Neath Port Talbot
Castell-nedd Port Talbot
County Borough Council Cyngor Bwrdeistref Sirol

AGENDA

REGENERATION AND SUSTAINABLE DEVELOPMENT CABINET BOARD

IMMEDIATELY FOLLOWING REGENERATION AND SUSTAINABLE DEVELOPMENT SCRUTINY COMMITTEE
FRIDAY, 25 FEBRUARY 2022

REMOTELY VIA TEAMS

ALL MOBILE TELEPHONES TO BE SWITCHED TO SILENT FOR THE DURATION OF THE MEETING

PART 1

1. Appointment of Chairperson
2. Welcome and Roll Call
3. Chair's Announcements
4. Declarations of Interest
5. Minutes of Previous Meeting *(Pages 3 - 6)*
6. Forward Work Programme 2021/22
7. Economic Recovery Plans *(Pages 7 - 154)*
8. South West Wales Regional Energy Strategy *(Pages 155 - 240)*
9. Waterfall Country Park and Ride Evaluation *(Pages 241 - 264)*

10. Urgent Items
Any urgent items (whether public or exempt) at the discretion of the Chairman pursuant to Statutory Instrument 2001 No 2290 (as amended).

11. Access to Meetings
To resolve to exclude the public for the following items pursuant to Regulation 4(3) and (5) of Statutory Instrument 2001 No. 2290 and the relevant exempt paragraphs of Part 4 of Schedule 12A to the Local Government Act 1972.

PART 2

12. Waterfall Country Options Appraisal
(Exempt under Paragraph 14) *(Pages 265 - 320)*

13. Alltwen Rugby Football Club
(Exempt under Paragraph 14) *(Pages 321 - 334)*

14. Astroturf Pitch Adjoining Cymmer Afan Sports Hall
(Exempt under Paragraph 14) *(Pages 335 - 348)*

15. Burrows Yard
(Exempt under Paragraph 14) *(Pages 349 - 358)*

16. The Metal Box, Neath
(Exempt under Paragraph 14) *(Pages 359 - 372)*

K.Jones
Chief Executive

Civic Centre
Port Talbot **18 February 2022**

Regeneration and Sustainable Development Cabinet Board Members:

Councillors. L.Jones and A.Wingrave

EXECUTIVE DECISION RECORD

REGENERATION AND SUSTAINABLE DEVELOPMENT CABINET BOARD

14 JANUARY 2022

Cabinet Members:

Councillors: L.Jones and A.Wingrave (Chairperson)

Invitees: Councillors S.K.Hunt and R.L.Taylor (Scrutiny Chair and Vice Chair)

Officers in Attendance:

S.Brennan, T.Davies, C.Jones and C.Plowman and T.Davies

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1. **APPOINTMENT OF CHAIRPERSON**

Agreed that Councillor A.Wingrave be appointed Chairperson for the meeting.

2. **WELCOME AND ROLL CALL**

Councillor A.Wingrave welcomed all to the meeting and a roll call was completed.

3. **CHAIR'S ANNOUNCEMENTS**

There were none.

4. **DECLARATIONS OF INTEREST**

No Declarations of Interest were received.

5. **MINUTES OF PREVIOUS MEETING**

That the minutes of the meeting held on 3 December 2021 be approved.

6. **FORWARD WORK PROGRAMME 2021/22**

Decision:

That the Forward Work Programme 2021/22, be noted.

7. **TOURISM UPDATE REPORT 2022**

Members noted and referred to the updated version of the Tourism report, which had been circulated prior to the meeting.

Decision:

That the report be noted.

8. **WESTERN BAY AREA PLANNING BOARD - GOVERNANCE FRAMEWORK AND FINANCIAL GOVERNANCE, AND RISK SHARING AGREEMENT**

Officers explained that pages 32, 33 and 34 of the report bundle had been included in error.

Decisions:

1. That the Western Bay Area Planning Board's Governance framework be endorsed.

2. That approval be given to enter into a Financial Governance and Risk Sharing agreement with the responsible authorities to the Area Planning Board.

Reason for Decisions:

To enable the Council, in its role as Banker to commission, decommission, or recommission services on behalf of the APB, and to do so within an arrangement that shares the risk across all the

responsible authorities and to enable the Council to regularise existing inherited service arrangements in the form of legally binding contracts.

Implementation of Decisions:

The decisions will be implemented after the three day call in period, which ends at 9.00am on Tuesday, 18 January 2022. There were no call ins of this item.

9. **BRYN PUBLIC TOILETS**

Decision:

Having had due regard to the first stage Integrated Impact Assessment, the Head of Property and Regeneration be given delegated authority to proceed with the demolition of the former public convenience block, at Bryn Community Centre, Maesteg Road, Bryn, Port Talbot.

Reason for Decision:

To enable the demolition of surplus property which would relieve the Council of any future financial or maintenance obligations.

Implementation of Decision:

The decision will be implemented after the three day call in period, which ends at 9.00am, on Tuesday 18 January 2022. There were no call ins of this item.

Consultation:

The local ward members are supportive of the proposals.

10. **URGENT ITEMS**

None were received.

11. **ACCESS TO MEETINGS**

RESOLVED: That pursuant to Regulation 4(3) and (5) of Statutory Instrument 2001 No. 2290, the public be excluded for the following item of business which involved the likely disclosure of exempt information as defined in Paragraph 14 of Part 4 of Schedule 12A to the Local Government Act 1972.

12. **DISPOSAL OF LAND**

Decisions:

1. That having had due regard to the Integrated Impact Screening Assessment, the Head of Property and Regeneration be given delegated authority to dispose of land (detailed in the private, circulated report) to the highest bidder.

2. Should the highest bidder be unable to proceed with the purchase of the land, then the Head of Property and Regeneration be granted delegated authority to proceed with the disposal of the land, in chronological order, to either the second or third highest ranked bidder.

Reasons for Decisions:

To enable the disposal of a surplus development land and to attain a capital receipt.

Implementation of Decisions:

The decisions will be implemented after the three day call in period, which ends on Tuesday 18 January 2022, 9.00am. There were no call ins of this item.

Consultation:

The local ward member is supportive of the proposals.

CHAIRPERSON

NEATH PORT TALBOT COUNTY BOROUGH COUNCIL

Regeneration and Sustainable Development Cabinet Board

Report of the Head of Property & Regeneration
Simon Brennan

25 February 2022

MATTER FOR DECISION

WARD(S) AFFECTED: All

Report title: Economic Recovery Plans

Purpose of Report

To seek approval of the South West Wales Regional Economic Delivery Plan (REDP), the Welsh Government's Regional Economic Framework (REF), and the Council's own Economic Recovery Plan (ERP).

Executive Summary

To secure adoption of the 3 Economic Recovery Strategies outlined below.

Background

1. SOUTH WEST WALES REGIONAL ECONOMIC DELIVERY PLAN (REDP)

It has been eight years since the publication of the Swansea Bay City Region Economic Regeneration Strategy in 2013, and the economic and policy context has changed considerably at the Welsh and UK level since then, particularly in light of the UK's decision to leave the European Union and the impact of the covid-19 pandemic. In addition, the regional landscape is changing with the advent of the new Corporate Joint Committees, and the preparation of new Regional Economic Frameworks by Welsh Government that set out visions and high level priorities for each region in Wales.

To respond to changing circumstances, the four local authorities in South West Wales, in partnership with Welsh Government, commissioned SQW to produce a new Regional Economic Delivery Plan (REDP). This will replace the previous Swansea Bay City Region Economic Regeneration Strategy.

The REDP commission included:

- A thorough analysis of the evidence base on the region's economy, labour market and infrastructure to determine its strengths, weaknesses, opportunities and threats
- Interpretation of the strategic policy context at local, regional and national level
- Development of detailed strategic aims and objectives that respond to the economic opportunities for the region and complement the shared regional vision as articulated in the Regional Economic Framework
- Preparation of Regional Economic Delivery Plan that includes actions that need to be taken to achieve the vision and objectives

The REDP sets out an ambitious 'route map' for the development of the region's economy over the next ten years, identifying priorities for intervention and setting out how business, government, education, voluntary/ community organisations, social enterprises and other partners can work together to bring them forward.

The Regional Economic Delivery Plan is attached as Appendix A

2. THE WELSH GOVERNMENT'S REGIONAL ECONOMIC FRAMEWORK

The REDP outlined above complements, and provides a further layer of detail, below the new Welsh Government Regional Economic Framework (REF)

- The REF outlines the basis for a regional approach to economic development across Wales, recognising the distinctive opportunities of all the regions and seeks to build upon key assets to deliver a stronger, fairer and greener economy. It supports the Welsh Government's commitment to a more regionally focussed model of economic development, by developing the distinctive strengths of the

region, supporting inclusive and sustainable economic growth and maximising opportunities to address regional and local inequalities, contributing to the Well-being Goals for Wales.

- The REF is intended as a vehicle to help promote collaborative regional planning and delivery amongst public, private and third sector partners, working to a shared vision and a set of common economic development objectives.

- The REF is not intended to duplicate the plans that already exist, but draw together the key elements to address regional inequalities and will aim to directly influence how Welsh Government and its partners deliver in regions and places.

The REF is attached as Appendix 2.

3. THE NEATH PORT TALBOT ECONOMIC RECOVERY PLAN

Whilst the REDP and REF provide useful over-arching strategies, in view of the unique and unprecedented economic circumstances that have arisen due to the vote to leave the European Union Agreement, coupled the global covid-19 pandemic, the Council took the decision to undertake further research and guidance into the Borough's own economic circumstances.

For continuity, we therefore commissioned the consultants SQW, who had delivered the REDP to produce a similar piece of work. However, this time with the focus specifically on the economic position of the Borough of Neath Port Talbot Borough, and in collaboration with the Council's Economic Development team, to produce an Economic Recovery Plan (ERP).

Following several meetings, it was concluded that this piece of work ought to consider six key considerations that would be important in developing the Recovery Plan at County Borough level:

1. The **specific identity of the local context.** There are always some aspects of the economy, such as key employers, major sites, pipeline investments, educational institutions, etc. that may

not be fully highlighted at a regional level, but are very significant locally. In the case of Neath Port Talbot, this is perhaps especially true, as **the County Borough has a highly distinctive local economy**, especially related to the steel industry and the scale of the wider manufacturing sector. This is matched with distinctive challenges, as well as opportunities, and understanding these, and the unique make-up of the local economy and its potential, will be key to a successful Recovery Plan.

2. **Stakeholder views and aspirations. T**he Recovery Plan will be 'owned' by Neath Port Talbot CBC. But successful delivery will depend on its relevance to a range of economic partners and stakeholders, including businesses and business groups and skills providers. It was important that these were engaged in the Plan's development, and were able to influence it.

3. **Links beyond Neath Port Talbot.** The regional strategy for South West Wales is obviously highly relevant, and connections with Swansea and its institutions are very important. But Neath Port Talbot also has close links with the concentrations of manufacturing in Bridgend and Rhondda Cynon Taf for example, and is also within easy reach of Cardiff and points east along the M4. Economically and historically, the County Borough has much in common with other Valleys authorities connected by the ever improving A465 'Heads of the Valleys' road. The Plan would need to recognise these 'cross-regional' links and the opportunities that can arise from them.

4. **The balance between strategy over the medium term and practical action.** It was anticipated that the Recovery Plan ought to extend **beyond the 'return to normality' after Covid**, and should set out a strategy looking perhaps 5-10 years ahead that the Council and its partners could work towards. We also wanted the Plan to identify specific actions that could be progressed in the shorter term.

5. **Reflecting more broadly on the exciting and timely opportunity that this proposed Economic Recovery Plan would offer.** It was recognised that we needed to produce a well thought through and clearly articulated Neath Port Talbot growth narrative that impacts locally, but is very much outward-facing and, is likely to pay the highest dividends for the area. Additionally, a

confident and assertive partnership-led approach would be needed to unlock our full economic potential.

6. **Developing actions:** With the strategic priorities providing a guiding framework, our next task will be to work with key partners to develop a widely supported Action Plan that can be practically taken forward. To this end, the Economic Development Team are already developing an Action Plan which is a working document.

The ERP is attached as Appendix 3 and the Action Plan as Appendix 4.

Financial Impact

There is no immediate financial impact on the Council however where there is a financial aspect regarding individual elements under these plans they will be subject to further reports to members with a detailed financial appraisal.

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Integrated Impact Assessment

A first stage impact assessment has been undertaken to assist the Council in discharging its legislative duties (under the Equality Act 2010, the Welsh Language Standards (No.1) Regulations 2015, the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016. The first stage assessment has indicated that a more in-depth assessment is not required.

Workforce Impact

Not applicable.

Valleys Communities Impact

The Economic Recovery and the future of our Valley Communities, is addressed within the document.

Legal Impact

There are no Legal impacts associated with this report.

Risk Management

There are no risk management issues associated with this report.

Consultation

There has been consultation throughout the production and delivery of the ERP with groups such as the NPT Economic Forum, which includes not only internal stakeholders, but external stakeholders as well, such as DWP, Neath Port Talbot College Group, CVS, Tai Tarian, Coastal Housing, NRW and the Federation of Small Businesses. In addition, the consultants, SQW interviewed 4 local businesses for their contribution to the document. These were TWI, Call of the Wild, British Rototherm and Swansea Valley Cottages.

Sustainability

The aim of these plans is to allow for a more prosperous and reactive local economy going forward.

Recommendations

Having had due regard to the first stage of the Integrated Impact Assessment, it is recommended that Members approve the adoption of the following documents:

1. South West Wales Regional Economic Delivery Plan
2. Welsh Government's Regional Economic Framework
3. Neath Port Talbot's Economic Recovery Plan

Reasons for Proposed Decision

These documents will form the basis of planning for the economic recovery from the pandemic and other influences, and provide a roadmap for the future prosperity and economic development of the Borough and the wider region, in line with the Council's Corporate Plan – Recover, Reset, Renew, Well Being Objective 4 *Jobs and Skills across the area are improved.*

Implementation of Decision

The decision will be implemented after a 3 day call in period.

Appendices

1. South West Wales Regional Economic Delivery Plan
2. Welsh Government's Regional Economic Framework
3. Neath Port Talbot's Economic Recovery Plan
4. Neath Port Talbot Action Plan

List of Background Papers

None.

Officer Contact

Andrew Collins – Regeneration & Economic Development Manager
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Impact Assessment - First Stage

1. Details of the initiative

Initiative description and summary: Proposed Adoption of the Regional Economic Delivery Plan, Regional Economic Framework and Local Economic Recovery Plan
Service Area: Property & Regeneration
Directorate: Environment

2. Does the initiative affect:

	Yes	No
Service users		**X**
Staff		**X**
Wider community	**X**	
Internal administrative process only		**X**

3. Does the initiative impact on people because of their:

	Yes	No	None/ Negligible	Don't Know	Impact H/M/L	Reasons for your decision (including evidence)/How might it impact?
Age		X				The adoption of these Plans will result in a positive impact for the whole community without discretion.
Disability		X				As above.
Gender Reassignment		X				As above.
Marriage/Civil Partnership		X				As above.
Pregnancy/Maternity		X				As above.
Race		X				As above.
Religion/Belief		X				As above.

Sex		X				As above.
Sexual orientation		X				As above.

4. Does the initiative impact on:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence used) / How might it impact?
People's opportunities to use the Welsh language		**X**				**Not Applicable**
Treating the Welsh language no less favourably than English		**X**				**As above.**

5. Does the initiative impact on biodiversity:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence) / How might it impact?
To maintain and enhance biodiversity		X				
To promote the resilience of ecosystems, i.e. supporting protection of the wider environment, such as air quality, flood alleviation, etc.		X				

6. Does the initiative embrace the sustainable development principle (5 ways of working):

	Yes	No	Details
Long term - how the initiative supports the long term well-being of people	X		The adoption of the plans will support the Council's Corporate Plan – Recover, Reset, Renew, Well Being Objective 4 *Jobs and skills across the area are improved.*
Integration - how the initiative impacts upon our wellbeing objectives	X		As above.
Involvement - how people have been involved in developing the initiative	X		As above
Collaboration - how we have worked with other services/organisations to find shared sustainable solutions	X		As above.
Prevention - how the initiative will prevent problems occurring or getting worse	X		As above.

7. Declaration - based on above assessment (tick as appropriate):

A full impact assessment (second stage) **is not** required	X
Reasons for this conclusion	
The adoption of the three Economic Recovery Plans will complement the Council's Corporate Plan, and will be fully inclusive to all members of society and the community resulting in positive impacts.	

A full impact assessment (second stage) **is** required	
Reasons for this conclusion	

	Name	Position	Date
Completed by	Andrew Collins	Regeneration & Economic Development Manager	3rd February 2022
Signed off by	Simon Brennan	Head of Property & Regeneration	3rd February 2022

September 2021

South West Wales Regional Economic Delivery Plan

SQW

Contents

Executive Summary

Background

1. South West Wales has a diverse economy and a unique set of natural and cultural assets, underpinned by the quality of its coastal and rural environment, industrial heritage and capacity and university presence. In 2014, partners in South West Wales jointly published an Economic Regeneration Strategy, setting the strategic groundwork for the Swansea Bay City Deal, a £1.3 billion investment package supported by the UK and Welsh Governments.

2. Seven years on, much has been achieved. However, there is more to be done to unlock the region's potential and to ensure that growth is resilient, sustainable and inclusive. In December 2020, the South West Wales local authorities, working closely with the Welsh Government, commissioned a new **Regional Economic Delivery Plan**. Looking ahead to the next ten years, this sets out an ambitious 'route map' for the development of the region's economy, identifying priorities for intervention and articulating how business, government, education, voluntary, community and social enterprise organisations and other partners should work together to bring them forward.

The economic and policy context

3. In the years leading up to the Covid-19 pandemic, the South West Wales economy performed strongly in generating new jobs: By 2019, there were some 322,000 jobs in the region, an impressive increase of 20,000 on the 2013 figure. However, there is still a large and persistent productivity gap with the rest of the UK.

4. Analysis of the region's economy highlights that:

- **The region's economic weaknesses are largely structural**, linked with long-term processes of industrial change (which in some respects are still ongoing), and are shared with other regions in Wales and the UK.
- **However, the region has a series of distinctive strengths and opportunities.** These are especially linked with the region's energy potential, university-industrial links, strong cultural identity, environmental assets and quality of life offer..
- **There is a 'window of opportunity' to build on and capture some of these,** especially in relation to the green energy and net zero opportunity, where the region has specific advantages, but where other parts of the UK (and beyond) also have ambitious plans and technology and the dynamics of investment are changing rapidly. **Having the capacity to exploit these opportunities will be important and the timing of this matters greatly**.
- **The region contains much diversity**, especially within the rural/ urban dimension. Despite diversity across the region, there is substantial commonality, and some of the big opportunities have a region-wide footprint. However, some of them extend beyond the

region itself, and 'out-of-region' links (for example, the South Wales Industrial Cluster and the links through to Cardiff Capital Region) will be of relevance.

- **'Transformational' growth opportunities need to be balanced with the conditions for incremental improvements in resilience, capacity and capability across the economy.** This was a key theme emerging from consultation as part of this Plan. There are distinctive opportunities at the 'leading edge' – but long-term employment resilience and wage growth will depend on the sustainability, productivity and expansion of the wider stock of regional SMEs.

5. The Plan has also been developed against the backdrop of a rapidly evolving policy context, as the region recovers from the Covid-19 pandemic and adjusts to a new trading and funding landscape following Brexit. However, looking to the next ten years, the climate emergency, the pace of (and adaption to) technology change and the need to ensure that the benefits are captured locally and are widely distributed will be central to economic strategy.

Our Ambitions and Missions for the next ten years

6. Over the next ten years, we will build on our distinctive strengths and opportunities summarised above to develop a more prosperous and resilient South West Wales economy.

7. To help plan for the future, we have identified three **Ambitions** (statements about the nature of the South West Wales economy that we want to work towards), supporting three complementary **Missions**:

Figure 1: Our strategic framework

Source: SQW 2021

8. Our three 'Missions' will guide future activity over the next ten years and beyond. They are designed to give a clear direction of travel, while remaining sufficiently broad to accommodate a wide range of potential investments that will come forward over time. The three high-level Missions are as follows:

- **Establishing South West Wales as a UK leader in renewable energy and the development of a net zero economy:** Taking forward the region's major energy related projects and driving the benefits through the region (via industrial decarbonisation, supply chain opportunities, university-linked innovation, etc.).
- **Building a strong, resilient and embedded business base:** Understanding and growing the business stock, supporting widespread social and commercial entrepreneurship, creating stronger supply chain and innovation networks, making public sector support sustainable; driving forward technology adoption and diffusion.
- **Growing and sustaining the 'experience' offer:** Linking environmental quality, quality of life and community character to create a region that retains and attracts talent and investment, and to promote this consistently and powerfully to the outside world.

Delivering the Plan

9. To translate our Missions into practical interventions, we have prepared a **project pipeline**. This sets out a schedule of interventions, describing how they contribute to our Ambitions and Missions, their current development status and the actions that need to be taken to bring them forward. This will be kept 'live': it will regularly be reviewed by regional partners and will evolve to embrace new investment proposals as they emerge.

10. Currently, the projects within the pipeline have a combined value of around £3 billion. While some are at an early stage of development, and costs will be determined through the business case process, this gives an indication of the scale of the opportunity ahead. Building on the success of the current Swansea Bay City Deal, we will pursue the creation of a further, flexible **Investment Fund** to co-invest alongside the private sector in projects that will deliver our Missions, where business cases are robust.

11. To oversee the strategic direction of the Plan, a new **South West Wales Corporate Joint Committee (CJC)** has been established, enabling the four local authorities to work closely together alongside the Welsh Government and to share resources. Building on our recent success, and alive to the immediacy of our current challenges and opportunities, the CJC will drive forward our Delivery Plan – building a South West Wales that is *"resilient and sustainable; enterprising and ambitious; and balanced and inclusive".*

1. Introduction

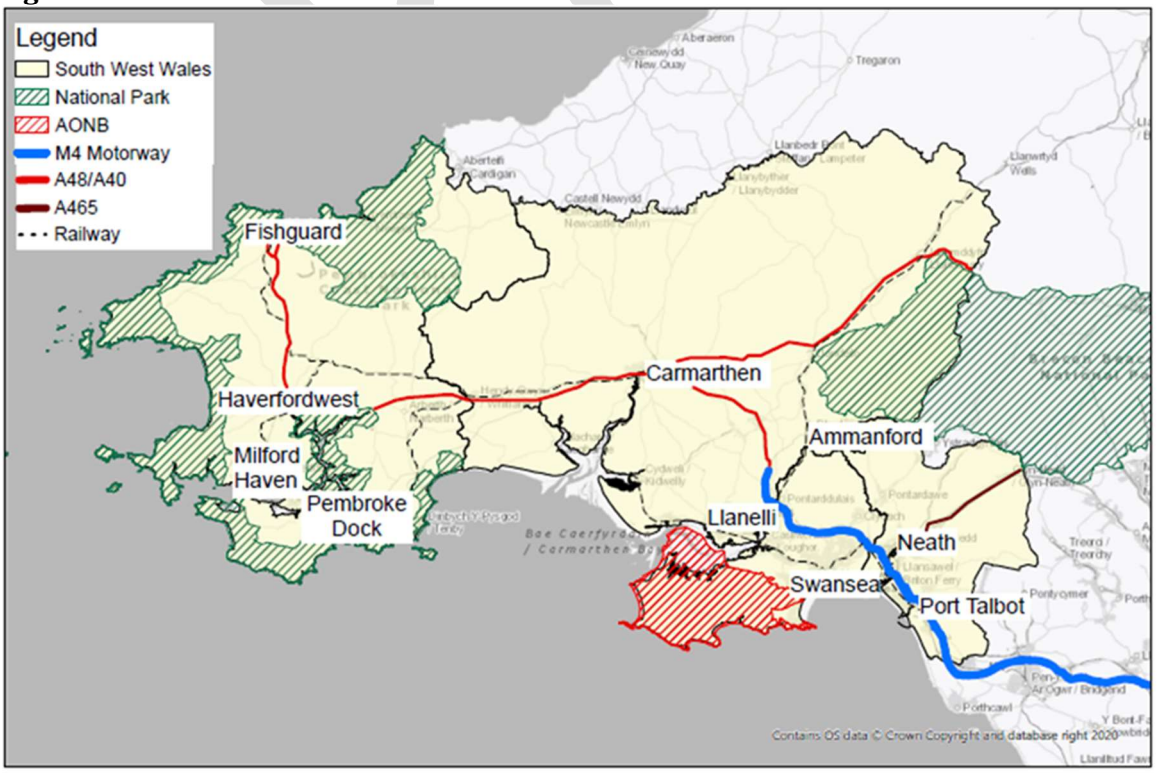
*Welcome to the **Regional Economic Delivery Plan** for South West Wales. Looking ahead to 2030, this Plan sets out our ambitions for a resilient, broad-based and sustainable economy – and outlines where we will focus our efforts in the next few years to realise them.*

Introducing South West Wales

1.1 Extending from Neath Port Talbot in the east to Pembrokeshire in the west, via Swansea and Carmarthenshire, South West Wales has a diverse economy and a unique set of natural and cultural assets.

1.2 Economically, our industrial heritage combines with some of the UK's most significant marine energy potential, driving major opportunities for decarbonisation and the growth of the UK's Green Economy. Environmentally, the coastline and countryside – including the Pembrokeshire Coast and Brecon Beacons National Parks and the Gower Area of Outstanding Natural Beauty – contribute to a superb visitor offer and quality of life. Culturally, the region encompasses the dynamic, growing university city of Swansea, a diverse and distinctive network of rural towns and an increasingly vibrant Welsh language.

Figure 1-1: South West Wales in context



Source: Produced by SQW 2021. Licence 100030994. Contains OS data © Crown copyright [and database right] (2020)

A bold and inclusive new economic delivery plan

1.3 In 2014, partners in South West Wales jointly published an **Economic Regeneration Strategy**, setting the strategic groundwork for the Swansea Bay City Deal, a £1.3 billion investment package supported by the UK and Welsh Governments.

