies beyond. AESC Plant 2 lies to the east, beyond which lies International Drive which provides the internal spine road through IAMP ONE.

2.5 Two photographs are provided in Figures 2.2 and 2.3 which show the three bespoke manufacturing buildings which have been completed within IAMP ONE, together with International Drive. Two of the buildings are occupied by Nissan's suppliers (SNOP and Faltec). The third building, which was a speculative build by Sunderland City Council, was vacant at the time of preparing this report. It was previously fitted out as a Nightingale hospital in response to Covid-19 and was used as a temporary vaccination centre.

Figure 2.2 Photograph of the three industrial units looking westwards (These photographs were taken before construction work commenced on AESC Plant 2.)

Figure 2.3 Photograph of the three industrial units looking eastwards

2.6 Agricultural land bounds the Application Site to the north and west. The residential areas of Sulgrave and Usworth Hall are located over 1km to the west and those of Town End Farm and Hylton Castle are over 1.5km to the east.

3.0 The Proposed Development

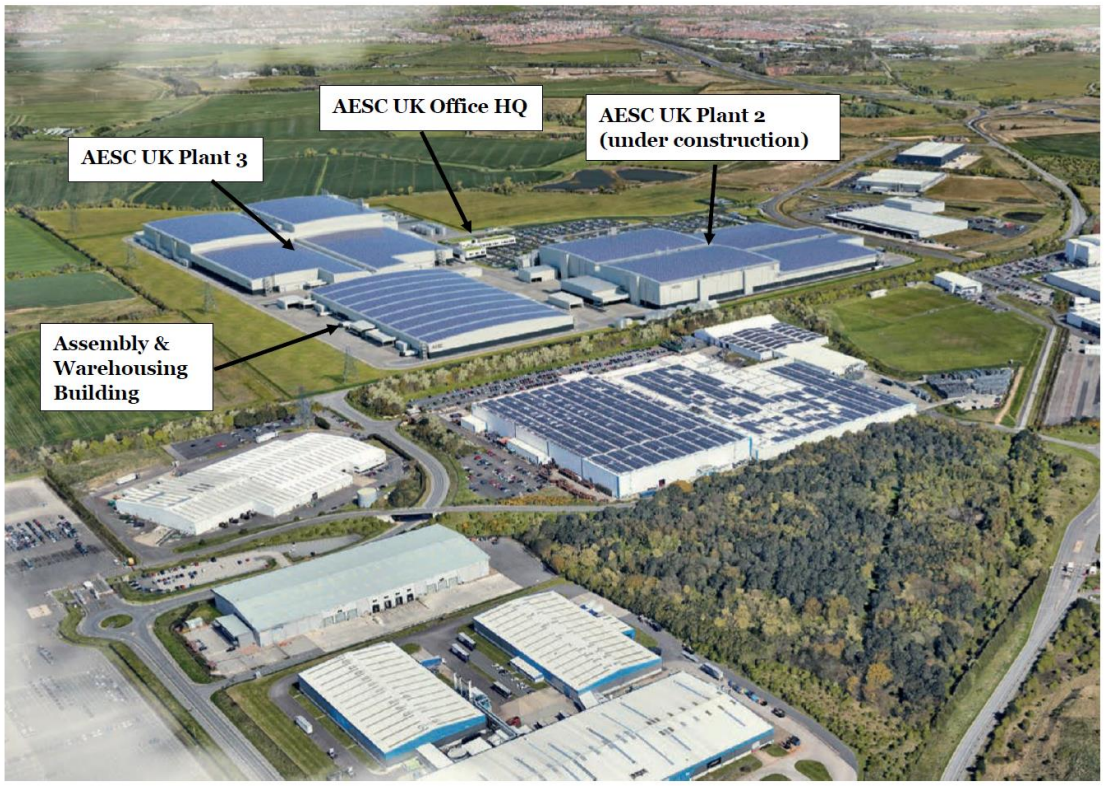
3.1 The Proposed Development consists of facilities for the manufacture of batteries for electric vehicles ('EVs') and would include a gigafactory, an assembly & warehousing building and an AESC Office HQ building (which would operate as shared facilities with AESC Plant 2), along with other ancillary buildings and structures. Table 1 provides the proposed floorspace.

Table 1 The Proposed Floorspace

Building / Structure	Floorspace (Gross Internal Area)
AESC Plant 3 (including substation and plant rooms)	133,048sqm
Assembly & Warehousing Building (including substation and plant rooms)	41,015sqm
Office	3,906sqm
MEP Plant Rooms	7,857sqm
Gatehouse	130sqm
Bulk store canopies, waste canopies and mezzanine floors (containing plant & equipment)	8,827sqm
Total	**194,783sqm**

3.2 An image of the Proposed Development is provided at Figure 3.1.

Figure 3.1 CGI of the proposed AESC Plant 3 development and AESC Plant 2 (under construction)

