

Economic and Social Value Statement

Project Dragon - Sustainable Aviation Fuel (SAF)
Production Facility

Land at Crown Wharf, Port Talbot Docks
November 2023

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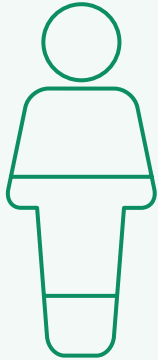
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Economic and Social Value Infographic

PROPOSED DEVELOPMENT: Development of a Sustainable Aviation Fuel production facility and associated development

SITE: Land at Crown Wharf, Port Talbot Docks, Neath Port Talbot

Operational Phase: Economic Impacts



85 gross on-site jobs...

FTE jobs, many in highly skilled occupations

- **Creating 50 direct jobs**
within Wales, including 35 within Neath Port Talbot (NPT)
- **Plus 100 indirect jobs**
In Wales, including 65 in NPT



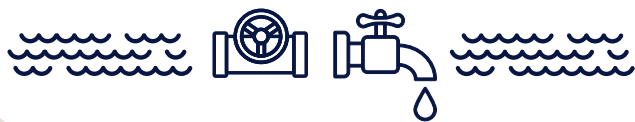
£8.0 million

Gross Value Added (GVA)
Generated each year including
£7.6 million in NPT



£168,000

Business Rates
Payments collected by
Neath Port Talbot Council



Sizeable supply chain impact

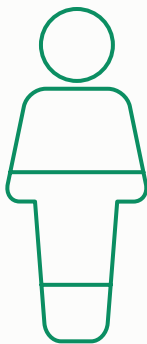
within Neath Port Talbot and Wales, during both construction and operation

Construction Phase: Economic Impacts



Significant Investment

In the construction
of the scheme



450 gross on-site jobs...

FTE (full time equivalent) jobs per annum during
construction (2.5 years)

- **Creating 270 direct jobs**
Which will be net additional (FTE) for Wales
residents, including 175 for residents of NPT
- **Plus 135 net indirect/
induced jobs**
In Wales, with 45 taken by NPT residents



£79.5 million

GVA
Generated during construction,
including £66.0 million in the
NPT economy

Social Value Considerations



LanzaTech aspire to become a good neighbour in Port Talbot and across South Wales. As a result, they are considering engaging in social value activities such as¹

- Supporting employment, training and apprenticeship opportunities, working with local providers to improve local skills and increase local employment on-site
- Collaborating with the Council to promote, partner and contribute to their employment assistance schemes where appropriate
- Sponsoring local football groups that cater for disadvantaged groups and coastal-based charities such as the RNLI and Aberavon Surf Life Saving Charity

¹ Subject to change and will be confirmed closer to the commencement of development

1. Introduction

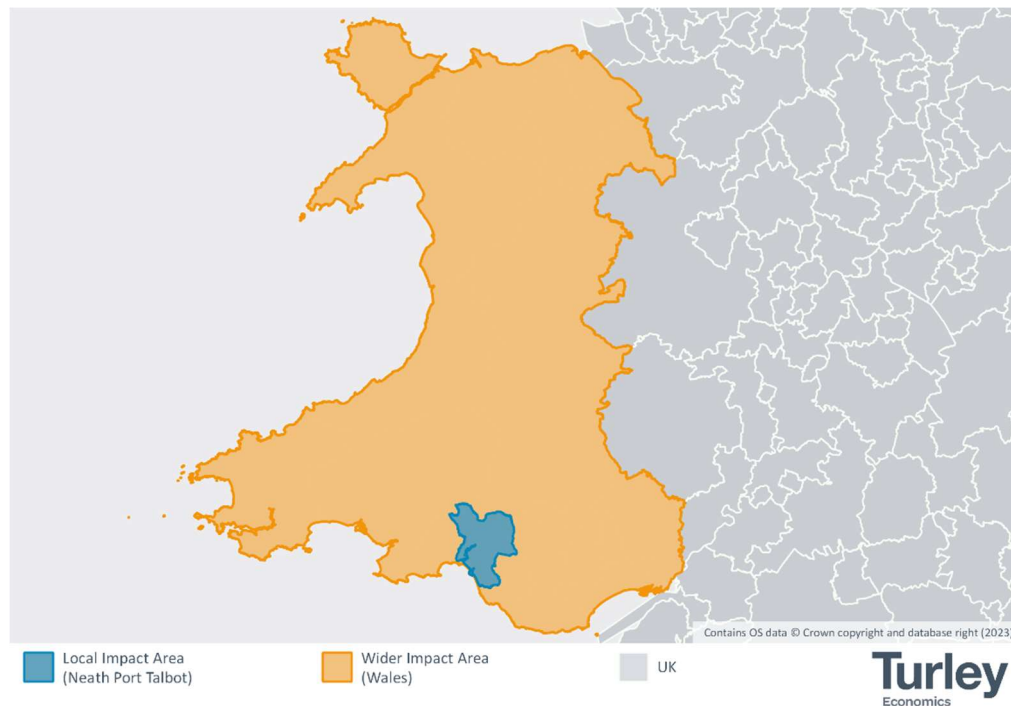
1.1 Turley Economics has been commissioned by LanzaTech UK Limited (hereafter referred to as 'LanzaTech') to estimate the economic and social benefits that could be generated at Project Dragon – Sustainable Aviation Fuel (SAF) Production Facility ('the Proposed Development') at Land at Crown Wharf, Port Talbot Docks, Neath Port Talbot, Wales. ('the site').

1.2 The planning application seeks full planning permission for the erection of an Alcohol to Jet Fuel production facility, with associated development. The full description of development which will be included on the statutory planning application forms is:

“Demolition of existing structures and erection of a Sustainable Aviation Fuel (SAF) production facility, including enclosed ground flare, storage tanks, installation of pipework and electrical, processing and utility equipment, administration, warehouse and laboratory buildings, new access, car parking and transport infrastructure including a truck loading area and associated works, hard and soft landscaping, areas for temporary construction laydown, and associated development.”

1.3 This site sits inside the local authority boundary of Neath Port Talbot (NPT), the local impact area, a county borough in south-west Wales. To align with data-defined regional geographies used later in this assessment the wider impact area has been chosen as Wales. The location of the site within Neath Port Talbot and Wales is shown at Figure 1.1 below.

Figure 1.1: The site's location within its wider geography



Source: Turley Economics 2023

- 1.4 This assessment has been informed by the latest edition of the Additionality Guide, produced in 2014 by the former Homes and Communities Agency¹ (HCA). This allows the net additional impact of the proposed development to be quantifiably estimated, accounting for factors such as leakage, displacement and multiplier effects.
- 1.5 The remainder of this report is structured as follows:
- **Section 2: Local Economic Context** – a profile of Neath Port Talbot and Wales, to briefly introduce the individuals that stand to benefit most from the proposed development;
 - **Section 3: Strategic Economic Ambitions** – considers the economic ambitions stated by a range of public bodies, from the UK and Welsh Government down to Neath Port Talbot Borough Council, to provide economic context for the proposed development;
 - **Section 4: Economic Benefits on Completion** – consideration of the number and types of jobs that will be created by the proposed development once it is operational, and their potential impact on the local economy;
 - **Section 5: Economic Benefits during Construction** – a summary of the jobs that could be temporarily created while the proposed development is under construction;
 - **Section 6: LanzaTech's Contribution to their Community** – a summary of the impacts that LanzaTech intends to have during the construction and operational phase to become a good neighbour in their local, regional and national community; and
 - **Section 7: Summary and Conclusions** – a concise overview of the report's findings.

¹ Homes and Communities Agency (2014) Additionality Guide, 4th edition

2. Local Economic Context

- 2.1 This section provides a profile of the area surrounding the site and will briefly introduce the individuals that stand to benefit most from the proposed development. A comprehensive understanding of the local economic context has also been key to formulating the social value approach adopted by the applicant which will be detailed later in this statement.

A growing population that is predominantly of working age

- 2.2 There were approximately 142,300 residents living in NPT at the last recorded census in 2021. The population of this area has increased by approximately 1.8% since 2011, which is a higher rate of growth than the 1.4% seen in Wales, but these are both substantially lower than the rate of growth across England and Wales combined (6.3%)².
- 2.3 The working-age population, those aged 16-64 in NPT, stood at 87,000 residents in 2021. This means that approximately 61% of the area's population are of working-age, which is level with Wales (61%) but below Great Britain (63%).
- 2.4 From 2011 – 2021, the working age population of NPT has declined by 2.3%, with a similar decline observed across Wales (2.4%). Conversely, the working-age population in England and Wales combined rose by 3.4% in this period.

Unemployment has reduced

- 2.5 In September 2023, 3.0% of residents in NPT and 3.2% in Wales aged 16-64 were claiming benefits associated with being out of work³. It is notable that this has reduced since January 2022 when 3.7% of residents aged 16-64 in NPT and 4% in Wales were unemployed.

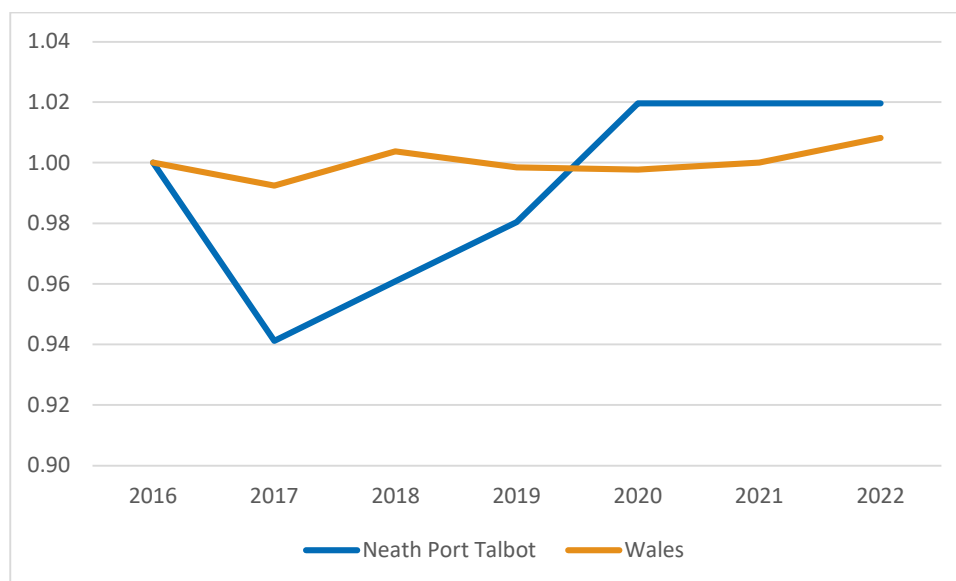
Sustaining employment growth

- 2.1 NPT accommodated approximately 52,000 jobs as of 2022, according to the Business Register and Employment Survey (BRES). Though this is only 2% higher than the figure in 2016 (51,000), there was a significant decrease in employment in NPT in 2017 meaning the area has displayed a strong recovery. Figure 2.2, below, shows the indexed change in employment in NPT and Wales from 2016 - 2021.

