



## Supporting Innovation and Low Carbon Growth

### Business case summary

Project Information	
<b>Project Title</b>	Supporting Innovation and Low Carbon Growth
<b>Project Authority Lead</b>	Neath Port Talbot Council
<b>Project Delivery Lead</b>	Neath Port Talbot Council
<b>Total project cost</b>	Total = £58,700,000 City Deal = £47,700,000 Public Sector = £6,000,000 Private Sector = £5,000,000
<b>Date Submitted to ESB</b>	26 <sup>th</sup> November, 2019

Project description
<p>The Supporting Innovation and Low Carbon Growth programme has been developed to deliver a coordinated delivery of sustainable growth and job creation in the region with a targeted focus on the Port Talbot Harbourside area.</p> <p>The Programme aims to create the right environment for innovation, new technologies and a decarbonised local and region economy.</p> <p>The Programme has been developed around four interlinked themes:</p> <ul style="list-style-type: none"> <li>• <b>Swansea Bay Technology Centre</b> – An energy positive building on Baglan Energy Park providing flexible office space for start-up companies and indigenous businesses, with a focus on the innovation, ICT and R&amp;D sectors. The excess energy from solar and other renewable technologies will be converted into hydrogen at the nearby Hydrogen Centre to be used to fuel hydrogen vehicles.</li> <li>• <b>National Steel Innovation Centre</b> that aims to support the steel and metals industry in Port Talbot and Wales – with the aim of reducing the carbon footprint of the steel and metals industry, and increasing the sustainability of the industry, linking in to the Circular Economy.</li> <li>• <b>Decarbonisation</b> – To assist with the delivery of decarbonising the City Region, a number of core projects will be undertaken in collaboration with a number of public, private and academic partners including the FLEXIS research operation. These projects include a hard-wired electrical link between the Swansea Bay Technology Centre and the nearby Hydrogen Centre, as well as an electrical charging infrastructure route map. Encouraging</li> </ul>

the uptake of electric vehicles, this includes the development and implementation of an electric vehicle charging network that meets the demands of residents, businesses and visitors. New charging stations will contribute to solving Wales' lag in electrical vehicle charging infrastructure and coverage compared to the rest of the UK. Air quality modelling and real-time monitoring will also be introduced to enable better informed air quality decisions in future. This project will include data analytics to identify correlation with pollution sources, evaluation of intervention measures, and area wide, real-time data with significantly more geographic detail than is currently available.

- **Industrial Futures** – This will address the gap between demand and supply for businesses and available land in the Port Talbot Waterfront Enterprise Zone, with a hybrid building providing production units as well as office space to support start-ups and indigenous businesses - especially those in the innovation and manufacturing sectors. There will also be laboratory space supported by Industry Wales for spin-outs to monetise research and development projects, as well as land remediation, flood defence work, construction of access roads and upgrading of highways. A Property Development Fund will also be made available to support the viability of private sector schemes to develop buildings in the Enterprise Zone.

The portfolio of projects meets the requirements of recommendations arising from reviews into the City Deal, while also representing a first stage response to the climate change emergency declared by the Welsh Government in April, 2019.

The programme will develop over 18,000 square metres of business space, primarily to meet evidenced demand from small to medium sized businesses, while providing the technological platforms essential for them to grow.

Reference information			
<b>Targeted Number of Jobs Created as set out in at Heads of Terms:</b>	Swansea Bay Technology Centre – 56 jobs over 5 years  National Steel Innovation Centre – 135 jobs over 5 years  Decarbonisation – 40 jobs over 5 years  Industrial Futures - 215	<b>Total GVA contribution as set out in the Heads of Terms:</b>	Steel Science Centre - £95 million over 15 years
<b>Number of Jobs Created as set out in the current version Business Case:</b>	Creation/safeguarding of 446 (new high value added jobs)	<b>Total GVA contribution as set out in the current version business case</b>	£6.2 million a year once all projects are fully operational  £93 million over 15 years
<b>Number of skills / training opportunities created:</b>	TBC, although NPT Council will work with appointed contractors and their supply chains	<b>No of enterprises / businesses engaged:</b>	TBC, although the vast majority will be start-up companies and indigenous

	to deliver targeted outputs.		businesses – especially in the innovation and manufacturing sectors
<b>NPV (15 year)</b>	£145,000,000		
<b>Build start date:</b>	Qtr2 2020	<b>Build end date:</b>	Qtr3 2022