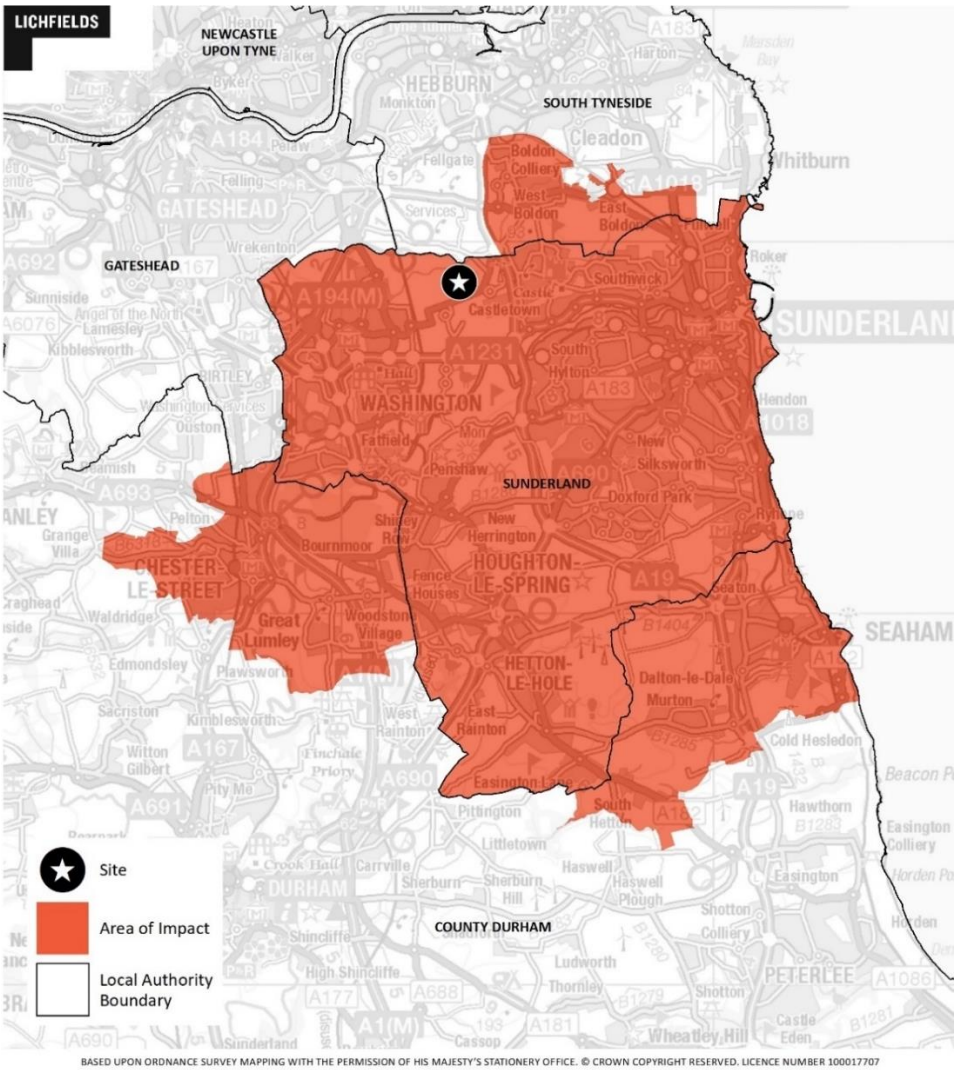


Source: RPS

4.0 Baseline Conditions

4.1 The AESC UK Plant 3 Health Impact Assessment defined an Area of Impact ('AOI') which covered the population groups and locations that are anticipated to be the most directly affected by the Proposed Development. The reasons for the chose of the area are discussed in Chapter 4 of the Health Impact Assessment. For consistency, the same AOI is being used for this Social Value Statement and this is area is shown at Figure 4.1.

Figure 4.1



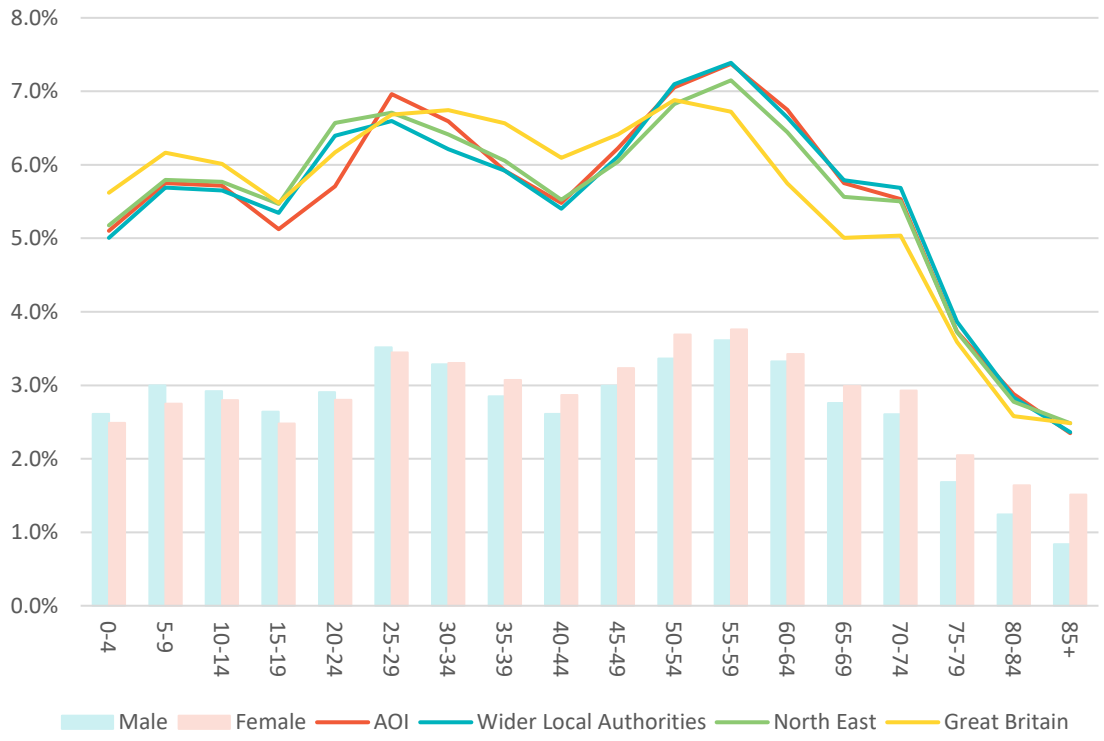
Source: Lichfields

Demographic Profile

Age and Gender

4.2 The latest Office of National Statistics ('ONS') Population Estimates indicates that 357,094 people lived within the AOI in 2020. A breakdown of the data by age structure and gender is presented in Figure 4.2. With respect to the age structure, it demonstrates that the AOI broadly aligns with the corresponding age profiles across the wider local authority area and regionally. Indeed, 62.1% of the AOI population is aged 16-64 (working age), which is equal to the wider authority average and regionally. This proportion is slightly below that observed across Great Britian. Similarly, the proportion of residents that are aged 65 or above in the AOI (20.2%) is broadly similar to the wider local authority area (20.5%) and the North East (20.1%), but higher than Great Britain (18.7%).

Figure 4.2 Population of the AOI by 5-year age groups and gender[2]



Source: ONS Population Estimates: local authority based by single year of age (2020) / Lichfields analysis

4.3 The same data indicates that the gender split in the AOI is broadly equal – 48.8% of the population is male and 51.2% is female.

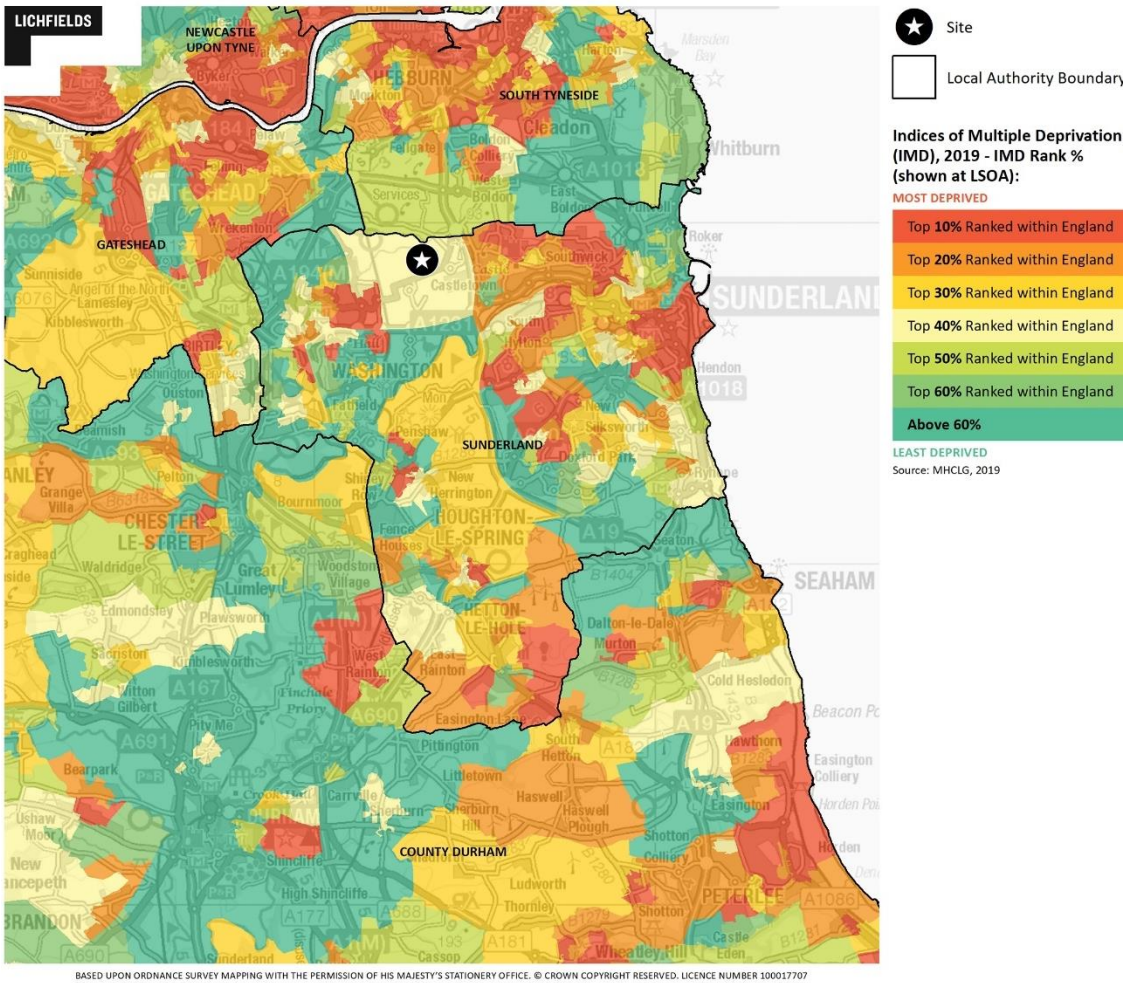
[2] Data for gender is unavailable at a MSOA level. As a result, data has been collected at a local authority level (smallest possible level).