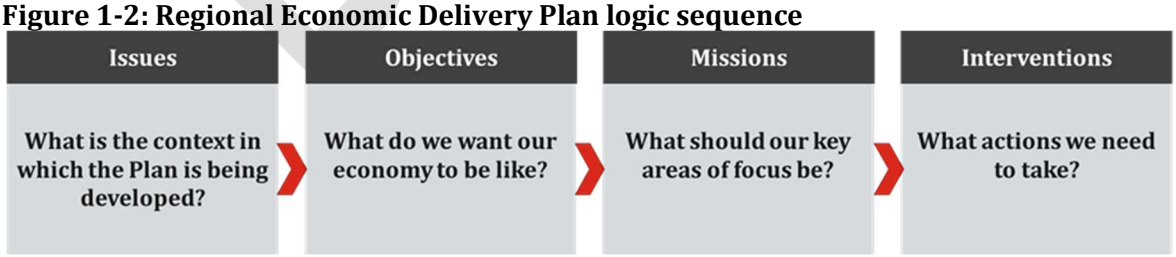
1.4 Seven years on, much has been achieved. The region's knowledge and research capacity has been supported through the delivery of major facilities such as the Swansea Bay Campus and continued investment in industry-academic links. The economic opportunities associated with the growth of the health economy have been reinforced through the development of the new Institute of Life Sciences and the start of work on the Pentre Awel health and wellbeing campus in Llanelli. S4C's new headquarters has opened in Carmarthen, accompanied by a concentration of creative media businesses; substantial investment has continued to flow into Pembrokeshire's offshore renewable opportunities; and Swansea city centre's ambitious regeneration programme is well underway. There has been major investment in our digital connectivity, with exciting plans for a more sustainable regional transport system through Swansea Bay and South West Wales Metro.

1.5 This provides a strong platform for future growth. However, as the analysis in Chapter 2 makes clear, there is more to be done to unlock the region's potential and to ensure that growth is resilient, sustainable and inclusive. Looking to the next ten years and beyond, the South West Wales local authorities, working closely with the Welsh Government, have prepared this **Regional Economic Delivery Plan** to ensure that we make the most of the exciting growth opportunities that are ahead of us.

Combining strategic clarity with delivery flexibility

1.6 In developing the Plan, we have followed a sequential approach. First, we started with a fresh view of the **evidence**, considering the 'state of the region' and the outlook for the future. This informed our high-level **objectives**, setting out *"what we want our economy to be (more) like"*. These provided a framework for a series of clearly-defined **missions**: key areas of focus for the next ten years, and the **interventions**, or project activities, needed to achieve them:

Figure 1-2: Regional Economic Delivery Plan logic sequence



Source: SQW

1.7 However, we live an uncertain and dynamic world, and over the lifetime of this Plan, we will need to respond to new challenges and opportunities (and new ideas and investments that are yet unforeseen). **A resilient plan is a flexible and agile plan:** while this document

provides strategic clarity and focus on our priorities, we anticipate that project actions and investments will evolve over time.

Navigating the changing strategic context

1.8 This Plan is developed in the context of (and contributes to) a range of plans and strategies developed at local, national and UK level. Looking across the strategic landscape, a number of themes are especially relevant to this Plan:

- First, the **Well-being of Future Generations Act 2015** requires public bodies in Wales to consider the long-term impact of their decisions across all aspects of wellbeing. The Act outlines seven 'wellbeing goals' – and public policy should contribute to all of them, not just one or two. For an economic plan, that means that in delivering "a prosperous region", we should also contribute to a region that is more resilient, equal, healthy, cohesive and globally responsible, and which enjoys a vibrant culture and Welsh language[1]. The principles of the Act are explicitly embedded in the Welsh Government's *Economic Resilience and Reconstruction Mission*[2] (and its principles of "Prosperous, Green and Equal") and are central to this Delivery Plan.

- Second, there is an overarching and firm **commitment to decarbonisation and the achievement of 'net zero' by 2050.** The UK and Welsh Government is legally committed to net zero carbon emissions (over a 1990 baseline) by 2050, a process that will involve far-reaching changes in industrial processes, transport networks and heating systems. The Welsh Government's *Programme for Government* commits to "acting decisively to tackle the nature and climate emergency"[3], and this is reinforced in the establishment of the Minister of Climate Change portfolio and (for example) in the clear prioritisation of sustainable and active travel within *Llwybr Newydd*, the new transport strategy. From an economic strategy perspective, the decarbonisation imperative creates opportunities for innovation and technology development, as well as an urgent need for adaptation to support industrial resilience.

- Third, a broader policy focus on the **opportunities and challenges presented by technological and demographic change** featured in the UK Government's former *Industrial Strategy* and remains prominent in its successor, the *Plan for Growth.* A series of reports to the Welsh Government have also set out approaches to digitalisation[4] and the adoption of an innovation strategy focused around meeting societal need[5].

- Fourth, **the response to the UK's exit from the European Union.** Over the coming years, we will need to adapt to changing patterns of trade. The impact of this is not yet fully

[1] Future Generations Commissioner for Wales, *Well-being of Future Generations Act (Wales) 2015*
[2] Welsh Government (February 2021), *Our Economic Resilience and Reconstruction Mission*
[3] Welsh Government (June 2021), *Programme for Government*, p.3
[4] Welsh Government (September 2019), *Wales 4.0: Delivering economic transformation for a better future of work*
[5] Rick Delbridge, Dylan Henderson and Kevin Morgan (May 2021), *Scoping the future of innovation policy in Wales*

apparent, although for some sectors will be far-reaching (for example, the adaption of agriculture to the new Environmental Land Management system). Brexit also means a significant change for South West Wales in terms of the public investment available for economic development: historically, the region has been one of the UK's largest beneficiaries from EU funding. Looking to the future, it is likely that we will need a new, perhaps more 'investment and return' based approach.

- Finally, this Plan is developed in the context of a wider approach to **regional economic development** in Wales, with South West Wales forming one of the regional 'building blocks' of *Future Wales*, the new national spatial development plan[6]. Plans have also been advanced for new approaches to regional governance and delivery (described in Chapter 5), as well as the Regional Economic Framework, which has been developed by the Welsh Government in conjunction with the local authorities alongside this Plan.

Plan structure

1.9 The remainder of this Plan is structured in six chapters:

- Chapter 2 sets out the **economic landscape** within which the Plan has been developed, outlining the strengths, weaknesses, opportunities and threats facing the regional economy and the key issues that need to be addressed.
- Chapter 3 introduces our **strategic framework**, setting out our ambitions for the future and the type of economy that we want to help develop.
- Building on this, Chapters 4-6 explain our three **key 'missions'**: the specific goals that we want to achieve over the next decade.
- Finally, Chapter 7 sets out **how we will deliver the Plan**, including the role of the Corporate Joint Committee and options for future implementation arrangements.

1.10 In addition, **Annex A** provides a summary SWOT analysis. **Annex B** provides an assessment of this Plan against the Wellbeing of Future Generations Act (Wales) 2015. **Annex C** explains the process of developing the Plan, and how partners were engaged and priorities identified.

1.11 Two supplementary documents support the Plan:

- First, an **Evidence and Policy Landscape Review** provides further detail in support of the narrative in Chapter 2

  Second, while this Plan takes a long-term view, specific actions will evolve over time as business cases are progressed and new investment opportunities come forward. Alongside the Plan, we have prepared a **supplementary Project Pipeline document**, setting out known and emerging interventions and the next steps involved in taking them forward.

[6] Welsh Government (February 2021), *Future Wales: The National Plan 2040*

2. South West Wales: The economic landscape

South West Wales has performed strongly in recent years in generating new jobs and driving forward priority investments. Despite continuing productivity challenges, there are major opportunities ahead for sustainable growth, linked with our energy, innovation, business and community assets. This chapter sketches a picture of the region's economy, outlining recent economic performance, key strengths and assets, and the major 'transformational' trends that will impact on future growth.

Places and connections: The region's economic geography

A distinctive heritage and a diverse economy…

2.1 With a population of around 705,000 across four counties, South West Wales is a diverse region. Historically, much of the area was an industrial pioneer, driven initially by the coal and metals industries and later by petrochemicals and manufacturing. Over the past 40 years, economic change has meant a challenging period of readjustment, which is to some extent still underway. But our industrial heritage has bequeathed an important legacy, including some of our leading research and innovation capabilities, our large advanced manufacturing sector and the character and form of our towns and cities.

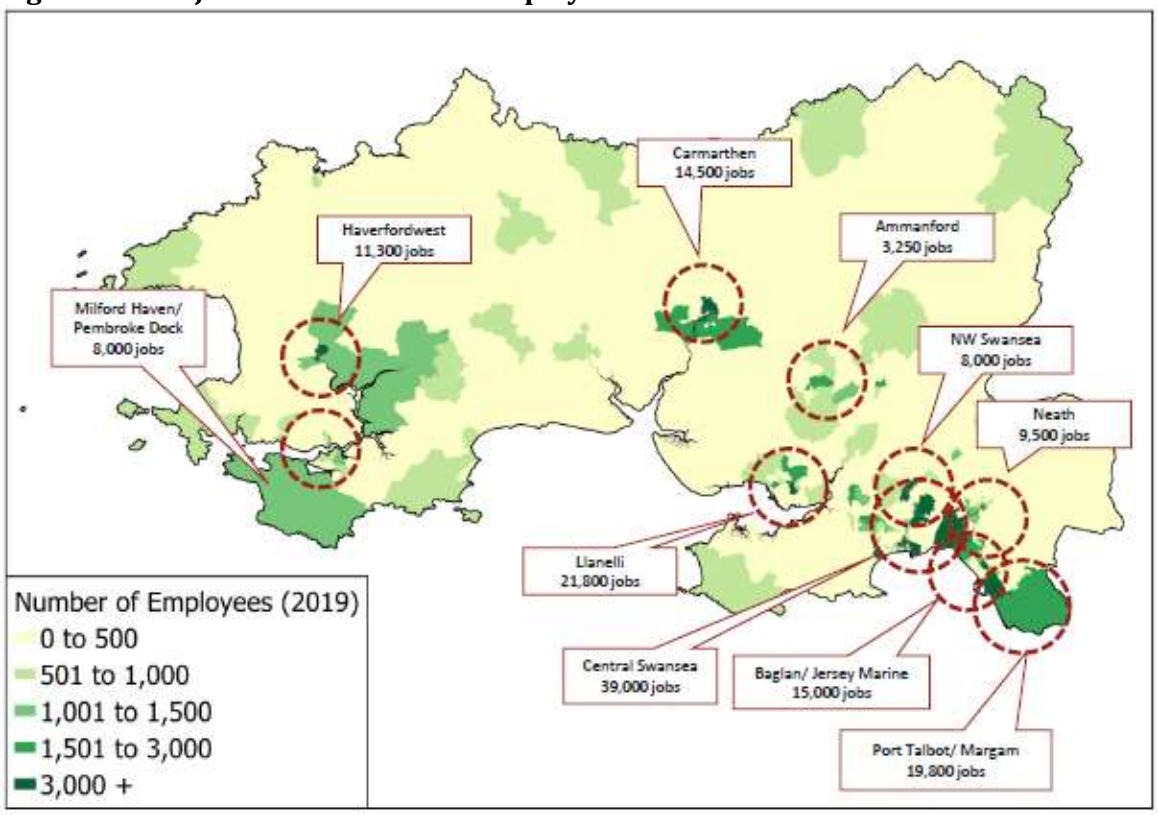
2.2 Reflecting the region's population distribution and historic industrial development, the largest concentrations of employment are in the east, around Swansea Bay, as Figure 2-1 illustrates. Swansea itself accounts for around 40% of jobs in South West Wales (and is its main commuter destination), and the area around Swansea Bay and Llanelli is defined in *Future Wales* as a 'National Growth Area' for new jobs and housing[7]. The east of the region also contains a distinctive and extensive concentration of manufacturing activity at Port Talbot, including the UK's largest steel plant and the Port Talbot Waterway Enterprise Zone.

2.3 Further west, around 20% of national energy supplies enter Britain via Pembrokeshire, with the Haven Waterway a major centre for existing energy infrastructure and the exploitation of new opportunities. More broadly, Carmarthen and Haverfordwest have important roles as regional centres, supporting an extensive rural economy and food production industry. Reflecting the environmental quality highlighted in Chapter 1, the region enjoys extensive environmental designations, including the two National Parks and AONB and special protections along much of the coast. This environmental quality supports a large, important

[7] Welsh Government (February 2021), *Future Wales: The National Plan 2040*, Policy 28. Policy 29 defines Carmarthen and the Haven Towns (Haverfordwest, Milford Haven, Pembroke and Pembroke Dock) as 'Regional Growth Areas'

and growing visitor economy as well as delivering significant wellbeing benefits to our local residents.

Figure 2-1: Major concentrations of employment



Source: Produced by SQW 2021. Licence 100030994 Contains OS data © Crown copyright [and database right] [2020]

2.4 Across the region, around 208,000 people speak Welsh – about 31% of the total population, and an increase of around 23% in the decade to 2020[8]. The Welsh Government's *Cymraeg 2050* strategy sets out a positive strategy to develop "a thriving, sustainable economy in rural areas" and to promote the Welsh language through the media and the growth of the cultural sector – a goal recently reinforced by investment in S4C's headquarters presence in Carmarthen.

… with important links beyond the region

2.5 Connections beyond the region are important too. The ports at Fishguard and Pembroke Dock provide the main gateway between the south of the UK and Ireland. Looking east, there are strong links (and important commuter flows) between the manufacturing clusters at Port Talbot and neighbouring Bridgend; shared issues across the Western and Central Valleys and the South Wales industrial base; and relatively easy access to opportunities in Cardiff and beyond. While our Plan focuses on what is needed *for* the region and *within* the region,

[8] Reflecting the region's diversity, the proportion of Welsh speakers is substantially higher in Carmarthenshire, at over 50% of the population.

economic boundaries are fluid: the key point is that South West Wales is not self-contained and homogeneous; it is outward facing and diverse, and it makes sense to work together.

The medium-term economic outlook

2.6 This Plan has been developed following the substantial economic shock precipitated by the Covid-19 pandemic. The UK economy contracted by 9.9% in 2020 – an unprecedented fall in annual output in modern times – as public health restrictions effectively closed some sectors (notably hospitality, a key industry in South West Wales). Across the region, the claimant count was 74% higher in December 2020 than it had been at the start of the year, with the full employment impact mitigated by the furlough scheme and the extensive series of business grant, loan and rates relief measures brought in by the Welsh and UK Governments.

2.7 At the time of writing, **the outlook for economic recovery from the pandemic is positive**. In July 2021, independent forecasters anticipated UK GDP growth of 6.9% in 2021 and 5.5% in 2022, sufficient to restore the economy to its pre-pandemic size[9]. In South West Wales, the percentage of employments furloughed fell from 12.5% in December 2020 to around 5% in June 2021[10], the claimant count had started to fall, and many employers were reporting staff shortages.

2.8 However, the pandemic has accelerated disruptive trends that are likely to have longer-term impacts. Structural changes in the retail sector have impacted on town and city centre uses. Remote working has expanded and is likely to become more permanent – presenting opportunities for people to access a wider range of jobs, but also potentially creating additional housing and service delivery pressures in rural and coastal areas. At the time of writing, the Covid crisis has not come to a conclusion and its consequences are still not yet fully known – but they are likely to have a longer-term influence over the period of this Plan.

The state of the region: Recent economic performance

2.9 Looking back over a longer period, the regional economy has grown since the previous Economic Regeneration Strategy was prepared. But on many indicators, there is still a significant gap between outcomes in South West Wales and the rest of the UK. The *Economic and Strategic Landscape Review* which accompanies this Plan explores our recent economic performance in more detail: the following paragraphs provide a snapshot of the 'state of the region'.

We have seen growth in jobs and economic activity, but there is capacity for more

2.10 The 2014 Strategy anticipated a relatively slow recovery in employment terms from the recession following the 2008/09 financial crisis. However, **performance has been much**

[9] HM Treasury (July 2021), *Forecasts for the UK Economy: A comparison of independent forecasts*
[10] Slightly below the Wales and UK averages, and accounting for around 14,400 employments furloughed.

stronger than anticipated. By 2019, there were some 322,000 jobs in the region, an increase of 20,000 on the 2013 figure. Despite some net job losses in 2016, growth until the start of the pandemic was stronger than in the rest of Wales.

2.11 **However, there is still 'spare capacity' in the labour market.** Although the 'jobs density' (the number of jobs per working age resident) has grown steadily, it is still lower than the UK and Wales averages[11]. Notably, despite Swansea's importance as a regional centre and inbound commuter destination, the city's jobs density is low relative to Cardiff and Newport[12].

2.12 There have been steady improvements in the economic activity rate over the past 15 years – at a faster pace than in the rest of the UK. However, **South West Wales' economic activity rate continues to fall behind the UK average** (and slightly behind the Wales average). If the gap between the 2019 regional economic activity rate (73.8%) and the UK rate (78.9%) could be bridged, it would bring an additional 21,000 people back into the labour market.

Economic output has grown, within the context of structural change

2.13 **Economic output (measured in gross value added) was around £13 billion in 2018** – equivalent to 21% of total Welsh output. The region's GVA increased by around £630 million in 2013-18 (representing growth of about 5% over the period). Within this overall expansion, some sectors grew strongly: combined, wholesale and retail; warehousing; real estate; information and communications; and health and care contributed an additional £689 million to GVA. But some sectors contracted over the period, with the metals, electrical products and machinery sector reducing its output by around £322 million.

2.14 This suggests a continuing process of adjustment within the economy, which is also reflected in employment growth (and a strengthening share of employment) in hospitality, health, distribution and administrative activities. Nevertheless, manufacturing is of fundamental importance to the regional economy, accounting for 13.6% of total output (and over 25% of output in Neath Port Talbot).

There is still a large productivity gap, which impacts on local prosperity

2.15 Productivity (the amount of GVA generated for every filled job) was around £45,100 in South West Wales in 2018. The gap with the rest of the UK has narrowed slightly over time. But it is still substantial: in 2018, productivity was around 80% of the UK level.

2.16 Our analysis of productivity in South West Wales leads to three observations, which are critical to the strategy advanced within this Plan:

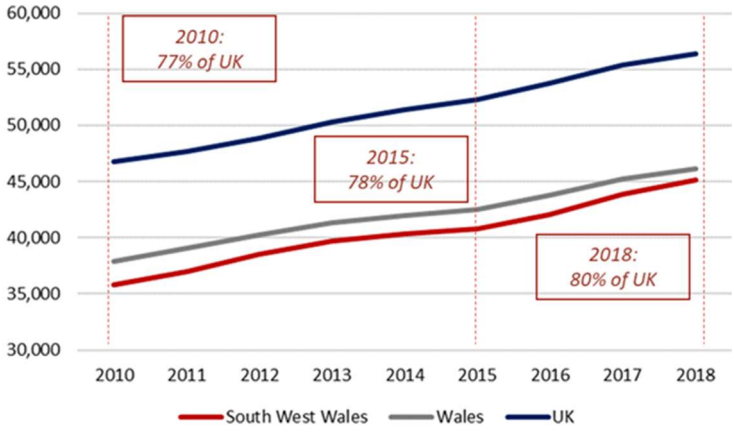
- **Productivity growth isn't 'everything'…. But it is *necessary* for long-term economic wellbeing, even if it isn't *sufficient*.** More 'productive' activities ought to lead to higher

[11] 0.75 jobs per resident aged 16-64 in South West Wales in 2019 (compared with 0.77 in Wales overall and 0.86 in the UK).
[12] Swansea's jobs density was 0.8 in 2019, compared with 0.98 in Cardiff and 0.91 in Newport.

average pay[13] and more opportunities for people to build careers and businesses in the region. But productivity can be seen as a somewhat abstract measure: a highly 'productive' economy might not necessarily be a sustainable or equitable one, and not everything that society values generates high levels of monetised output. So, as well as generating higher output per worker, **the key challenge is ensuring that the productivity gain is captured locally in pay, conditions and business opportunities.**

- **Productivity growth is not *just* about growing 'more productive' sectors, or those firms at the leading edge.** The structural shift in South West Wales from relatively high value-added manufacturing to lower value services has presented a long-term challenge. Part of the gap is also explained by the type of activities that take place in different locations within the same industry – with headquarters activities, research and development and so on typically contributing to higher value output per worker[14]. But recent research also highlights the gains that can be made in all sectors (including those within the 'foundational economy' as well as within 'export'-like industries) through investment in management capacity, technology adoption, supply chain capabilities, skills development and so on[15]. This is likely to be especially important in South West Wales: in a region with relatively few large firms, **a broad-based approach that supports SME growth and entrepreneurship across the board and increases the local 'stickiness' of investment is likely to be important.**

Figure 2-2: Productivity: GVA per filled job (£), 2010-18



ONS, Subregional productivity: labour productivity by local authority district and labour productivity by UK NUTS2 and NUTS3 subregions, 2010-18

- **Productivity growth is likely to be gradual over time.** It may be accelerated by major transformational investments – but 'narrowing the gap', and ensuring the gain is captured regionally in higher pay and local business growth, is a long-term endeavour, demanding sustained investment across the economy[16].

[13] Currently, gross median pay in the South West Wales local authority areas ranges between 86% and 92% of the UK average.
[14] Welsh Government (2018), *Welsh Budget 2018: Chief Economist's Report*, p.12
[15] Jurgen Maier (2017), *Made Smarter Review: Report to the UK Government;* Institute for Government (2021), *Productivity: Firing on all cylinders – why restoring growth is a matter for every UK sector*
[16] Note also the challenges in 'narrowing the gap': other regions will also grow at the same time, and some (principally London and the Greater South East) will have more favourable starting-points.

The evidence reveals mixed progress against wider drivers of productivity

2.17 Linked with the region's overall productivity performance, there has been mixed progress in relation to wider 'drivers of productivity':

In relation to skills…

2.18 Recent years have seen a strong emphasis on strengthening links between providers and employers, with the Regional Learning and Skills Partnership playing an increasingly important role in brokering relationships, identifying employer need and providing better labour market intelligence[17].

2.19 **Over time, there has been a steady improvement in qualification levels**: in 2019, 35% of the working age population was qualified to NVQ4+, compared with 22% in 2004, and the proportion with no qualifications halved over the same period (partly as new entrants to the labour market gradually replace those who leave). But in *relative* terms, there is still a gap with the rest of the UK[18], and substantial variation across the region[19].

In relation to connectivity…

2.20 **There has been transformational progress in the delivery of digital connectivity** since the 2014 Regeneration Strategy. Commercial investment and public support through Superfast Cymru and successor programmes have increased access to superfast broadband to over 90% of premises. However, beyond superfast, there is still a still a significant rural/ urban digital divide, with ultrafast penetration in Pembrokeshire among the lowest in the UK[20]. The Digital Infrastructure programme across South West Wales aims to address this – but applications for new technology continue to advance rapidly: staying ahead of the curve will be important as digital technology transforms working practices and business models.

2.21 The picture is perhaps less positive in relation to **transport connectivity**. There has been some disappointment in the scaling back of plans to electrify the South Wales Mainline to Swansea. However, proposals are being advanced to take forward the **Swansea Bay and South Wales Metro** as the core of a better-integrated regional transport system (highlighted further in Chapter 4); Transport for Wales plans to increase services between Swansea and Manchester from 2022; and work progresses in taking forward active travel measures across the region. While the future policy presumption is against new strategic road schemes, investment has started on much-needed improvements to the A40 in Pembrokeshire and

[17] See South West Wales RLSP (2019), *Regional Employment and Skills Plan 2019*
[18] Between 2004 and 2019, the gap between South West Wales and the UK actually widened, from 3.6pp to 4.8pp.,
[19] For example, in 2019, only 29% of the Neath Port Talbot 16-64 population was qualified to NVQ4+, compared with 37% in Swansea.
[20] In September 2020, around 77% and 58% of premises in Swansea and Neath Port Talbot respectively were able to access 'ultrafast' download speeds of up to 300 Mbps, although this is largely confined to urban areas where it is commercially viable.

beyond the region, major improvements on the A465 Heads of the Valleys road are improving connectivity with the English Midlands.

In relation to the business stock…

2.22 **The size of the region's business base grew in the years leading up to the start of the pandemic.** In 2020, there were around 23,800 active enterprises in South West Wales, a number that had steadily increased over the preceding five years – and survival rates keep pace with the rest of Wales and the UK. But the region's 'enterprise density' (the number of enterprises relative to the working age population) and the start-up rate remain lower than in the rest of the UK[21]. Recent research has highlighted that while overall entrepreneurial activity in Wales is broadly in line with the rest of the UK, there is a shortfall in perceptions of the availability of good start-up opportunities[22].

In relation to sites and premises for business growth…

2.23 South West Wales benefits from some substantial sites for industrial expansion, including the large strategic site at Baglan Energy Park, future phases of the Cross Hands development in Carmarthenshire, and key sites at Felindre and Fabian Way in Swansea and the Haven Waterway. However, **there is a widely-recognised gap between demand and supply for industrial sites and premises**, as low rents (and in some cases high remediation and infrastructure costs on ex-industrial land) make viability challenging, especially west of Swansea. The evidence is that this acts as a brake on business expansion, both to new investors and to existing local businesses seeking 'grow-on' space[23].

Inequalities remain significant

2.24 Despite jobs growth over time and improvements in economic activity, recent research highlights the extent to which rising living costs (especially housing costs) have impacted on the real incomes of the lowest paid, a situation which has accelerated during the pandemic[24].

2.25 Across the region, concentrations of disadvantage are significant, principally in the main urban centres of Swansea, Llanelli, Neath, Port Talbot and Pembroke Dock, and in the upper Western Valleys. Many of these concentrations are persistent over time and reflect the long-term impact of industrial change: while they highlight the importance of 'supply-side' measures to reduce economic inactivity and bring people back into the labour market, most

[21] In 2020, there were 11 business starts to every 100 active enterprises, compared with 14 in the UK overall.
[22] Karen Bonner *et al* (2018), *Global Entrepreneurship Monitor UK: Wales report 2018*
[23] SQW/ Welsh Government (March 2020), *Commercial Property: Market analysis and potential interventions*
[24] Bevan Foundation (June 2021), *A snapshot of poverty in spring 2021*

households on low incomes are already in work[25]. For a regional economic strategy, **driving demand and creating "better jobs, closer to home" is a key goal and challenge**[26].

Building on strengths: Key assets

2.26 Overall, the review of economic performance over recent years suggests good progress, especially in terms of job creation. But there is a persistent gap in outcomes between the region and the rest of the UK. This is partly because most change is incremental: the investment secured through City Deal (for example) will not yet have translated into improvements in the economic data. It also reflects the 'structural' nature of many of the region's challenges, some of which (including the productivity deficit) are shared with other parts of Wales and the North of England.