<b>Alignment with the strategic aims and objectives of the Swansea Bay City Deal</b>		
<b>Aim</b>	<b>✓ / x</b>	<b>How</b>
Reduce gap in GVA performance between the Region and the UK through improving regional productivity	✓	Analysis estimates an annual GVA impact of £6.2 million once all projects are fully operational. It's also estimated that the programme will deliver a positive, cumulative NPV of £145 million over 15 years.
Create circa 10,000 high value / high skilled jobs	✓	1,320 jobs (including construction) will be safeguarded/created, with at least 30% of these to be new. Jobs will be created in the advanced manufacturing, energy, engineering and technology sectors.
Establish and maintain an effective and aligned skills base	✓	All projects will work with the Regional Learning and Skills partnership to ensure there is an appropriate skills base to take advantage of the investment.
Create, prove and commercialise new technologies and ideas	✓	The overall project will develop over 18,000 square metres of business space. This will include flexible office space for start-up companies and indigenous businesses to commercialise their ideas and technologies. There will also be laboratory space supported by Industry Wales for spin-outs to monetise research and development projects. The National Steel Innovation Centre will also facilitate the commercialisation of steel science research and development.
Build capacity and drive forward further and greater inward investment	✓	Employment sites and premises will be developed to house growing indigenous businesses and attract investment, helping meet gaps in business property supply through a demand-led approach with sufficient capacity. A distinctive programme of decarbonisation for manufacturing will also be developed, helping attract investment, along with a property development fund to stimulate private sector investment. The marketability of the Enterprise Zone for further investment will also be enhanced.

<p>Create a sustainable regional economy that contributes meaningfully to the economy of Wales and the UK</p>	<p>✓</p>	<p>The project will inject momentum into the delivery of sustainable growth and job creation in Neath Port Talbot and the wider City Region.</p> <p>A sustainable regional economy will be created via decarbonisation to establish cleaner processes for industry and cleaner air for communities.</p> <p>Decarbonisation interventions will also promote sustainable travel, buildings and economic growth, while creating a more diversified economy. This will contribute to Wales and UK-wide climate change targets.</p> <p>The project will also invest in 21<sup>st</sup> century employment facilities to create sustainable jobs in identified sectors, with innovative steelmaking research and development due to benefit the steel industry in Neath Port Talbot, the City Region and far beyond for many years to come.</p>
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<p><b>Alignment with other Swansea Bay City Deal and other Regional / National Projects</b></p>	
<p>Digital Infrastructure Project</p>	<p>Next generation digital infrastructure, as well as the potential for early in-region access to 5G, will boost business productivity in the new employment spaces being developed, helping attract further investment.</p> <p>It will also accelerate work to decarbonise the economy, while facilitating advanced research and development to safeguard the future of the steel industry.</p>
<p>Skills &amp; Talent Initiative</p>	<p>All projects forming part of the programme will work with the Regional Learning and Skills Partnership to ensure there is an appropriate skills base to take advantage of this investment.</p>
<p>Other City Deal Project(s) <i>please specify</i></p>	<p>This Programme is also aligned to the four 'internet' themes within the City Deal programme:</p> <ul style="list-style-type: none"> <li>• The Internet of Economic Acceleration: next generation digital infrastructure</li> <li>• The Internet of Life Science and Well-being: expanding research and innovation</li> <li>• The Internet of Energy: energy innovation and sustainable housing</li> <li>• Smart manufacturing</li> </ul> <p>The energy efficient buildings and decarbonisation elements of the programme also align to the regional Homes as Power Stations project, as well as the Pembroke Dock Marine project aimed at boosting South West Wales' blue economy</p>
<p>Other significant regional project(s) <i>please specify</i></p>	<p>The Supporting Innovation and Low Carbon Growth programme and the Active Building Centre at Swansea University are aligned in a number of ways, and will continue to work together to accelerate market adoption of energy positive and net zero buildings.</p> <p>Port Talbot is a demonstration zone identified in the Flexis (Flexible Integrated Energy Systems) research operation programme</p>