Deprivation

4.4 Deprivation is measured by the Index of Multiple Deprivation (2019) ('IMD'), which uses a series of indicators to rank areas across seven domains that range from income to health. These categories combined produce a multiple deprivation score for each local area. The IMD calculates deprivation as a proportion of the resident population of a given Lower Super Output Area ('LSOA'). As such, the AOI Middle Super Output Areas ('MSOAs') have been converted into 237 respective LSOAs.

4.5 IMD data across these LSOAs is demonstrated in Figure 4.3. A significant proportion (70.9%) of the LSOAs fall within the 50% most deprived nationally. Furthermore, 47 LSOAs (19.8%) in the AOI fall within the 10% most deprived nationally. In contrast, only 4 LSOAs (1.7%) fall within the 10% least deprived nationally. It is clear that higher concentrations of deprivation can be found to the east of the site.

Figure 4.3 Deprivation Map



Source: IMD (2019) / Lichfields

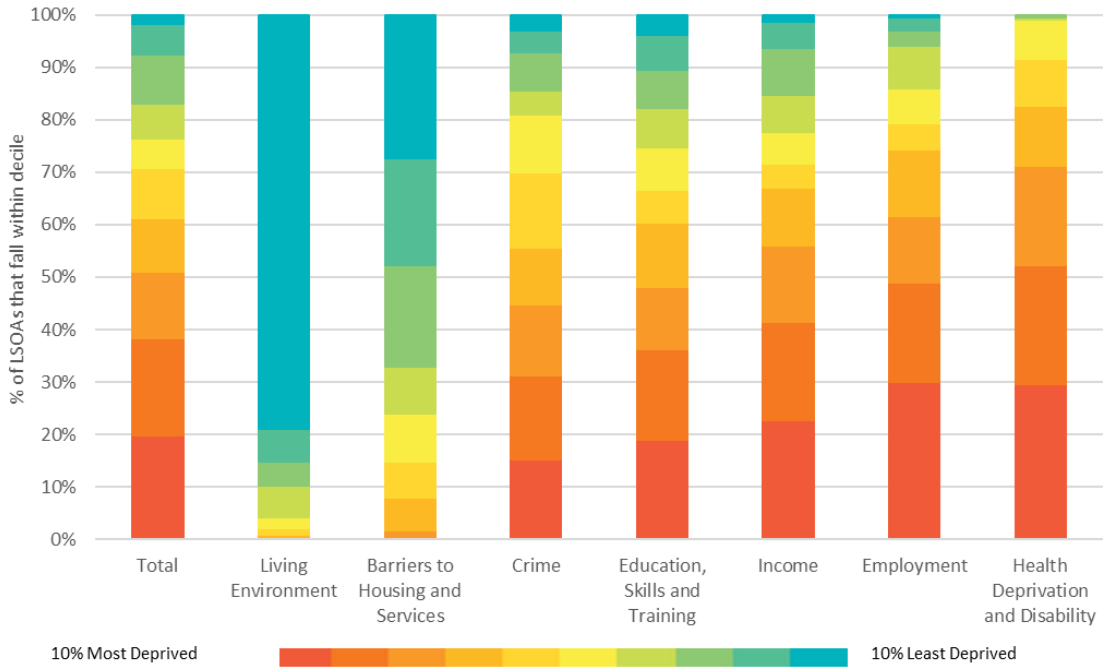
4.6 Figure 4.4 contains IMD data disaggregated by the individual deprivation domains across the AOI. It shows the proportion of LSOAs that fall within each decile, where 1 (red) indicates the most deprived decile and 10 (blue) indicates the least deprived decile. The performance of the AOI varies considerably across the indicators. It most evidently performs well with regard to:

- Living Environment: 97.9% of the LSOAs fall within the 50% least deprived LSOAs nationally, including 78.9% within the 10% least deprived. No Area of Impact LSOAs fall within the 30% most deprived.

4.7 In contrast, the AOI performs less well with regard to:

- Health Deprivation and Disability: 91.6% of the LSOAs fall within the 50% most deprived LSOAs nationally, including 29.5% that fall within the 10% most deprived. Only one Area of Impact LSOA falls within the 30% least deprived nationally; and
- Employment: 79.3% of the LSOAs fall within the 50% most deprived LSOAs nationally, including 30.0% that fall within the 10% most deprived. Only 0.4% of the LSOAs fall within the 10% least deprived nationally.

Figure 4.4 Deprivation by IMD indicator



Source: IMD (2019) / Lichfields analysis

Socio-Economic Indicators

Employment

4.8 Analysis of ONS data indicates that the total number of jobs in 2021 within Sunderland stood at 134,000, which is an increase of 5.5% relative to 2012[3]. This rate of growth is lower than the corresponding figures for the wider local authority area (11.2%), the North East (9.7%) and England (12.3%).

4.9 The same dataset provides a measure of the ratio of total jobs to working age residents in a given area (job density). The latest available data (2021) shows that Sunderland had a job density of 0.77, indicating that for every 100 working age residents there were 77 jobs. This is higher than the rates observed across the wider local authority area (0.66) and the North East (0.74), but lower than Great Britain (0.86).

4.10 Data collected from the Annual Population Survey (2022) highlights that the economic activity rate (the share of working age residents (16-64) either in or seeking employment) stands at 74.0% in Sunderland. This is lower than the average across the wider local authority area (75.1%), the North East (74.6%) and Great Britain (78.6%). The same data also shows that model-based unemployment in Sunderland in 2022 (4.3%) was lower than the wider local authority area (4.6%) and regional average (5.3%), but slightly higher than the national average (3.9%).

Income

4.11 ONS data highlights that the median resident-based annual earnings in Sunderland stood at £27,549 in 2022. This is lower than the corresponding figures across the wider authority impact area (£29,312), the North East (£29,764), and Great Britain (£33,111). Workplace-based annual earnings in Sunderland stood at £28,219 in 2022, meaning those working in the authority earned slightly more than those living there. It should also be noted, however, that workplace-based earnings in Sunderland were slightly lower the average observed across the region (£29,521), and Great Britain (£33,106).