2.27 However, South West Wales contains some **distinctive economic strengths and opportunities** which provide a good platform for future growth. Realising each of these presents a challenge for future strategy, which we have set out below.

We have nationally and internationally significant university research assets

2.28 There is a strong higher education presence in the region, anchored by Swansea University and University of Wales Trinity St David's campuses in Carmarthen and Swansea[27]. Both universities have expanded in recent years, have made an important contribution to the region's physical regeneration (e.g., through the Swansea Bay campus and the SA1 development in Swansea city centre) and are key economic 'drivers' in their own right.

2.29 Beyond this, Swansea University's research is ranked as 'world leading' in several (mostly STEM-related) subjects[28]. Across both universities, key research capabilities relate to:

- **Advanced data science,** where Swansea's assets include the Computational Foundry (bringing together computer science and mathematical expertise, and working with industry) and the CHERISH-DE Digital Economy Centre.
- **Health and medicine**, with a strong focus on the application of data science in health, linked with wider computer science expertise, and including one of six Health Data Research UK (HDR-UK) sites nationally.
- **Engineering and manufacturing**, especially in materials research, and with relevance to the energy and decarbonisation opportunities discussed further below.

[25] Joseph Rowntree Foundation (November 2020), *Briefing: Poverty in Wales 2020* (Annex A)
[26] "Better jobs, closer to home" is a stated Welsh Government objective, as set out in the *Economic Action Plan* and the Valleys Task Force strategy *Our Valleys, Our Future.*
[27] In addition to a smaller University of South Wales presence at the Hydrogen Centre in Baglan.
[28] Swansea University is assessed as 'world-leading' in 14 units of assessment within the 2014 Research Excellence Framework.

2.30 **There is a long history of collaboration between both universities and local industry**, especially in the manufacturing sector. Examples of recent programmes include ASTUTE 2020, supporting industrial research, development and innovation in manufacturing businesses; and UWTSD's Manufacturing for Advanced Design Engineering (MADE) programme, designed to support collaboration with SMEs. Many industrial collaboration initiatives have been supported with European funding: as this draws to a close, **it will be important to maintain the momentum and capacity that has been built up in recent years, while expanding opportunities for collaboration across the wider regional SME base.**

2.31 The commercial research base is somewhat smaller. But there has been investment in recent years (for example, TWI's Technology Centre Wales and Advanced Engineering Materials Research Institute at Baglan), adding value to the university-based presence.

Our energy infrastructure is extensive, and we have some of the UK's greatest low carbon energy generation potential

2.32 South West Wales has long had an important energy sector, especially associated with Pembrokeshire's oil and gas industry. The infrastructure and skills associated with this will be important in taking advantage of the region's vast potential in renewable energy. Several opportunities are currently being developed through the emerging South West Wales Regional Energy Strategy. These include:

- **Wave and marine energy off the Pembrokeshire coast**, with a series of commercial and pre-commercial projects underway and in the pipeline
- **The proposed Dragon Energy Island** scheme in Swansea Bay, offering scope for tidal, wave and potentially solar energy generation
- **Onshore capacity**, including the UK's largest onshore wind farm at Pen-y-Cymoedd and a range of opportunities in wind, biomass and waste-to-energy.

2.33 There is also substantial research and development capacity to support the region's renewable energy potential. The Offshore Renewable Energy (ORE) Catapult has a presence at Pembroke Dock and, with several other universities, is engaged in progressing new opportunities off the Pembrokeshire Coast. Swansea University's SPECIFIC Innovation and Knowledge Centre has expertise in the capture and storage of solar energy, while the University of South Wales' Hydrogen Centre at Baglan is supporting the experimental production of hydrogen energy storage systems.

2.34 Our energy potential is therefore a key asset to exploit – both for South West Wales and indeed the rest of Wales and the UK. **The challenge over the next few years will be in realising the opportunity, recognising that some technologies remain relatively nascent – and in ensuring that the benefits can be captured locally.** A long-term perspective will also be important in developing business cases for some of the region's major energy projects –

recognising that while they have the potential to be transformational, the full benefits may take several years to be realised

Our business community offers scope for growth

2.35 We noted earlier the region's relatively low levels of enterprise density and its relatively low start-up rate. But **business is central to future economic strategy** – put simply, employment is either created by existing businesses expanding, new businesses starting up, or businesses from elsewhere deciding to locate in the region.

2.36 Recent years have seen the loss of some larger, externally-based firms (note, for example, recent job losses in some of the region's automotive supply chain). We retain relative strengths in manufacturing, food production and hospitality, with evidence of start-up and inward investment activity linked with the data science strengths highlighted above[29]. However, the region's business stock is broadly-based: 'high growth' SMEs are quite widely distributed across sectors (and across the region)[30]; ownership models are diverse[31]; and there are opportunities for productivity growth across the sectoral landscape[32]. Following our analysis of the 'productivity deficit' above, **the challenge is to strengthen the 'breadth and depth' of the business base, recognising scope for growth across the economy, including *(but not just)* in those activities at the 'leading edge' of technology and innovation.**

Environmental quality and 'sense of place' are key assets

2.37 South West Wales' combination of 'place-based' assets is distinctive and rich, including the National Parks, the coastline, the sport and leisure offer and a university city offering both 'compactness' and a wide range of metropolitan amenities.

2.38 Beyond this range of functions and amenities, **the region's distinctive identity forms an important part of the offer**. There are two aspects to this:

- First, **'quality of life' offer clearly forms part of the proposition to visitors, investors and potential new residents**, and one which plays a key economic role. There is an important balance to be struck between environmental quality and community and environmental sustainability.

  Second, **the region's identity relates to the importance of 'community', the associations that businesses and other institutions have with the places in which they are based**, and the stake that they have locally. This is harder to pin down in conventional economic terms, but relates to the extent to which value and ownership can

[29] See the *Evidence and Strategic Landscape Review* for further examples.
[30] SQW analysis of regional distribution of FastGrowth 50 award winners, 2009-20; Beauhurst records of 'fast growth' firms in South West Wales
[31] Consultation as part of the development of this Plan. See also Co-operatives Wales
[32] Institute for Government (2021), *Productivity: Firing on all cylinders – why restoring growth is a matter for every UK sector*

be captured or embedded locally and the challenges in growing the business and employment base highlighted above[33].

Looking to the future: Key transformational trends

2.39 Future strategy will also be influenced by wider 'transformational' factors that will impact all aspects of economic life. While these apply to all advanced economies, the way in which they are addressed and how they interact with our existing economic structure and strengths will be fundamental. Three 'macro trends' are especially important, relating to **decarbonisation, digitalisation** and **demographic change**. We consider each in turn below.

Decarbonising South West Wales

2.40 As we highlighted in the earlier overview of the policy context, the UK and Welsh Governments' commitment to net zero by 2050 will have an impact on all aspects of policy.

2.41 In headline terms, Wales has been successful in reducing carbon emissions while maintaining economic growth: between 1990 and 2018, total CO2 emissions fell by 20%, and the country was on track to meet its 2020 carbon reduction targets[34]. However, around 85% of the cut in emissions came from the power sector[35]. While most other sectors also achieved reductions (especially manufacturing), these were substantially smaller, and the surface transport sector actually generated a net increase. Looking to the future and the net zero commitment, the Climate Change Committee recommended a *"leadership driven pathway"* requiring far-reaching action over the next thirty years[36].

> **The actions required to achieve the targets – including full decarbonisation of the power sector, full switchover to electric vehicle sales, installation of low-carbon heating, and decarbonisation of manufacturing – go beyond those required from the world on average, in line with Wales' responsibility as a richer nation with larger historical emissions.**
>
> **Climate Change Committee**

2.42 This presents South West Wales with some distinct challenges. Currently, **regional carbon emissions are much higher than the Wales and UK average.** These mostly reflect the role of the huge Tata works at Port Talbot, an industrial installation of national significance that remains reliant on coal inputs. **The challenge for future strategy is enabling the transition of the region's industrial base, while ensuring wider action to decarbonise the transport, housing and manufacturing systems** – and making sure that South West Wales

3333 This is also at the centre of discussions about the concept and role of the foundational economy. See Joe Earle *et al* (2017), *What Wales Can Do: Asset-based policies and the foundational economy* (CREW/ Foundational Economy)

[34] Climate Change Committee (December 2020), *Progress Report: Reducing emissions in Wales*

[35] Principally through the decommissioning of the Aberthaw coal-fired power station

[36] Climate Change Committee (December 2020), *Advice Report: The path to a net zero Wales*

remains competitive with other regions. Our renewable energy potential will play an important role in this, which we explain further in Chapter 4.

Digital transformation

2.43 **'Digitalisation'** refers to the transformation of the economy through massively increased use of data and the development of digital technologies such as artificial intelligence, machine learning and robotics. Digitalisation isn't about change within a single industry; rather, it is about the use of 'general purpose' technologies with a wide range of applications across industries.

2.44 Digital transformation is not new: the period since the publication of the last Swansea Bay Economic Regeneration Strategy has seen a transformation in the everyday use of new digital technologies, and it has been recognised as a key driver of economic strategy for some time. Three aspects of the transformational impacts of digitalisation are especially relevant:

- **Disruptive effects on industry:** Use of digital technology leads to greater efficiency, with firms that have the capacity and capability to invest and adopt more likely to benefit from productivity gains and improved competitiveness. But its 'transformative' power is in the convergence of technologies to drive entirely new industries (wearable devices or gaming, for example), which in turn drive applications elsewhere. A consequence is the breakdown of traditional industry sectors and markets, leading to a recognition of digitalisation as the 'fourth industrial revolution'.
- **Impacts on the labour market:** Estimates of the potential impact of automation on jobs vary greatly, although most studies suggest that while new technologies will substitute for labour in some sectors, this is likely to be more than offset by job creation[37]. However, technology is changing the *way* in which work is done, with the potential for positive and negative impacts on working conditions; the need and opportunity for job changes over the course of the working life; changing demand for skills; and the ability to work remotely.
- **Impacts on services**, potentially helping to overcome relative remoteness, and including the development of new ways of accessing health and care, which in turn impact on the development of new goods and services and demand for jobs.

2.45 Across all of these, the message for future strategy is that responding to digitalisation is not just about ensuring the 'supply' of new technology and connectivity (although that is important). It is also about **driving economic *demand* for new skills and technologies** – both at the 'leading edge' of innovation and throughout the economy.

[37] Welsh Government (September 2019), *Wales 4.0: Delivering economic transformation for as better future of work* (Professor Philip Brown's review of digital innovation for the economy and the future of work in Wales), pp.22-26

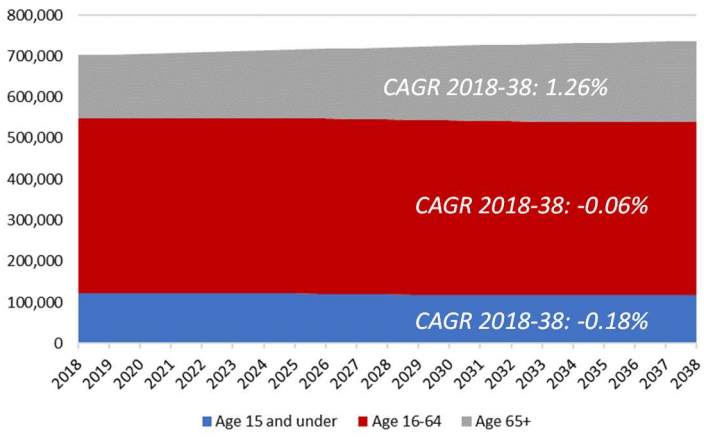
Responding to demographic change

2.46 South West Wales has a growing population. However, the 'working age' population has fallen slightly over the past decade. Over the next 20 years, the 'working age' population is expected to fall by around 1%, representing a net loss of around 4,700 people aged 16-64 over the period[38].

2.47 The gradual ageing of the population is a long-term trend. Key implications for future economic strategy include:

- **Changing working lives:** The concept of 'working age' is becoming increasingly fluid, as people work for longer, and more flexibly (although individuals' ability to work for longer will depend on job type and conditions and the ability to adapt to new roles and technologies over time).

Figure 2-3: Population change (compound annual growth rates) by age group, 2018-38



Source: StatsWales, 2018-based population projections

- **Changes in service demand:** As the analysis of recent economic performance demonstrates, there has been strong growth in employment and output associated with health and social care, as demand increases from an ageing population. Changing demographics will support changes in wider demand for goods and services as well.
- **Rising dependency ratios:** While changing demographics are driven by life expectancies and birth rates, they also partly reflect the balance of migration, with gradually falling populations in some post-industrial and rural communities, and in-migration, especially from older people, along parts of the coast[39]. This is a gradual process – but retaining and attracting younger people also helps to support community resilience and sustainability, and itself depends on generating local economic activity and demand.

Bringing it together: key issues for the Delivery Plan

2.48 Summarising the 'state of the region', our key assets and the long-term 'macro' trends that will impact across the economy, we can see that:

[38] Although note that the picture varies across the region, with a sharp projected fall in the working age population in Pembrokeshire, but continued growth in Swansea.
[39] Gerald Holtham (June 2021)), *Rejuvenating Wales* (Hodge Foundation/ CLEC)

- **The region's weaknesses are largely 'structural'**. They are linked with processes of long-term industrial change, are shared with many other parts of the UK, and map onto the region's relatively low productivity.
- Set against this, **there has been strong progress in recent years,** especially in creating new jobs and in driving forward transformational projects. This provides a strong foundation on which to build.
- **South West Wales enjoys some distinctive strengths and opportunities** – especially linked with the region's renewable energy potential, university - industrial links and its quality of life offer. These also have the potential to make a positive impact in relation to the long-term environmental, technological and demographic trends.
- **There is a 'window of opportunity' to build on and capture some of these strengths**. Some are still at a relatively early stage (for example, elements of the renewable energy opportunity and the potential for industrial decarbonisation), but the technology is developing fast, and some other regions will offer fierce competition for investment.
- **We are a very diverse region**, with a distinctive balance of urban, rural, national park, coastal and industrial assets. But there is substantial commonality across South West Wales, and some of our big opportunities have a region-wide footprint. Some also extend beyond the region itself, and outward-facing links will be important.
- **'Transformational' growth opportunities need to be balanced with the conditions for incremental improvements in business resilience and capacity** across the regional economy. There are some distinctive opportunities at the 'leading edge' – but long-term employment resilience and wage growth will depend on the sustainability, productivity and expansion of the wider stock of regional SMEs – not just the 'pioneer' firms.

2.49 Based on this understanding of our economy and its potential, the next chapter introduces our strategic framework, to guide our actions over the next decade.

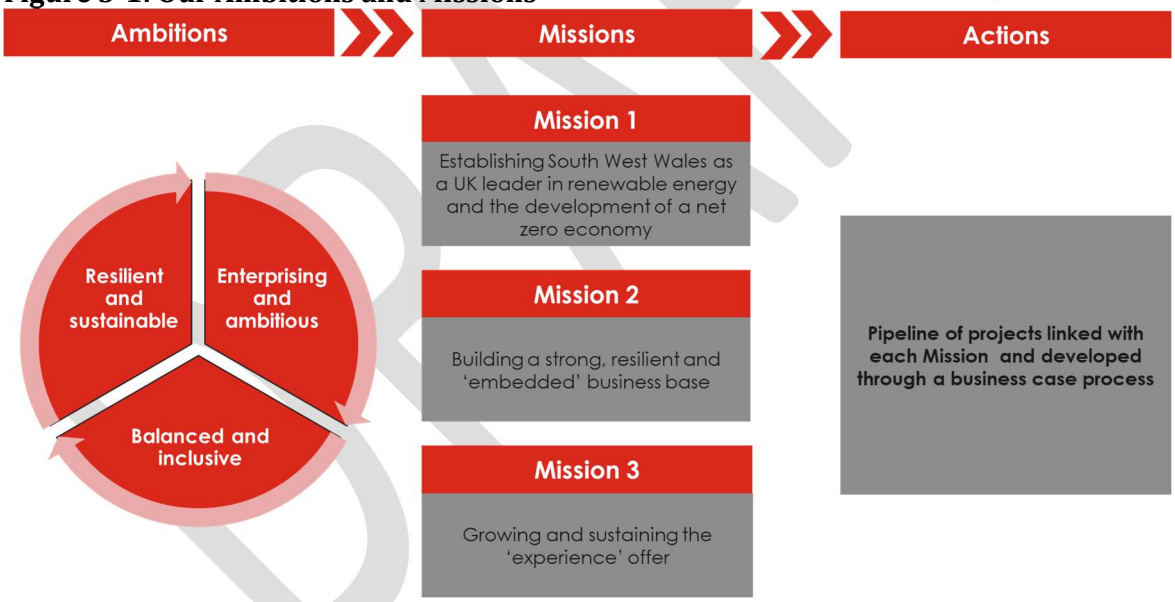
3. Our ambitions to 2030

Building on the evidence base, this chapter introduces our ambitions for the South West Wales economy. It explains the changes that we want to see over the next decade and introduces the three 'Missions' that will guide our shared activity.

From the evidence to a strategic framework…

3.1 Over the next ten years, we seek to build on the distinctive strengths and opportunities identified in the previous chapter to develop a more prosperous and resilient economy. To help plan for the future, we have identified three **Ambitions** (statements about the nature of the South West Wales economy that we want to work towards), supporting three **Missions** (priority areas on which our shared **Delivery Plan actions** will be focused):

Figure 3-1: Our Ambitions and Missions



Source: SQW 2021

Unpacking our Ambitions

3.2 Our three Ambitions are broadly cast. They recognise that achieving sustainable, long-term prosperity and the "South West Wales we want" is about more than the pursuit of economic growth as a goal for its own sake – and that prosperity will itself be enabled by progress across a number of fronts.

3.3 Our Ambitions seek an economy that is, over the long term, more resilient and sustainable; enterprising and ambitious; and balanced and inclusive.

Table 3-1: Unpacking our Ambitions: The economy we want

Resilient and sustainable
• **Resilient to technology change and the impacts of digitalisation:** ➢ Supporting firms in adopting and adapting to new technology ➢ Building labour market resilience through the skills system from schools through to adult learning • **Resilient to climate change and decarbonisation:** ➢ Increasing the resilience of the region's manufacturing base (including in its (currently) relatively carbon-intensive foundation industries) ➢ Supporting adaption and adoption throughout the economy (across sectors and through the building stock and transport system) ➢ Delivering robust digital connectivity to support changing working practices and better access to employment. • **Supporting resilient and more 'embedded' firms and supply chains** ➢ Developing the local business base through access to support, finance, networks and procurement ➢ Embedding best practice and resilience throughout the supply chain ➢ Continuously building management capacity and capability.
Enterprising and ambitious
Enterprising and ambitious • **Ambitious in relation to our long-term energy opportunity** ➢ Ensuring capacity to drive forward our potential ➢ Integrating our natural renewable energy advantages with our university and industrial strengths • **Enterprising in relation to changing market conditions, technology and opportunities** ➢ Investing in the skills system across the economy and driving demand for higher level and technical skills, as well as influencing supply ➢ Investing in the commercial property stock – for local businesses scaling up as well as new investors • **Driving new investment, innovation and funding models** ➢ Developing sustainable alternatives to European funding ➢ Promoting the region as a location to invest, work and visit
Balanced and inclusive
Balanced and inclusive • **Balanced between innovation at the leading edge and sustainable growth across the economy** ➢ Developing opportunities for 'new to the firm' innovation, as well as R&D and new technology and product development ➢ Recognising the opportunity for a diverse range of business and ownership models • **Balanced spatially, across the region** ➢ Celebrating regional diversity and a wide distribution of opportunity • **Creating long-term growth, while sustaining and enhancing core environmental and community assets** ➢ Recognising and enhancing the inherent value of the environment to the quality of life and quality of place proposition ➢ Supporting community ownership of economic assets, where this can support local opportunity and generate a sustainable return.

Realising our Ambitions

3.4 The Ambitions set out above are extensive, and are consistent with the Wellbeing of Future Generations Act. They are also all interlinked: they are not so much 'themes' as a vision of how we want the economy to evolve. Over the next ten years, **all the actions that the South West Wales local authorities take in support of regeneration and economic development will contribute to achieving them** – whether they are delivered at regional scale, or are more locally focused.

3.5 But to deliver our overall goal of a more "resilient and sustainable; enterprising and ambitious; and balanced and inclusive" economy, there are clear actions on which we will need to focus over the next decade. We have called these our three **Missions**, which we will use to guide delivery. These are:

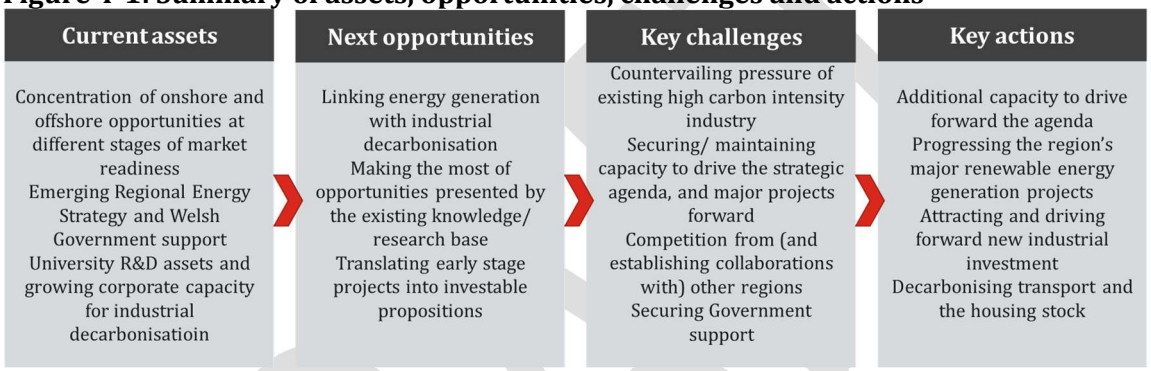
- Establishing South West Wales as a UK leader in renewable energy and the development of a net zero economy
- Building a strong, resilient and 'embedded' business base
- Growing and sustaining the experience offer.

3.6 The following chapters explain each Mission, setting out what we seek to achieve, the opportunities, challenges and risks that we need to address, and the solutions and projects that we aim to progress. Although we explain each Mission in turn, they should be seen as integrated: establishing South West Wales as a UK leader in renewable energy and a net zero economy is, for example, a key aspect of the other two Missions.

4. Mission 1: A UK leader in renewable energy and the net zero economy

Looking to 2030, we aim to make South West Wales a UK leader in renewable energy. That means taking advantage of our natural assets and our industrial and R&D capabilities to build an internationally-significant presence in future fuel technologies and to drive the decarbonisation of our industrial base and the wider economy.

Figure 4-1: Summary of assets, opportunities, challenges and actions



Understanding the case for the Mission: the core rationale

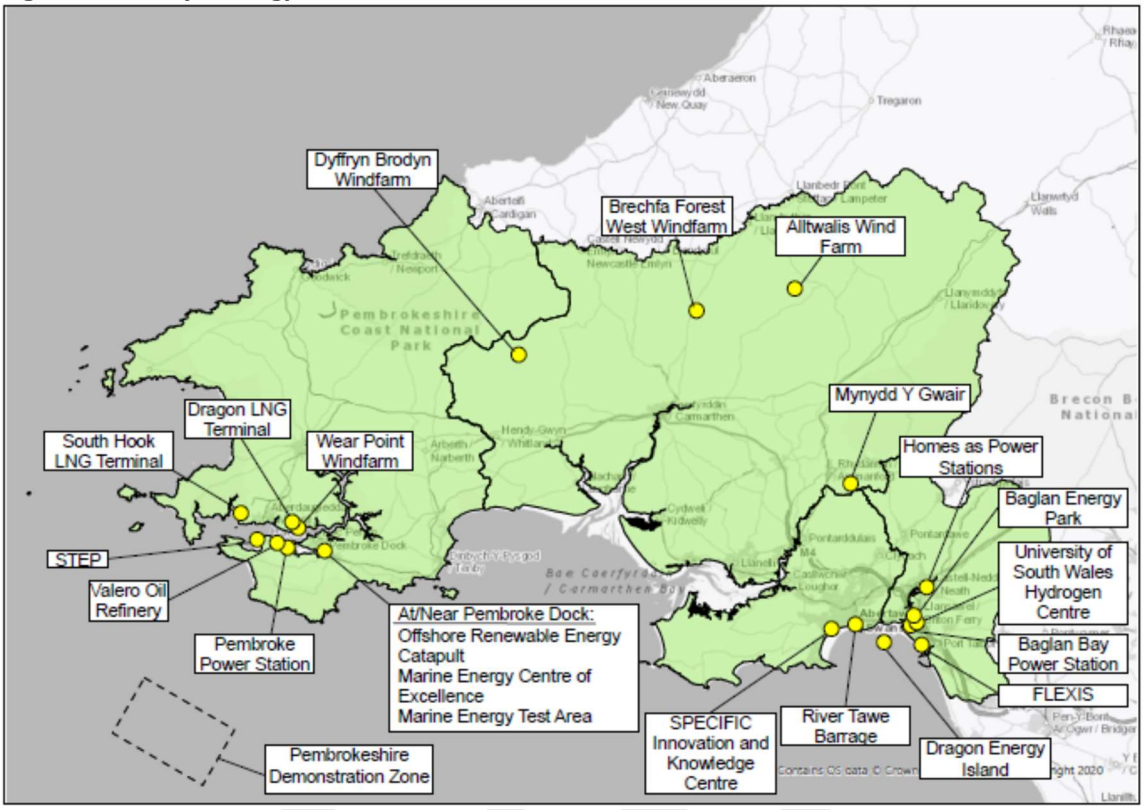
4.1 As set out in the evidence base the decarbonisation imperative is global, and in Wales is mandated by the UK and Welsh Governments' net zero commitments and the need to take urgent action now. There is a clear overall policy direction, which has been reinforced by the emerging suite of strategies at UK Government level ahead of COP26 in autumn 2021[40] and by the renewed and re-emphasised climate change focus of the Welsh Government. With a clear and compelling direction of travel, there is an opportunity for South West Wales to capitalise on its renewable energy assets and ensure that it is on the 'front foot' in adapting to change.