² ONS (2023) Census 2021; Census 2011

³ ONS (2023) Claimant Count: September 2023; January 2022

Figure 2.1: Employment level across geographies (2016 – 2022)



Source: BRES 2022

- 2.2 However, it is important to caveat that the jobs density, the number of jobs per working-age resident aged 16-64, in NPT has remained unchanged between 2016 and 2021, at 0.64⁴. The jobs density at the Welsh level has also remained unchanged in this period though at the notably higher level of 0.77.
- 2.3 Further, Table 2.1, below, demonstrates that the Manufacturing sector accounts for the largest proportion of employment in Neath Port Talbot, significantly above the equivalent proportion in Wales⁵.

Table 2.1: Employment by industry

	Manufacturing	Retail	Transport & storage	Accommodation & food services	Professional, scientific & technical	Business administration & support services	Public administration & defence	Education	Health
Neath Port Talbot	16.9%	8.4%	8.4%	5.6%	2.8%	4.2%	11.3%	8.4%	15.0%
Wales	10.3%	10.4%	3.4%	7.9%	5.4%	7.3%	7.4%	8.5%	14.8%

⁴ ONS (2022) Jobs Density 2021

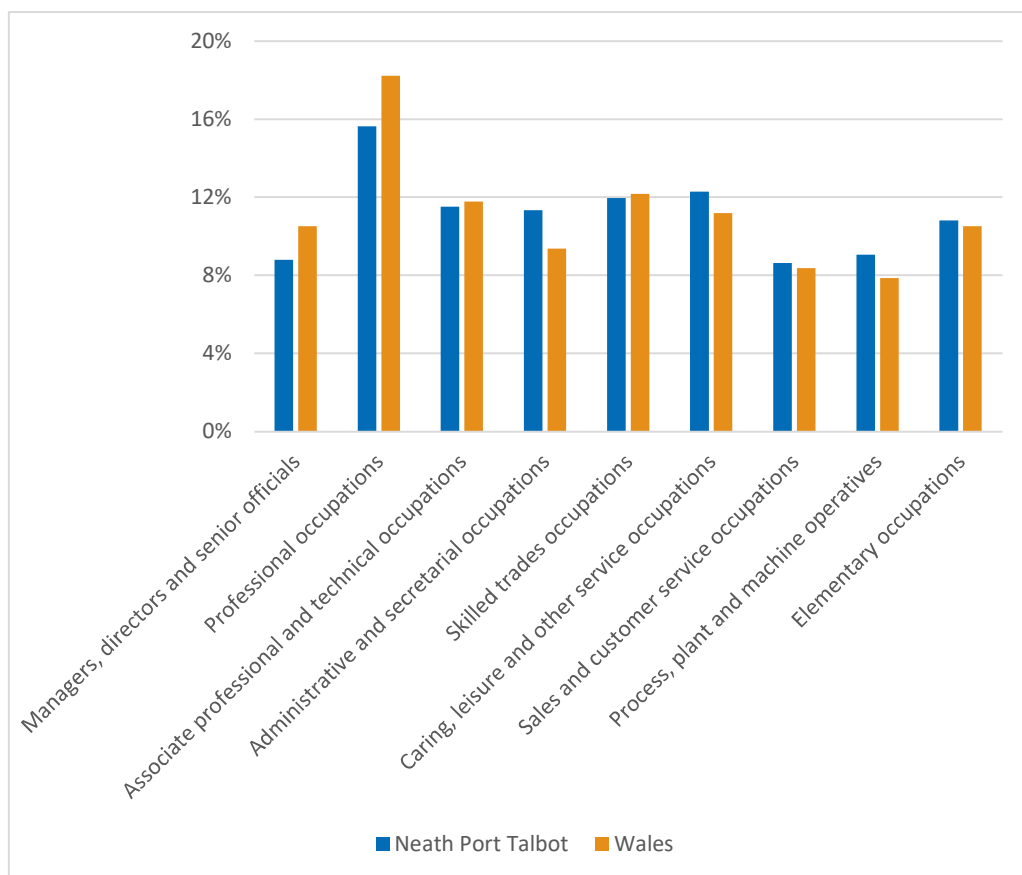
⁵ ONS (2022) Business Register and Employment Survey 2021

Source: BRES 2021 (Sectors below 5% at both geographies excluded from the table for presentation purposes)

A broad occupational profile

- 2.4 Census 2021 reported that the most common occupation in Neath Port Talbot was professional occupations, with 16% of residents in this type of role⁶. This was reflected at the level of Wales as a whole, although to a greater degree (18%). Following on from this, the most common role in Neath Port Talbot was caring and leisure occupations (employing 12% of residents in Neath Port Talbot, but 11% of residents in Wales) and skilled trade occupations (12% across Neath Port Talbot and Wales).

Figure 2.2: Occupational Profile



Source: ONS Census 2021

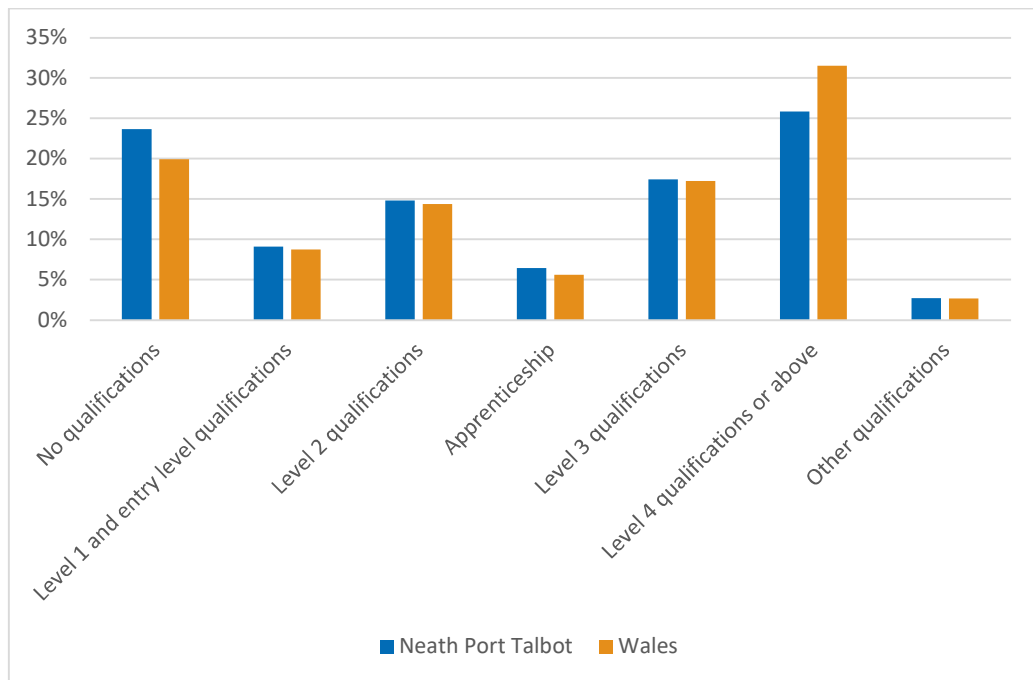
High Rate of No Qualifications

- 2.5 At the 2021 Census, it was reported that there is a notably higher rate of people without qualifications in NPT (24%) compared to Wales (20%)⁷. Contrarily, there is a lower rate of people with Level 4 (Degree-equivalent) qualifications in NPT (26%) compared to Wales (32%).

⁶ ONS (2022) Census 2021

⁷ Ibid

Figure 2.3: Qualifications



Source: ONS Census 2021

Index of Multiple Deprivation

- 2.6 The Welsh Index of Multiple Deprivation (WIMD) 2019 found that a third of the lower-level support output areas (LSOAs) in NPT are in the top 20% most deprived LSOAs in the country⁸. This is the second highest of all local authorities in Wales.
- 2.7 The WIMD can be further examined through the domains of deprivation upon which is measures. Within the income domain of deprivation, 29% of LSOAs in NPT are in the top 20% most deprived which is the third highest proportion within Wales. Likewise, within the employment domain of deprivation, 36% of LSOAs in NPT are in the top 20% most deprived which is the third highest within Wales again. Finally, within the education domain of deprivation, 32% of NPT LSOAs are in the top 20% most deprived which is the second highest within Wales.

Summary

- 2.8 The Proposed Development is located in Neath Port Talbot, an area with a relatively large working age population and a strong manufacturing base.
- 2.9 There are significant pockets of deprivation in Neath Port Talbot, particularly in relation to income, employment, and education. Census data supports this with Neath Port Talbot having a relatively larger proportion of residents with no qualifications than Wales.

⁸ StatsWales (2019) Welsh Index of Multiple Deprivation 2019

3. Strategic Economic Ambitions

- 3.1 This section provides the strategic economic context to the proposals for the Alcohol to Jet Fuel facility, outlining local and wider ambitions for economic growth as well as the identified opportunities that the proposals to develop the facility could help to fulfil.

UK Policy and Economic Strategy Context

Levelling Up White Paper

- 3.2 The Levelling Up White Paper⁹ outlines that a key objective of the Government over the period to 2030 is to close the gap in economic opportunities and outcomes between those top performing and other areas, tackling geographic disparities. It is outlined that the ‘six capitals’ – physical, human, intangible, financial, social and institutional – are interdependent and success will only be achieved if each of them is thriving in a given place.
- 3.3 A key pillar of the policy regime is the setting of clear and ambitious medium-term missions to:
- *‘Boost productivity, pay, jobs and living standards by growing the private sector, especially in those places where they are lagging’* through missions related to boosting investment in research & development and improving local public transport connectivity and digital connectivity.
 - *‘Spread opportunities and improve public services, especially in those places where they are weakest’*, through missions related to education, skills, health, and wellbeing.
 - *‘Restore a sense of community, local pride and belonging, especially in those places where they have been lost’*, through missions related to pride in place, housing, and crime.
 - *‘Empower local leaders and communities, especially in those places lacking local agency’*, through missions related to devolution deals and long-term funding settlements.