Skills

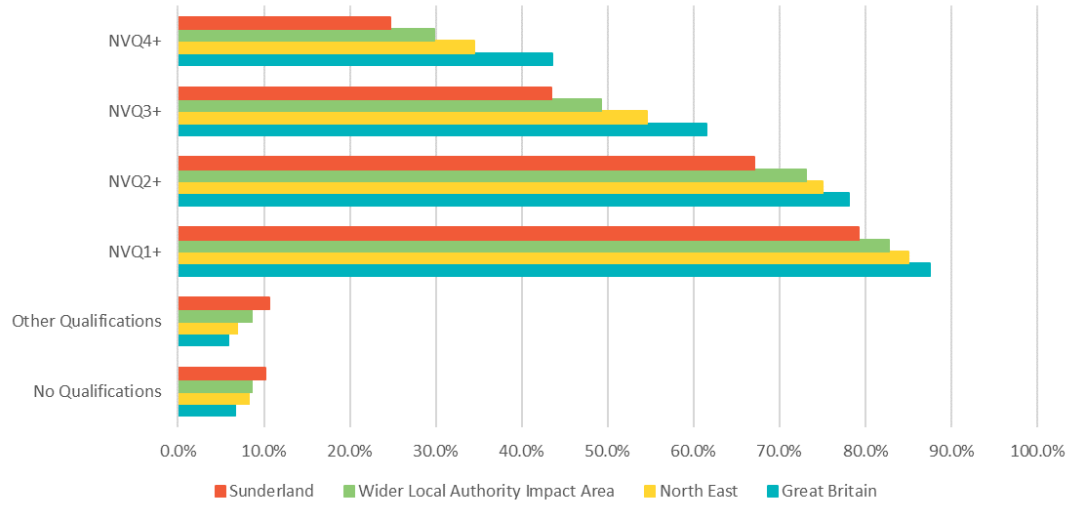
4.12 Figure 4.5 provides a summary of the skills base of the resident population for Sunderland and the relevant benchmark areas. This illustrates that the AOI is characterised by[4]:

- A lower proportion of residents with NVQ[5] level 1 qualifications (79.2%) than in the wider local authority area (82.8%), the North East (85.0%) and Great Britain (87.5%).
- A lower proportion of residents with NVQ level 2 qualifications (67.1%) than across wider local authority area (73.1%), regionally (75.0%), but lower than nationally (78.1%);
- A lower proportion of residents with graduate level (NVQ level 4+) qualifications (24.7%) than the wider local authority area (29.8%), regionally (34.5%) and nationally (43.6%); and

[3] ONS Job Density (2021)
[4] Annual Survey of Hours and Earnings (2022)
[5] National Vocational Qualification

- A higher proportion of residents with no qualifications (10.2%) than the wider local authority area (8.6%), regionally (8.2%), and nationally (6.6%).

Figure 4.5



Source: Annual Population Survey (2021)

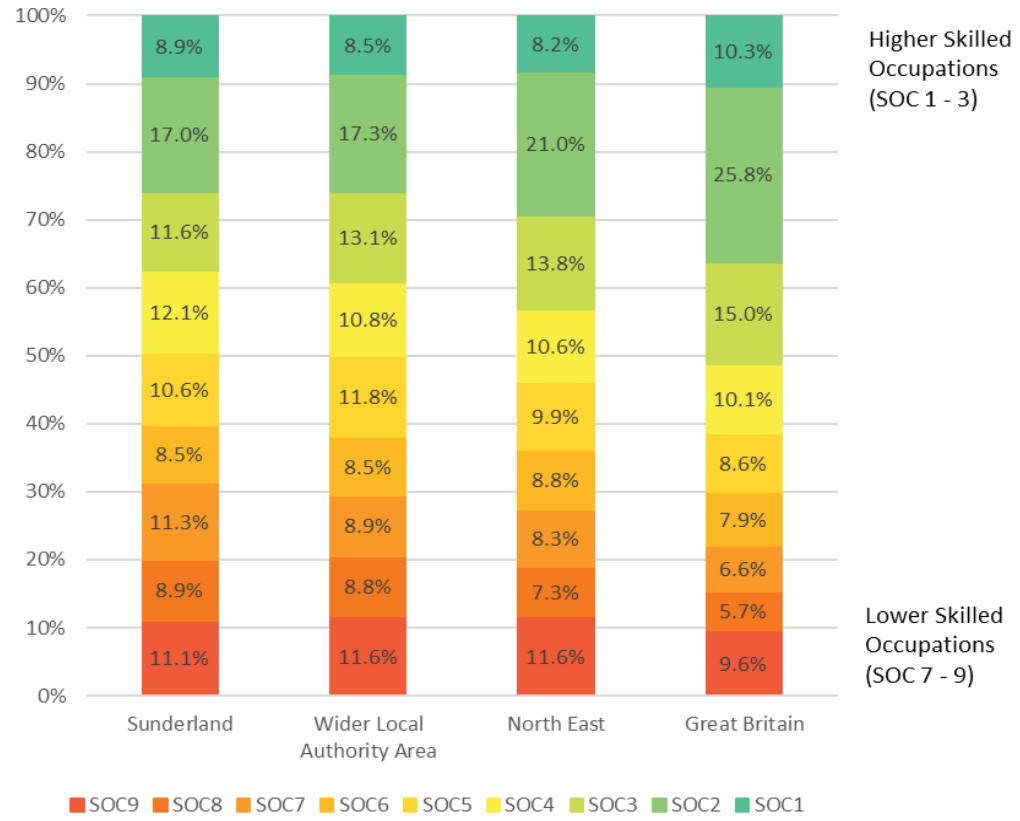
Occupations

4.13 It can be seen from Figure 4.6, that the occupational base in Sunderland is characterised by[6]:

- 37.5% of residents that work in professional and technical roles, and managerial/directors roles (SOC1-3[7]). This is lower than the wider authority impact area (38.9%), the North East (43.0%) and national average (51.1%); and
- 31.5% of residents work in lower skilled jobs such as elementary occupations, process and machine operatives, and sales and customer services roles (SOC 7-9). This is higher than wider authority impact area (29.3%), the region (27.2%), and Great Britian (21.9%).

[6] Annual Population Survey (2022)
[7] SOC: Standard Occupational Code

Figure 4.6 Proportion of residents that work within SOC



Source: Annual Population Survey (2022) / Lichfields analysis

Summary

4.14 A summary of the demographic profile and local economic conditions is as follows:

- Sunderland falls within the 15% most deprived areas local authority areas nationally, with many parts of Sunderland lying within the 10% most deprived in nationally;
- Sunderland is performing less well in relation to health deprivation, disability, employment, income and unemployment than regional and national averages;
- The median gross weekly earnings of full-time employees in Sunderland (workplace earnings) were £540.90 in 2022, which was lower than the North East (£575.20) and Great Britain (£642.00); and
- The working age population in Sunderland has contracted between 2012 to 2021 at a greater rate than that of the North East and Great Britain.

5.0 Economic Benefits

5.1 This Chapter considers how the Proposed Development would contribute to economic value outcomes through considering the opportunities for employment, skills and training, as well as economic growth.