	<p>The University of South Wales Hydrogen R&amp;D Centre in Baglan Energy Park is a partner in the hydrogen stimulus project</p> <p>The SPECIFIC Innovation and Knowledge Centre at Swansea University</p> <p>The Steel and Metals Institute (SaMI) at Swansea University</p> <p>The Port Talbot Waterfront Enterprise Zone – a strategic plan (2018-2021) was endorsed by the Enterprise Zone Board and Neath Port Talbot Council's Cabinet in October and November 2018 respectively. The vision is to create a diversified and resilient economy, while building on local strengths in steel, energy and manufacturing.</p>
Other significant national project(s) please specify	<p>Neath Port Talbot benefits from European funding as it is part of the West Wales and the Valleys programme area. European funding helps support people into work and training, youth employment, research and innovation, business (SMEs) competitiveness, renewable energy and energy efficiency, and connectivity and urban development.</p> <p>The Supporting Innovation and Low Carbon Growth also meets the requirements of the UK Government's Industrial Strategy, the BEIS Energy Innovation Programme and the Climate Change Act.</p>

Key Milestones, monitoring and evaluation	
Key milestones	<p><b>Swansea Bay Technology Centre</b></p> <ul style="list-style-type: none"> <li>• Two-stage design and build contract award - Qtr3 2019</li> <li>• Pre-Application Consultation (PAC) - Qtr1 2020</li> <li>• Technical design - Qtr2 2020</li> <li>• Full planning consent - Qtr2 2020</li> <li>• Construction start - Qtr2 2020</li> <li>• Construction complete - Qtr3 2021</li> </ul> <p><b>National Steel Innovation Centre</b></p> <ul style="list-style-type: none"> <li>• Site confirmation - Qtr4 2019</li> <li>• Tender period two stage-procurement (Design and build) - Qtr1 2020</li> <li>• Pre-Application Consultation (PAC) - Qtr4 2020</li> <li>• Full planning consent - Qtr1 2021</li> <li>• Start construction - Qtr2 2021</li> <li>• Construction complete - Qtr3 2022</li> </ul> <p><b>Decarbonisation</b></p> <ul style="list-style-type: none"> <li>• Purchase and install air quality monitors - Qtr4 2019</li> <li>• Monitor air quality via data analytics - Qtr1 2020</li> </ul>

	<ul style="list-style-type: none"> <li>• Start work with key partners on evidence-based electric vehicle charging strategy - Qtr1 2020</li> <li>• Mobilisation of electric link between Swansea Bay Technology Centre and Hydrogen Centre - Qtr3 2021</li> <li>• Development of commercial strategy - Qtr1 2022</li> </ul> <p><b>Industrial futures</b></p> <ul style="list-style-type: none"> <li>• Start of two-stage design and procurement process for production facility - Qtr1 2020</li> <li>• Start of two-stage design and procurement process for R&amp;D innovation and growth facility - Qtr1 2020</li> <li>• Opening of three-year Property Development Fund scheme - Qtr2 2020</li> <li>• Completion of production facility construction - Qtr4 2021</li> <li>• Completion of R&amp;D innovation and growth facility construction - Qtr4 2021</li> </ul>
SMART/Investment Objectives	<ol style="list-style-type: none"> <li>1- To create a 2,500 square metre, three-storey Swansea Bay Technology Centre in response to well-evidenced demand for high-quality, flexible business premises.</li> <li>2- To establish a National Steel Innovation Centre of about 6,000 square metres that will provide access to world class facilities for the development of innovative steel products and processes. This will allow for the commercialisation of research and development, while supporting the transition to reduce carbon emissions in the steel and metals industry. This will help safeguard 3,000 jobs in the Welsh steelmaking sector.</li> <li>3- To help decarbonise the local and regional economy through the introduction of electric vehicle infrastructure, the production of zero carbon fuel for council vehicles, and the use of state-of-the-art modelling and monitoring to inform air quality interventions.</li> <li>4- The creation of over 10,000 square metres of flexible office spaces, laboratory spaces and production units to support start-up companies and indigenous companies at the Port Talbot Waterfront Enterprise Zone.</li> </ol>