Plans for Growth and Jobs amid the Cost-of-Living Crisis

- 3.4 The UK Government’s economic strategies, as expressed through its ‘Build Back Better: Our Plan for Growth’¹⁰ and ‘Plan for Jobs’¹¹ documents, outline the means by which the economic recovery of the UK following Covid-19 will aim to “*build back better*” by driving growth that creates high-quality jobs across the country.
- 3.5 The Plan for Growth, which builds upon and replaces the Government’s Industrial Strategy, outlines that the UK’s economic strategy will be built upon three ‘*core pillars of growth*’, these being:

⁹ Department for Levelling Up, Housing and Communities (2022) Levelling Up: White Paper

¹⁰ HM Treasury (2021) Build Back Better: Our Plan for Growth

¹¹ HM Treasury (2020) Plan for Jobs

- **Infrastructure**, to stimulate economic activity and drive long-term productivity;
- **Skills**, to support productivity growth, with the importance of high-quality apprenticeships and technical education in key industries being emphasised; and
- **Innovation**, with the Government stating its intention to support and incentivise the development of the creative ideas and technologies that will shape the UK's future high-growth, sustainable and secure economy.

- 3.6 The Plan highlights that the implementation of actions based on the three pillars will prioritise the delivery of the Government's 'levelling up' agenda, which is characterised as the need to ensure that everyday life is improved for communities throughout the UK, and that where people live should not be a barrier to their life chances.
- 3.7 The Plan for Jobs includes measures to protect and create jobs. The construction sector is described as "*vital for the recovery of the UK economy*", and the Plan highlights the Government's commitment to supporting 'shovel ready' infrastructure projects across the country, to ensure that projects which can support the UK's economic recovery in the next few critical years proceed at pace.
- 3.8 The need for new jobs and a boost to pay and living standards remain of vital importance in the current context of inflationary pressures and the cost-of-living crisis, with ONS research indicating that in October 2023 over half (52%) of adults in Great Britain reported an increase in their cost of living compared to the previous month. In addition, the Resolution Foundation projected real incomes to have fallen in 2022/23 and then stagnated in 2023/24, which would mean a combined two-year fall in real household income of 4%¹².

Powering Up Britain: The Net Zero Growth Plan

- 3.9 In March 2023, the UK Government set out its plan to enhance its 'energy security, seize the economic opportunities of the transition, and deliver on our net zero commitments'¹³.
- 3.10 A central component of the plan is developing a 'Net Zero Workforce', which emphasised that the Government's 'net zero and environmental goals depend on the UK having the right workforce with the right skills and capacity in the right locations across the UK'. Additionally, the plan states the 'government should take a proactive approach to identifying and working with industry to tackle net zero specific workforce challenges and skills gaps'¹⁴.

Jet Zero strategy: Delivering Net Zero Aviation by 2050

- 3.11 In July 2022, the UK Government published a 'framework and plan' for achieving net zero aviation by 2050¹⁵. The aviation sector's global competitiveness is acknowledged,

¹² House of Commons Library (2023) 'Rising cost of living in the UK'. Available at: <https://commonslibrary.parliament.uk/research-briefings/cbp-9428/>

¹³ GOV.UK (2023) Powering Up Britain: Net Zero Growth Plan

¹⁴ Ibid, page 92

¹⁵ UK Government (2022) Jet Zero strategy: Delivering Net Zero Aviation by 2050

and it is hoped that through taking an ‘international, leadership role’ the Government can go ‘further, faster and secure more global emissions reductions.’

- 3.12 One of the key principles of the strategy is ‘Maximising Opportunities’ which is defined as ‘Using the opportunity of the Jet Zero transition to boost our economy, create new jobs, develop new industries, and become a more energy secure nation’. This involves a strong commitment to sustainable aviation fuels (SAF), with the Government providing £180 million of new funding between 2022 – 2025 to support the commercialisation of SAF plants and fuel testing in the UK to build a new SAF industry.
- 3.13 The Jet Zero Investment Flightpath, which highlights opportunities in the UK’s aviation decarbonisation sector and sets out clear milestones for government and industry to capitalise on, emphasises a commitment to have at least five commercial-scale UK SAF plants under construction by 2025 – helping to deliver on a target of at least 10% SAF blended into the jet fuel mix by 2030.
- 3.14 The UK Government sought to reaffirm its vow to promote SAFs in September 2023 with a commitment to introduce a revenue certainty scheme that it hopes will contribute toward their ambitions for at least five commercial-scale UK SAF plants under construction by 2025 and cement the UK’s status as a world leader in this industry¹⁶.

Wales Policy and Economic Strategy Context

Planning Policy Wales (PPW)

- 3.15 The primary objective of PPW is to ‘ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, and environmental and cultural well-being of Wales’¹⁷.
- 3.16 A key theme of PPW is fostering *Productive and Enterprising Places*, which is defined as those which promote ‘economic, social, environmental and cultural well-being by providing well-connected employment and sustainable economic development’. Such places are labelled as being designed to tackle the climate emergency. It goes onto note that the key issues that underpin this theme are:
- Ensuring that there is sufficient employment land to meet the needs and requirements of a range of future employment scenarios;
 - Embracing the challenge of decarbonising our energy and transport sectors including phasing out of fossil fuels;
 - Supporting and enabling training, education, infrastructure, construction and manufacturing capacity to support progress towards a circular economy; and
 - Supporting and enabling renewable, low carbon globally responsible material choices and their efficient and most appropriate use, so as to prevent waste and ensure finite resources are not unnecessarily diminished.

¹⁶ Department for Transport (2023) New measures to support sustainable aviation fuel industry

¹⁷ Welsh Government (2018) Planning Policy Wales [Last updated October 2023]

Well-being of Future Generations (Wales) Act 2015

- 3.17 The Well-being of Future Generations (Wales) Act 2015 requires public bodies to do things in pursuit of the economic, social, environmental and cultural well-being of Wales in a way that accords with the sustainable development principle¹⁸.
- 3.18 It encompasses a set of seven well-being goals to improve the social, economic, environmental and cultural well-being of Wales. The Act has been designed to make the relevant public bodies *'think more about the long term, work better with people and communities and each other, look to prevent problems and take a more joined-up approach'*. The seven goals are summarised below. The seven goals are summarised below:
- **A prosperous Wales:** An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.
 - **A resilient Wales:** A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example, climate change).
 - **A healthier Wales:** A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.
 - **A more equal Wales:** A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio-economic background and circumstances).
 - **A Wales of cohesive communities:** Attractive, viable, safe and well-connected communities.
 - **A Wales of vibrant culture and thriving Welsh language:** A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.
 - **A globally responsible Wales:** A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.

A Manufacturing Future for Wales: Our Journey to 'Wales 4.0'

- 3.19 In April 2023, the Welsh Government published *'A Manufacturing Future for Wales: Our Journey to 'Wales 4.0''* which underlines the Welsh Government's commitment to supporting manufacturing¹⁹. The Ministerial Foreword to the document outlines the vision for manufacturing:

"We must transition and support the transformation of our manufacturing community – including its supply chains – to one which is increasingly involved in 'added value' activities... This is how we define High Value Manufacturing in

¹⁸ Welsh Government (2015) Well-being of Future Generations (Wales) Act 2015

¹⁹ Welsh Government (2023) A Manufacturing Future for Wales: Our Journey to 'Wales 4.0'

Wales – not by the sector, its complexity, or its use of technology – but on how it impacts the wellbeing of the citizens of Wales”

3.20 There are six key strategic objectives and associated actions that comprise the document:

- Address the climate emergency by decarbonising the manufacturing sector in Wales, underpinned by circular economy practices and processes;
- Develop the conditions to anchor key manufacturing companies in Wales, including provision of modern infrastructure and resilient supply chains;
- Identify and develop the necessary leadership and workforce skills required to achieve ‘Wales 4.0’;
- Strengthen collaboration between stakeholders to embrace technological change and deliver more commercial Innovation at pace;
- Embed ‘Fair Work’ employment principles in Wales, promoting inclusivity, security, and protecting our cultural heritage; and
- Mobilise business support to equip Welsh manufacturers to meet future demand for products of strategic importance.

3.21 Throughout the document, the importance of a ‘just transition’ is emphasised which affirms a commitment to ensure that nobody is left behind as Wales moves away from a fossil-fuelled economy. This focuses particularly on the energy-intensive heavy industries which face significant challenges in the race to Net Zero. As such, there is a specific focus identified to:

- Work with Net Zero Industry Wales, the South Wales Industrial Cluster and stakeholders in North Wales including Hynet to understand the infrastructure necessary to decarbonise industry and maximise the benefits from relevant initiatives

3.22 Other identified focusses of the document include:

- Improve anchorage of manufacturing companies and encourage greater decision making in Wales. We will do this through direct support levers such as the Economic Contract and capital investment, for example, opportunities provided by the transition to zero emission transport.

Net Zero Skills Action Plan

3.23 In February 2023, the Welsh Government published their Net Zero Action Plan that it sees as being a key enabler for developing ‘A stronger, fairer, greener Wales means an economy that works for everyone’²⁰.

3.24 The Plan acknowledges ‘economic change driven by our net zero transition will take place in the context of continuing “churn”, with some businesses being created, some

²⁰ Welsh Government (2023) Stronger, Fairer, Greener Wales: Net Zero Skills Action Plan

expanding, and others contracting or ceasing to exist'. As such, 'policies to secure the decarbonisation of the economy...will be one of the factors driving both the creation of new jobs and the change in skill requirements of existing jobs, over the coming decades'.

- 3.25 A key aspect of the Plan's approach to supporting a growing a skilled and diverse workforce and creating quality jobs to meet Wales' net zero commitments in a rapidly changing economy. Actions relating to this within the plan includes:
- Develop a roadmap setting out the current detailed skills position for each sector in Wales, what skills are needed in the short and longer term and how this will be achieved through continued partnership working. This will include dependencies between sectors and their supply chains; and
 - Look for opportunities where net zero skills will support the Innovation agenda and the climate and nature mission. Innovation is crucial to ensure we maximise our investment across Wales and deliver the fundamental changes needed for our workforce to meet our net zero commitment.