Employment, Skills and Training

Promoting Local Employment

5.2 During construction, it is anticipated that the Proposed Development would have the following significant employment benefits:

- Around 1,525 direct full time equivalent ('FTE') jobs per year throughout the construction period (2.6 years); and
- Approximately 1,450 indirect FTE jobs in the supply chain per year throughout the construction period.

5.3 Once operational, it is anticipated that the Proposed Development would have the following significant employment benefits:

- Employment of over 1,000 people, taking AESC's workforce in Sunderland to over 2,500 high skill, high value jobs; and
- Support of a further 800 indirect and induced FTE jobs in the wider region in the supply chain.

5.4 AESC UK would seek to pool the new staff from the local labour force, either hired from allied industries or as new recruits through apprenticeships. The creation of over 1,000 jobs would therefore have significant benefits for the local community.

Apprenticeships, Training, Local Labour, Working with Local Schools and Colleges

5.5 The jobs / apprenticeships / training situation is summarised as follows:

1 The new jobs would be at level 2-5 would include apprenticeships with support from local further education colleges. The apprenticeships would include (but would not be limited to):

   a Battery Manufacturing Technicians – a new standard designed for battery manufacturing technicians, which would be majority of the workforce;

   b Engineering/maintenance apprenticeships – for the maintenance and engineering department;

   c Supervisor/leadership level 3's – for supervisors new to the role; and

   d The company has a clear development pathway for its staff, a commitment to promote from within and is investing heavily in employee training and development.

2 It is anticipated that AESC would use the CTP (Career transition partnership) for civilian employment for Service leavers – these would be local funded courses to ensure recognition of prior learning and upskilling.

3 Currently AESC's engaging extensively with local colleges and universities aiming to deliver the required training for both current and future staff, with some staff already undertaking Level 7 courses as part of upskilling in the existing business. AESC would partner with a local university for the delivery of this training as and when it is required.

4 There would be an internal training programme delivered by dedicated trainers within the factory. AESC is uniquely placed to deliver this knowledge and training due to the skills within the business; this would cover process and procedural skills that couldn't be delivered by an external trainer.

5 There would be a need for supportive short course training to ensure competency of our workers which would be delivered by local suppliers.

6 Plans are being progressed for some STEM outreach activity – this may involve, school/college visits, competitions, career talks etc. and would focus on highlighting what an interesting place AESC is to work. This is also to ensure a pipeline of potential recruits for the future. This would support the hiring plan for both the set-up, factory acceptance testing and ramp up towards Start of Production and would ensure succession and progression within the company for their employees. Investing in future talent is a priority for AESC and the STEM outreach programme would support this.

5.6 The Proposed Development would therefore deliver significantly improved social values outcomes through provision of training, apprenticeships and work experience placements which would help to upskill the local population within Sunderland and would provide employment opportunities for different groups, including school leavers, university graduates, unemployment workers who are seeking work and highly skilled professionals.

Economic Growth and Investment

Importance of the Manufacture of Batteries for Electric Vehicles

5.7 The UK Government is committed to achieving net zero by 2050 and to the phasing out of combustion engines, which is driving forward the need to decarbonise vehicles and to electrify the automotive industry. The '*UK Battery Strategy*' (Department for Business & Trade, 26 November 2023) states:

"Batteries will play an essential role in our energy transition and our ability to successfully achieve net zero by 2050".

"The Government's 2030 vision is for the UK to have a globally competitive battery supply chain that supports economic prosperity and the net zero transition. The UK will be a world leader in sustainable battery design and manufacture, underpinned by a thriving battery innovation ecosystem. Batteries represent one of the highest growth clean energy sectors and the UK is well placed to reap the rewards thanks to its comparative advantage in research and advanced manufacturing."

"Our successful battery industry will be a significant source of jobs and regional economic growth, supporting the Government's levelling up agenda. A battery industry that addresses domestic demand could employ 100,000 people by 2040, with the majority likely to be located outside of London and the South East."

5.8 There is therefore an urgent need for the UK to develop large scale battery production capacity to enable the transition to EVs and to help the UK become net zero. The industry is facing a huge challenge and needs to gear up in the production of batteries for EVs. The market is fast moving and competitive and the UK risks being left behind in the global race if it does not ramp up production.

5.9 AESC's Proposed Development provides a once-in-a-lifetime opportunity to help AESC UK, Sunderland and the UK compete in the global market in the move to the EVs, whilst ensuring that Sunderland continues to be one of the best international locations for automotive and advanced manufacturing.

Supporting Economic Growth and Productivity

5.10 At a national level, the National Planning Policy Framework (December 2023) places significant weight on the need to support economic growth and productivity. The Government is committed to large scale investment to drive forward economic growth as outlined in documents such as the 'Build Back Better, Our Plan for Growth' (HM Treasury, March 2021), the UK Battery Strategy (Department for Business & Trade, 26 November 2023), and the Advanced Manufacturing Plan (Department for Business & Trade, last updated 6th December 2023).

5.11 At a regional level, various strategies including the '*North East Strategic Economic Plan'* (North East Local Enterprise Partnership, January 2022), the '*Strategy for Change 2023 – 2025'* (North East Chamber of Commerce, September 2023), the Northern Powerhouse initiative, the '*Great North Plan'* (Institute for Public Policy Research and the Royal Town Planning Institute) and the '*Strategic Transport Plan'* (Transport for the North, 2019) are all seeking to boost North East's economy through higher productivity, improving competitiveness, attracting inward investment, increasing the number of jobs, upskilling the population rebalancing growth and addressing the long-term economic activity gap.

5.12 At a local level, the adopted Sunderland '*Core Strategy and Development Plan (2015 – 2033)*' ('CSDP') outlines relevant planning policies to guide development in Sunderland up to 2033. The CSDP recognise that advanced manufacturing and particularly the automotive sector are a key part of the local economy. The CSDP, particularly Policy SP3, emphasises that "*Economic growth will be focused in identified Employment Areas (Policies EG1 and EG2) and at the IAMP*", with Strategic Priorities 1 and 5 of the CSDP supporting economic growth particularly through "*supporting developments which enhance automotive industries and advanced manufacturing, particularly at the IAMP; and supporting development of key sectors such as education, health, high-tech and knowledge-based industries*".

5.13 '*Sunderland City Council's City Plan 2023 – 2035'* outlines the city's vision and ambitions up to 2035. The City Plan seeks to increase the number and quality of jobs in the city whilst improving the qualifications and skills of local people, with one of the main ambitions of

the plan being that: "*Residents' skills and qualifications enable them to secure good jobs matching the needs of employers in the city's key sectors*".

5.14 In accordance with the national, regional and local policies and strategies, the Proposed Development would:

- drive forward economic growth;
- help create a new, dynamic and highly skilled battery industry in the UK.;
- be at the forefront of innovations in battery technology;
- act as a catalyst for the attraction of more suppliers to the region, which would further stimulate the economic growth of the region; and
- help underpin the continued success of the automotive and advanced manufacturing sectors in the North East.

5.15 The Proposed Development would significantly support the growth of the local economy. In part, this would be achieved by increasing economic output (as measured by Gross Value Added (GVA). As outlined in the Socio-Economic Chapter of the Environmental Statement, the Proposed Development is expected to generate:

- A temporary uplift in GVA (direct and indirect) of £90.7 million per year throughout the construction period;
- A permanent increase in GVA during operation, attributable to the new jobs created on-site. This is anticipated to be in the order of £109.3 million per year; and
- An uplift in wages by £33.8 million per year[8].