<b>Wider Impacts</b>	
Influencing curriculum	All projects forming part of the programme will work with the Regional Learning and Skills Partnership to ensure there is an appropriate skills base to take advantage of this investment.
Environmental impacts	The decarbonisation theme of the programme will lead to environmental improvements through:

	<ul style="list-style-type: none"> <li>- Energy efficient buildings, including the Swansea Bay Technology Centre</li> <li>- Cleaner air, thanks to air quality modelling and real time monitoring that will inform positive air quality interventions</li> <li>- Encouragement of further electric vehicle uptake due to investment in charging infrastructure</li> <li>- Research and development being anchored into future steel-making across the region to further reduce carbon emissions</li> <li>- The production of zero carbon fuel for use by council vehicles</li> </ul>
Alignment with WCFG Act	<p>The programme will meet the requirements of the WCFG Act by helping create:</p> <ul style="list-style-type: none"> <li>• <b>A prosperous Wales</b> through the provision of new employment and efficient use of resources via building design and the re-use of brownfield land</li> <li>• <b>A resilient Wales</b> via new business premises, with the necessary technological infrastructure to promote diversification and reduce overreliance on traditional industries and public sector employment</li> <li>• <b>A healthier Wales</b>, with long-standing evidence demonstrating the positive impact of employment on health and well-being</li> <li>• <b>A more equal Wales</b>, thanks to the programme including opportunities accessible to all to reduce societal inequalities</li> <li>• <b>Cohesive Communities</b> through sustainable, viable employment</li> <li>• <b>A Vibrant Culture and thriving Welsh Language</b>, with increased employment opportunities supporting the language in the medium and longer term</li> <li>• <b>A Globally Responsible Wales</b>, thanks to the design and delivery of buildings in line with required sustainable development principles</li> </ul>
Other <i>Please specify</i>	The programme will help the UK and Welsh Governments with their carbon reduction targets, while meeting the requirements of the BEIS Energy Innovation Programme.

<b>Procurement</b>	
<p>Construction works will be procured through the South West Wales Regional Construction Framework, with engineering works procured via the South West Wales Civil Engineering Framework.</p> <p>Requirements for project evaluations will be procured through Sell2Wales or appropriate frameworks.</p> <p>The Council will work with appointed contractors and their supply chains to deliver targeted outputs. These include:</p> <ul style="list-style-type: none"> <li>• training and the recruitment of the economically inactive by offering apprenticeships</li> <li>• traineeships or work experience opportunities</li> <li>• maximising opportunities for SMEs to bid for sub-contract opportunities</li> </ul> <p>There are also collaborative arrangements to coordinate the delivery of community benefits, including employability initiatives like Workways+ and Communities for Work.</p>	

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<b>Financial Profile</b>	
Breakdown of public sector funding sources and timing	<ul style="list-style-type: none"> <li>• City Deal = £47.7 million</li> <li>• Neath Port Talbot Council – £3.7 million</li> <li>• WEFO/WG grant - £4 million</li> </ul>
Breakdown of private sector funding sources and timing	<ul style="list-style-type: none"> <li>• £5m minimum contribution from Property Development Fund</li> <li>• Rental income from Swansea Bay Technology Centre, Production Unit, National Steel Innovation Centre</li> </ul>

<b>Sustainability</b>
<p>Private sector investment will be levered into the programme, helping to promote its sustainability beyond the 15-year programme. The Industrial Futures and Swansea Bay Technology Centre aspects of the portfolio will also lead to a clustering of sector specific businesses, which will attract further inward investment and jobs. This will create a legacy of economic buoyancy for many years, with NNDR income helping to create improved services and more vibrant communities.</p> <p>The programme's decarbonisation theme will lead to Neath Port Talbot and the City Region becoming an exemplar in the use of renewable energy and technologies, helping develop a greener economy for decades to come.</p>