Regional Policy and Strategy Context

South West Wales Industrial Cluster: A Plan for Clean Growth

- 3.26 In March 2023, the South West Wales Industrial Cluster, which is supported by UK Research and Innovation and the UK Government and includes the Associated British Ports, Industry Wales and Neath Port Talbot Borough Council amongst its partners, published their clean growth plan²¹. The Cluster's vision is to develop a '*world leading, truly sustainable industrial Cluster, befitting the societal needs of 2030, 2040, 2050 and beyond*'.
- 3.27 The Cluster hopes to achieve:
- Net zero industries in South Wales by 2040, equating to 40% reduction of total current Welsh CO2 emissions;
 - Retention of 113,000 jobs and a net positive job increase overall (relating specifically to the production industry sector in South Wales);
 - Unlocking £30bn investment opportunities within industries in the region (not including the investment for FLOW or tidal); and
 - Growing the current £6bn Gross Value Added benefit from South Wales production industry to an as yet undefined potential.
- 3.28 Energy and Resource Efficiency and Fuel Switching are seen as among the two key components that will contribute to achieving these goals. This involves promoting the development of cleaner energy which necessarily requires the appropriate infrastructure development to enable this.

²¹ South West Wales Industrial Cluster (2023) A Plan for Clean Growth

- 3.29 In addition, The Plan ultimately recognises that widespread emissions reductions will require a range of different technologies and calls for ‘policies and incentives for the production of fuels from sustainable feedstocks (such as sustainable aviation fuel (SAF) and renewable diesel’.

Local Policy and Strategy Context

Neath Port Talbot Council: Local Development Plan 2011 - 2026

- 3.30 Neath Port Talbot’s Local Development Plan (LDP), adopted in January 2016, aims to provide developers and the public with certainty about the planning framework for Neath Port Talbot²².
- 3.31 The LDPs central vision included an aspiration to deliver a competitive economy at key sites such as Port Talbot. This was coupled with an area-based objective (**OB5**) to ‘realise the diverse potential and opportunities available for sustainable economic development along the coastal corridor to foster economic growth’.
- 3.32 **OB6** also expresses support for promoting a ‘diverse portfolio of employment land and employment opportunities to meet the needs of residents and businesses and stimulate economic growth’ and **OB12** furthers this committing to improving and strengthening ‘the economic base of Neath Port Talbot to increase economic activity’.

Neath Port Talbot Council: Economic Recovery Plan

- 3.33 Neath Port Talbot Council’s Economic Recovery Plan, published in February 2022, gives an overview of some of the longer-term socio-economic trends in the area and the challenges ahead²³. Some of the key messages emanating from the document include:
- **There is a distinct industrial economy, which has seen significant restructuring:** Manufacturing remains highly significant and of high value to the local economy, accounting for approximately a quarter of output. However, in the late 1990s and early 2000s total output fell in the area reflecting a substantial loss of manufacturing activity and the close of the petrochemicals industry. The manufacturing output was as high as 37% in 1998.
 - **Jobs and economic activity are increasing but are still below the wider UK.** Jobs density (the number of jobs per working age resident) has steadily grown over time. Manufacturing accounted for almost a fifth of all employee jobs in 2019.
 - **Fewer working-age residents of Neath Port Talbot have higher-level qualifications,** over the three years from 2018-2020 only around 28% of working-age residents were qualified to NVQ4+ compared with 43% in the UK which is partly reflected in the county borough’s occupational profile with relatively fewer residents employed in management and professional roles...**This is likely to affect residents’ ability to access better-paid local**

²² Neath Port Talbot Council (2016) Local Development Plan 2011 - 2026

²³ Neath Port Talbot Council (2022) Economic Recovery Plan

employment with wages data suggesting that there is some in-commuting to NPT's more highly-paid roles.

- **Low-income households are mostly already in-work** and therefore the Economic Recovery Plan has a focus on supporting more, sustained employment opportunities 'closer to home'.

- 3.34 However, an opportunity for Neath Port Talbot to take a leadership role in transforming its carbon-intensive economy is identified. Specific opportunities include supporting technology development in low carbon technologies and building on cross-regional networks, such as the South Wales Industrial Cluster, to support the decarbonisation of relatively carbon-intensive industries.
- 3.35 The Economic Recovery Plan stipulates that the document will adopt a jobs and opportunities first approach with a focus on 'creating the conditions for practical, meaningful and relatable opportunities' fundamental to this.

Summary

- 3.36 The Welsh and UK Government's planning, industrial and economic policy as well as regional and local strategies highlight the importance of developing infrastructure key to meeting their ambitions for a net-zero economy. It is emphasised that critical infrastructure and the embrace of new technologies are fundamental to achieving this.
- 3.37 Various policies emphasise the importance of embracing the economic opportunities, including jobs and skills, that may be presented by the net zero transition to ensure that the existing and future workforce are well-prepared and well-served by the economy of the future.
- 3.38 The UK Government has repeatedly expressed an explicit commitment to promote SAF and is aiming to have at least five commercial-scale UK SAF plants under construction by 2025 and ensure the UK's status as a world leader in this industry.

4. Economic Benefits on Completion

- 4.1 This section presents the quantified economic impacts likely to be generated by the proposed development when complete. These impacts will all be net additional relative to the existing state of the site, which currently supports no economic activity.

Gross jobs created on site

- 4.2 LanzaTech have estimated that the Proposed Development **support 85 full-time equivalent (FTE) gross jobs**. This will be in a range of roles including in operations, technicians, technology support and management.

Net additional employment

- 4.3 While the above provides an indication of the number and type of jobs likely to be created on site, in gross terms, the *net additionality* of these jobs can also be estimated. This is a term that is used to refer to the final scale of employment that is generated once a number of economic considerations have been taken into account. The net additional employment is essentially the sum of the direct and indirect employment impacts of the proposed development.
- 4.4 The former HCA recommended a specific approach to calculating additionality which is still widely referenced²⁴. It allows for the consideration of the following:
- **Deadweight** – the economic outcomes which would occur if the proposed development were not implemented;
 - **Leakage** – a measure of the extent to which employment will be taken up by persons residing outside of the target area;
 - **Displacement** – the extent to which investment in the proposed development will lead to existing companies or employees within the target area relocating activities to the site, rather than attracting new investment and employment from businesses located outside of the target area; and
 - **Multiplier effects** – further economic activity (jobs, expenditure or income) associated with additional local income (from employment), local supplier purchases and longer term expenditure effects.
- 4.5 These factors are considered below to estimate the net additional employment benefit generated by the proposed development, with the exception of deadweight which is considered to be zero given that the site is predominantly not in economically active use. Where firms are affected by development, their operations are being relocated within Port Talbot.

²⁴ 'Additionality' is defined in the Homes and Communities Agency (2014) Additionality Guide 4th Edition. The Guide advises on the assessment of the additional impact (or 'additionality') of interventions in terms of local and regional economic growth.

Leakage

- 4.6 The creation of jobs at the proposed development can be expected to provide new employment opportunities both for local residents of NPT as well as those residing in Wales.
- 4.7 LanzaTech have advised that some of the jobs on-site will be high-skilled and industry-specific, and it is anticipated that not all of these skills will currently be available within the local and wider impact area. However, LanzaTech have expressed a willingness to promote and encourage learning and training opportunities for those in Neath Port Talbot and across Wales to develop industry expertise with the eventual aspiration of increasing on-site local employment in the long-term.
- 4.8 The last reported Census in 2011²⁵ found that circa 64% of those working in Neath Port Talbot also live there, with this increasing to 99% being filled by residents of Wales. It is therefore reasonable to assume, given the data presented and information provided by LanzaTech, that a rounded proportion of approximately 65% of jobs created through the operational of the proposed development will be contained within and accessed by residents of Neath Port Talbot, expanding to 80% being filled by those residing somewhere in Wales. The remaining 20% will be high-skilled, industry-specialised labour from further afield.

Displacement

- 4.9 Displacement occurs when new development takes existing market share – in this case labour – from other existing local businesses.
- 4.10 As of September 2023, there were at least 2,590 Neath Port Talbot residents claiming benefits associated with being out of work²⁶, increasing to 60,270 at the scale of Wales.
- 4.11 It is therefore considered reasonable to make an allowance for only a low level of displacement in Neath Port Talbot and Wales. This recognises the relatively large supply of prospective workers, and the scale of employment effect generated by the proposed development. Based on the benchmarks outlined in the Additionality Guide²⁷, a low rate of displacement (25%) has been assumed during the operational phase.

Multiplier Effects

- 4.12 Once operational, the proposed development will generate considerable expenditure on materials, goods and other services that will be purchased from a wide range of suppliers. This expenditure will have far-ranging benefits both locally and further afield, as it filters down the supply chain (indirect effects).
- 4.13 This will result in an amplification of the initial investment in the proposed development; in other words an economic multiplier effect, with linked benefits in terms of expenditure on goods and services locally. This will bring indirect employment

²⁵ ONS (2011) Census 2011. N.B. The equivalent data from Census 2021 was not yet available at the time of assessment.

²⁶ ONS via Nomis (2023) Claimant Count: September 2023

²⁷ HCA (2014) Additionality Guide 4th Edition

and financial benefits for local individuals and firms, and could help to sustain employment across the local and wider economy.

- 4.14 Turley Economics undertook an analysis of the economic impact to supply chains estimated to occur as a result of the Proposed Development. This analysis estimated that up to 130 Gross FTE jobs could be supported in the supply chain in activities such as water treatment, waste management, chemical management and ship loading / unloading and related activities.

Net additional jobs for Neath Port Talbot residents

- 4.15 After accounting for these additionality factors, it is estimated that the proposed development will directly generate 35 FTE employment opportunities for residents of Neath Port Talbot, increasing to 50 for people living in Wales.
- 4.16 A further 65 FTE jobs could be locally supported via indirect effects, including contracts within the supply chain, salaries and onward expenditure in Neath Port Talbot, with this increasing to 100 when considered at the wider scale of Wales.
- 4.17 Overall, when rounded, the proposed development can therefore be expected to provide at least 100 net additional employment opportunities for residents of Neath Port Talbot and at least 150 for people living throughout Wales.