Use of the Local Supply Chains

5.16 During the build period and once operational, opportunities would be created for businesses within the local supply chain. For instance, the construction of buildings would involve purchasing from a range of suppliers (e.g. concrete, steel, glass). In turn, these businesses purchase from their own suppliers further down the supply chain.

5.17 There are also opportunities for the materials used in battery production to be sourced from local suppliers, further enhancing the benefits for the local, regional and national economies.

Summary

5.18 With regards to the local economy and business base, the Proposed Development would deliver improved social value outcomes by:

- delivering significant benefits through substantial job creation; upskilling the local population; providing training, apprenticeships, work experience opportunities, as well as working with local schools and colleges both during construction and on operation of the gigafactory;
- creating new opportunities in local supply chains;

[8] Taking into account an indicative breakdown of roles supported by industrial developments once operational, as well as the average annual salary for such roles

- delivering increased expenditure to support other local services, shops and facilities;
- helping the UK complete in the global race for the large-scale manufacture of batteries and in the electrification of vehicles;
- acting as a catalyst for the attraction of more suppliers to the IAMP and the North East, which would further stimulate the economic growth of the region; and
- helping underpin the continued success of the automotive and advanced manufacturing sectors in the North East and UK.

5.19 Further details are provided in the Socio-Economic Chapter of the Environmental Statement ('ES'), the Planning Statement and Very Special Circumstances Report.

6.0 Social Benefits

6.1 The social objective of the NPPF is to support strong, vibrant and healthy community. This Chapter considers how the Proposed Development would help to strengthen local community and increase social value within the area.

Enhanced Sense of Pride

6.2 The Proposed Development provides a fantastic opportunity to deliver a nationally important development within Sunderland, which would build on the highly successful cluster of automotive businesses that are already present. The Proposed Development would help Sunderland and the UK to compete in the global battery race, would play an important role in the electrification of the UK's automotive industry and would ensure that residents are at the forefront green revolution. This should give Sunderland residents a huge sense of pride in their area.

Health and Wellbeing Outcomes from Increased Wages

6.3 The Proposed Development would support a large number of employment opportunities during construction and operation. These jobs are likely to be spread across a number of roles and qualification levels, therefore would provide opportunities for a wide range of members of the public. It is also noted that apprenticeship opportunities are currently being advertised by AESC, which could provide individuals with a foundation to enter employment.

6.4 The Proposed Development would result in an uplift in local wages of approximately £33.8 million per year, which would have a positive impact on health inequalities. It is widely demonstrated in health literature that income has a strong relationship with health outcomes. If those on low incomes access higher pay or those who are unemployed are able to access employment at the Proposed Development, it could unlock the following:

- The opportunity to purchase better quality goods and services;
- Improved access to housing and / or better housing conditions;
- Reduced financial stress; and
- The ability to access healthier foods and higher quality items.

6.5 This impact would be particularly strong if it is access by individuals that are currently seeking employment.

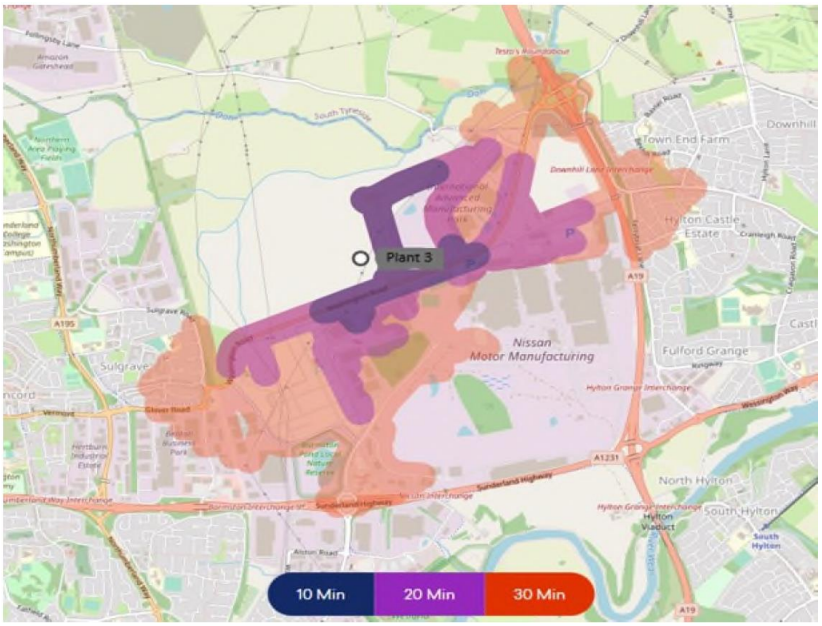
6.6 The increase in local wages would help to support local services, shops and facilities through increased expenditure to the benefit of the wider community.

Improving Health and Wellbeing through Promoting Walking

6.7 The Proposed Development would be connected to pedestrian links to encourage the use of walking as a means of sustainable transport. There is generally a good network of footways in the vicinity of the AESC Plant 3. As part of the detailed design process, all pedestrian routes would be convenient, accessible, safe and attractive for potential pedestrians. A

Travel Plan would be used to help encourage walking and increasing levels of activity would have associated health benefits, although it is recognised that the size of the population that lives within walking distance is limited. Figure 6.1 shows the walking accessibility of the Application Site.

Figure 6.1 Walking Accessibiity



Source: AESC Plant 3 Transport Assessment (Systra, February 2024)

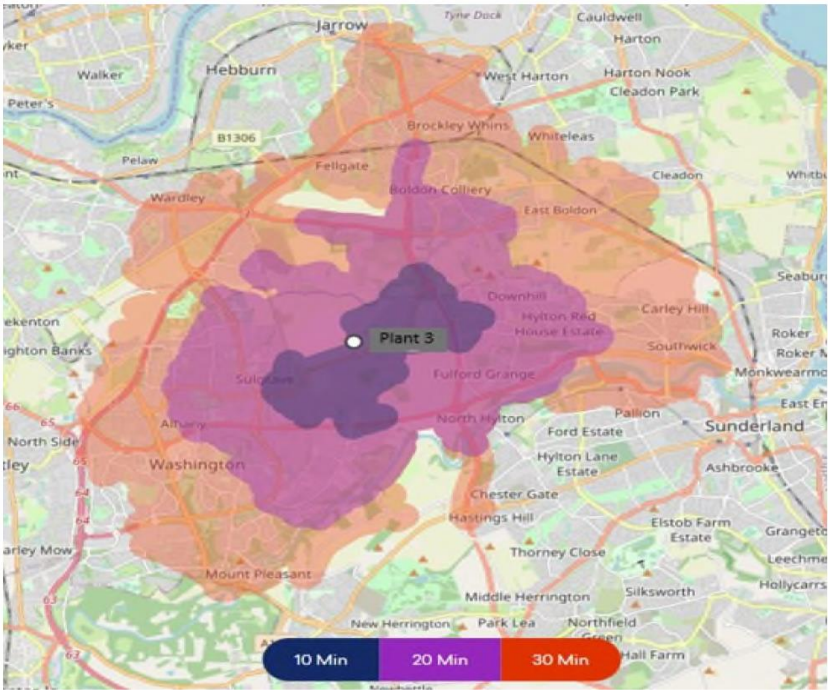
Improving Health and Wellbeing through Promoting Cycling

6.8 The Travel Plan would also promote cycling to work, which would have associated health benefits. The A1290 benefits from a shared use pedestrian / cycle provision along its length, which forms part of a wider off-road cycle route. Figure 6.2 shows the cycling accessibility of the area. The Application Site is accessible from Hylton Castle, Fulford Grange and Downhill within 20 minutes, whilst Washington, Southwick and Boldon are accessible within 30 minutes.