Delivering the region's low-carbon energy projects at scale

4.2 In South West Wales, our potential is clearly articulated, and is linked with both our natural environmental assets and infrastructure and skills base resulting from our long history in energy-related activity. The range of existing and emerging projects and assets is extensive, as illustrated in Figure 4-2:

[40] For example, the new UK Hydrogen Strategy (August 2021)

Figure 4-2: Key energy assets



Source: Produced by SQW 2021. Licence 100030994 Contains OS data © Crown copyright [and database right] [2020]

4.3 Key renewable energy assets include the combination of marine energy activity associated with **Pembroke Dock Marine** and the proposed tidal, wind and potentially solar energy scheme at **Dragon Energy Island** in Swansea Bay**.** They also include a range of onshore wind and waste-from-energy schemes across the region, and a potential nuclear fusion prototype scheme in Pembrokeshire. The **Hydrogen Centre** at Baglan focuses on experimental development of renewable hydrogen production and storage, as well as R&D in hydrogen vehicles, fuel cell applications and energy systems. The **Flexible Integrated Energy Systems (FLEXIS)** project is delivering a smart energy demonstration zone in Port Talbot, focused on local energy systems, heat recovery and the adoption of low emission vehicles.

4.4 However, while the scale of activity is substantial, there is a risk that the potential may not be fully realised, for three reasons:

- **Technologies are, in some cases, at a relatively early stage**. They are also complex, and in many cases will require long-term funding, commercially or from Government. Some of this will need to come forward in conditions of some uncertainty: for example, the Welsh Government's *Hydrogen Pathway* notes that *"there is uncertainty regarding the exact role hydrogen will have in supporting decarbonisation in Wales…. [but despite this], there is still an urgent need to take the first steps to develop the skills, expertise and supply chain for hydrogen scale-up in Wales"*[41].

[41] Welsh Government (January 2021), *Hydrogen in Wales: A pathway and next steps for developing the hydrogen energy sector in Wales.* (consultation document), p,11

- **Competing areas and technologies may move faster** within this dynamic technology environment. South West Wales has distinctive assets – but if additional capacity and investment is directed elsewhere, some of these advantages could diminish.

- **Local benefits are not *automatically* captured through the energy generation process.** The good news is that there is a solid R&D base in South West Wales to capitalise on the opportunity (see, for example, the Hydrogen Centre referred to above; Swansea University's SPECIFIC Centre), as well as schemes (such as the Marine Energy Engineering Centre for Excellence project at Pembroke Dock) to build supply chain opportunities with SMEs. It will be important that these are driven hard, to ensure that the region benefits from the added value of renewable energy investment.

4.5 Delivering the region's renewable energy opportunities at scale – and ensuring that they are integrated with wider policy and maximise local benefits for local businesses and communities will be central to regional strategy over the coming years:

Key action areas

- **We will build capacity and expertise to maximise South West Wales' renewable energy and net zero potential.**

  There are several public bodies with knowledge and expertise, including (for example) the Welsh Government Energy Service and Marine Energy Wales, as well as UK Government agencies such as the ORE Catapult. But the agenda is complex: establishing a regional 'decarbonisation system' could help to address region-wide goals (including in relation to skills and infrastructure) and coordinate investment priorities beyond the delivery of specific initiatives.

- **We will seek to secure new investment in renewable energy infrastructure**

  Linked with the capacity building described above, we will work with the Welsh and UK Governments and with the private sector to make the case for investment in 'nationally significant' schemes such as Dragon Energy Island and the Pembrokeshire marine proposition, as well as smaller-scale schemes, including on public land.

- **We will work to deliver the Regional Energy Strategy**

  The Regional Energy Strategy has been developed in parallel with this Plan and will be published in 2021. We will work to take forward pilot and successor Local Energy System projects (such as the pilot currently underway at Milford Haven Energy Kingdom), and we will seek to link the energy system objectives of the Energy Strategy with opportunities for local business engagement and supply chain development.

Decarbonising our industrial base

4.6 The high carbon intensity of some of South West Wales' industrial activity is a vulnerability: while the region's relatively high carbon emissions in the data is largely caused by the steel industry, oil and gas are also important to the region, as well as our large manufacturing base.

4.7 Work is currently underway to develop a programme for industrial decarbonisation through the **South Wales Industrial Cluster (SWIC)** initiative, funded by UK Research and Innovation and including several energy and heavy industrial firms in South West Wales (including Tata, Valero and RWE, the operator of the Pembroke refinery)[42]. The focus of the programme is on the production and use of hydrogen and on mechanisms to secure large-scale industrial decarbonisation through 'fuel switching': as with some of the initiatives discussed above, the proposition is in its relatively early days, although achieving large-scale change will be important for the region's future competitiveness. More broadly, there is an opportunity to attract additional investment into the region, beyond the decarbonisation of the existing stock: 'transformational' projects such as the forthcoming **Global Centre for Rail Excellence** provide examples of investments supported with public funds, but the existing combination of energy-related activity will be an important factor in attracting new business locations.

4.8 Building on the region's growing presence in renewable energy and the current focus on industrial decarbonisation:

Key action areas

- **We will progress the opportunity presented by SWIC and seek to secure future investment to support the region's future industrial competitiveness**

  As with other aspects of the low carbon agenda, technology is developing rapidly and the scale of investment in demonstration projects and initiatives such as SWIC is substantial. Through our increased capacity to drive forward the decarbonisation agenda, we will seek to secure sequential investment, working with the UK and Welsh Governments as appropriate.

- **We will grow the wider low carbon industrial base and promote the region's potential to new investors**

  Linked with actions to promote the region as an investment destination, we will highlight our potential to new investors (including our university presence, skills base and access to sites and premises) and will press forward major proposed investments such as the GCRE.

[42] https://www.swic.cymru/news

Decarbonising the wider economy

4.9 Decarbonisation will extend beyond the industrial base, and will impact on housing and domestic heating, non-domestic properties and the transport network. Much is already underway:

- In relation to the **housing stock**, Pobl Housing is leading one of the UK's largest community-based retrofit, energy generation and smart energy management projects at Penderry, Swansea, the outcomes of which will inform the larger, City Deal-funded Homes as Power Stations scheme.
- In relation to **transport,** all the local authorities are engaged in programmes of fleet decarbonisation, and the **Swansea Bay and South West Wales Metro** will be at the core of the region's lower carbon, more sustainable transport system.
- In relation to **re-using and preventing waste**, Wales already has some of the world's highest municipal recycling rates – with all South West Wales authorities (and Wales as a whole) experiencing a rapid increase in recycling rates over the past twenty years[43].

4.10 Linked with the Regional Energy Strategy, over the coming years:

Key action areas

- **Building on existing schemes, we will progress the decarbonisation of the housing and business stock**

  From an economic development perspective – and our wider ambitions to secure a more 'embedded and resilient' business base, this should provide opportunities for local supply chain development and community-based employment solutions (as well as, in some cases, local community ownership).

- **We will press forward the development of Swansea Bay and South West Wales Metro**

  As well as the Metro itself, this will lead to a better integrated and more sustainable transport network through the incorporation of bus and active travel services and the development of opportunities to work and access services closer to home.

- **We will work to achieve a circular economy**

  Building on our performance in reducing waste and transforming recycling rates, there are opportunities to increase re-use of goods and materials offering potential for community-based solutions to increase repair and the use of technology to increase the scope for re-use of materials and reduced food waste.

[43] Welsh Government (2019), *Beyond Recycling: A strategy to make the circular economy in Wales a reality;* StatsWales (2021), Combined municipal re-use, recycling and composting rates

5. Mission 2: Building a strong, resilient and embedded business base

Business is at the centre of our strategy to 2030: it will be through the expansion of existing firms and the start up and attraction of new ones that new employment will be generated and productivity growth secured. That means supporting sustainable business growth– both at the 'leading edge' of technology and innovation and across the economy.

Figure 5-1: Summary of assets, opportunities, challenges and actions

Understanding the case for the Mission: the core rationale

5.1 The review of the evidence in Chapter 2 highlighted positive employment outcomes in recent years, growth in the business stock, and a strong record in translational research activities between the university knowledge base and industry.

5.2 However, the economy remains to some extent in a process of 'restructuring', away from traditional strengths in parts of the manufacturing sector and towards growth in areas such as information and communications and health care (as well as in activities linked with the growing energy sector highlighted in Mission 1). Changing trading relationships also present challenges (notably, but not only, in agriculture and food production), some of which have yet to fully work through)[44].

5.3 This transition will bring opportunities within those sectors that are growing – and as highlighted earlier, opportunities for growth and productivity gain are cross-sectoral. However:

[44] Janet Dwyer (2018), *The implications of Brexit for agriculture, land use and rural areas in Wales* (Wales Centre for Public Policy)

- Even where job losses in one industry are replaced with jobs in another, there is the risk that they may not generate the same level of output (and therefore command the same pay).
- The wider economy of South West Wales has a *relatively* narrow business base: business density is relatively low, and there are few indigenous large or larger medium-sized businesses. However, the prospect of inward investment at scale has reduced over the past twenty years. The risk is that as the economy evolves, losses may not be fully offset by gains, and the 'productivity gap' remains or widens.

5.4 In response, our Mission to create a **"strong, resilient and embedded business base"** seeks to encourage a continued focus on innovation and the growth of capabilities at the 'leading edge', balanced with an approach aimed at achieving greater resilience, growth potential and capacity for sustained employment across the region's wider business base, linked with the decarbonisation imperative in Mission 1.

Growing the innovative edge and accelerating diffusion

5.5 Innovation policy in Wales is at a point of transition, as the European funding that has sustained several major programmes (including the 'core' SMART programmes delivered via the Welsh Government[45] and the wide range of sector or thematic schemes (such as, in South West Wales, ASTUTE and RICE[46]) come to an end; and the range of actors involved in innovation policy (including, potentially, a more active role for UK Government), increases.

5.6 At the same time, there is a consensus, highlighted in a recent review for the Welsh Government, that the role of innovation policy has evolved, to be less narrowly focused on technology, and more embracing of actions focused on addressing social challenges (perhaps especially important given the growth of the health and care sector and the long-term demographic challenges highlighted in Chapter 2) and the impact of climate change[47]. The review also emphasises a need to further develop translational research activities and to link innovation support activity more clearly with the range of finance, advisory, networking and other programmes that contribute to a successful innovation 'ecosystem'.

> **"Today, innovation is about so much more than science and technology"**
>
> **Future of Innovation Policy report**

[45] SMART Innovation (advice and support to business); SMART Cymru (financial assistance to business); and SMART Expertise (financial support to higher education).
[46] Reducing Industrial Carbon Emissions (RICE) is led by University of South Wales and Swansea University and works with Welsh supply chain companies to test how CO2 produced from heavy industrial processes can be used to make high value products and industrial chemicals.
[47] See Kevin Morgan, Dylan Henderson and Rick Delbridge (May 2021), *Scoping the future of innovation policy in Wales* (Cardiff University, Centre for Innovation Policy Research)

5.7 It will be important that regional activity in South West Wales adds value to and aligns with evolving Welsh national policy (and the wide range of programmes and institutions at UK level). Over the next few years:

Key action areas

- **We will explore a better-integrated regional innovation offer, in the form of a 'virtual Research and Technology Organisation' for South West Wales**

  The universities are key regional assets and have a strong history of translational research with industry. However, the wider landscape is somewhat fragmented, and may become increasingly so as current programmes come to an end. We aim to achieve a model where there is "no wrong door", making the most of our university capabilities and enabling them to meet industry need. This could extend across a range of sectors and technologies, linked with (for example) future plans for the development of the research and development offer linked with Pentre Awel at Llanelli, and the close involvement of University of Wales Trinity St David and the development of Yr Egin and its associated creative cluster. It may also embrace wider innovation capabilities, including support in management skills and capacity and (linked with our wider approach to regional skills development) access to talent to enable innovative SMEs to reach their potential.

  There may be several options in taking this proposal forward – but the key point is that we maximise the value of our shared assets to deliver a joined-up service across government, higher education and the private sector.

Growing productivity and resilience across the economy

5.8 Across the wider business stock, there have been changes in the support landscape since the last Regeneration Strategy was produced. Nationally, Business Wales provides a central gateway to a range of support products, and since 2017, the Development Bank of Wales has consolidated publicly-backed loan and equity support into an 'arms-length' and widely-recognised vehicle. In addition, the Welsh Government provides some direct investment (generally in relation to larger, often manufacturing firms), and all the South West Wales local authorities offer support services (in addition to the often university-linked innovation services highlighted above).

5.9 A recent review of the Welsh business support landscape highlighted three challenges, which are relevant to the strategy set out in this Plan[48]:

- First, Wales' **relative vulnerability to economic shocks:** a function of the continuing process of restructuring highlighted in the evidence base. This has contributed to the

[48] Jack Watkin (February 2021), *A Better Balance: Business support policy for the foundational economy* (CREW/ Institute of Welsh Affairs)

more recent policy focus on indigenous business growth. However, while economic 'shocks' are often seen through large 'one-off' events (plant closures, redundancy programmes, and so on), economy-wide technology-driven transformation is larger in its overall impact, and the ability to adapt and respond will be important across firm sizes and sectors.

- Second, the **scale** of the support offer, and the relatively small number of firms that it reaches (the inference being that there is a much wider range of SMEs that could benefit from interaction with the support system, were the reach to be greater).
- Third, **dissemination of benefits**, in particular the extent to which gains in business performance are captured in wages and tax and in which benefits to the supply chain accrue regionally. The Welsh Government has placed a greater emphasis on this in recent years, through the development of the 'economic contract' proposed in the *Economic Action Plan*

5.10 Over the coming years, we want to create a better integrated system across local and national government, within which a strengthened 'support' offer is linked with the supply of skills and premises, the role of the public sector as a purchaser and commissioner within the local economy and in ensuring that there is widespread access to fair and sustainable work:

Key action areas

- **We will seek a better co-ordinated support package for business**

  The scope of this, and the interaction between delivery at different geographical levels, will need to be explored. But the proposition is that there is a need to drive business density, start-up rates and entrepreneurship, and resilience and 'adaptability' to change across the SME base – recognising that 'enterprise' embraces a range of organisational types and ownership models[49].

- **We will link this with public sector purchasing power**

  Recently, there has been a focus on the role that public procurement can play in supporting local economic growth. This has been reflected in the Welsh Government's review of procurement, which has explored the concepts of 'community wealth-building and the 'anchor institutions' in the procurement process[50], and the South West Wales local authorities are all committed to the proactive and progressive use of procurement. The aim here is to ensure that local SMEs are able to successfully tender for work (linked with the business support offer above), and to use this as a springboard for future growth.

[49] Including social enterprises, employee-owned businesses, and so on.
[50] Welsh Government (2020), *Progress towards the development of a new procurement landscape in Wales*

Key action areas

- **We will invest in bringing forward access to sites and premises**

  The evidence shows that there is a persistent market failure in the delivery of commercial property. This has the effect of blocking the expansion of local SMEs (as well as presenting a barrier to attracting larger investors). Across the local authorities and Welsh Government, we will seek to bring forward development on the region's key strategic sites at Baglan, Port Talbot Waterfront, Fabian Way, Felindre, Cross Hands and the Haven Waterway, as well as within the wide range of smaller sites that will help to support distributed growth across the region, consistent with our wider decarbonisation objectives. We will also work to bring forward new city centre office accommodation in Swansea city centre, building on recent investment and continuing the city's transformation.

- **We will actively promote South West Wales as an investment location**

  While the focus of this Mission is on growing our locally-based business stock, inward investment has historically been important in South West Wales, and it remains a key driver of skills and employment and a source of demand for local suppliers. We welcome new investment: we will actively promote the region's assets (linked with its quality of life and visitor economy offer described in Mission 3) and we will work with investors to ensure access to skills and supply chain links, embedding them further in the local economy.

- **We will continue to invest in the region's skills capacity**

  Recent years have seen an improvement in the region's skills profile, and we have a strong track record in building an understanding of employer demand and linking it clearly with provision. Alongside the measures within this Plan to increase skills demand and employer engagement, we will continue to invest in strengthening supply at all levels, through specialist infrastructure, investment in access to employment and a continued focus (building on the region's Skills and Talent Programme) on responding to local economic demand and opportunity.

- **Across all our actions, we will improve access to fair and secure employment**

  Despite the region's success in creating jobs, economic inactivity remains higher than in the rest of the UK. While in-work poverty is a significant issue - and one which our focus on productivity and resilience across all sectors seeks to tackle – there is strong evidence that being in work supports positive outcomes across a range of measures[51]. Building on our experience of successful programmes such as Workways+, we will ensure a range of support to enable people to enter and progress in the labour market.

[51] Welsh Government (2019), *Employability Plan*, p,9

6. Mission 3: Growing and sustaining the South West Wales 'experience' offer

South West Wales enjoys a superb environment and a unique 'quality of life' offer. This is a key asset for the region, and one which we must protect and enhance. We will make South West Wales known for the quality and breadth of its 'experience offer', bringing together urban and rural environmental quality, 'quality of life' and culture. This will support a high-value visitor economy – but it will also be locally owned and a central part of our investment proposition.

Figure 6-1: Summary of assets, opportunities, challenges and actions

Understanding the case for the Mission: the core rationale

6.1 South West Wales' 'experience offer' is a key strength. It is also multifaceted and interlinked: while it includes the region's substantial visitor economy, it recognises that the visitor economy is itself dependent on the quality of the region's cultural and environmental offer. At a national level, this is reflected with the statement of 'Wales' core offer' within the Welsh Government's *Priorities for the Visitor economy* (set out in Figure 6-2). This highlights the importance of 'sense of place' within the Welsh offer, with the visitor economy helping to act as a showcase for local food and drink and celebrating the Welsh language as a central part of local and national identity[52].

6.2 In South West Wales, the range of experiences the region has to offer is diverse and impressive. It is this diversity that provides much of the region's distinctiveness: the proximity of the university city of Swansea to the beaches of the Gower for instance, or the region's range of landscape types (including the Pembrokeshire Coast and Brecon Beacons National Parks) and network of smaller rural towns. This also makes the region attractive as a place to live, and ought to be a central part of the region's investment proposition. This

[52] Welsh Government (January 2020), *Welcome to Wales: Priorities for the visitor economy, 2020-25*, p.9.

Mission focuses on **investment** in the 'experience economy' and how we can **promote** it to new and diverse audiences.

Figure 6-2: The Welsh 'core offer' to visitors

Source: Welsh Government (2020), Welcome to Wales: Priorities for the visitor economy, 2020-25

Investing in our experience economy

6.3 The 'good news' is that several visitor economy trends coincide with some of South West Wales' inherent strengths: in particular, the increased interest in sustainability, green tourism and nature and a desire for 'authentic' experiences. These, and the inherent value of local communities and identity, form part of the wellbeing 'offer' to residents as well. However, with the exception of Swansea, all parts of the region are forecast to see falling working age populations over the next twenty years. New employment opportunities should help to reverse this – but there is also an opportunity through the acceleration of remote working and increasing flexibility to retain more of our young people and university graduates, and to attract a wider demographic to the region.

6.4 Over the next decade, this will mean investment focused both on the quality of the visitor offer and the appeal of South West Wales as a place to live and work – recognising that these are inherently interconnected:

Key action areas

- **We will invest in the region's 'experience infrastructure'**

  We will seek to broaden the range of attractions and opportunities across the region, especially where they contribute to an increasingly sustainable offer, linked with the region's heritage (including in relation to local food and drink produce), culture and natural environment. This will include ensuring that the delivery of key national

Key action areas

initiatives (such as the proposed National Forest) contribute to our wider economic ambitions.

- **We will invest in our city, town and community centres**

  Our towns and cities are the gateways to our region, and the focal points for community, commercial and civic life. Much investment has taken place and much is underway – with (for example) the Swansea Arena and its bridge link to the city centre opening in 2021, creating a further milestone in the city's regeneration. However, there is more to do: across the region, many of our town and community centres have been impacted by structural change in the retail sector – with the process of repurposing requiring complex action on a number of fronts.

  Building on our experience of working together across the region, and in the spirit of the Welsh Government's Transforming Towns initiative, we will prioritise further investment in our town and city centres, ensuring that they are sustainable focal points for the long term.

- **We will make the 'experience economy' work for everyone**

  Not all parts of the region benefit from the excellent quality of life that the region has to offer – and in some places, our ability to retain and attract younger people is impacted by deteriorating housing affordability (an issue which has the potential to worsen further in an economy increasingly characterised by remote working). Linked with our decarbonisation and net zero objectives, we will continue to invest in affordable housing solutions and long-term community renewal.

Promoting the region

6.5 The quality of South West Wales' assets present an opportunity to better promote the region – to visitors and investors and to raise the region's profile on the wider stage. This should extend to encompass the renewable energy potential and industrial opportunities highlighted earlier: the region's future in a greener economy (and the opportunities that presents) combining with its cultural and environmental quality:

Key action areas

- **We will take a more coordinated approach to promoting the South West Wales opportunity**

  Recognising that each part of the region has a distinct identity and 'brand', we will work to ensure coordination across the visitor, education, local produce and investor

Key action areas

marketing channels to ensure that South West Wales has a clearer 'external' profile and a complementary offer.

- **We will invest in quality**

  Welcome to Wales, the Welsh Government's strategy for the visitor economy, places a strong emphasis on *quality* of the whole experience offer – accommodation, food and drink, the public realm, environment, and so on – as the route to a higher-value, more sustainable economic base. Across all of the actions above, we will invest – with business – in quality and excellence.

7. Moving forward: Delivering the Plan

This Plan provides a framework for taking forward the priorities that we have identified in our Ambitions and Missions over the long term. Delivery will depend on a range of investment sources and the coordination over time of specific projects which combine to deliver our objectives. This chapter explains our approach to funding and delivery, and how we will prioritise and monitor our progress.

From a framework to a pipeline of complementary projects…

7.1 This Plan takes a long-term view. Recognising that new opportunities will emerge over time, it is intended to be flexible, with specific actions described at a relatively high level.

7.2 To convert these into practical interventions, we have prepared a **project pipeline**. This sets out a schedule of interventions, describing how they contribute to our Ambitions and Missions, their current development status and the actions that need to be taken to bring them forward. This will be kept 'live' and will be regularly reviewed by regional partners. This will enable new interventions to come forward where opportunities arise (for example, commercial proposals may lead to propositions that have not yet been identified), and for project information to be updated as schemes progress.

7.3 The projects within the pipeline are at different stages of development. Consistent with the approach used by HM Treasury and the Welsh Government (and adopted by the City Deal), projects will be brought forward through the business case process set out in the 'Green Book' appraisal guide. In summary, this means that projects will be considered against the following headings:

Table 7-1: Project business case considerations

Consideration	Description
Strategic fit	• How strong is the evidence of economic demand or need? • Does the project add 'net regional value' (i.e., is it additional to activity already taking place in the region, and if there is any duplication, is this mitigated?) • Does the project contribute to the overall strategic framework (i.e., will it support delivery of an economy that is *"resilient and sustainable; balanced and inclusive; and enterprising and ambitious"*?
Options appraisal	• Have a range of options been considered, and is there a clear case for the preferred option?
Value for money	• Does the project represent good value, in terms of the outputs and outcomes it will achieve, relative to anticipated public costs?

Consideration	Description
Affordability	• Does funding for the project exist, and/ or is there a clear route to funding? • Is the funding model compliant with Subsidy Control and other regulations?
Deliverability	• Have procurement options been considered and is there a clear route to successful procurement? • Are governance and management arrangements in place, and is there sufficient delivery capacity?

Source: SQW

It will be important that the action plan is seen as a dynamic document and that it is regularly updated by partners. In broad terms, projects include:

- **Region-wide initiatives to build capacity to take advantage of the opportunities identified in the Plan**. These are highlighted within each Mission, and include:
  - Building capacity and expertise to maximise South West Wales' 'net zero' potential
  - The creation of a 'virtual innovation agency' to coordinate and galvanise links between industry and the knowledge base, especially as European funding comes to an end
  - Support at scale for enterprise and entrepreneurship
  - Public investment in the commercial property offer, to enable investment, business growth and greater environmental sustainability
  - Delivering a coordinated approach to investment marketing and support, linked with the 'experience' economy.
- **High profile strategic capital investments**, such as the Swansea Bay and South West Metro

7.4 **Major local projects** contributing to the overall objectives and Missions. Not all will *directly* benefit all parts of the region. However, in aggregate they will offer substantial regional benefit.

Funding the Plan: A longer-term investment fund

7.5 Funding to take forward the Regional Economic Delivery Plan and its component projects will come from multiple sources, and some individual funding packages are likely to be complex. At the time of writing, there is some uncertainty regarding future funding, as European sources (historically an important part of the funding mix in South West Wales) draw to a close. However, potential sources may include:

- Private investment, especially in bringing forward some of the energy related investments set out in relation to Mission 1, and in respect of major regeneration and development schemes

- The proposed Shared Prosperity Fund (or alternative successors to the European Structural Funds)
- Joint investment across the local authorities, or between the local authorities and the Welsh Government
- UK Government funds (such as the Strength in Places Fund and the Levelling Up Fund).

Key action areas

- **We will seek to secure a devolved regional Investment Fund**

  The nature of the funding sources identified above will change over time. However, given the scale of the opportunity (and the regional challenge) in South West Wales, we will seek to secure a devolved **regional investment fund**, which would offer the region the ability to lever in additional funding and bring projects forward on a flexible basis. Such a fund could be structured to give a partial financial return on investment, as well as an economic and social return, depending on the nature of the project. This would require investment expertise and capacity, but could lead to the development of a regional portfolio of projects, derived from the emerging project pipeline and building on the successful implementation of the existing City Deal. Currently, the projects within the pipeline have a total value of around £3 billion over the coming decade: while costs will be determined through the business case process, this provides an indication of the scale of the challenge and opportunity ahead.

Monitoring progress

7.6 Our proposed projects are all currently at different stages of development. Through the business case process, we will set out a series of performance indicators against which progress can be monitored. These are likely to include:

Table 7-2: Indicative performance measures

Indicator	Description
Private investment	Additional private investment secured in the region as a result of public support through the REDP
Gross value added	Estimated additional GVA generated as a result of investment
Firm creation and survival	New business starts as a result of REDP-backed activity and survival rates over time
Jobs	Jobs created and safeguarded as a result of investment. The REDP emphasises the quality of jobs (in line with the Economic Contract) and this should be reflected in the performance measure (e.g., employment at or above Real Living Wage and sustained over time).