Table 4.1: Operational Phase Net FTE Employment Generation

FTE Employment Generation	Neath Port Talbot	Wales
Gross On-site Employment	70	
<i>Specialist industry-specific employment</i>	15	
Net Direct Employment	35	50
Indirect Employment	65	100
Net Additional Employment (Total)	100	150

Source: Turley Economics, 2023

Note: figures may not sum due to rounding

Gross value added to the Neath Port Talbot economy

- 4.18 Once operational, the proposed development can be expected to generate an increase in gross value added (GVA) which measures the value of output created (i.e. turnover) net of inputs purchased and used to produce a good or service (i.e. production of the output). GVA therefore provides a key measure of economic productivity.
- 4.19 Estimates sourced from economic data provider Experian indicate that the average FTE employee in the manufacturing and utilities industries in Neath Port Talbot generates circa £48,900 and £91,800 annually in GVA, respectively²⁸.
- 4.20 The proposed development has the potential to generate economic productivity in the form of a GVA uplift throughout its operational lifetime. It could deliver an annual £8.9

²⁸ Experian (September 2023) UK Regional Planning Quarterly; average 2018 – 2022

million GVA contribution to the wider economy of Wales each year, depending on how the new floorspace is used. Circa £8.5 million of this annual total could relate to the local economy of Neath Port Talbot. This is summarised in Table 4.3.

Table 4.2: Operational Phase - Net GVA Generation (per annum)

Net GVA Generation	Neath Port Talbot	Wales
Direct GVA Impact (£million)	£2.7 million	
Indirect / Induced GVA Impact (£million)	£4.9 million	£5.3 million
Net Additional Impact (Total) (£million)	£7.6 million	£8.0 million

Source: Turley Economics, 2023

Note: figures may not sum due to rounding

Business rates

- 4.21 Businesses pay non-domestic rates (known as business rates) to contribute to the cost of the local authority providing public services within which the business property is situated. There is potential for £168,000 per annum in business rates revenue to be retained by Neath Port Talbot Borough Council going forward, as a result of the proposed development. This additional funding will contribute towards the delivery of public services and enable investment in maintaining and enhancing infrastructure within the locality. This will in turn generate associated socio-economic benefits and potentially attract further inward investment.

Summary

- 4.22 In summary, once operational the proposed development has the potential to generate the following economic impacts:
- The proposed development is expected to create **85 full-time equivalent jobs** on site.
 - The creation of these jobs on site could generate around **150 net additional employment opportunities** for individuals living throughout Wales, when allowing for economic multipliers, displacement and leakage. Some **100 jobs** could be created in total for residents of Neath Port Talbot.
 - The proposed development could also generate **circa £8.0 million in GVA** at the Wales scale every year, including **£7.6 million in Neath Port Talbot**, with the development also set to generate **£168,000 in additional business rates** revenue every year.
 - The estimates of economic impact demonstrate that the proposed development can be expected to have a sizeable beneficial impact on the supply chain in Neath Port Talbot and Wales, with as many as **130 jobs supported**.

5. Economic Benefits during Construction

- 5.1 This section outlines the economic impacts estimated to temporarily result from the proposed development during its construction phase.

Gross jobs supported by investment

- 5.2 LanzaTech have estimated that the construction of the Proposed Development will generate 1,125 person-years of direct employment. Given that construction is expected to last 2.5 years, this suggests that there will be circa 450 gross direct FTE construction-related jobs supported on and off-site.

- 5.1 As in the operational phase to estimate the net additional employment benefit generated by the proposed development, deadweight, leakage, displacement and multiplier effects must be considered:

- **Deadweight:** Considered to be zero given that there is currently no on-site construction employment.
- **Leakage:** Aligns with the operational phase. A rounded proportion of approximately 65% of jobs created through the construction of the proposed development will be contained within and accessed by residents of Neath Port Talbot, expanding to 80% being filled by those residing somewhere in Wales. The remaining 20% will be filled by specialist, industry-specific construction labour from further afield.
- **Displacement:** As of August 2023, there were at least 95 Neath Port Talbot residents seeking work in construction-related occupations²⁹, increasing to 2,055 at the scale of Wales. It is therefore considered reasonable to make an allowance for only a low level of displacement in Neath Port Talbot and Wales. This recognises the reasonable supply of prospective workers, and the scale of employment effect generated by the proposed development. Based on the benchmarks outlined in the Additionality Guide³⁰, a low rate of displacement (25%) has been assumed during the construction phase.

Net additional jobs for Neath Port Talbot residents

- 5.2 Net additional employment is a term, introduced in the previous section, that is used to refer to the final scale of employment that is generated once a number of economic considerations have been taken into account.
- 5.3 The creation of temporary construction jobs during the build period will provide new employment opportunities for the local and wider labour force in Neath Port Talbot and Wales. The positive economic impacts of the proposed development will extend beyond construction employment, as expenditure on construction materials, goods

²⁹ ONS via Nomis (2023) Jobseekers Allowance by Occupation: September 2023

³⁰ HCA (2014) Additionality Guide 4th Edition

and other services will have far-ranging benefits both locally and further afield as it filters down the supply chain.

- 5.4 Based on the Additionality Guide's recommendations³¹, a sub-regional composite multiplier of 1.25 has been applied at the scale of the local authority, with a multiplier of 1.5 being applied at the scale of Wales.
- 5.5 Applying this, it is estimated that the construction of the proposed development will directly generate 270 FTE employment opportunities for Wales residents during construction, including 175 for residents of Neath Port Talbot.
- 5.6 A further 135 indirect and induced FTE jobs could be annually supported throughout Wales through economic multiplier effects, of which 45 could be local to Neath Port Talbot.
- 5.7 In total, therefore, the direct and indirect impacts of the construction of the proposed development can be expected to annually create 405 net additional FTE employment opportunities for residents of Wales, inclusive of 220 jobs for residents of Neath Port Talbot. This is summarised at Table 5.1 overleaf.

Table 5.1: Construction Phase Employment

Employment	Neath Port Talbot	Wales
Person-years of Employment	1,125	
Construction Period (Years)	2.5	
Gross FTE Employment	360	
<i>Specialist industry-specific employment</i>	90	
Direct Net Additional FTE Employment	175	270
Indirect / Induced Net Additional FTE Employment	45	135
Total Net Additional FTE Employment	220	405

Source: Turley Economics, 2023

Note: figures may not sum due to rounding

Gross value added to the Neath Port Talbot economy

- 5.8 Construction can also be expected to generate a temporary productivity boost, which can be measured in GVA.
- 5.9 Estimates sourced from Experian indicate that the average FTE employee in the construction industry in Neath Port Talbot generates circa £88,700 annually in GVA³².
- 5.10 Applying this and where appropriate the all-sector average to the net additional employment impact generated by construction of the proposed development indicates that an additional £99.5 million in GVA could be generated across Wales during the

³¹ Ibid.

³² Experian (September 2023) UK Regional Planning Quarterly; average 2018 – 2022

construction period, inclusive of £86.0 million in Neath Port Talbot itself. This is summarised in the following table.

Table 5.2: Construction Phase GVA

GVA	Neath Port Talbot	Wales
Direct Net Additional GVA (Annual)	£23.9 million	
Indirect / Induced Net Additional GVA (Annual)	£2.5 million	£7.9 million
Total Net Additional GVA (Annual)	£26.4 million	£31.8 million
Total Net Additional GVA (Construction Period)	£66.0 million	£79.5 million

Source: Turley Economics, 2022

Note: figures may not sum due to rounding

Summary

5.11 In summary, construction of the proposed development has the potential to generate the following economic impacts:

- Significant investment in construction;
- **1,125** person-years of employment directly supported through construction investment, equivalent to **450** FTE gross direct jobs over the 2.5-year build period;
- An average of **405** direct, indirect and induced net additional FTE employment opportunities generated for people living in Wales during construction, including **220** for residents of Neath Port Talbot; and
- Total net additional contribution of circa **£79.5 million** GVA to the economic output of the Welsh economy, of which **£66.0 million** will be concentrated in Neath Port Talbot.

6. LanzaTech's Contribution to their Community

- 6.1 This section outlines the social and community impact that LanzaTech are committed to having within their local community, and how they hope to grow this as a result of development. The High-Level Social Value Strategy and Opportunities, is appendixes below, and summarised here and will lead into the Social Value Strategy which is being developed while the planning application is determined.
- 6.2 It must be noted that a final decision on social value actions has not yet been taken and therefore it is emphasised that these are not commitments but considerations of how LanzaTech might support their local and wider community.

Construction Phase

- 6.3 At this stage in the planning process, LanzaTech have not appointed a construction contractor. As a result, the Social Value Strategy will recommend actions for LanzaTech to consider during the tendering process. These are listed in the table, below.

Table 6.1: Construction Phase Social Value Recommendations

Recommendation	Detail
Apprenticeships and training opportunities	Neath Port Talbot Council's Community Benefits Information Sheet states that a minimum benchmark of 52 weeks Targeted Recruitment and Training per £1million spent in contract sum is set up at framework level. This can include apprenticeships, work experience and employment of disadvantaged groups ³³ . The Social Value Strategy details local education institutions that could be engaged to achieve this.
Supply Chain Opportunities	Promoting open and accessible supply chains is fundamental to the social value approach in Wales ³⁴ . This primarily involves ensuring that Welsh based businesses, particularly SMEs, are well prepared to bid for work. On top of ensuring prompt payment to sub-contractors and suppliers, contractors can take steps to ensure opportunities are visible to local suppliers and sub-contractors through Meet the Buyer or Meet the Contractor events or posting a notice on Sell2wales.gov.uk ³⁵ .
Employment opportunities for local people	Best endeavours should be made to ensure as many employment opportunities as possible are offered to Neath Port Talbot or South Wales residents.

³³ Neath Port Talbot Council (2020) Community Benefits Information Sheet [Version 01/2020]

³⁴ Welsh Government (2020) WPPN 01/20 Social value clauses/community benefits through public procurement

³⁵ Welsh Government (2014) Community Benefits: Delivering Maximum Value for the Welsh Pound – 2014.

Volunteering	The contractor should commit to donating a minimum of 20 hours of voluntary time over the duration of the build period (one person's working day for every year of construction) and work with the local authority to identify potential organisations where this time can make a valuable impact (E.g. a presentation on site health and safety at local schools).
Opportunities for disadvantaged groups	Commit to using best endeavours to ensure that a minimum of 20-25 FTEs (2% of on-site employment) hired or retained who are long-term unemployed / NEET / 16-25 care leavers / rehabilitating ex-offenders / disabled. The contractor should work with the local authority on how they can best engage or interact with current programmes (such as the Neath Port Talbot Council for Voluntary Service) to assist these groups.
Connections with local education providers	The contractor should look to collaborate with the local post-16 education providers identified in the Social Value Strategy to establish appropriate opportunities to contribute to career events.