6.9 The availability of convenient and secure parking facilities is an influential factor which can encourage people to ride a bike to a destination. AESC UK would provide cycling facilities, as well as showers and changing facilities.

6.10 A Travel Plan Coordinator (TPC) would promote cycling amongst staff and would use initiatives to help encourage cycling such as providing local cycle route maps, cycle-to-work schemes and would investigate local social cycling groups and local bike mechanics who can maintain bikes. Through encouraging staff to cycle to work it is hoped that those who would not normally cycle or who have not ridden a bike for a long time (and lack confident) could start cycling for recreational purposes and this would also improve their health.

Figure 6.2 Cycling Accessibility



Source: AESC Plant 3 Transport Assessment (Systra, February 2024)

Summary

6.11 The Proposed Development would help to strengthen local community and increase social value through supporting an enhanced sense of pride, by improving the health and wellbeing of the community through increased wages which would have a positive impact on health inequalities, as well as through promotion of walking and cycling.

7.0 Environmental Benefits

7.1 The environmental objective of the NPPF is to protect and enhance our natural, built and historic environment including moving to a low carbon economy. This Chapter considers the environmental benefits and values of the Proposed Development.

Moving to a Low Carbon Economy

The Climate Change Emergency and De-Carbonisation of Transport

7.2 There is a climate change emergency following findings that to avoid a more than 1.5°C rise in global warming, global emissions would need to fall by around 45 per cent from 2010 levels by 2030, reaching net zero by around 2050. In March 2019 Sunderland City Council declared a Climate Emergency[9], recognising it was "*important to join other councils in giving the issue suitable attention and clearly setting out how we will meet our targets on cutting emissions*", in light of the "*recent weather and changes in ecosystems [that] show that we are already seeing changes as a result of climate change*".

7.3 To help reduce greenhouse gases, on 28th September 2023, the Government made an announcement on 'the path to zero emission vehicles by 2035' that by 2030 80% of all new cars and 70% of new vans sold should be set to be zero emission increasing to 100% by 2035[10].

7.4 The *UK Battery Strategy*[11] states:

"The UK has set one of the most ambitious targets to reduce carbon emissions. To successfully achieve this, we will create and maintain favourable conditions for ongoing industry investment amid strong overseas competition. The UK Government is committed to continuing to invest in UK battery manufacturing."

7.5 Vehicles with internal combustion engines are a significant source of emissions. With Transport for the North's consultation draft '*Strategic Transport Plan'* (May 2023) stating that:

- Cars, buses, vans and HGVs within the North of England accounted for about 25 mega-tonnes (95%) of CO2 emissions in 2018.
- Nearly one quarter of the UK's total emissions from road users fall within the North of England.
- Over half of the road emissions in the North are generated by cars, with 28%, a relatively high proportion compared to the UK, generated by HGVs.

7.6 This document states that:

[9] https://www.climateemergency.uk/blog/sunderland/ (Accessed 20/04/2021).
[10] https://www.gov.uk/government/news/government-sets-out-path-to-zero-emission-vehicles-by-2035
[11] UK Battery Strategy (Department for Business & Trade, 26 November 2023), page 4

"The development and deployment of low carbon technologies, such as electric vehicles and hydrogen fuel cells will significantly reduce emissions from road transport as the low and zero emission share of the vehicle fleet grows. Prior to and during this transition, however, substantial modal shift and management of road vehicle demand will be necessary to reduce emissions in the short to medium term, to stay within our carbon budgets." (page 57)

7.7 It is therefore clear that a huge amount of carbon emissions are from vehicles. In light of the Government's strategy to transform UK vehicle production to help meet the target of net zero carbon emissions by 2050, there is a national requirement for the development of large-scale battery production facilities to help accommodate the UK's ongoing transition towards the use of EVs. The ongoing transition towards the use of battery-powered EVs is therefore in direct response to the climate change emergency.

7.8 The Proposed Development would play a critical role in leading the de-carbonisation revolution through the promotion of clean energy and new energy electric vehicles. AESC's Plant 3 would have initial capacity to produce 12Gwh of batteries per year. Overall, AESC would have capacity to build batteries for ten times as many EVs per year from the three plants than at present. This would make a most significant contribution in the drive towards EVs and would play an important role in helping to reduce greenhouse gas emissions.

7.9 In addition to the above, the '*Batteries for EV Manufacturing Report*'[12] states that a domestic supply of batteries would confer environmental benefits by reducing emissions generated by shipping batteries in from overseas.

Carbon Savings from Switching to EVs

7.10 The AESC Plant 3 Energy Strategy, prepared by Wardell Armstrong and submitted with the planning application, has calculated the carbon dioxide ('CO_2') saving that would be made if the equivalent amount of petrol and diesel vehicles were displaced by EVs and allowing for charging with grid electric. Based on an average of 6,600 miles being travelled by each vehicle over a 12-month period, the average emissions saved would be equivalent to 130,345 tCO_2e per year. If those EVs were charged by decarbonised electricity, savings could rise to as much as 183,785 tCO_2e per year. This is more than 34,720 tCO_2e greater. This is a most significant reduction in CO2 emissions.

AESC Internal Carbon Neutral Strategy

7.11 The Proposed Development would help AESC UK achieve their internal strategy of carbon neutrality by 2028 by streamlining transportation activities and logistics. This is a most ambitious target and is significantly in advance of the UK's requirement to be net zero by 2050.

7.12 Reaching net zero is essential to sustainable long-term growth and it is most important that the UK is home to pioneering businesses, new technologies and green innovation as they make progress toward net zero emissions. AESC UK's target is raising the bar on tackling climate change.

[12] Batteries for electric vehicle manufacturing' (House of Commons, Business and Trade Committee First Report of Session 2023-24, November 2023) para. 36

Environmental Credentials of AESC Plant 3

7.13 The Proposed Development is designed to be sustainable and energy efficient. The measures are considered the Climate Change Chapter of the Environmental Statement, the Energy Strategy and the Sustainability Statement. They include solar panels on available roofs (which could supply 15% of the required energy), EV charging bays, modern methods of construction, and where possible the use of natural ventilation, solar gains, locally sourced materials, reuse and recycling of materials, energy efficient building fabrics and building services, and reduction of water consumption through water saving measures such as grey water recovery, low flow taps, dual flush and vacuum toilets.

7.14 AESC is keen to explore wind energy as a potential future opportunity following direction from the company Managing Director, who has voiced his support that all AESC plants around the world should consider options for integrating wind generation wherever possible and feasible to do so. Whilst it does not form part of this application, further work will be undertaken in the future to see if a suitable nearby site can be identified for potential future development.

Protection and Enhancement of Our Natural, Built and Historic Environment

7.15 The Proposed Development would contribute to improved social value outcomes by supporting the protection and enhancement of the local environment, wherever possible. It would achieve this by promoting sustainable development and adopting sustainable construction practices. The environmental effects of the Proposed Development are now summarised, with further details being provided in the accompanying Environmental Statement (ES) and Planning Statement:

1 **Ecology** – the site supports habitats for farmland birds, there is limited bat activity and there is no recent evidence of water voles, otters, badges, great crested newts or other reptiles. Given the scale of development, some off-site compensation would be required for the farmland birds and to ensure the delivery of 10% biodiversity net gain. Discussions are ongoing regarding the delivery of this mitigation.