Indicator	Description
Access to employment	People entering employment (or increasing hours) as a result of intervention
Innovation	Research and development into new products, goods and services as a result of intervention. Adoption of 'new to the firm' products or processes as a result of intervention
Carbon reductions	CO2 savings as a result of investment
Modal shift	Increased journeys on public transport/ increased use of active travel as a result of investment.
Visitor spend	Increased visitor spend as a result of investment

Source: SQW

Governance

7.7 The Regional Economic Delivery Plan will be 'owned' and overseen by the **South West Wales Corporate Joint Committee** (CJC). This will be one of four CJCs established in Wales under new legislation, enabling the constituent local authorities to exercise joint functions relating to strategic planning, transport and measures that will improve the economic wellbeing of their regions.

7.8 Supporting the CJC, the Regional Regeneration Directors will keep track of progress and will be responsible for developing business cases, securing investment and ensuring delivery on the CJC's behalf. It will be important to secure sufficient capacity – within individual partner authorities and jointly – to do this, given the scale of the opportunities and challenges. The CJC will also establish mechanisms for a strong non-government voice (e.g., from business and the third sector) in influencing priorities and maintaining oversight.

Annex A: Summary SWOT analysis

A.1 The Evidence and Strategic Landscape Review prepared to inform this Plan contained an analysis of the region's strengths, weaknesses, opportunities and threats. This formed the basis for the analysis within Chapter 2 of the Plan, and is summarised below:

Table A-1: Summary SWOT analysis

Strengths	Weaknesses
• Nationally and internationally significant university research assets, with a strong record of industrial collaboration in the region and recent and planned investment in new university facilities • Outstanding natural environment, supporting quality of life and a distinctive location proposition for visitors and investors • Relatively strong record in job generation and in increasing economic activity • Some established sectoral strengths (e.g., engineering and advanced manufacturing; food production) • Some major site development opportunities • Growing and diverse SME base • Community strengths and capacity and strong sense of identity	• Projected decline in working age population and rising dependency ratio • Relatively low productivity, reflected in relatively low wages • Relative peripherality, leading to weak transport and digital connections in some places, and viability constraints on physical developments • Few large firms and company headquarters • Some constraints on firm expansion, linked with workforce skills shortfalls (although qualifications levels are rising) and limited commercial property options • Market change impacting on viability and vitality of town and city centres • Persistent concentrations of disadvantage
Opportunities	**Threats**
• Talent pool generated by the region's universities and further education system; opportunity to retain and grow the skilled workforce and business stock • Opportunities for growth in areas of activity relevant to the region's historic strengths (e.g., advanced manufacturing) and in current research and technology capabilities • Opportunity for location-specific growth in the energy sector and in decarbonisation more broadly • Distance might become less important as remote working becomes 'normal' (potentially increasing the appeal of SW Wales' quality of life offer and helping to change perceptions • Closeness to the natural environment and ability to offer unique sporting, cultural and environmental offer – helping to retain and attract young and talented people	• High carbon intensity of part of the industrial base • Risk of loss of major employers, with potentially significant labour and spatial impacts • Risk of outflow of talent and of younger workers, if there are insufficient opportunities locally • Wider Brexit-related uncertainties relating to export markets, port-related activity and future farm payments • Impacts of the Covid-19 pandemic, including higher unemployment as mitigation measures wind down and accelerate changes in the role of High Street/ town centre functions • Risk that existing inequalities could be exacerbated.

Strengths	Weaknesses
• Opportunities to build on a track record of collaboration between the public sector, academia and industry • Potentially significant infrastructure investments (e.g., Swansea Bay Metro) • Economic policy innovation in Welsh policy context • Major site opportunities (e.g., Baglan Energy Park) and ambitious plans for investment and development, including as part of Swansea Bay City Deal • Opportunities for business innovation	

Source: SQW

Annex B: Well-being of Future Generations Act assessment

Contribution to the Well-being Goals

B.1 The Wellbeing of Future Generations (Wales) Act 2015 (WFGA) identifies seven Well-being Goals: a Prosperous Wales; a Resilient Wales; a Healthier Wales; a More Equal Wales; a Wales of Cohesive Communities; a Wales of vibrant culture and thriving Welsh language; and a Globally Responsible Wales. Guidance on the application of the WFGA states that policy should seek to contribute to all seven Well-being Goals, not just the one that most closely approximates to the central purpose of the initiative.

B.2 The table below summaries how this Plan contributes to the Well-being Goals:

Table B-1: Contribution of the REDP to the Well-being Goals

Goal	Contribution
A Prosperous Wales	**Direct contribution** The Plan contributes to increasing productivity and economic growth, to support the creation and safeguarding of more, better paid jobs, opportunities for business starts and growth, and further links between the knowledge base and industry.
A Resilient Wales	**Direct contribution** The Plan places an increased emphasis on economic sustainability through focus on the need to decarbonise the economy; resilience to future technology change through emphasis on responding to and harnessing digitalisation
A Healthier Wales	**Indirect contribution** The Plan is not directly concerned with health matters. However, greater prosperity (especially where more equally distributed) leads to better health outcomes. The Plan also notes the importance of the health and care sector and the opportunity to link it with economic growth.
A More Equal Wales	**Direct contribution** The Plan recognises the need to build an 'inclusive growth' model into the strategy, via efforts to support skills outcomes, resilience to automation, or mechanisms to support greater wealth retention within the community
A Wales of Cohesive Communities	**Indirect contribution** Better economic inclusion outcomes should improve cohesion, where linked with programmes and mechanisms that focus on local community involvement and engagement.
A Wales of Vibrant Culture and Thriving Welsh Language	**Indirect contribution** Measures to support the growth of the creative economy (including associated with the Welsh language) should directly support, and could be an important part of the SW Wales investment proposition. More

Goal	Contribution
	broadly, the Plan seeks to support the economic vibrancy of the region, including principally Welsh-speaking communities.
A Globally Responsible Wales	**Indirect contribution** Achieving over time a decarbonised growth model will contribute to this The Plan also highlights openness to new ideas (and investment) from elsewhere

Delivering against the National Well-being Indicators

B.3 The Welsh Government has adopted 46 **National Indicators**, against which progress against the goals of the Well-being of Future Generations Act can be measured. As set out in the core of the REDP, while increasing productivity (gross value added per filled job, or hour worked) is an important measure, success will be measured against a number of other indicators as well. The key relevant indicators are listed below (with the number against each one corresponding to the indicator number published in the Welsh Government list), along with a description of how the Ambitions and Missions in the Plan are likely to contribute to their achievement:

Table B-2: Assessment of contribution to meeting the National Well-being Indicators

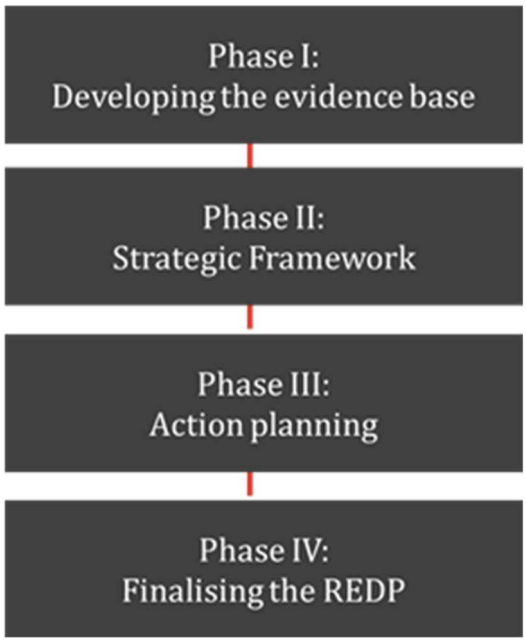
Indicator	Route to impact: Enabled through…
04. Levels of nitrogen dioxide pollution in the air	Large scale decarbonisation (Mission 1)
08. Percentage with adults with qualifications at different levels of the National Qualifications Framework	Measures to raise the supply of workforce skills, and improved engagement with employers, over time (across all Missions) Measures to raise demand for skills (across all Missions, but especially relevant to Missions 2 and 1)
09. Gross value added per hour worked relative to UK average	All Missions. This is a measure of productivity, which the Plan overall seeks to address. Note however that 'success' in achieving a relative measure in respect of the rest of the UK depends on the pace of growth elsewhere in the UK (hence the challenges in 'closing the gap' without very large-scale investment)
10. Gross disposable household income per head	All Missions. Note however that this data is not available at the South West Wales geography (it is published at ITL 1 and 2)
11. Percentage of businesses which are innovation active	Measures to increase interaction between business and the knowledge base, and to strengthen the innovation ecosystem (principally Mission 2)
12. Capacity (MW) of renewable energy equipment installed	Developing our renewable energy potential (Mission 1)
16. Percentage of people in employment who are on permanent	Measures to increase economic activity and the supply of higher paid employment. Delivered across all Missions.

Indicator	Route to impact: Enabled through…
contracts (or on temporary contracts and not seeking permanent employment) and who earn more than 2/3 of the UK median wage)	
18. Percentage of people living in households in income poverty relative to the UK median	Measures to increase access to employment, especially at higher rates of pay. Across all Missions
21. Percentage of people in employment	Key measure of economic success; relevant to all Missions
22. Percentage of people in education, employment or training measured for different age groups	Measures to improve access to, and demand for, education and training (across all Measures)
26. Percentage of people satisfied with their area as a place to live	Consequential measure arising from the success of measures to improve 'quality of place' (especially relevant to Measure 3)
33. Percentage of properties with adequate energy performance.	Measures to achieve a 'net zero' economy and to improve the energy efficiency of the housing stock as part of that (Mission 1)
42. Emissions of greenhouse gases within Wales	Measures to support decarbonisation (Measure 1)

Annex C: Developing the Plan: The process

C.1 The Regional Economic Delivery Plan was developed in 2021 with the support of SQW, through a sequential process that worked from a fresh analysis of the economic evidence to identify the key opportunities and challenges facing the region, and based on that, the Ambitions and Missions reflected in the Plan:

Figure C-1: Developing the Plan: Phases



- **Phase I** resulted in the development of a detailed **Evidence and Strategic Landscape Review**. This provides an overview of the region's economy and the policy context, informing an overall SWOT analysis. The Evidence and Strategic Landscape Review has been produced as a separate supporting document and informed the analysis in Chapter 2 of this Plan.
- Based on the outcomes of Phase I, **Phase II** involved the preparation of a **'strategic framework'** for the Plan, which identified the set of Ambitions and Missions that we have set out. As part of this, we analysed the outcomes of the SWOT analysis to consider the region's distinctive challenges, and we developed a series of future scenarios.
- In **Phase III**, we developed an initial pipeline of projects to meet the goals of the Ambitions and Missions. This involved a 'call for proposals' with the South West Wales local authorities and other stakeholders, and the development of a **Project Pipeline Supplement**, which will be kept 'live', as set out in Chapter 7.
- Based on the outcomes of the preceding phases, **Phase IV** involved the finalisation of the Plan, which was produced in draft in August 2021.

Consultation and engagement

C.2 The development of the Plan was led by the South West Wales local authorities, and regular dialogue took place with a steering group involving the four authorities and the Welsh Government, and with the Regional Directors. The strategic framework and contents of the Plan was also considered by South West Wales Leaders and Chief Executives.

In developing the Plan, consultation took place with over 50 stakeholders from business, local and Welsh national government, leaders within the region's Enterprise Zones and local

business partnerships, and the third sector. This included bilateral consultations throughout the process; discussions at county-level economic partnership boards, the Regional Learning and Skills Partnership, and the Economic Strategy Group of the Swansea Bay City Deal; and a stakeholder consultation workshop which took place in June 2021.

Cyngor Sir Gâr Carmarthenshire County Council

Cyngor Castell-nedd Port Talbot Neath Port Talbot Council

Cyngor Abertawe Swansea Council

Llywodraeth Cymru Welsh Government

Regional EconomicFramework For South West Wales

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Contents

Ministerial Foreword

This Government's approach to economic well-being is grounded on the principle that places matter. We want to realise ourambition of delivering better jobs closer to home and ensuring that the benefits of economic growth are felt fairly across all parts of Wales. Regional Economic Frameworks which are co-designed with our partners, are an essential part of our commitment to a more regionally focussed model of economic development. They are part of our work to develop the distinctive strengths of our regions, while supporting inclusive and sustainable economic growth, maximising opportunities to address regional and local inequalities and improvingthe well-being of our people.

Our Regional Economic Frameworks will help us to tackle our inherent structural challenges responsively, by turning them into opportunities to build dynamic and distinct regions which demonstrate inclusive, fair and sustainable economic growth. They will help us to design solutions for the future, together with our local partners.And importantly, they will be living and evolving documents which are responsive to changing circumstances.

Our Economic Resilience & Reconstruction Mission sets out our vision of a well-being economy which drives prosperity, is environmentally sound, and helps everyone realise their potential. Co-produced with our regional partners, our Regional Economic Frameworks will have a key role in deliveringthis vision and ensuring activities at all levelsalign to focus our resources where they can have greatest impact. They will help us to deliver a stronger regional voice and enable us to build upon the progress already made in developing our regional economies. The Regional Economic Frameworks will also play an important role in helping us recover from the economic damage of the pandemic

and mitigate against the impacts of our exitfrom the European Union whilst providing the longer term vision needed for a more prosperous, green and equal regional economy.

Our Net Zero Wales Plan will be supported through the delivery of our Regional Economic Frameworks, delivering cleaner, stronger and fairer regions.

We will strengthen the resilience of our natural and built environments to the impact of a changing climate and enable aneconomic transformation for our regions, which will help to displace our reliance on fossil fuels, and create the industries and thejobs of the future.

My ongoing commitment is to give the people and businesses right across Wales every opportunity to achieve long-term economic wellbeing with dignity and fairnessfor all. Our Regional Economic Frameworks are an important part of this work and we willcontinue to work constructively with our key partners, and the many other people who have an interest in the regional economy to meet the challenges we face and to grasp new opportunities.

In particular, the Frameworks will play a key part in creating the conditions where more people, particularly the disadvantaged and young people, feel confident about planningtheir futures in Wales.

How we deliver is as important as what we deliver, and the principles of partnership, sustainable development, addressing climate change and driving decarbonisationwill be at the very heart of this work.

I recognise that Government alone does not have all the answers. A phased, collaborativeapproach, working together with partners from across the region, is vital to our success. That joint working with our partners has already resulted in us co-developing a single vision that is supported by a shared and prioritised set of outcomes, and articulated in this new Regional Economic Framework for south west Wales. It is a framework that will enable greater alignmentand integration across government and one that will drive the joined up economic development and strategic planning between partners that is needed to buildnew approaches and facilitate further joint working and economic growth in the future. I would like to thank all stakeholderswho have engaged and participated in this process so far – particularly our local authority partners and look forward to a continuing conversation with all those whohave an interest in a prosperous future regional economy.

Vaughan Gething MS
Economy Minister

As Chief Regional Officer for Mid and South West Wales, it is my privilege to be the voice of the region within Government and the voice of Government in the region. Myrole is to provide leadership, coordination,planning and alignment of economic development activities across the region.

There has already been considerable conversation and dialogue with regional partners at a strategic, sub regional and local level. This new Regional Economic Framework (REF) is the first step on the journey which has brought partners togetherto co-design, with a focus now on the co- delivery of this REF for south west Wales –
it is only through a process of joint-workingand co-production that we will create the shared endeavour and unity of purpose critical to a successful regional economy.

While we know the REF will address someof the key themes that are emerging suchas skills, infrastructure and support for business, our priority must be to ensure a genuinely place based and tailored responseto needs and opportunities, recognising
the distinct sub regional differences within and across south west Wales. Underpinningthis will be the principle that regions are notsubordinate to the national level in respect of their own priorities agreed under shared principles, and we must make paramount the importance to respect subsidiarity
and democratic accountability at different national, regional and local levels. REFs can enable greater alignment and integration across government, bringing benefits including joined up economic developmentand strategic planning on a range of issues from land use to skills as well as supportingcollaboration across the regions – working with the new and existing governance structures across local authority boundarieson issues such as town centre regeneration,strategic transport and infrastructure for example.

> ...it is only through a process of joint-working and co-production that we will create the shared endeavour andunity of purpose critical to a successful regional economy.

REFs will not duplicate the plans that already exist, but draw together the key elements to address regional inequalities and will aim to directly influence how Welsh Government delivers in regions and places. These frameworks will be agile to ensure they remain relevant and responsiveto changing economic circumstances and new opportunities, playing a key role in delivering against our new Programme for Government and Economic Resilience & Reconstruction Mission. This REF can be
a vehicle to help promote collaborative regional planning and delivery amongst public, private and third sector partners, working to a shared vision and a set of common economic development objectives.In taking forward the development of the REF we have been acutely aware of the immediate reset and recovery required in the wake of the Coronavirus pandemic, but also the need to set out the longer term aspirations for the region and respond to the climate and nature emergency in our efforts to build a stronger, greener regional economy as we make maximum progress towards decarbonisation.

I would like to thank all those who have provided their input to date, particularly our four Local Authority partners (Carmarthenshire, Neath-Port Talbot, Pembrokeshire and Swansea). We have sought to foster closer and more effective collaboration with our regional partners andstakeholders which is bearing real dividend
and through collaborative effort with our key partners across the region we are delivering tangible differences to businesses and communities across south west Wales.

Rhodri Griffiths
Chief Regional Officer, Mid & South West Wales

THE REGIONAL ECONOMIC FRAMEWORK FOR SOUTH WEST WALES

The Regional Economic Framework for South West Wales, developed through collaboration and co-production with stakeholders from across the region, supports a more regionally-focused model of economic development, in accordance with the Welsh Government's Programme for Government and a commitment to progress our Economic Resilience and Reconstruction Mission for Wales. It sets out what we will do, and how we will do it.

OUR VISION

Balanced and inclusive

Enterprising and ambitious

Resilient and sustainable

A South West Wales which is …

OUR ECONOMIC PRIORITIES

Mission 1

Establish South West Wales as a UK leader in renewable energy and the net zero economy.

Mission 2

Build a strong, resilient and 'embedded' South West Wales business base.

Mission 3

Grow and sustain the South West Wales 'experience' offer.

Welsh Language, Heritage and Culture

OUR SHARED VALUES

Inclusivity	Trust	Openness	Collaboration	Whole System Thinking	Appetite For Change
we will gather more people around the table.	we will trust and respect all those we work with.	we will share our knowledge and resources.	we will work together towards our common goals.	we will consider the full impact of our actions.	we will challenge convention and take action.

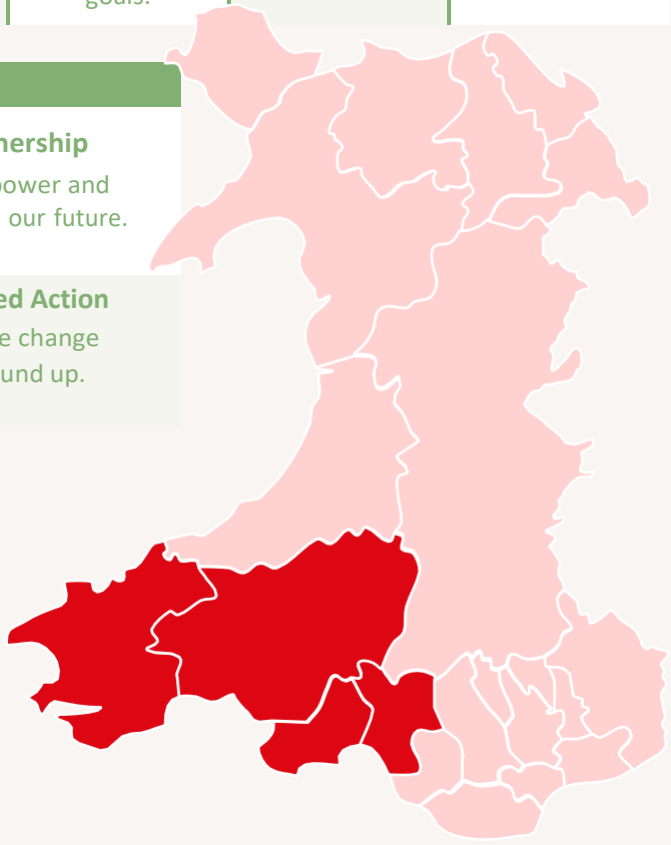
OUR WAYS OF WORKING

Asset-based
we will build on our region's great strengths.

Shared-ownership
we will share power and responsibility for our future.

Continuous Development
we will always push for positive change.

Community-led Action
We will enable change from the ground up.



We will implement the Regional Economic Framework for South West Wales in accordance with the Well-being of Future Generations (Wales) Act 2015 '5 ways of working'.

Llywodraeth Cymru
Welsh Government

1. The Co-Production Process

This is the first REF for south west Wales and part of the transition to a regionally focussed model of economic development. The framework is the result of a different approach involving extensive engagement and co-design with the people that are living and working across the region as well as building on the existing work of regional partners. The approach has been as much about asking better questions, as it has about providing the answers and the REF isthe start of a continuous and collaborative process that will be reflected in the way thatwe work as a region.

The engagement process has in particular highlighted the following themes:

- Equality and diversity
- Children and young people
- The Welsh language
- The environment

The REF is also not meant to be a rigid or traditional business plan but provides a framework to capture how the public, privateand third sectors are delivering for the region and place. Many of the conversations informing the REF were about not just what we must do to grow the region's economy, but how we must do it and the kind of decisions that will need to be made. And
in facing the significant challenges for the region's economy, particularly the impacts from COVID-19, leaving the European Unionand diminishing resources, it is right that theREF determines where to focus, why and theroles and responsibilities.

In keeping with the principle of building on pre-existing work and not duplicating,this first edition of the REF is intentionally broad and high level, with much of the detailed and technical rationale found in the economic development strategies andthe local plans that currently exist or in development.
Importantly, Local Authority
partners in south west Wales, supported byWelsh Government, commissioned work to prepare a Regional Economic Delivery Plan(REDP) for the region, to provide a further layer of detail below the REF which outlinesthe actions required to deliver against
the high level priorities set out in the REF.
Behind the vision, there is a collaborative approach driven by the Local Authorities and Welsh Government to provide the alignment and consistency required to ensure complementarity between strategicambitions and ways of working set out in the REF and the detailed actions captured in the REDP necessary to drive sustainableeconomic wellbeing across south west Wales.

Therefore, the REF closely reflects the existing work at a regional level and througha place-based and inclusive approach, echoing the discreet challenges and opportunities of people living and working in south west Wales. The engagement phasein the development of this REF, together with extensive engagement through the REDP has reaffirmed the region's strengths, its key USP's, the challenges that lie ahead and an appetite for greater collaboration and involvement to improve our economic prospects.

2. Shared Values & Ways of Working

Shared values are those which underpin andgive coherence to our actions and decision making. They enable us to work together asa region, speak with a collective voice, and drive forward positive change.

Inclusivity

We value inclusivity. Everyone who lives, works, visits and invests in south west Wales is a stakeholder in its economy. Every stakeholder given the opportunity to contribute to decision making, and decision making taking into account its impact on every stakeholder.

Trust

We value trust. To work together we musttrust each other. We must trust those whoask us to share our power, trust those whoask us to share their responsibility, and wemust trust that those who make decisions will do so with the best interests of the region at heart.

Openness

We value openness. Everyone should have access to the information they need in order to act in the best interests of the region. Communication should be regular, data transparent and access for information equitable to all concerned parties.

Collaboration

We value collaboration. We can only make positive change happen by workingtogether. Collaboration must span sectors and hierarchies, be accepting of concessionand compromise, and be focused on doingwhat is required to make positive change happen.

Whole System Thinking

We value whole system thinking. The economy of south west Wales does not existindependently of everything, and everyone, in the region. As such, the decisions which drive our economic development must take into account their consequences for everything, and everyone else. The economymust work for the whole region and every community within it.

Appetite for Change

We value an appetite for change. The way things are done now should not be given automatic precedence over the way in whichthings could be done in the future. We mustbase every decision on its own merits and when change is called for, embrace it.

Our Ways of Working sets out how we will apply our shared values, in working towards our shared economic priorities. They providethe backdrop against which the roles and responsibilities of every stakeholder can be defined.

Asset-Based Approaches

We will build on what we already know, what we are already doing and what alreadyworks. Our economic development must build on successes, reduce waste, and growour economy from our strong base and existing strengths.

Shared-Ownership

We will empower responsibility for the development of our economy and striveto ensure that the REF has a sense of ownership by all stakeholders across southwest Wales.

Continuous Development

We will adapt and evolve our REF over time. Economies are changeable, regions are changeable and the needs of stakeholders are changeable. Our current circumstances and context are dynamic and whilst our purpose will be enduring, the way in which we drive regional economic development should be subject to continuous review, reflection and revision.

Community-Led Action

We will work to the principle of subsidiarity, empowering stakeholders and communitieswho can most effectively drive the change they will reap the rewards of.

3. South West Wales –Where Are We Now?

South west Wales is a large and varied economy comprising the Local Authoritiesof Carmarthenshire, Neath Port Talbot, Pembrokeshire and Swansea and accountsfor 22%[1] of the population of Wales. This diverse region includes post-industrial communities of the western valleys and coastal towns as well as rural communities,market towns and Wales' second city of Swansea.

South west Wales has a strong cultural heritage and areas with a high proportion of Welsh speakers and known for its natural beauty. The coastline is particularlyimportant, it is both industrialised and developed as well as a significant tourism destination and protected environment including Gower, the UK's first designatedArea of Outstanding Beauty and Pembrokeshire Coast National Park,
all within easy access of several urban conurbations resulting in an exceptional and diverse quality of life offer.

The region's economy is worth £14 billion and supports some 300,000 in employmentand although the vast majority are SME businesses providing the backbone of
the economy but also contains globally significant firms. Food and tourism are important sectors across the whole region, whilst across the economy GVA per head remains persistently below the Welsh and UK average.

The region has important economic assets particularly the city of Swansea, with two substantial universities, R&D assets and ambitious plans for growth as a major regional centre. The region has good connectivity with links to the M4 Corridor and Cardiff Capital Region and to Ireland via the Trans-European Network, several major ports and local airport/airfields and the proposed new Swansea Bay & West Wales Metro offers exciting opportunities for enhanced accessibility across the region.Advanced manufacturing capabilities exist for example at Llanelli, and Port Talbot
with a deep water harbour and significant capacity for future growth combined with the region's two Enterprise Zones at the Haven Waterway and Port Talbot Waterfront.The regions natural assets, in particular the Celtic Sea, have the potential to support
the growth of onshore and offshore energy generation. The Haven Waterway is critically important to the future energy security of the UK with a number of long established energy installations.