Source: Turley Economics, 2023

Operational Phase

- 6.4 Given the operational phase of the Proposed Development is not likely to begin until later in the 2020s, it is likely that new needs and opportunities will arise before then. Consequently, the below table gives an approximate idea of the type of activities LanzaTech may become involved in to support their local and wider community.
- 6.5 A full Social Value Strategy will be developed closer to the time of operation. This will be grounded in engagement with local stakeholders, for example with local education providers and the economic development team at the Council, and an up-to-date needs analysis to ensure LanzaTech are having a strong social impact where it is most needed and where it is most appropriate to intervene.

Table 6.2: Operational Phase Social Value Considerations

Recommendation	Detail
Offering apprenticeship and graduate opportunities for local residents in Port Talbot	LanzaTech could provide support local education providers through a range of activities, for example placement or apprenticeship opportunities or sponsoring students from disadvantaged backgrounds through their studies. To explore this further would require engaging local education providers when LanzaTech are ready to take on apprentices to understand which courses it would be most appropriate for their needs to take students from.
Port Talbot's Opportunity Hub and Neath Port Talbot	Opportunity Hub, based in Aberafan Shopping Centre, opened in January 2023 with the aim of 'providing a venue in the community that could help and support unemployed or

Communities for Work Plus project	economically inactive people towards finding employment'. The Hub is there 'to offer help to all residents aged over 16, as well as providing them with additional training days, jobs fairs, citizens advice, and an additional warm hub facility during winter months'. Currently supported by central Government at a value of around £29,517 per annum which has recently been renewed for another year. The Communities for Work Plus (CfW+) project is a Welsh Government funded project run by the Council. The project aims to help those aged 16+, living in NPT who are either unemployed or working low hours/part time/on zero-hour contracts/experiencing in-work poverty. Their Employer Liaison Officers seek to develop positive relationships with employers across Neath Port Talbot. This would involve consultation with the Council's Economic Development team to understand which employment assistance programme it would be most appropriate for LanzaTech to contribute to and partner with.
JES Group	JES' aspires to establish a 'Skills Academy' to 'assist with the development of Fabrication & Welding skills that align with industry needs and the opportunities presented by Net Zero, the Circular Economy and the Celtic Freeport'. The Academy plans to use the latest immersive digital technologies to work alongside first class, face-2-face tuition from expert trainers to harness the large repository of skills accumulated by the existing JES workforce. LanzaTech have already been in discussion with JES about potentially providing capital equipment.
Supporting Port Talbot Disability Football Club	In 2022, Port Talbot Disability Football Club organised a fundraiser in the aim of becoming the number one disability football provider in South Wales . They wanted to work with new and established clubs in South Wales to set up the region's first disability football league. Their fundraiser raised £5,130 of their £10,000 target with the £5,000 of this coming from the actor Michael Sheen.
Supporting Port Talbot RNLI and other coastal safety charities	Port Talbot RNLI has one active lifeboat at Port Talbot Lifeboat Station. In the past, local businesses have supported the RNLI by supporting them with space at festivals, giving them an opportunity to fundraise and share water safety advice . There may be an opportunity for LanzaTech, as an organisation with a coastal site, to collaborate with the RNLI in providing health and safety sessions to young people. This would likely be a staffing cost in terms of attending a school or a financial commitment to sponsor equipment for the RNLI.

Aberavon Surf Life Saving Charity are another local organisation who deliver water safety education and training on Aberavon beach.

Source: Turley Economics, 2023

7. Summary and Conclusions

7.1 Turley Economics has been commissioned by LanzaTech UK Limited to estimate the economic and social benefits that could be generated at Project Dragon – Sustainable Aviation Fuel Production Facility at Land at Phoenix Wharf, Port Talbot Docks, Neath Port Talbot, Wales.

7.2 This report has framed these benefits within the local context of Neath Port Talbot, parts of which rank amongst the most deprived areas in the country in terms of employment and education with residents less likely to have qualifications than their counterparts elsewhere in Wales. There is a stated desire to sustain the competitiveness of Neath Port Talbot, and harness the economic opportunity of the net-zero transition by ensuring the existing and future workforce is well-prepared and well-served by the industries of the future.

Operational Phase Benefits

7.3 In summary, once operational the proposed development has the potential to generate the following economic impacts:

- The proposed development is expected to create **85 full-time equivalent jobs** on site.
- The creation of these jobs on site could generate around **150 net additional employment opportunities** for individuals living throughout Wales, when allowing for economic multipliers, displacement and leakage. Some **100 jobs** could be created in total for residents of Neath Port Talbot.
- The proposed development could also generate **circa £8.0 million in GVA** at the Wales scale every year, including **£7.6 million in Neath Port Talbot**, with the development also set to generate **£168,000 in additional business rates** revenue every year.
- The estimates of economic impact demonstrate that the proposed development can be expected to have a sizeable beneficial impact on the supply chain in Neath Port Talbot and Wales, with as many as **130 jobs supported**.

Construction Phase Benefits

7.4 Construction of the proposed development has the potential to generate the following economic impacts:

- Significant investment in construction;
- **1,125** person-years of employment directly supported through construction investment, equivalent to **450 FTE** gross direct jobs over the 2.5-year build period;

- An average of **405** direct, indirect and induced net additional FTE employment opportunities generated for people living in Wales during construction, including **220** for residents of Neath Port Talbot; and
- Total net additional contribution of circa **£79.5 million** GVA to the economic output of the Welsh economy, of which **£66.0 million** will be concentrated in Neath Port Talbot.

Social Value contribution to their community

- LanzaTech have stated a commitment to becoming a good neighbour within Port Talbot and south Wales. As part of this, they aspire to make meaningful social value interventions to help local members of the community where it is most needed in both the construction and operational phase of the development.

Appendix 1: High-Level Social Value Opportunities

High-Level Social Value Strategy and Opportunities

Project Dragon - Sustainable Aviation Fuel (SAF) Production Facility

Land at Crown Wharf, Port Talbot Docks

November 2023

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Client
Turley

Our reference
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November 2023

1. Introduction

- 1.1 This document has been prepared by Turley Economics on behalf of LanzaTech UK Limited (LanzaTech) to outline a High-Level Social Value Strategy and Social Value Opportunities that they may consider as part of Project Dragon – Sustainable Aviation Fuel (SAF) Production Facility in Land at Crown Wharf, Port Talbot Docks.
- 1.2 A Needs Analysis is first presented to analyse the current socio-economic context in Neath Port Talbot alongside medium and long-term trends. Such an understanding should inform the selection of operational phase social value interventions to ensure they can deliver tangible benefits to the local community and the wider region. Following on from this, a summary of potential operational phase social value interventions that LanzaTech may consider is presented in Section 3. These have been identified by Turley Economics as being appropriate for LanzaTech’s ambitions and activities.
- 1.3 At this stage in the planning process, LanzaTech have not appointed a construction contractor. As a result, the Social Value Strategy will recommend actions for LanzaTech to consider during the tendering process. These are listed in Section 4.
- 1.4 This document is also intended to inform other planning documents such as the Economic and Social Value Statement.

2. Needs Analysis

- 2.1 It is recognised that the first step in developing the social value approach and strategy is understanding the local context within Neath Port Talbot (NPT) and specifically the nature and scale of challenges to which the development can provide value.
- 2.2 NPT Council's Economic Recovery Plan, published in February 2022, gives an overview of some of the longer-term socio-economic trends in the area and the challenges ahead. Some of the key messages emanating from the document include:
- **There is a distinct industrial economy, which has seen, and continues to see, significant restructuring:** Manufacturing remains highly significant and of high value to the local economy, accounting for approximately a quarter of output. However, in the late 1990s and early 2000s total output fell in the area reflecting a substantial loss of manufacturing activity and the close of the petrochemicals industry. The manufacturing output was as high as 37% in 1998¹.
 - **Jobs and economic activity are increasing but is still below the wider UK.** Jobs density (the number of jobs per working age resident) has steadily grown over time. Manufacturing accounted for almost a fifth of all employee jobs in 2019.
 - **Fewer working-age residents of NPT have higher-level qualifications,** over the three years from 2018-2020 only around 28% of working-age residents were qualified to NVQ4+ compared with 43% in the UK which is partly reflected in the county borough's occupational profile with relatively fewer residents employed in management and professional roles. **This is likely to affect residents' ability to access better-paid local employment** with wages data suggesting that there is some in-commuting to NPT's more highly paid roles.
 - **Low-income households are mostly already in-work** with low-paid work and low-paid self-employment being a particular issue in urban Port Talbot (Sandfields and Aberavon). To compound this, the rising cost of living have further impacts the real incomes of the lowest paid. Consequently, the Economic Recovery Plan has a focus on supporting more, sustained employment opportunities 'closer to home'.
- 2.3 In addition, the NPT Public Services Board (NPTPSB) published a Well-Being Plan 2023 – 2028 in accordance with the Well-being of Future Generations (Wales) Act 2015 which is about improving the social, economic, environmental and cultural well-being of Wales. The act sets out "sustainable development principles" which guide how the public bodies listed in the Act should go about meeting their well-being duties. NPTPSB outlined four well-being objectives in their Plan:

- 1) *"To ensure all children get the best start in life;*

¹ Whilst not presented in the Council's document, data from Experian indicates that Manufacturing accounted for 21% of GVA output in 2022.

- 2) *To ensure all our communities are thriving and sustainable;*
- 3) *To ensure our local environment, culture and heritage can be enjoyed by future generations; and*
- 4) *To ensure there are ore secure, green and well-paid jobs and that skills across the area are improved”.*

2.4 Under these objectives, specific steps were outlined to illustrate how they may be achieved in practice. Such steps relevant to this social value strategy include:

- Support and advise our school leavers to increase access to employment, education or training;
- Increase the number of apprenticeship, traineeship and work placement opportunities in the local area and support more people to access them;
- Support more people to achieve the necessary level qualifications linked to the skills that local employers need now and in the future; and
- Ensure local businesses, local people and communities have maximum benefit from external major investment for the area both existing and planned.