2 **Trees** – groups G3 and H1 which are of moderate and low values (as identified in the Arboricultural Impact Assessment ('AIA') would be removed, whilst 70 native trees would be planted, in addition to both native and ornamental hedgerows. Overall, the AIA identifies a neutral arboricultural impact.

3 **Landscape and Visual** – the following is identified:

   a some localised significant adverse effects on the visual and spatial openness of this part of the Green Belt, but as the Green Belt to the north would remain and would be enhanced through the extensive area of Ecology and Landscape Mitigation Area (ELMA), it is considered that the long-term and permanent effects would not be significant. The ELMA land would create a strong but soft boundary to what would become the new Green Belt boundary to the north of the site.

   b limited significant effects during operation on the landscape character and landscape resource of the area, as well as limited significant effects on visual amenity for properties close to the site. The nearest dwelling is over 500m away

and hence there would not be any short-range significant effects. The effects would reduce in the longer-term through the assimilation of the Proposed Development into the general area and the implementation of the wider ELMA.

4 **Heritage**

a minor adverse effect on Penshaw Monument (Grade I) – there would be a localised impact on the setting through introducing additional industrial buildings within an existing industrial area. The Proposed Development would be seen in the context of this highly industrialised setting.

b very minor adverse effect on the wider setting of the group of listed buildings at Downhill Farm (Grade II) by slightly extending the area of industrial development within the wider setting of these buildings (although the Application Site is a very distant feature). Their architectural and historic significance would be unaffected.

c minor adverse effect on the setting of by Strother House and East Moor Farm (non-designated heritage assets) by further eroding the rural context by introducing a large-scale industrial use on the horizon. Although their rural setting has already been affected by industrial developments and infrastructure. This would have a negligible impact upon their significance.

5 **Archaeology** – the geophysical survey identified predominantly features associated with agriculture, including ridge and furrow and field boundaries, with relatively limited evidence of well-defined features of probably archaeological origin. Trial Trenching, excavation and archaeological monitoring would be undertaken to record any features.

6 **Air Quality** - the ES did not identify any significant effects on air quality. A Construction Environment Management Plan, including a Dust Management Plan, would help reduce the effects during construction.

7 **Noise and Vibration** - the ES did not identify any significant effects from noise or vibration. The closest dwelling is approximately 500m away and any vibration effects would be negligible.

8 **Contamination** – the ES identified a low risk associated with ground contamination. There is the potential for localised contamination around North Moor Farm and this would be investigated.

9 **Soils** – a Soil Management Plan would be prepared to ensure an appropriate management of soil resources.

10 **Loss of Agricultural Land** - loss of 23.95 ha of agricultural land consisting of 11.18ha of Subgrade 3a agricultural land (which is the best and most versatile land) and 12.77ha of Subgrade 3b. The overall site is 42.39ha and of this 0.42ha is non-agricultural land. The Proposed Development includes the creation of green spaces and these have has the potential to be returned to agricultural land as the soil resource would remain in-situ.

11 **Energy** – solar panels would be used as the primary means of reducing carbon emissions, with the potential use of air source heat pumps in the office areas and potential waste water heat recovery. The solar panels are expected to generate approximately 8,352 MWh per year. The thermal performance of the building fabrics

would be a key part of energy efficient – this would be considered as part of the Building Regulation process.

7.16 The above identifies that there would be some harm as a result of built development in the Green Belt, localised harm on landscape character and visual amenity, the loss of agricultural land and a minor adverse effect on some designated and non-designated heritage assets. However, it is clear that the Proposed Development would have very significant benefits that clearly outweigh the harm and which would have significant social value outcomes including the significant employment and economic benefits through helping drive forward economic growth, the creation of jobs and training opportunities, increased economic output, increased business rates and through helping Sunderland and the UK compete in the global market in the move to the EVs and ensuring that Sunderland continues to be one of the best international locations for automotive and advanced manufacturing.

Summary

7.17 The Proposed Development would contribute to significantly to improved social value outcomes through the production of EVS which would play an important role in the transition to a low carbon future through helping to decarbonise transport. Importantly, it could save the equivalent of 130,345 tCO2e per year through displacing petrol and diesel vehicles for EVs and this would play an important role in driving the UK forward to becoming net zero.

7.18 The Proposed Development seeks to protect and enhance the environment wherever possible. It is recognised that there would be some harmful environmental effects; however, these are considered to be outweighed by the significant economic benefits.

8.0 Conclusion

8.1 The Proposed Development would contribute significantly to social value outcomes through the following:

Employment and Skills

1 During construction:

   i Around 1,525 direct full time equivalent ('FTE') construction jobs per year throughout the construction period (2.6 years); and

   ii Around 1,450 indirect FTE jobs in the supply chain per year throughout the construction period.

2 During operation:

   i Employment of over 1,000 people which will include highly skilled and high value jobs;

   ii Support of a further 800 indirect and induced FTE jobs in the wider region in the supply chain.

3 Employment opportunities for different groups, including school leavers, university graduates, unemployment workers who are seeking work, as well as highly skilled professionals;

4 New staff to be pooled from the local labour force, either hired from allied industries or as new recruits through apprenticeships;

5 Provision of training, apprenticeships and work experience placements, including working with local schools and colleges;

6 Training and employment opportunities would help to upskill the local population in Sunderland and could also help to reduce unemployment rates.

Economic Growth and Investment

1 Substantial capital investment in the new facilities;

2 Increased economic output:

   i Uplift in GVA during construction period (direct and indirect) of £90.7 million per annum;

   ii Increase in GVA during operation of around £109.3 million per year, attributable to the new jobs created on-site;

3 Generation of additional wages - around £33.8 million per year;

4 Increased expenditure to support other local services, shops and facilities;

5 Support the creation of a new, dynamic and highly skilled battery industry in the UK;

6 Act as a catalyst for the attraction of more suppliers to Sunderland and the region, which would further stimulate the economic growth of the region;

7 Help underpin the continued success of the automotive and advanced manufacturing sectors in the North East; and

8 Help the UK complete in the global race for the large-scale manufacture of batteries and in the electrification of vehicles.

Social Benefits

1 Help to strengthen the local community and increase social value through supporting an enhanced sense of pride;

2 Improvements to the health and wellbeing of the community through:

   i increased wages which would have a positive impact on health inequalities; and

   ii Promotion of walking and cycling.

3 Increased local wages would help support and sustain local services, shops and facilities through increased expenditure. This could also help the creation of new facilities to the benefit of the wider community.

Environmental

1 Important role in the transition to a low carbon future through helping to decarbonise transport and helping the UK in its drive forward to become net zero;

2 Potential saving of the equivalent of 130,345 tCO2e per year through displacing petrol and diesel vehicles for EVs;

3 Installation of solar PV panels on available rooftops to secure energy from a sustainable source. The installed capacity of solar PV is expected to supply approximately 15% of the required energy;

4 Sustainable construction and design practices; and

5 Protection and enhancement of the environment wherever possible. It is recognised that there would be some harmful environmental effects; however, these are outweighed by the significant economic benefits.

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