Looking to the future, there are big opportunities and advantages for the regionwith the potential of low carbon energy,
the future growth of our universities and the development of their relationship withthe business base; changes to technology/working practices that provide greater opportunities for home-working that will
help overcome the regions peripherality and maximise the advantages of a higher quality of life.

But there are also some long-term challenges to overcome including the historically weak productivity – despitehaving made progress in recent years;skills deficits; ongoing legacy of deindustrialisation, falling working age

1 Source: Office for National Statistics

population and in many areas and relativelylow pay. These will be reinforced by some major challenges that are structural including decarbonisation and the impact on the regions historic manufacturing strengths – immediate but with potential longer term consequences of Covid-19, EU exit and changing trading relationshipsglobally and the impacts on the business base, from manufacturing to agriculture and food production. In addition, the structural challenges for our town and city centres, accelerated by Covid-19, and the importance of addressing the viability of the commercial property market remain major concerns.

However, the south west region has made big steps already through the Swansea BayCity Deal (see project list) and looking to the future, the region will build on this andthe track record of success to build a more resilient, productive and inclusive economy.

Swansea Bay City Deal Projects

- Skills and Talent initiative.
- Digital Infrastructure.
- Canolfan S4C Yr Egin.
- Swansea City and Waterfront Digital District.
- Homes as Power Stations.
- Pembroke Dock Marine.
- Life Science and Well-being and sport Campuses.
- Life Science and Well-Being Village, Pentre Awel
- Supporting Innovation & Low carbon Growth

South West Wales – At a Glance

Strengths/Opportunities

Outstanding natural environment and attractive tourism and heritage offer

HEI excellence, commercialisation of research with combined FE provision and a committed labour force

Sectoral strengths in energy, advanced manufacturing and digital with strategic sites and innovation centres

Swansea Bay City Deal and EZ as transformational designations

Global firms and a growing number of indigenous micro enterprises and graduate start-ups

Physical regeneration activities as the catalyst for further investment and growth

Weaknesses/Threats

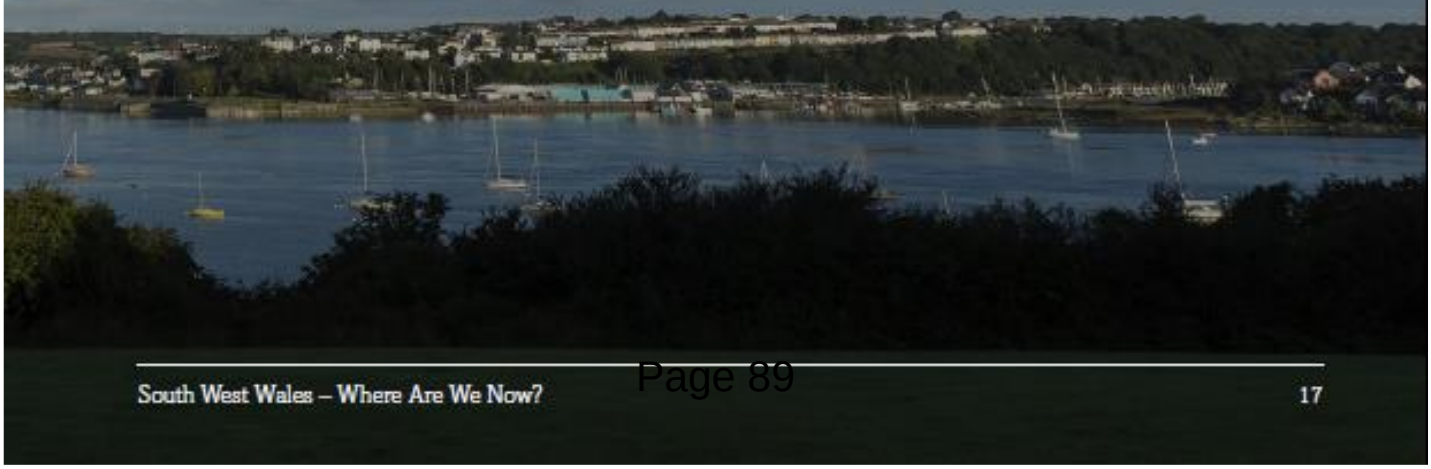
Lagging productivity, skills deficits and concentrations of economic inactivity, unemployment and deprivation

A lack of modern business infrastructure, with limited speculative development, low rental values and viability gaps highlighting market failure

Struggling city and town centres with declining footfall

Poor digital and transport connectivity in parts of the region

Potential impact of Brexit on rural communities and ports



Regional Assets

South west Wales has strong heritage and provenance in key industries and sectors with significant developments in regional assets providing an opportunity to generate new, sustainable and inclusive growth. The importance and potential of the region's foundational economy will also provide a keyopportunity to improve south west Wales' prospects.

The region will build on a range of importantand distinct place-based assets that include:

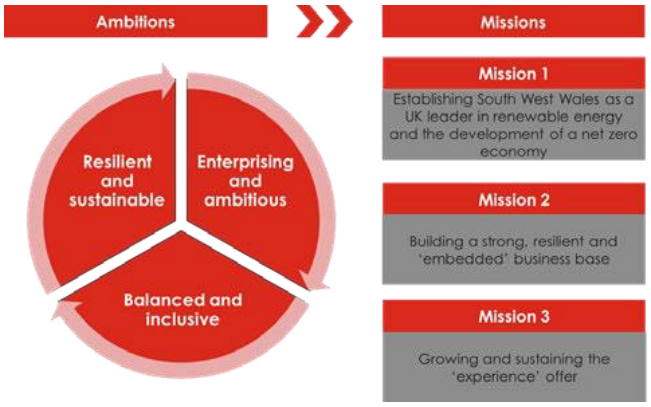
- The Celtic Sea – with the potential for theregion to be at the forefront of the UKs drive for Floating Offshore Wind (FLOW) energy generation and a catalyst to accelerate the development of enabling infrastructure and stimulate the growth ofoffshore energy
- Ports – the region hosts two of the UK's busiest deep water ports at Milford Havenand Port Talbot supplemented by generalcargo and Ferry Ports at Swansea and Fishguard
- Higher Education Institutions including our Universities at Swansea and Universityof Wales (Trinity Saint David) and the range of world class industrial and scientific research such as Swansea University SPECIFIC Innovation and Knowledge Centre; the Active Building Centre and ASTUTE (Advanced Sustainable Manufacturing Technologies) and the University of South Wales' Hydrogen Research & Development Centre at Baglan
- Sector specific assets including Pembrokeshire Food Park, Yr Egin – Creative and digital hub in Carmarthen that features the facilities for media production and has co-working spaces; Cyber Wales and the to-be-constructed Pentre Awel Life Science and Well-BeingVillage in Llanelli
- The wealth of outstanding natural assets, traditional market towns, cultural assets including the Pembrokeshire Coast and Brecon Beacons National Parks and the Gower Area of Outstanding Natural Beauty – contribute to a superb visitor offer

There are assets that also strengthen links with our neighbouring regions – looking tothe future the Global Centre of Rail Testing Excellence between Neath Port Talbot and south Powys provides an opportunity to maximise the economic benefits for both mid Wales and south west Wales.

In delivering a place based approachto regional economic development and reconstruction we recognise the opportunities to build on our distinctive strengths, stepping up our investment in town centres, including providing better access to open spaces, the creation of remote working hubs, and making sure thatour public services are more accessible, adopting a 'Town Centre First principle'
as part of our decision making.

4. South West Wales – Where Do We Want To Be?

Through the development of the REDP, regional partners have agreed a shared ten year vison for the south west Wales economy. The REDP Strategic Frameworkoutlines three key areas of focus and provides the basis for setting out our collective aspirations in this first REF.



Resilient and Sustainable

Resilient to technology change and theimpacts of digitalisation:

- Supporting firms in adopting and adapting to new technology
- Building labour market resilience throughthe skills system from schools through to adult learning.

Resilient to climate change and decarbonisation:

- Increasing the resilience of the region's manufacturing base (including in its (currently relatively carbon-intensive foundation industries)
- Supporting adaption and adoption throughout the economy (across sectorsand through the building stock and transport system)
- Delivering robust digital connectivity to support changing working practices and better access to employment.

Supporting resilient and more 'embedded' firms and supply chains:

- Developing the local business base through access to support, finance, networks and procurement
- Embedding best practice and resilience throughout the supply chain
- Continuously building management capacity and capability.

Enterprising and Ambitious

Ambitious in relation to our long-termenergy opportunity:

- Ensuring capacity to drive forward our potential
- Integrating our natural renewable energy advantages with our university and industrial strengths.

Enterprising in relation to changing market conditions, technology and opportunities:

- Investing in the skills system across the economy and driving demand for higher level and technical skills, as well as influencing supply
- Investing in the commercial property stock – for local businesses scaling up aswell as new investors.

Driving new investment, innovation andfunding models:

- Developing sustainable alternatives to European funding

- Promoting the region as a location to invest, work and visit.

Balanced and Inclusive

Balanced between innovation at the leadingedge and sustainable growth across the economy:

- Developing opportunities for ‘new to the firm’ innovation, as well as R&D and new technology and product development
- Recognising the opportunity for a diverse range of business and ownership models.

Balanced spatially, across the region:

- Celebrating regional diversity and a wide distribution of opportunity
- Creating long-term growth, while sustaining and enhancing core environmental and community assets
- Recognising and enhancing the inherent value of the environment to the quality oflife and quality of place proposition
- Supporting community ownership of economic assets, where this can supportlocal opportunity and generate a sustainable return.

5. Economic Priorities

A shared set of economic priorities are thoseareas of focus where collective action and investment can deliver the greatest benefits for all across the region, maximising our strengths and assets. The existing body of work carried out by regional partners to produce the south west Wales REDP provides a solid foundation on which to set out a suite of regional economic development priorities, or 'Missions', supported by regional stakeholders:

Mission 1 – Establish south west Walesas a UK leader in renewable energy andthe net zero economy

Looking to 2030, we aim to make south west Wales a UK leader in renewable energy. That means taking advantage of our natural assetsand our industrial and R&D capabilities to build an internationally-significant presence in future fuel technologies and to drive the decarbonisation of our industrial base and the wider economy.

Mission 2 – Build a strong, resilientand embedded business base

Business is at the centre of our strategy to 2030: it will be through the expansion of existing firms and the start-up and attractionof new ones that new employment will be generated and productivity growth secured.That means supporting sustainable businessgrowth– both at the 'leading edge' of technology and innovation and across the economy.

Mission 3 – Grow and sustain the 'south west Wales experience' offer

South West Wales enjoys a superb environment and a unique 'quality of life' offer. This is a key asset for the region, and one which we must protect and enhance. We will make south west Wales known for the quality and breadth of its 'experience offer', bringing together urban and rural environmental quality, 'quality of life' and culture. This will support a high-value visitor economy – but it will also be locally owned and a central part of our investmentproposition.

Building our Capacity

Underpinning our approach is the need to consider both supply and demand generating interventions, which are aboutbuilding the region's capacity to support economic wellbeing, ensuring that the region has the appropriate supply of skills and talent to meet future demand as well as digital infrastructure, connectivity and the availability of commercial sites and premisesas critical enablers for all 3 Missions.

6. Our Next Steps

Through this first edition of the REF forsouth west Wales we will aim:

- To work collectively as a region, recognising that how we deliver is as important as what we deliverand embrace the ways of workingset out in the Wellbeing of Future Generations (Wales) Act 2015
- To embed our response to the climateand nature emergency in our efforts to build a stronger, greener regional economy as we make maximum progress towards decarbonisation
- To further develop and deliver the three 'Missions' and priority actions captured in the south west Wales REDP through a joined up, collaborative approach
- To work collaboratively with the Regional Skills Partnership to develop the right skills for a future workforce, aligned to theregion's economic development priorities,ensuring the flexibility and opportunity for life-long learning and employability for all and the transferability of skills to new areas as technology develops
- To continue to investigate gaps in our knowledge and understanding of the key drivers of change such as the impacts of Covid-19, leavingthe EU and demographic changes including how best to retain a greaternumber of our young people
- To explore how we measure success for our region – giving consideration to a much broader suite of indicators than purely economic and which reflect the region's well-being as well as its prosperity
- To inform and influence the design and delivery of future national policy in areas such economic development,skills and regeneration to shape programmes and funding opportunitiesto meet the distinctive needs and opportunities of south west Wales
- To confidently promote and championthe south west Wales region as an area with economic opportunities, an ambitious attractive place to live, for skilled and well-paid employmentand to encourage investment
- To continue the conversation aboutthe future direction of the economywith all of the stakeholders with an interest in a sustainable and successful south west Wales
- To develop the REF through future editions that reflects the context and evolving regional landscape in relation to funding opportunities forregional investment and emerging governance arrangements such as Corporate Joint Committees (CJC's)
- To consider and develop an appropriate means by which to monitor and evaluateour progress in achieving our objectives, including delivery against our strategic priorities, ways of working and which enables our ability to respond to changing circumstances

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February 2022

Neath Port Talbot Economic Recovery Plan

Final draft

DRAFT – Version 4.1

SQW

Contents

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Executive Summary

Why we're producing a new economic plan for Neath Port Talbot

1. Neath Port Talbot has a proud history of industrial innovation. Today, it is one of Wales' most important manufacturing locations, containing the UK's largest steel production complex at Port Talbot and a series of strategic development sites of national significance. But the process of economic change has been challenging: despite investment success, too many residents remain too far from economic opportunity.

2. Over the past two years, the Covid-19 crisis has presented a major challenge to the local economy, driving a focus on protecting jobs, businesses and incomes during the pandemic. But as the crisis recedes, we need to plan for growth over the longer term. This **Economic Recovery Plan** sets out how Neath Port Talbot Council and its partners will economic prosperity over the long term, as part of a coordinated approach to wellbeing.

Introduction

3. In 2021, partners in South West Wales (including Neath Port Talbot Council) commissioned a Regional Economic Delivery Plan. This set out a strategy for the region's economy looking ahead to 2030, identifying three 'missions' to establish South West Wales as a UK leader in renewable energy and the development of a net zero economy; build a strong, resilient and ''embedded' business base; and grow and sustain the 'experience' offer. The Plan also sets out an ambitious framework for regional investment.

The economic context

4. Neath Port Talbot has an economy worth around £2.6 billion, and supports around 56,000 jobs. In the years leading up to the pandemic, employment grew quite strongly: the number of jobs increased by 10% between 2014 and 2019. There has also been some success in increasing the economic activity rate. Looking across the county borough's economy:

   - **The industrial profile of the economy is highly distinctive.** Around 25% of output and 19% of employment is in manufacturing, with a nationally-significant presence in the metals sector and industrial assets including major companies and translational research institutions. While the local economy has experienced substantial restructuring in recent decades, it remains one of the UK's most highly concentrated industrial districts – and the industrial sector is a major source of good quality employment.

   - **This industrial profile presents both vulnerabilities and opportunities for technological leadership.** The economy is very carbon intensive, making decarbonisation an especially pressing challenge, and there are several initiatives in

place. However, some propositions are at an early stage (and are operating in a competitive environment): sustained investment and flexible leadership will be important.

- **There are major expansion opportunities that are of national significance.** These include the extensive waterfront sites in Port Talbot and Baglan (as well as the potential of the Port), and former industrial sites inland. Opportunities on this scale and with the right connectivity are rare in South Wales – but they require (continued) long term investment and strategy to bring them forward.
- **…. But parts of Neath Port Talbot are further away from economic opportunity.** While economic activity is substantially concentrated along the M4 Corridor, there are fewer job and business opportunities based in the Valleys – despite the *potential* of the area's communities and natural assets. This challenge is compounded by generally poor transport connections beyond the main towns and coast.
- **There are significant deficits in workforce skills**, which impede residents' ability to take full advantage of new opportunities. Addressing these will be important in supporting the productivity and adaption of the existing industrial base, as well as supporting diversification.
- **The overall business stock remains relatively small.** A larger and more dynamic SME base ought to help in developing opportunities for growth across the economy – especially in those parts of the county borough that are further away from employment opportunities at scale.

A framework for action

5. Building on the evidence, we aim to **"create the conditions for practical, meaningful and relatable"** opportunities for businesses and residents. This is a Plan for the whole county borough, recognising the need to create opportunities, and access to opportunities, in all parts of Neath Port Talbot, and we have identified four priorities for action:

Figure 1: Strategic framework

Source: SQW

6. The four key areas for action are:

- **Entrepreneurial and resilient economy:** Strengthening our SME base – in all sectors and across the county borough - through a better coordinated approach to support, premises and finance and a renewed focus on sustainable 'indigenous' business growth at community level.
- **Transformational investment and change:** Ensuring continued investment in (and the capacity to deliver) our major strategic sites at Port Talbot Waterfront and Baglan Bay; the key opportunity associated with the Global Centre of Rail Excellence; and the range of long-term – but in some cases emergent – actions to support industrial decarbonisation.
- **Quality and connected places:** Investing in our town centres and communities, making the most of our environmental assets and their potential in the development of the visitor economy, and improving connectivity to work and learning.
- **Future skills and opportunities:** Developing a skilled and resilient workforce, with a stronger employer voice.

Delivering the Plan

7. This Plan is intended to provide a flexible framework for action over the coming years, recognising that the economy is dynamic and we will need to be responsive to new proposals (and, potentially, shocks). While it will be 'owned' by Neath Port Talbot Council, success will come through partnership working, shared leadership and a pragmatic approach to seizing opportunities as they emerge.

1. Introduction

Welcome to Neath Port Talbot Council's draft **Economic Recovery Plan**. This Plan sets out our strategy to grow our business community, support sustained employment and progression in work, and increase productivity and pay over the long term.

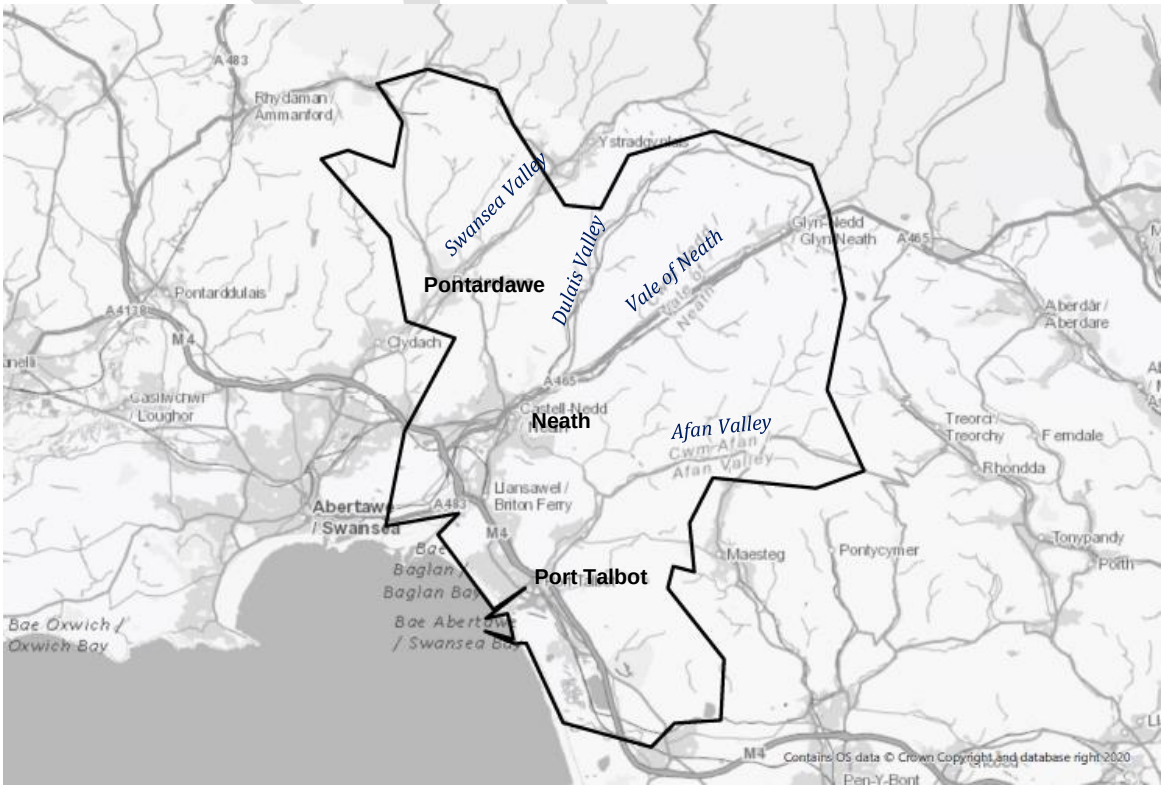
This Plan is a starting point for working together with partners in business, government and the community. We welcome feedback and ideas– and we look forward to translating our plans into action.

Welcome to Neath Port Talbot

Introducing Neath Port Talbot

1.1 Neath Port Talbot has a proud history of industrial innovation, originally built around coal, steel and petrochemicals and manufacturing. Today, we are one of Wales' most important manufacturing locations: our assets include the UK's largest steel production complex at Port Talbot, extensive industrial development, and major opportunities for expansion at strategic sites such as Baglan Energy Park and within the Port Talbot Waterfront Enterprise Zone.

Figure 1-1: Neath Port Talbot



Source: Produced by SQW 2021. Licence 100030994. Contains OS data © Crown copyright [and database right] (2021)

A spatial picture of the county borough

1.2 Around 70% of Neath Port Talbot's 144,000 people live in its three largest urban areas. **Neath** is an historic market town and major industrial centre which, with the adjacent settlements of Briton Ferry, Skewen and Llandarcy, has a population of around 52,000. A further 38,000 live in the coastal **Port Talbot** conurbation, extending to Baglan, Taibach and Margam, which includes the Port Talbot steelworks and port and some of South Wales' most important strategic development sites. **Pontardawe**, in the Swansea Valley, is the third principal centre, with a population of about 13,000[1]. Within the National Plan, the southern part of the county borough is designated part of the 'Swansea Bay and Llanelli' National Growth Area[2].

1.3 However, beyond the coastal strip and the major towns, the county borough is extensively rural, containing several relatively remote, primarily post-industrial communities. North of the M4, settlement patterns follow the main valleys: east to west, these are the **Afan Valley, the Vale of Neath, the Dulais Valley, the upper Swansea Valley and part of the upper Amman Valley** around Gwaun-Cae-Gurwen. Rural Neath Port Talbot also contains important natural and heritage assets, including Afan Forest Park and the Aberdulais Falls.

Building on success, looking to the future: the case for the Economic Recovery Plan

1.4 In Neath Port Talbot, **we have a strong track record of attracting investment and driving forward major projects to support economic growth**. Swansea University's new Bay Campus at Fabian Way is now open and complete, transforming a former petrochemicals site into a world-class science and innovation campus. Completion of the Harbour Way distributor road in Port Talbot has opened up access to the Port and enabled the delivery of the Harbourside research and innovation village. Baglan Energy Park continues to be developed as a major strategic industrial site, with an Innovation Centre open and the new Bay Technology Centre nearing completion. Investment in our town centres is well underway, with Port Talbot Parkway station and associated improvements open, and the major new leisure development in central Neath well underway.

1.5 Looking to the future, there is much more to do. As the analysis in Chapter 3 sets out, working through the legacy of our industrial past is a generational challenge. Delivering our major sites requires a long-term approach over many years, and there is a need for a concerted effort to secure investment and prosperity in the county borough, especially in those communities that are further away from the major growth opportunities – and to ensure access to those opportunities. At the same time, we are aware of the vulnerabilities presented by our distinctive industrial profile, and the need to build a more resilient and diverse economy.

1.6 In that context, Neath Port Talbot Council, with the support of the Welsh Government, has prepared this **Economic Recovery Plan** to set out our priorities for future economic

[1] ONS, Built Up Area Subdivision mid-year population estimates, 2020.
[2] Welsh Government (2021), *Future Wales: The National Plan 2040*, Policy 28

development. In preparing the Plan, we have taken a long-term view, looking beyond 'recovery' from the Covid-19 pandemic to the next five to ten years. It is designed to set a clear direction, while remaining flexible, responsive and practical, so that we can drive forward investment proposals and business ideas as they emerge. Importantly, we recognise that although the Plan has been initiated by Neath Port Talbot Council (and the Council has a key leadership role), success will depend on collaboration with business and with partners across the public sector.

Contributing to our Wellbeing Plan…

1.7 The Economic Recovery Plan is a key 'building block' of Neath Port Talbot's approach to wellbeing. In 2018, NPT Public Services Board published its five-year Wellbeing Plan, ***The Neath Port Talbot We Want***. Developed by partners across the county borough, this set out a vision for Neath Port Talbot as *"a vibrant and healthy place where people have an equal chance to get on in life - a place where people want to live, learn, work, invest and visit for many generations to come"*[3].

1.8 The concept of Wellbeing (as defined in the 2015 Wellbeing of Future Generations Act) is wide-ranging, and holistic[4]. But a key dimension is **economic prosperity:** put simply, the sustainable generation of wealth, and the means by which people across Neath Port Talbot are able to access prosperity through skills, work and enterprise.

> **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 Prosperous Wales: one of the seven Wellbeing Goals***

1.9 Work is underway to prepare a new Wellbeing Plan. The Economic Recovery Plan will help to drive its prosperity objectives, alongside a wider-ranging Regeneration Strategy, which will be prepared over the coming months.

… within an evolving strategic context

1.10 In addition to the Wellbeing Plan, the Economic Recovery Plan responds to a strategic context which has evolved substantially over the past four years. This includes the preparation of a **Regional Economic Delivery Plan (REDP)** for South West Wales, which builds on the success of the Swansea Bay City Deal and sets out both a regional strategy and a suite of

[3] Neath Port Talbot Public Services Board (2018), *The Neath Port Talbot We Want: Wellbeing Plan 2018-23*

[4] Future Generations Commissioner for Wales (2015), *Wellbeing of Future Generations Act (Wales) 2015*

transformational investments to support growth over the coming decade. The REDP underpins the development of an enhanced framework for joint working across the region (including the new Regional Energy Strategy and the approach to the Swansea Bay and South West Wales Metro): this local Economic Recovery Plan is designed to complement and align with it.