2.5 In this section we set out a summary of the findings of the needs analysis and an explanation as to how this has informed the social value strategy.

Profiling Socio-Economic Need

2.6 The following overview of socio-economic need in NPT and wider geographies has been undertaken for the purpose of this assessment using the latest available data and, in some areas, will build on the information presented in the Council’s Economic Recovery Plan.

A growing population that is predominantly of working age

2.7 There were approximately 142,300 residents living in NPT at the last recorded census in 2021. The population of this area has increased by approximately 1.8% since 2011, which is a higher rate of growth than the 1.4% seen in Wales, but these are both substantially lower than the rate of growth across England and Wales combined (6.3%)².

2.8 The working-age population, those aged 16-64 in NPT, stood at 87,000 residents in 2021. This means that approximately 61% of the area’s population are of working-age, which is level with Wales (61%) and just below the rest of Great Britain (63%).

2.9 From 2011 – 2021, the working age population of NPT has declined by 2.3%, with a similar decline observed across Wales (2.4%). Conversely, the working-age population in England and Wales combined rose by 3.4% in this period.

² ONS (2023) Census 2021; Census 2011

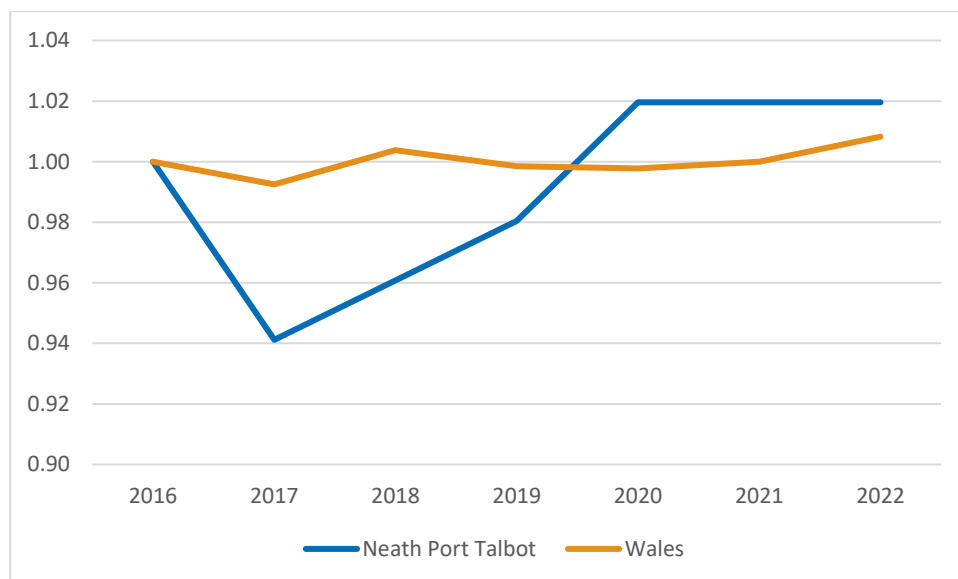
Reduction in unemployment

- 2.10 In August 2023, 3.0% of residents in NPT and 3.2% in Wales aged 16-64 were claiming benefits associated with being out of work. It is notable that this has reduced since January 2022 when 3.7% of residents aged 16-64 in NPT and 4% in Wales were unemployed.
- 2.11 However, this data does not account for the likelihood that there will be job losses at the Port Talbot Steelworks. It is estimated that as many as 3,000 jobs across the UK could be lost, many in NPT³.

Sustaining employment growth

- 2.12 NPT accommodated approximately 52,000 jobs as of 2022, according to the Business Register and Employment Survey (BRES). While this is only 2% higher than the figure in 2016 (51,000), there was a significant decrease in employment in NPT in 2017 with a 6% decrease from the 2016 employment level. This means the area has displayed characteristics of a strong employment recovery. Figure 2.2, below, shows the indexed change in employment in NPT and Wales from 2016 - 2022.

Figure 2.1: Employment level across geographies (2016 – 2022)



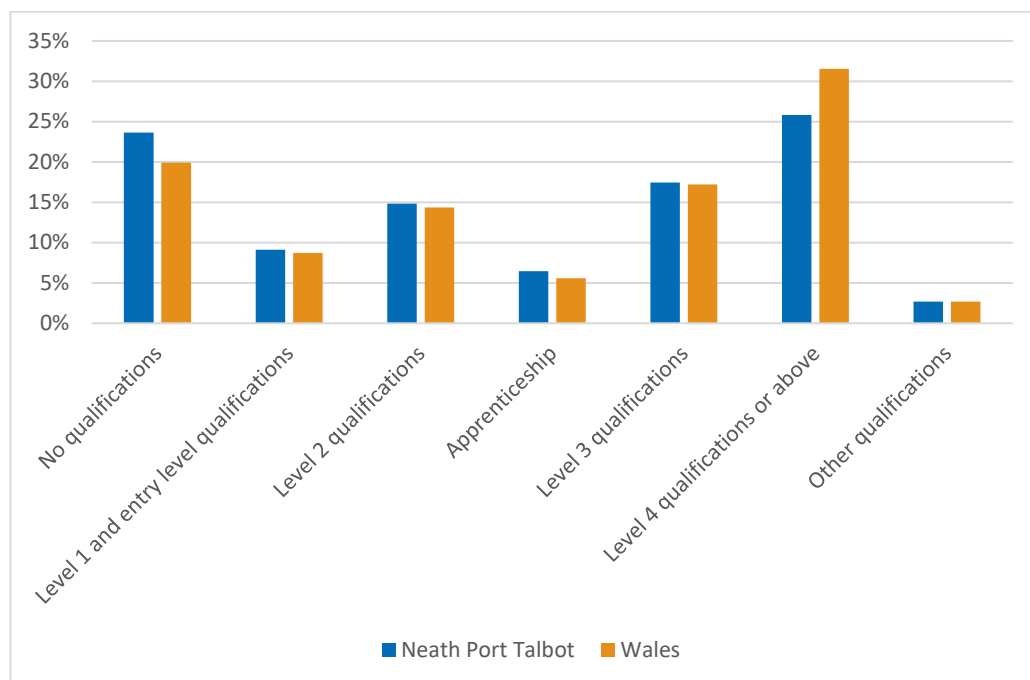
Source: BRES

High Rates of No Qualifications and Economic Inactivity

- 2.13 At the 2021 Census, it was reported that there is a notably higher rate of people without qualifications in NPT (24%) compared to Wales (20%). There is also a lower

³ BBC (2023) Tata Steel: Port Talbot steelworks gets £500m by UK government [Available at: <https://www.bbc.co.uk/news/uk-wales-66819458>]

rate of people with Level 4 (Degree-equivalent) qualifications in NPT (26%) compared to Wales (32%).



Source: ONS Census 2021

- 2.14 Furthermore, in the Annual Population Survey which covered the year to March 2023, it was reported that there are 22,900 economically inactive people in NPT, equivalent to 26.6% of residents aged 16-64. This is a slightly higher percentage than Wales (24.5%) and Great Britain (21.6%). Of this, the two primary reasons for inactivity were long-term sick (9,800 residents) and looking after family/home (5,700 residents).
- 2.15 In addition, the 2021 census reported that NPT had the highest proportion of residents providing unpaid care of all local authorities in England and Wales with 12.3% of residents providing some degree of unpaid care.

Some Areas of Serious Deprivation

- 2.16 The Welsh Index of Multiple Deprivation (WIMD) 2019 found that a third of the lower-level support output areas (LSOAs) in NPT are in the top 20% most deprived LSOAs in Wales. This is the second highest of all local authorities in Wales.
- 2.17 The WIMD can be further examined through the domains of deprivation upon which it is measured. Within the income domain of deprivation, 29% of LSOAs in NPT are in the top 20% most deprived which is the third highest proportion within Wales. Likewise within the employment domain of deprivation, 36% of LSOAs in NPT are in the top 20% most deprived which is the third highest within Wales again. Finally, within the education domain of deprivation, 32% of NPT LSOAs are in the top 20% most deprived which is the second highest within Wales.

Earnings

- 2.18 The Annual Survey of Hours and Earnings 2022 reported that earnings by place of residence and workplace are marginally higher in NPT than in Wales. However, within NPT, it can also be seen that the earnings by place of residence are marginally higher than earnings by place of work. This suggests that there is a degree of out-commuting for higher-paid jobs from NPT to elsewhere.

	NPT	Wales
Earnings per week by place of residence	£611	£604
Earnings per week by place of work	£604	£598

Source: ONS Annual Survey of Hours and Earnings 2022 – Resident and Workplace Analysis

Informing the Social Value Strategy

- 2.19 The Proposed Development would bring an internationally significant employer into NPT and create manufacturing jobs in a location that is integral to the local economy. As evidenced in the Council's Economic Recovery Plan, the number of manufacturing jobs has decreased recently and may continue to do so, but the sector remains vitally important to the local economy.
- 2.20 One of the challenges identified by both the Council's Economic Recovery Plan and the data presented in the needs section of this chapter is the low skills base in the local area. There is a higher proportion of people in NPT with no qualifications and fewer people within Level 4+ qualifications than in Wales. This is likely to mean local people are excluded from accessing high-skilled and high-paid jobs.
- 2.21 NPT records much higher rates of economic inactivity than geographical comparators, with long-term sickness and care duties preventing people from accessing work.
- 2.22 The Proposed Development provides an opportunity to provide high-skilled and well-paid employment opportunities in Port Talbot and to support upskilling and training amongst the local population, particularly for more vulnerable groups who have or could be excluded from finding meaningful employment in the past.
- 2.23 The next steps of this process will be to outline short-, medium- and long-term actions for LanzaTech to consider and undertake as the planning application progresses. This will include engagement with local stakeholders, including local education providers and the Neath Port Talbot Borough Council's Economic Development team, and updating the needs analysis. It will also include a plan for reporting and monitoring the delivery of such commitments and the responsible persons for overseeing them.
- 2.24 This would also inform the Labour Recruitment Strategy, which LanzaTech are likely to be required to submit to the Council for approval at least three months prior to the

commencement of the development⁴. Such a strategy would include ‘measures aimed at facilitating best available access for local people’ for employment opportunities arising in the construction and operation phase of the Proposed Development and identifying how ‘benefits to Wales and to local communities through targeted recruitment and training, and supply chain initiatives’ can be delivered’.