The South West Wales Regional Economic Delivery Plan

In 2014, partners in South West Wales jointly published an Economic Regeneration Strategy. This set the groundwork for the Swansea Bay City Deal, a £1.3 billion investment package supported by the Welsh and UK Governments, which is now well underway.

The new Regional Economic Delivery Plan prepared in 2021 looks to the next ten years, setting out a vision for a regional economy that is *"resilient and sustainable; enterprising and ambitious; and balanced and inclusive"*. It informs the Regional Economic Framework prepared by local partners together with the Welsh Government, and identifies three 'Missions' to guide future activity:

- Establishing South West Wales as a UK leader in renewable energy and the development of a net zero economy
- Building a stronger, resilient and embedded business base
- Growing and sustaining the 'experience' offer

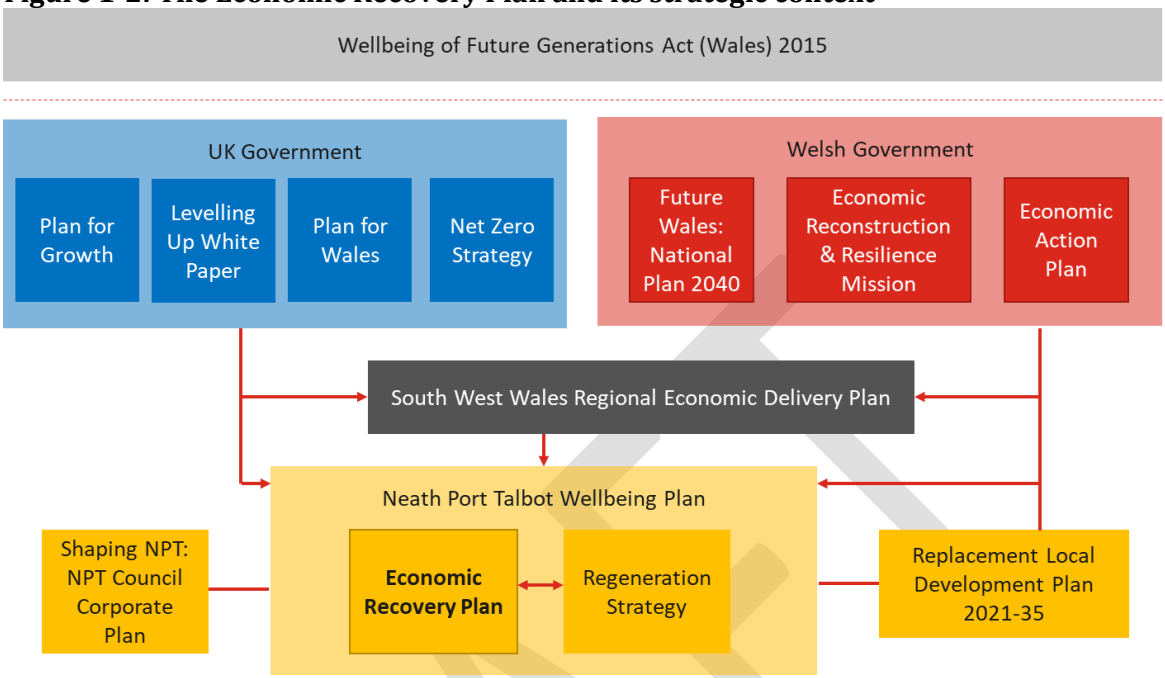
The project pipeline associated with the REDP has a combined value of around £3 million, including several strategic schemes in Neath Port Talbot, outlined further in this Plan.

1.11 Locally, work is also underway to prepare a new **Replacement Local Development Plan (LDP)**, looking forward to 2036. An initial review of the policy context and delivery over the lifetime of the current LDP (2011-26) has been prepared, and has informed this Economic Recovery Plan[5].

1.12 Looking more widely, Figure 1-2 summarises (at high level) the links between the Plan and the wider strategic context:

[5] Neath Port Talbot Council (July 2020), *LDP Review Report*

Figure 1-2: The Economic Recovery Plan and its strategic context



Source: SQW

1.13 Across the wider strategy landscape, four inter-connected themes are especially relevant to the development of this Economic Recovery Plan:

- **Recovery and resilience:** The Covid-19 pandemic led to a concerted – and unprecedented – response from government at all levels. While the economic recovery has been positive to date (as Chapter 2 outlines), there is a strong emphasis in strategy on the need to build 'resilience' to future shocks and on the need to respond to the accelerating effects of the pandemic on pre-existing structural trends[6].

- **Net zero and decarbonisation:** The UK is committed to achieving net zero carbon emissions (over a 1990 baseline) by 2050. Reflecting this, the UK Government produced its net zero strategy in 2021, setting out a plan for reducing emissions in every sector of the economy[7]. The Welsh Government has also committed to "acting decisively to tackle the nature and climate emergency"[8], a stance reinforced in the National Plan and the new national transport strategy and developed locally in Neath Port Talbot's *Decarbonisation and Renewable Energy (DARE) Strategy*[9]. In the meantime however, climate change risks (for example, linked with flood risk and supply chain disruption) are significant and will need to be the focus of intensified policy action (nationally and locally) over the coming years[10].

[6] For example, the impact on town centres and the retail offer. See Welsh Government (February 2021), *Our Economic Resilience and Reconstruction Mission*
[7] HM Government (October 2021), *Net Zero Strategy: Build Back Greener*
[8] Welsh Government (June 2021), *Programme for Government*
[9] Neath Port Talbot Council (May 2020), *Decarbonisation and Renewable Energy Strategy*
[10] See Third UK Climate Change Risk Assessment Technical Report: Summary for Wales (2021), p.107

- **Technology change:** As well as the long-term impact of the shift to net zero, the UK Government's *Plan for Growth* highlights the challenge and opportunity associated with digitalisation and 'Industry 4.0'[11]. The Welsh Government's recent manufacturing support strategy and review of digitalisation similarly emphasise the challenges and opportunities associated with technology adoption[12].

- **Changing environment for public investment:** In parallel, the landscape for public intervention at local level is changing substantially. This includes the delivery of the UK Shared Prosperity Fund, which will be managed as a single UK-wide programme and is designed as a replacement for the European Structural Funds. Historically, Neath Port Talbot has been a significant beneficiary of European funding for a wide range of infrastructure, employment and business support programmes: navigating a new set of programmes and relationships will be an important short-term challenge.

Plan structure

1.14 The remainder of this Plan is structured in seven chapters:

- Chapter 2 takes a closer look at **Neath Port Talbot's economy**, providing an overview of the 'state of the county borough', outlining its key strengths and assets, and the economic challenges that need to be addressed.

- Chapter 3 presents a **'strategic framework'**, outlining in headline terms our priorities to support future growth.

- Chapters 4-6 unpacks these priorities further, explaining the **areas for action** on which we will focus.

- Finally, Chapter 7 sets out a **framework for measuring progress** and explains how we will monitor delivery.

1.15 In addition, two annexes are attached. **Annex A** provides an assessment of the Plan against the Wellbeing of Future Generations Act (Wales) 2015. **Annex B** provides a summary SWOT analysis. Alongside the Plan itself, a separate Local Economic Evidence Base document provides further detail in relation to the economic analysis set out in Chapter 2, and an 'action plan' to support delivery will also be developed.

[11] HM Government (March 2021), *Build Back Better: Our Plan for Growth*
[12] Welsh Government (February 2021), *A Manufacturing Future for Wales*; Welsh Government (September 2019), *Wales 4.0: Delivering economic transformation for a better future of work*

2. Looking inside Neath Port Talbot's economy

Neath Port Talbot has a distinctive economic profile, reflecting its extensive concentration of industry. In recent years, there has been success in increasing economic activity rates, reducing unemployment and taking forward a series of nationally-significant investments. However, NPT's economy has vulnerabilities alongside important opportunities for long-term growth. This chapter presents an overview of the county borough's economy, outlining recent economic performance, key strengths and assets, and medium-term outlook and wider factors that are likely to impact future growth.

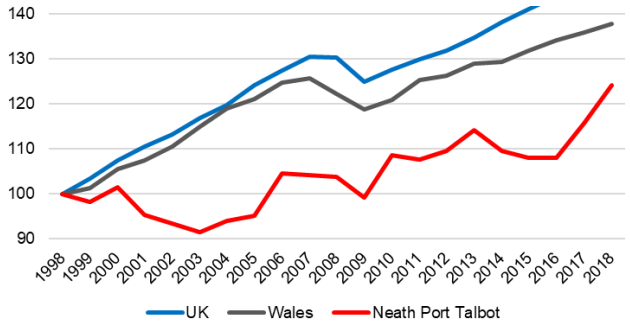
Recent economic performance

We have a distinctive industrial economy, which has seen significant restructuring

2.1 **Neath Port Talbot's total economic output (measured in gross value added) was around £2.6 billion in 2018**. Manufacturing is highly significant, accounting for around a quarter of output (compared with 17% in Wales and 10% in the UK as a whole).

2.2 Over time, there has been a significant structural shift in the composition of output. As Figure 2-1 illustrates, total output fell in the late 1990s and early 2000s, reflecting a substantial loss of manufacturing activity and the closure of NPT's petrochemicals industry. In parallel, the manufacturing share of output fell from 37% in 1998, with contraction linked with the steel industry and some important closures (such as Crown Packaging at Neath, TRW at Resolven and, more recently, the automotive supply chain firm Hi-Lex at Baglan).

Figure 2-1: Index of GVA growth (1998=100)



Source: ONS, GVA chained volume measure (2016 money value)

2.3 This all suggests a **continuing process of adjustment within the economy**, with the fastest recent growth in transport and storage; administrative and support service activities; health; and (from a much smaller base) information and communications. Nevertheless, manufacturing output has more recently stabilised, and it remains a central (and high-value) driver of the local economy.

Jobs and economic activity have expanded (although there is capacity for more)…

2.4 There has been strong progress in raising **economic activity rates.** The gap has narrowed between NPT and the Wales and UK averages, reflecting a trend common to many Valleys authorities, as those exiting the labour market (often for health reasons) following industrial restructuring reach retirement age. However, there is still a gap (of around three percentage points) with the rest of the UK, and the pace of change has slowed somewhat in recent years.

2.5 Despite relatively weak output growth, **Neath Port Talbot has also performed quite strongly in generating new jobs**, at least up until the start of the pandemic. In 2019, there were around 56,000 jobs in the county borough, a 10% increase in the number of jobs between 2014 and 2019. This has meant that the 'jobs' density' (the number of jobs per working age resident) has steadily grown over time[13].

2.6 Reflecting the sectoral balance of output, **manufacturing has a high share of total employment.** Around 19% of all employee jobs were in manufacturing in 2019 (almost 2.5 times the share of manufacturing in total UK employment)[14]. Manufacturing employment remained broadly stable in the five years to 2019, having stabilised following earlier contraction. But over the same period, the strongest growth in employment was in public and general business services, hospitality and transport and storage.

… and in the short term, employment has been relatively resilient

2.7 During the Covid-19 pandemic, unemployment rose sharply, although it was mitigated by the furlough scheme and by the extensive range of grant, loan and rates relief measures delivered by the UK and Welsh Governments and by the local authority.

2.8 In Neath Port Talbot, the claimant count rose by 59% between March 2020 and March 2021. However, this rate of increase was much lower than the Welsh or UK averages (86% and 111% respectively – reflecting NPT's relatively lower exposure to sectors such as hospitality, which were especially impacted by Covid restrictions. Since March, there has been a steady and consistent fall in the claimant count, with a reduction of 20% between March and September, bringing Neath Port Talbot's claimant count rate to below the UK average[15].

Employment in Neath Port Talbot is geographically quite concentrated

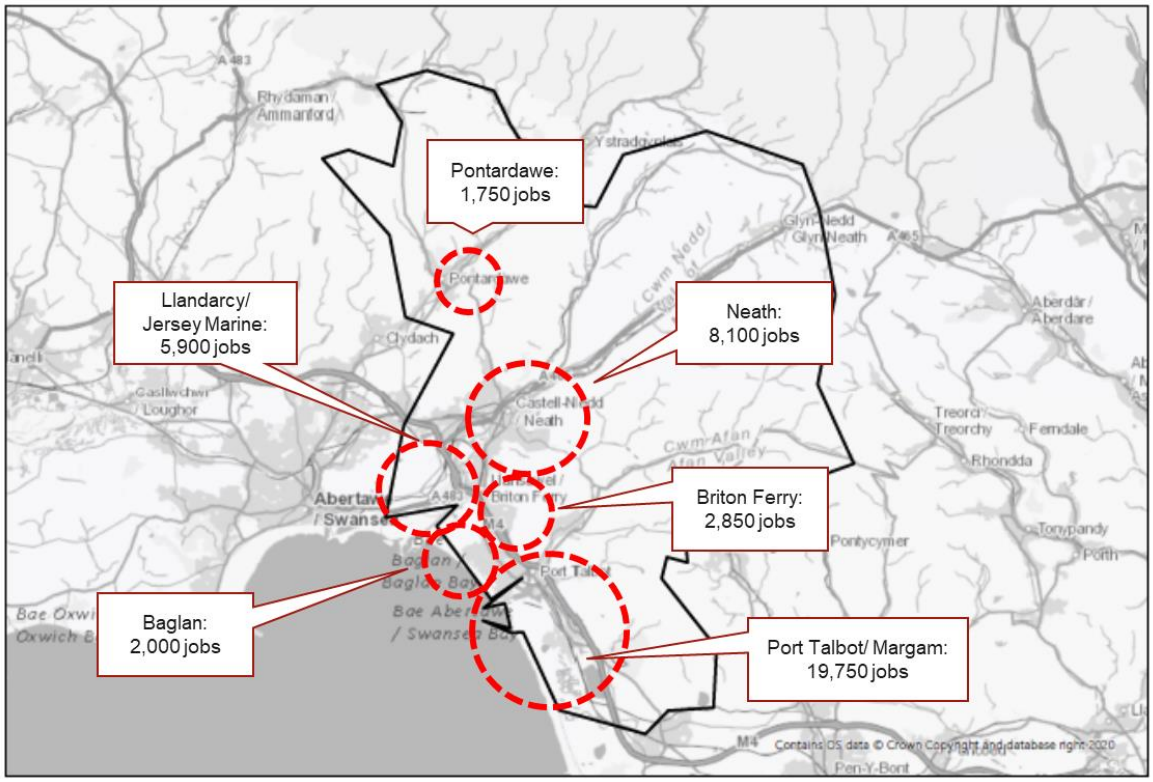
2.9 The greatest concentrations of employment in NPT are along the M4 Corridor and the waterfront (as Figure 2-2 illustrates below). This is somewhat more pronounced than the population distribution within the county borough, reflecting the major concentrations of

[13] The jobs density in NPT increased from 0.54 jobs per working age resident in 2008 to 0.64 in 2019. This is similar to neighbouring Bridgend, although lower than in the regional centre of Swansea.
[14] See the Local Economic Evidence Base for further detail on the sectoral composition of employment.
[15] ONS, DWP. Note however that the Coronavirus Jobs Retention Scheme (the furlough scheme) closed on 30 September. The impact of this is not yet visible in the data, although furlough take-up had been falling for several months while claimant count rates also declined.

industrial activity (especially around Port Talbot) and the distribution of transport connections and major sites.

2.10 However, beyond the M4, the stock of jobs is weaker and more dispersed, and connectivity (especially by public transport) is more challenging.

Figure 2-2: Key employment concentrations in Neath Port Talbot



Source: ONS, BRES: Produced by SQW 2021. Licence 100030994. Contains OS data © Crown copyright [and database right] (2021)

Economic connections with our neighbours are important

2.11 Economic links beyond Neath Port Talbot are also very significant. The southern part of the county borough forms a contiguous urban area with Swansea, and the M4 and South Wales Main Line offer excellent access to Bridgend, Cardiff, the rest of the South Wales coast and beyond. The A465 through the Vale of Neath also offers access to the Heads of the Valleys and the English Midlands.

2.12 In 'travel to work' terms, this is reflected in a **net outflow of workers**, principally to Swansea, although the pattern of outflows and inflows is quite complicated, reflecting NPT's major employment concentrations. Functional industrial connections have historically also been important across South Wales – and continue to be, as (for example) the collaboration involved in the South Wales Industrial Cluster, described further in Chapter 4, illustrates. While links with the rest of the South West Wales region are important – and joint working across the region will be key to the delivery of much of this Plan – relationships with Cardiff Capital Region and beyond will be important to Neath Port Talbot too.

Productivity and its key drivers

2.13 **Productivity (the amount of GVA generated per filled job) was around £48,000 in 2018**. This was slightly higher than the Welsh average (and was also higher than in the South West Wales region overall). But the gap with the UK as a whole is consistent over time: generally, GVA per filled job in Neath Port Talbot is around 85% of the UK average.

2.14 Partly, productivity is influenced by the sectoral make-up of the economy: in Wales, GVA per filled job in manufacturing is about 57% higher than the all-industries average[16], and this is probably reflected in NPT's higher productivity relative to its neighbours. However, productivity gains can be made in all sectors, through investment in management capacity, supply chain capabilities, better workforce skills and so on.

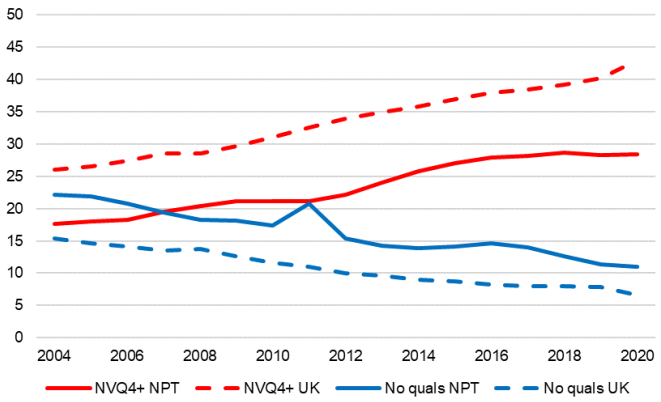
2.15 The following paragraphs consider progress in relation to **skills**, **business stock and growth**, **space for business expansion** and **connectivity.**

Skills…

2.16 In general, workforce qualifications have improved over time, as workers with few formal qualifications reach retirement age and leave the labour market, and demand for higher-level skills rises.

2.17 Neath Port Talbot follows the same trajectory as the rest of Wales and the UK. However, there is a substantial gap: over the three years from 2018-20, **only around 28% of people of working age in NPT were qualified to NVQ4+, compared with 43% in the UK**. This is partly reflected in the county borough's occupational profile, with relatively fewer NPT residents employed in jobs generally requiring higher-level qualifications (such as management and professional roles), and relatively more in 'elementary', process and administrative roles.

Figure 2-3: % of population aged 16-64 qualified to NVQ and with no qualifications, 2004-20



Source: ONS, APS. NPT data is presented as three-year rolling average to smooth out data volatility

2.18 **This is likely to impact on residents' ability to access better-paid local employment.** Median annual pay at *workplaces* in NPT is around £29,000 – higher than the Welsh average. But the average pay commanded by NPT *residents* is substantially lower, at around £27,000.

[16] ONS, Region by industry labour productivity (ITL1 regions), 2019

The implication is that there is a relatively high amount of out-commuting to jobs on modest salaries and some in-commuting to NPT's more highly-paid roles. For the Plan, increasing *access* to better paid employment and improving progression in work needs to accompany the creation of new jobs.

Business stock and growth…

2.19 **Although we have an expanding business base, growth and density rates are relatively low.** In 2020, there were around 3,275 active enterprises in Neath Port Talbot. Between 2015 and 2019, the overall stock of enterprises grew by around 4%. But this was only about half of the UK growth rate, and substantially below that of Wales as a whole. Similarly, enterprise density (the number of enterprises relative to the working age population), was just over half the UK rate, with start-up rates below the UK average.

2.20 However, there is evidence of locally-based 'high growth' businesses in NPT emerging within the established manufacturing sector and in a range of service, construction and environmental activities[17]. Building on these and **raising entrepreneurship and 'indigenous' business growth** is likely to be an important factor in future strategy.

Business sites and premises…

2.21 Neath Port Talbot benefits from some of Wales' most important strategic sites for industrial expansion, notably at Baglan Bay and the other sites contained within the Port Talbot Waterfront Enterprise Zone – and there has been good progress in bringing these forward. However, despite NPT's position as a major industrial location, evidence of high demand for industrial stock and a supply of strategic opportunities, access to modern commercial premises remains relatively constrained.

2.22 This reflects the **persistence of market failure in the supply of commercial property**: the recent *Commercial Property Report* for the Welsh Government found that, *"for significant schemes to be brought forward, there remains a need for direct public intervention"*, and that sites in less favourable Valley locations are likely only to be viable with grant support[18]. This also applies in the case of smaller units geared to local SME occupiers, which are challenging to bring forward in market conditions, despite the widespread evidence of occupier demand.

Connectivity…

2.23 In terms of **digital connectivity**, Neath Port Talbot is relatively well-served and there has been strong progress in recent years. Some 98% of premises can access superfast broadband, following the success of the rollout of the Superfast Cymru programme, with 60% able to access 'ultrafast' and 30% of premises gigabit enabled – although the latter are concentrated

[17] The Wales FastGrowth 50 Index identifies some 23 high growth businesses in NPT between 2003 and 2019, in manufacturing, retail, construction-related and environmental/ remediation activities.
[18] Welsh Government [SQW] (March 2020), *Commercial Property: Market analysis and potential interventions*

along the M4 Corridor. However, the physical infrastructure to enable digital connectivity isn't the same as the ability to pay for it, with affordability presenting an important challenge for some people in accessing increasingly online opportunities.

2.24 **Road** infrastructure has benefited from the delivery of Harbour Way in Port Talbot, providing direct access to Harbourside from the M4; and outside the county borough boundaries, the efficiency of the A465 has been improved through dualling on the Heads of the Valleys stretch. **Rail** connections via the South Wales Main Line are also good (although electrification plans have been scaled back), and NPT will benefit from the improved connectivity planned though the Swansea Bay and South West Metro, principally through frequency enhancements on the existing network over the next decade.

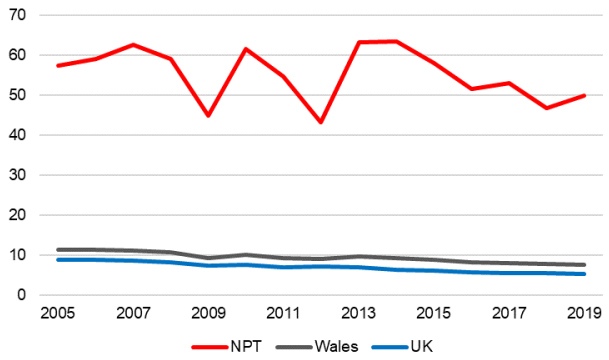
2.25 **Transport connectivity is substantially more challenging in the Neath Port Talbot Valleys.** Longer term plans for the Metro offer the potential for the reintroduction of passenger rail services in the Valleys, although there is much work to be done to develop the business case for these. In the shorter term, public transport connections are an important constraint on access to work and study, with a substantial need for investment in bus services and innovative community transport solutions.

Big challenges ahead

High carbon emissions are a key economic vulnerability

2.26 Reflecting its industrial composition, **Neath Port Talbot has a relatively carbon-intensive economy.** In 2019, the county borough generated around 7,165 kt of carbon dioxide emissions, giving it the highest level of carbon emissions of any local authority in the UK.

Figure 2-4: Carbon emissions (CO2, kt) per capita, 2005-19



Source: BEIS, Local authority and regional CO2 emissions

2.27 This is mostly accounted for by the steelworks at Port Talbot: over recent years, domestic, public sector and non-industrial commercial emissions have fallen in line with the UK average. But with strong regulatory and price pressure to decarbonise (and the relatively high costs associated with energy-intensive businesses in the UK), it is an economic vulnerability, as well as a driver of innovation.

Persistent inequalities and low incomes

2.28 Despite success in steadily increasing the overall stock of jobs and increasing economic activity rates, recent research has focused on the impact and extent of low-paid work (including low-paid self-employment), and on the extent to which rising costs have impacted on the real incomes of the lowest paid[19].

2.29 Within Neath Port Talbot itself, the principal concentrations of disadvantage are in urban Port Talbot (Sandfields and Aberavon), Briton Ferry and Neath; and in the upper Valleys, especially in the Afan Valley around Croeserw. Partly they reflect the need for continued measures to support *access* to employment (through skills development and so on – and the incidence of workless households is much higher in Neath Port Talbot (around 21% of all households) than in Great Britain overall. **But most households on low incomes are already in work:** for an Economic Recovery Plan, a focus on more, sustained employment opportunities "closer to home" is likely to be key[20].

Looking ahead: The forward outlook

From pandemic to recovery

2.30 **Looking to the future, the outlook for economic recovery from the pandemic is positive.** The UK's economy contracted by 9.8% in 2020 – an unprecedented fall in annual output in modern times. However, the Office for Budget Responsibility anticipates UK GDP growth of 6.5% in 2021 (sufficient to restore the economy to its pre-pandemic size) and 6% in 2022. These forecasts are rather more optimistic than those predicted earlier in the crisis, and are reflected in more positive estimates of the bounce-back in employment[21]. Growth in the longer term is expected to be more modest, averaging around 1.5% in 2024-26. This reflects a return to pre-pandemic 'normality', but remains below the rates of growth experienced before the 2008/09 financial crash.

2.31 **The pandemic has also led to behavioural trends that are likely to have longer-term impacts.** The share of household retail spending taking place online rose rapidly, remains higher than pre-pandemic levels, and has accelerated pre-existing structural changes in the retail market[22]. Remote working has expanded, with the Welsh Government adopting an ambition for 30% of all workers to "work at or near to home" – potentially a source of opportunity for NPT residents, as well as supporting demand for flexible town centre uses. Also relevant to Neath Port Talbot's industrially-oriented economy, both the pandemic and

[19] Bevan Foundation (October 2021), *On the edge: Low income self-employment in Wales*
[20] "Better jobs, closer to home' is a Welsh Government objective. It is set out in the *Economic Action Plan* and *Our Valleys, Our Future*, and is, by extension an aim of the Regional Economic Delivery Plan and the associated Regional Economic Framework.
[21] Office for Budget Responsibility (October 2021), *Economic and Fiscal Outlook*, p.14
[22] Online spend accounted for about 26% of all UK household retail spend in September 2021, c

Brexit have encouraged firms to build greater supply chain resilience, with more companies planning to source supplies locally and hold more inventory[23].