⁴ This was included as a condition for planning approval for the Global Centre of Rail Excellence at Neath Port Talbot (P2021/0327) and Afan Valley Adventure Resort (P2018/0493).

3. Operational Phase Social Value Opportunities

Given the operational phase of the Proposed Development is not likely to begin until late 2026 at the earliest, it is likely that new needs and opportunities will arise before then. Consequently, the below table gives an approximate idea of the type of activities LanzaTech may become involved in to support their local and wider community.

A full Social Value Strategy will be developed closer to the time of operation. This will be grounded in engagement with local stakeholders, for example with local education providers and the economic development team at the Council, and an up-to-date needs analysis to ensure LanzaTech are having a strong social impact where it is most needed and where it is most appropriate to intervene.

Skills and Industrial Focused:

Through consultation with the Colleges, LanzaTech could offer apprenticeship and placement opportunities should they be appropriate for the skills required for Project Dragon. A more informal approach could be considered with LanzaTech staff visiting as guest lecturers, the site being used for site safety talks or by sponsoring capital equipment. Tata Steel, a large employer in the area, have been known to use the University of South Wales and Swansea University, alongside Bridgend College for their apprenticeships. However, they continually engage with education providers while courses change to ensure their apprentices are attending those most suitable for their skill needs.

A selection of potentially relevant courses at local educational institutions are presented below:

Neath Port Talbot College Group offer courses in:

- Diplomas in Engineering, Maintenance Engineering, Mechanical Engineering, General Engineering, Performing Engineering
- Engineering HNC

Bridgend College offer courses in:

- Level 2 and Level 3 *Certificate in Fabrication and Welding Practice* courses
- Evening courses to teach a basic understanding of CNC Machining
- Level 2 and 3 diplomas in Electrical Installation
- Diplomas and HNCs in Electrical and Mechanical Engineering Technologies
- Subsidiary Diplomas in Electrical and Mechanical Engineering Technologies which involve 25 days work placement

University of Wales Trinity Saint David offer courses in:

- Advanced Manufacturing Operations Part-Time (BEng, HNC) which has been developed alongside employers for key manufacturing requirements and is part of the degree apprenticeship framework commissioned by the Welsh Government
- Mechanical Engineering (BEng, Foundation Entry) has a year in industry option which also look for internship opportunities.

- Skills for Engineering (CertHE) designed to give a ‘range of skills sought by employers when considering applications to Higher and Degree Apprenticeships’: “The programme team will work with students and industrial partners to provide opportunities for students to gain work experience within a real industrial environment or within the university”
- STEM (CertHE) as an alternative route to ‘an alternative route to our Computing, Environmental and Electronics degree programmes’ and welcomes ‘Guest lectures from lecturers and industry professionals across a wide range of applications and sectors’.

Swansea University’s Bay Campus, which opened in 2015, is situated within Neath Port Talbot and have worked with Tata Steel to develop the ‘UKs first regional centre of excellence for steel innovation creating a high-tech research cluster that links the local supply chain in new research projects, commercial opportunities, funded projects, training and further cooperation and collaborations’⁵.

Swansea University offers a wide range of undergraduate and postgraduate courses including, but not limited to, subjects such as: mechanical engineering, materials science and engineering and chemical engineering.

Recommendation	Detail
Offering apprenticeship and graduate opportunities for local residents in Port Talbot	LanzaTech could provide placement or apprenticeship opportunities through to sponsoring students from disadvantaged backgrounds through their course. The financial commitment would range from the basic costs associated with hosting a placement student to taking on an apprentice. (National Minimum Wage of £5.28p/hr x 40hr x 52 weeks = £10,982). LanzaTech could also consider sponsoring someone considered NEET (Not in Education, Employment or Training) through a skills course. The cost would either be a proportion of, or equal to, the course fee.

⁵ Swansea University (Date Unknown) Tata Steel: Working in Partnership [Available at: <https://www.swansea.ac.uk/business-and-industry/business-partnerships/tata-steel/>]

Port Talbot's Opportunity Hub

Opportunity Hub, based in Aberafan Shopping Centre, opened in January 2023 with the aim of 'providing a venue in the community that could help and support unemployed or economically inactive people towards finding employment'. The Hub is there 'to offer help to all residents aged over 16, as well as providing them with additional training days, jobs fairs, citizens advice, and an additional warm hub facility during winter months'⁶. Currently supported by central Government at a value of around £29,517 per annum which has recently been renewed for another year.

Supporting the local emergency services

A best practice Social Value intervention we have observed in the past is supplying end of life materials or facilities to the emergency services, particularly the Fire & Rescue service, to enable them to simulate scenarios and workshop training sessions. LanzaTech could consider whether any of their equipment may be appropriate for this (Would be a commitment for the medium and long-term).

JES Group

JES' aspires to establish a 'Skills Academy' to *'assist with the development of Fabrication & Welding skills that align with industry needs and the opportunities presented by Net Zero, the Circular Economy and the Celtic Freeport'*. The Academy plans to use the latest immersive digital technologies to work alongside first class, face-2-face tuition from expert trainers to harness the large repository of skills accumulated by the existing JES workforce. LanzaTech have already been in discussion with JES about providing capital equipment.

⁶ Wales Online (2023) A hub helping people in Port Talbot back to work is to continue for another year [Available at: <https://www.walesonline.co.uk/news/wales-news/hub-helping-people-port-talbot-27413437>]

Working with the Neath Port Talbot Communities for Work Plus project	The Communities for Work Plus (CfW+) project is a Welsh Government funded project run by the Council. The project aims to help those aged 16+, living in NPT who are either unemployed or working low hours/part time/on zero-hour contracts/experiencing in-work poverty. Their Employer Liaison Officers seek to develop positive relationships with employers across Neath Port Talbot. LanzaTech could offer to host a workshop or identify some positions within their own workforce where they could draw from the pool of labour which CfW+ are involved with.
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Community Focused

These opportunities would provide good visibility for LanzaTech within their local community and act as steps on their path to being seen as a good neighbour in the area.

Recommendation	Detail
Supporting Port Talbot Disability Football Club	In 2022, Port Talbot Disability Football Club organised a fundraiser in the aim of becoming the number one disability football provider in South Wales⁷. They wanted to work with new and established clubs in South Wales to set up the region's first disability football league. Their fundraiser raised £5,130 of their £10,000 target with the £5,000 of this coming from the actor Michael Sheen. This is a locally important issue. At the 2021 census, NPT had the highest rate in England and Wales of people providing at least 20 hours of unpaid care a week.
Keep Wales Tidy Charity	An environmental protection charity working across Wales who work with Welsh Government, public bodies, partner organisations, community groups and a huge network of volunteers. Local and corporate business is a key part of their funding, which can be monetary and staff time. Such a partnership would also strengthen LanzaTech's sustainability credentials.
Crucial Crew	Crucial Crew, an annual event organised by Neath Port Talbot Council's Community Safety Team hosted 50 primary schools

⁷ GoFundMe (2022) Port Talbot Disability Football Club [Available at: <https://www.gofundme.com/f/port-talbot-disabled-football-club>]

	over a two-year period in Taibach⁸. Involved organisations included: South Wales Police, Mid and West Wales Fire Service, National Grid, RNLI, Food Standards Agency, Network Rail, Calan DVS, Thrive Women's Aid, Stori, Dogs Trust, NPT Road Safety. This year's event was sponsored by Tata Steel. Considering importance of the Project site to the local area, LanzaTech may be a good firm to represent and educate health & safety at Port Talbot or could decide to sponsor the event.
Ysgol Maes y Coed	Ysgol Maes y Coed is an enhanced resource school in Neath. The school caters for young people with a variety of complex learning difficulties from the ages of 2 to 19 years of age. This school is a good one for LanzaTech to engage and explore opportunities to provide support.

⁸ NPT (2023) Young people get important safety advice with Crucial Crew [Available at: https://www.npt.gov.uk/1410?pr_id=7249]

4. Construction Phase Social Value Recommendations

Recommendations that LanzaTech could incorporate into the tendering process for the construction contractor are outlined below. It should be noted that the Council and Government published guidance is aimed at local authorities, and LanzaTech would not necessarily be bounded by the same requirements.

As stated previously in the document, it is likely that LanzaTech will be required to produce a Labour Recruitment Strategy prior to the commencement of development that will be expected to include measures such as those outlined below.

Recommendation	Detail
Apprenticeships and training opportunities	Neath Port Talbot Council's Community Benefits Information Sheet states that a minimum benchmark of 52 weeks Targeted Recruitment and Training per £1million spent in contract sum is set up at framework level. This can include apprenticeships, work experience and employment of disadvantaged groups ⁹ . The Social Value Strategy details local education institutions that could be engaged to achieve this.
Supply Chain Opportunities	Promoting open and accessible supply chains is fundamental to the social value approach in Wales ¹⁰ . This primarily involves ensuring that Welsh based businesses, particularly SMEs, are well prepared to bid for work. On top of ensuring prompt payment to sub-contractors and suppliers, contractors can take steps to ensure opportunities are visible to local suppliers and sub-contractors through Meet the Buyer or Meet the Contractor events or posting a notice on Sell2wales.gov.uk ¹¹ .
Employment opportunities for local people	Best endeavours should be made to ensure as many employment opportunities as possible are offered to Neath Port Talbot or South Wales residents.
Volunteering	The contractor should commit to donating a minimum of 20 hours of voluntary time over the duration of the build period (one person's working day for every year of construction) and work with the local authority to identify potential organisations where this time can make a valuable impact (E.g. a presentation on site health and safety at local schools).

⁹ Neath Port Talbot Council (2020) Community Benefits Information Sheet [Version 01/2020]

¹⁰ Welsh Government (2020) WPPN 01/20 Social value clauses/community benefits through public procurement

¹¹ Welsh Government (2014) Community Benefits: Delivering Maximum Value for the Welsh Pound – 2014.

Opportunities for disadvantaged groups	Commit to using best endeavours to ensure that a minimum of 20-25 FTEs (2% of on-site employment) hired or retained who are long-term unemployed / NEET / 16-25 care leavers / rehabilitating ex-offenders / disabled. The contractor should work with the local authority on how they can best engage or interact with current programmes (such as the Neath Port Talbot Council for Voluntary Service) to assist these groups.
Connections with local education providers	The contractor should look to collaborate with the local post-16 education providers identified in the Social Value Strategy to establish appropriate opportunities to contribute to career events.

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