The medium-term employment outlook

2.32 Over the coming decade, the working age population in Neath Port Talbot is anticipated to be static (although as noted above, there is 'capacity' to bring more people into the labour market)[24]. In that context, total employment growth is expected to be modest: for South West and Mid Wales, annual employment growth is forecast to be around 0.3% to 2027[25].

2.33 Over that period, the largest growth sectors are anticipated to be in health; accommodation and food and support services, reflecting recent growth patterns. The qualifications profile of employment is also projected to change, with a sustained fall in jobs requiring qualifications at Level 2 or below, and sustained growth in jobs requiring higher qualifications. **By 2027, around 49% of jobs in South West and Mid Wales are projected to require qualifications at Level 4+ - a substantial increase on the number of people in NPT currently qualified to that level.**

Building on strengths - and opportunities for the future

2.34 Future growth will build on Neath Port Talbot's existing strengths and its major emerging opportunities. These include:

The strength of the existing industrial base

2.35 Neath Port Talbot has a substantial stock of major firms, principally in the manufacturing sector: some of the county borough's largest companies are highlighted in the table below. Given the economic restructuring processes that have taken place in recent decades, the industrial base is highly competitive and internationalised, and operating in many cases at the 'leading edge' of advanced technology. In the manufacturing sector, key companies include Sandvik Osprey, Freudenberg Oil and Gas Technologies and British Rototherm, as well as Tata Steel, with the manufacturing base extending from advanced coatings and materials through to paper and packaging. **TWI**'s industry-led engineering research and technology offer at Harbourside, including the Advanced Engineering Materials Research Institute) is also of international significance, with expertise and talent in Neath Port Talbot supporting leading businesses across the UK and the wider world[26].

[23] Business Continuity Institute (BCI) (October 2021), *The future of business continuity and resilience: the emerging landscape report 2021*
[24] StatsWales population projections
[25] Cambridge Econometrics/ Warwick University Institute for Employment Research (2020), *Working Futures 2017-27.* South West & Mid Wales is the smallest geography for which the projections are prepared.
[26] See TWI

2.36 In addition to these distinct assets, recent years have also seen increased collaboration between industry and the knowledge base. This includes a long history of collaboration between local universities and the manufacturing sector. However, the potential to do more is highlighted within the draft South West Wales Regional Economic Delivery Plan: from a more local perspective, increasing awareness of and access to the range of support on offer, and increasing its relevance to local firms is likely to be important.

Opportunities for leadership in the transition to a net-zero economy

2.37 The 'flip side' of Neath Port Talbot's carbon-intensive economy is the potential for leadership (and economic opportunity emerging from) the decarbonisation process. Specific opportunities include:

- **Cross-regional opportunities to support the decarbonisation of relatively carbon-intensive industries.** These include the **South Wales Industrial Cluster programme**, recently awarded funding from UKRI to develop a plan for decarbonisation across the region's industrial and energy base, with partners including Associated British Ports and Tata Steel[28].
- **Technology development in low carbon technologies**, much of which is still in the early stages of development. Relevant assets include the University of South Wales' **Hydrogen Centre** at Baglan Energy Park and a new hydrogen demonstrator project at Hanson UK's cement plant at Port Talbot; Swansea University's Bay Campus also hosts the **SPECIFIC** Innovation and Knowledge Centre, focused on the development and commercialisation of building technologies to capture and store solar energy.
- **Renewable energy potential**, including the large on-shore wind farm at Pen-y-Cymoedd and tidal and wave energy opportunities in Swansea Bay.
- **Opportunities for innovative energy systems projects.** The FLEXIS project in Port Talbot has also delivered a demonstrator project in Port Talbot, linked with the town's combination of energy generation potential, industry and residential demand, and in relation to the building stock, NPT Council is leading the City Deal-funded Homes as Power Stations project.

2.38 Some of these initiatives remain 'experimental' and in the planning phase: not all will be directly relevant to businesses facing more immediate challenges. **But over time, all businesses will become 'low carbon' businesses:** enabling them to reach that goal is both a competitive challenge and opportunity.

The scale of Neath Port Talbot's major sites and their investment potential

2.39 Part of Neath Port Talbot's industrial legacy is its endowment of major strategic sites. These include Baglan Bay Energy Park and the Port Talbot Waterfront sites cited above; ABP's

[28] See SWIC

emerging plans to maximise the potential of their assets at Port Talbot (described further in Chapter 5); and the major former opencast colliery site at Onllwyn in the Dulais Valley, planned for the location of the new **Global Centre for Rail Excellence**. Supported by substantial infrastructure investment, these represent a national and regional asset, although delivering their potential is a long-term endeavour.

The value of 'place'

2.40 Beyond the major sites, Neath Port Talbot's **town and community centres** also offer potential for growth. Town centre investment is a key pillar of Welsh Government strategy (and funding), reflecting the role that town centres can play in acting as sustainable focal points for economic and community life. Investment has already been made in the quality of the environment at Neath, Port Talbot and Pontardawe and in improved leisure and transport facilities. While conventional office demand has generally been weak in NPT's town centres, the prospect of increased local working presents opportunities for investment in flexible workspaces linked with a wider range of town centre amenities.

2.41 In addition to our town centres, Neath Port Talbot's **natural environment** is an economic asset in addition to its inherent value. Tourism in the county borough generated an economic impact of around £113 million in 2019 – and despite the short-term impact of the pandemic, rising demand for high-quality outdoor visitor experiences and new investment in facilities such as Afan Forest Park offers great potential for future development, especially given the county borough's accessibility to visitor markets. It will be important that investment in developing this economic potential is accompanied by continued investment to support environmental quality, linked with the sustainable development of the farming and forestry sectors.

Capturing the benefits of new ways of working

2.42 The Covid-19 pandemic accelerated a long-term trend towards remote and flexible working. While the eventual impacts of this remain unclear, recent research indicates that about a quarter of the workforce could work remotely over the long term, with this percentage likely to be much higher in computer-based office activities[29]. In some industries, this might have the effect of 'decoupling' firms' business locations from the areas that they are able to recruit from, opening up new opportunities for local residents to work further afield without moving. In the long term, this means that the way in which we think about local labour markets could change substantially – but it reinforces the importance of investment in workforce skills to ensure that residents can take advantage of new opportunities as they emerge.

[29] McKinsey Global Institute (2021), *The future of work after Covid-19*, p.14

Reviewing the evidence: Key issues for the Economic Recovery Plan

2.43 Looking across the state of Neath Port Talbot's economy and its opportunities and challenges:

- **We have a highly distinctive economy**, with a nationally-significant presence in the metals sector and industrial assets including major companies and translational research institutions. While the local economy has experienced substantial restructuring in recent decades, it remains one of the UK's most highly concentrated industrial districts – and the industrial sector is a major source of good quality employment.
- **Our industrial profile presents vulnerabilities and opportunities for technological leadership.** High carbon intensity gives an urgency to the need to decarbonise, and there are several initiatives in place. However, some propositions are at an early stage (and are operating in a competitive environment): sustained investment and flexible leadership will be important.
- **We have major expansion opportunities that are of national significance.** These include the extensive waterfront sites in Port Talbot and Baglan (as well as the potential of the Port), and former industrial sites inland. Opportunities on this scale and with the right connectivity are rare in South Wales – but they require (continued) long term investment and strategy to bring them forward.
- **…. But parts of Neath Port Talbot are further away from economic opportunity.** While economic activity is substantially concentrated along the M4 Corridor, there are fewer job and business opportunities based in the Valleys – despite the *potential* of the area's communities and natural assets. This challenge is compounded by generally poor transport connections beyond the main towns and coast. More broadly, the relationship between overall economic growth and 'real' outcomes in local communities is complex.
- **We have some significant deficits in workforce skills**, which impede residents' ability to take full advantage of new opportunities. Addressing these will be important in supporting the productivity and adaption of the existing industrial base, as well as supporting diversification.
- **Our overall business stock remains *relatively* small.** A larger and more dynamic SME base ought to help in developing opportunities for growth across the economy – especially in those parts of the county borough that are further away from employment opportunities at scale.

2.44 Building this analysis of our strengths and weaknesses, the next chapter introduces our priorities to support economic growth over the next few years.

Bringing the economy to life: Business case studies

With a strong manufacturing heritage, Neath Port Talbot's economy has diversified in recent years, with its 3,275 businesses including significant international investors as well as established locally-based firms. Neath Port Talbot Council recently commissioned a series of interviews with some of the county borough's leading businesses: here is a snapshot of some of the firms that are driving the local economy:

- **Keytree** is a business software solutions firm, with around 40 staff in Port Talbot (and 400 worldwide). Founded in 2006, it recently became part of the Deloitte group. Having been in the area for more than four years, the company recently relocated to larger premises in the former Port Talbot Magistrates Court. Port Talbot's central location, connectivity and proximity to the university in Swansea are key to Keytree's location decision.

> **"Port Talbot is a perfect location between Swansea and Cardiff. It's easy to travel here from the London office. I can stop off in Cardiff if I need to, or continue to the university in Swansea. It's all really close."**

- **Paragon Engineered Timber** offers a design, supply and installation service for timber systems for the construction industry. Based in Resolven Business Park, their clients include major house builders Persimmon, Bellway, St Modwen and Edenstone, as well as regional customers. Established three years ago, Paragon's expansion has been so rapid that it has already outgrown their first unit on the business park and has achieved additional capacity by leasing a second.

- **Rototherm** has manufactured precision instrumentation to measure temperature, pressure, density and flow since 1969. Based in Margam, it supplies worldwide to customers in the energy, beverage, LPG, pharmaceutical, healthcare, water, transport and defence industries. Responding to a call from a Welsh NHS Trust in March 2020 to produce face shields, the company has expanded into Wales' largest manufacturer of medical face masks with a capacity of 13 million units a month, and is currently the UK's only manufacturer of safety goggles.

- **Armadillo Metal Coatings** is a pioneer in corrosion and tarnish protection, with its patented technology providing long-lasting defence using smart release corrosion inhibitors. Based at the Baglan Bay Innovation Centre, Armadillo is a spin-out from Swansea University, and resulted from a four-year research project into anti-tarnishing technology with the Royal Mint.

These four examples are diverse, but all benefited from practical support from Neath Port Talbot Council in helping them to locate and expand in the county borough.

3. A framework for action

Based on the evidence outlined in Chapter 2, this chapter sets out where we will focus our efforts over the next few years in support of a more prosperous Neath Port Talbot. It outlines some key principles on which our strategy is based and an overall 'framework' to guide our activities.

Evidence to action: Six key principles…

3.1 In moving from *"what the evidence says"* to *"what we intend to do"*, **six key principles** underpin our strategy:

- **Jobs and opportunities first:** Fundamentally, we want to create more opportunities for residents to access and progress in work, gain the skills they need and want and achieve their potential. This will take place in the context of the wider 'drivers for change' identified in the last chapter and it demands short term actions and long-term planning – **but our focus is on creating the conditions for practical, meaningful and relatable opportunities**.
- **The whole county borough:** Not all parts of Neath Port Talbot have the same capacity for locally-based economic growth. But we want to unlock the potential of every part of the county borough, both by realising locally-available opportunities and providing access to them. **That means a strengthened focus on NPT's Valley communities, as well as the M4 Corridor, and it means a focus on generating and sustaining employment.**
- **Flexibility and routes to impact:** Over time, new investments, ideas and proposals will come forward, and there will be new opportunities to access funding and support government priorities. So **our Plan is flexible and resilient** – but it provides a basis for the Council to work together with partners, and we will develop an action plan alongside it that can evolve over time.
- **Business and community voice:** Although the Plan has been developed by Neath Port Talbot Council (and many of the activities resulting from it will be led by the Council), it will only be delivered through partnership working, with business and the wider community – and as the Plan evolves, the business and community voice will be important.
- **Wider contribution:** A number of wider factors will influence people's ability to access new jobs and opportunities. Some of these (such as housing quality and health) are outside the scope of the Plan, but will still have an important bearing on it. So it is intended that this Plan will be accompanied by a broader Regeneration Strategy. It will also inform

the wider Neath Port Talbot Wellbeing Plan – maintaining its focus, but contributing to the bigger picture.

- **Consistent with the regional approach,** set out in **the South West Wales Regional Economic Delivery Plan** developed earlier this year, with the support of Neath Port Talbot Council, our regional partners and the Welsh Government. Specifically, the Plan should contribute and add value to the three 'Missions' set out in the REDP of: establishing South West Wales as a UK leader in renewable energy and the development of a net zero economy; building a strong, resilient and 'embedded' business base; and growing and sustaining the experience offer.

3.2 In the light of these key principles, Figure 3-1 sets out a high-level framework for action. In the context of the priorities of the Regional Economic Delivery Plan and the evidence outlined in Chapter 2, it identifies three areas on which we will focus action over the coming years, linked with developing a more **entrepreneurial and resilient** economy, realising the county borough's **transformational investment opportunities;** developing **quality and connected communities** and **developing an increasingly skilled workforce**. All of these will contribute to (and be supported by) our wider regeneration strategy and Wellbeing Plan:

Figure 3-1: Strategic framework

Source: SQW

3.3 Delivering all four themes will need flexibility and new ideas: Chapters 5-8 work through our key areas of action in greater detail.

4. Entrepreneurial and resilient economy

Neath Port Talbot is a great place in which to start and grow a business, and the county borough has a strong track record in attracting investment. But our business base is smaller than it ought to be: by growing our stock of enterprises across all sectors and by enabling enterprise to flourish in all parts of NPT, we aim to support a more diverse economy and a more resilient employment market.

The case for action

Opportunities for growth in all sectors…

4.1 Neath Port Talbot has a large and distinctive industrial sector, much of which is driven by small and medium enterprises. However, around 75% of the county borough's output and 80% of its employment is within a very diverse range of service activities. While we have some important 'transformational' investment opportunities highlighted in the next chapter, recent research has highlighted the potential for productivity gains to be made in all sectors through investment in management capacity, skills development, technology adoption (including in 'general purpose' technologies), and so on[30]. This is reflected in the draft Regional Economic Delivery Plan, which notes that *"a broad-based approach that supports SME growth and entrepreneurship across the board and increases the local 'stickiness' of investment is likely to be important".*

… and potential to grow the business base

4.2 As the evidence in Chapter 2 demonstrates, the SME base in Neath Port Talbot is relatively small: enterprise density is only around half of the UK level, and total business stock growth and start-up rates are also relatively low. Recent evidence suggests that this is partly linked with perceptions that available opportunities are limited, which impacts both on individuals' propensity to start and grow a business, and on the supply of finance, premises, support services and so on to support the market, and potentially acts as a constraint on the ability of existing firms to expand[31]. However, a more 'dynamic' business landscape can support economic resilience, by increasing diversity and creating opportunities in communities that are further away from the main concentrations of economic activity.

[30] Institute for Government (2021), *Firing on all cylinders – why restoring growth is a matter for every UK sector*

[31] Jack Watkins (2021), *A Better Balance: Business support for the foundational economy* (Institute of Welsh Affairs). p.29; K. Bonner *et al* (2018), *GEM UK: Wales Report 2018*

Priorities for the future: A new focus on local economic development

4.3 We want economic growth to result in real and meaningful opportunities for local residents, across Neath Port Talbot. As well as securing investment in some of the major opportunities that we highlight in the next chapter, this will mean supporting the steady growth, resilience and diversity of our local business base. Over the coming years, we want to **strengthen the 'gateway' to business support**; invest in an **improved sites and premises** offer to small and growing businesses; **use wider public sector expenditure proactively** to support business; and create an increasingly **joined-up approach** to community-focused economic development.

> **Support to boost entrepreneurship and encourage better succession planning can result in some of these firms growing, taking on new employees, moving into new markets…. [raising] the profile of entrepreneurship and increasing the strength of the entrepreneurial ecosystem.**
>
> **IWA, *A Better Balance***

Improving the 'gateway' to support

4.4 Neath Port Talbot Council has long provided direct and proactive support to business, including start-up advice and access to grant support, as well as assistance to firms seeking to invest and expand in the area. This is supplemented by the Welsh Government's range of support products (principally delivered as information and advice under the 'Business Wales' brand; loan and equity finance offered via the Development Bank of Wales, and some specialist products (e.g., the SMART suite of innovation support programmes, and specific schemes often supported through European funding). **We are responsive, proactive and flexible in supporting businesses that wish to invest and expand in Neath Port Talbot**, and a practical and welcoming offer to business is key to the Neath Port Talbot offer.

However, Welsh Government business support only reaches a minority of businesses (partly through strategic decisions to focus support on a targeted number of firms with high growth potential), and there is evidence of challenges in engaging with the businesses at scale[32].

[32] Jack Watkins (2021), *A Better Balance: Business support for the foundational economy* (Institute of Welsh Affairs). p.7

Key actions

A better-coordinated gateway…

We want to develop a better coordinated gateway to business support, maximising the use of resources across the public and private sectors and making best use of local intelligence and business leadership. Working with the Welsh Government and business, we will:

- Use our local intelligence to review 'what works' in supporting business creation and growth, and where value can best be added to the existing offer. This should include the balance between repayable and non-repayable finance (and whether there is scope for a supplementary offer to that provided by DBW); demand for support in the private sector; the potential benefits of an expanded local offer; and 'routes' between generic and more specialist support to support productivity gain and adapt to new technologies. This will inform the development of new approaches in the light of future funding from the Shared Prosperity Fund and other new schemes.

… recognising diversity of opportunity

Within our approach, we recognise a wide range of opportunities for business growth, some of which have been enabled by the increasing ability to work remotely using digital technology; and some of which will include opportunities in the 'foundational economy' (the supply of local goods and services, often involving public contracts and direct community relationships). Our focus is on sustainable and 'resilient' employment, and we want to support SMEs that can offer routes to good work across the board.

Improving access to sites and premises

4.5 Recent research for the Welsh Government demonstrates the existence of a generalised market failure in the supply of commercial property, driven by low rents (especially in Valley communities and places north of the M4) and ageing stock[33]. This acts as a significant barrier to business expansion. However, there is evidence of substantial business demand, as demonstrated at the Council's extensive range of industrial units across NPT, the success of its long-established workshop and office facility at Sandfields Business Centre, and the more recent investment at Baglan Bay Innovation Centre.

4.6 Ensuring a supply of good-quality business premises suitable for a range of uses will be important in supporting small business growth. While this applies across the county borough, it is especially important in those Valleys locations where commercial development is more challenging to bring forward and where opportunities for locally-based employment at scale are more limited.

[33] Welsh Government [SQW] (March 2020), *Commercial Property: Market analysis and potential interventions*

Key actions

Investing in a network of business facilities

Although developing new workshop and office facilities may not always be attractive to the private sector, NPT's own experience demonstrates business demand and operational viability. We will seek to expand and modernise the network of business facilities across the county borough, especially within the Valleys, integrated with our wider approach to business support.

In the first instance, we will develop a business case for an enhanced approach, setting out the potential financial and economic return on a new programme of investment; and exploring the different roles that partners (including the Council and the private sector, as well as community-based social enterprises) can play in delivery.

Developing a wider pipeline of sites and premises

On a larger scale, work is underway to establish a Regional Property Development Fund, in conjunction with the other South West Wales authorities and the Welsh Government, focused both on opportunities in the major strategic locations and a more widely-distributed range of smaller sites. Working through this (and with the potential for further funding opportunities in the future), we will engage proactively with developers to identify a pipeline of schemes across the county borough.

Maximising the Neath Port Talbot pound

4.7 In recent years, there has been an increased focus on the opportunity to support local SME growth through public procurement. The proposition is that in areas with a more dense network of SMEs and potential local purchasers, there are more opportunities to win work and expand – but this is often more challenging in 'thinner' markets, in which public sector purchasers are likely to account for a greater proportion of locally-based demand. By increasing spend with locally (or regionally) based businesses, there is an opportunity to retain expenditure within the local economy – and more importantly, it can provide stable contracts from which local SMEs can develop and grow.

Key actions

Raising demand and supply

We will work to increase the ability of locally-based SMEs to secure contracts with the Council and we will work with other public sector bodies to extend this approach. However, a proactive public sector procurement strategy is about raising the quality of *supply* as much as it is about increasing local *demand:* through our approach to enhancing business support services highlighted above, we will seek to improve the ability of firms to win contracts, raising quality and competitiveness.

Joining it up: Developing a new partnership with business

4.8 Our focus on small business growth and community-based economic development will mean ensuring that all of the elements set out above are joined up – linking up the premises offer, business support and proactive procurement approaches through a coordinated approach. Ensuring access to new opportunities will be critical too – we say more about transport accessibility in Chapter 7, and about the links with workforce skills and access to employment in Chapter 8.

4.9 As part of this, **we will seek to develop our partnership with business, recognising the role that firms can play as 'anchors' within the local community**, offering fair work, raising aspirations and supporting access to skills and progression opportunities. Consistent with the 'economic contract' approach developed by the Welsh Government, we will link local business support with firms' commitment to sustainability and the resilience of the labour market.

5. Transformational investment and long-term change

Neath Port Talbot has a strong track record in delivering transformational site-based investments. With some of Wales' most important strategic sites, and an industrial economy that will see significant change over the coming decade, there is more to do. This will require further investment at scale and at pace – alongside delivery capacity across government and the private sector.

The case for action

5.1 Neath Port Talbot has a distinctive concentration of strategic assets that are of regional and national significance. These reflect the county borough's industrial heritage and include the major strategic sites at Port Talbot Waterfront and the transformational investment in the Global Centre for Rail Excellence. They also include the series of institutions and projects linked with NPT's industrial base and network of transport and energy systems that could enable it to take a leading role in the decarbonisation of the economy, and emerging plans from commercial investors.

5.2 Collectively, these present a series of opportunities for Neath Port Talbot (and South Wales generally) that could reinforce the county borough's role as one of the UK's leading industrial districts, and provide long-term economic benefits across the wider region. Much has already been achieved: for example, Swansea University's Bay Campus is fully open and complete and high quality residential development is coming forward at Coed Darcy, both on extensive brownfield sites formerly occupied by the petrochemicals industry. **However, transformational development is a long-term endeavour:** driving forward the next stage of investment will require continued commitment and coordinated joint working with the Welsh and UK Governments.

Priorities for the future: Major investments

Port Talbot Waterfront

5.3 Port Talbot Waterfront was designated as an Enterprise Zone in 2016, covering one of Wales' principal industrial districts and benefiting from extensive land availability, good road and rail links and access to a deep-water harbour.

5.4 The overall strategic approach to the development of the Waterfront is set out in the **Waterfront Regeneration Strategy**, and presents an integrated approach to the development of the major ex-industrial sites, town centre renewal in Port Talbot and

neighbourhood regeneration more widely, and the development of an improved leisure offer, linked with Margam Park, Aberavon Seafront and the regeneration of Brunel Dock[34].

5.5 Major sites within the Waterfront include:

- **Baglan Bay Energy Park:** Once at the heart of Europe's largest petrochemicals complex, Baglan Bay Energy Park extends to 180 hectares and is the first stage in the long-term redevelopment of the rest of the Baglan Bay site. The Park contains the University of South Wales' Hydrogen Research and Demonstration Centre, Baglan Bay Innovation Centre and the new Swansea Bay Technology Centre, as well as several large manufacturing businesses.
- **Harbourside and Port Talbot Docks:** Much has already been achieved in bringing forward the Harbourside redevelopment scheme, with the completion of Harbour Way and Port Talbot Parkway station, the construction of the first phase of the Harbourside Research and Development Village, and the start of work on a second phase of development. NPTC Group also has plans to develop its new Port Talbot college campus at Harbourside.

5.6 However, despite significant achievement, the Council recently observed that development has been slower to come forward than initially planned, reflecting the viability challenges cited in Chapter 2 and the complexity associated with these major sites[35].

5.7 Meanwhile, there is the prospect of further transformational investment, associated with **ABP Ports**' planned 'masterplan' for development at the Port in the context of wider opportunities at Port Talbot, and the potential to seek future Freeport designation.

Key actions

Taking forward the major opportunities at Port Talbot Waterfront

Over the next few years, we will continue to focus on driving forward the major transformational opportunities at Port Talbot Waterfront. In particular, we will:

- Work with the Welsh Government to bring Baglan Bay Energy Park into public ownership, enabling a better coordinated approach to strategic investment
- Explore the opportunities for Freeport designation and other approaches that could provide a consolidated package of incentive measures, investment and delivery capacity linked with the Waterfront's strategic regional significance
- Proactively engage with investors, including ABP and, through a better coordinated regional approach, the wider investment community.

[34] Neath Port Talbot Council (n.d.), *Waterfront Regeneration Strategy*
[35] Neath Port Talbot Council (July 2020), *Local Development Plan Review Report*, p.52

Transforming the Port of Port Talbot

The Port of Port Talbot is a major economic asset and has an important role to play in the future of the UK economy. Earlier in 2021, ABP, the owner of the Port, published *Future Ports: Wales Vision*, which set out the 'transformational' opportunities that the Port could enable over the coming years. This identified four 'missions' for the future of the South Wales ports, strongly associated with the themes identified in Chapter 2

- **Decarbonising energy generation:** At Port Talbot, this includes the potential for a hub for Floating Offshore Wind (FLOW), involving assembly and manufacturing, linked with Port Talbot's combination of connectivity, deep water and existing manufacturing base. It also includes the potential for tidal power via a lagoon in Swansea Bay
- **Decarbonising manufacturing:** Currently, the Port is closely linked with the steel industry, and it will be important in Tata's decarbonisation, through (for example) the role of the Port in bringing in hydrogen and through the development of large-scale carbon capture and sequestration facilities. There are also opportunities to expand manufacturing more broadly adjacent to the Port.
- **Decarbonising logistics**, through improved connectivity between transport modes, opportunities for on-site energy generation and the potential for 'zero carbon freight villages'.
- **Creating new 'growth environments' at the Port**, linked with industrial and logistics uses and potentially residential.

These opportunities are potentially far-reaching. But ABP's vision (and the wider regional missions set out in the Regional Economic Delivery Plan) note that rapid action will be needed to keep pace with developments elsewhere in Europe. Realising the potential of the Port (and the industrial decarbonisation process more broadly) will involve investment and action from government at all levels, in which NPT Council and its partners can play a key role in 'making the case', ensuring that shorter term actions are complementary, and demonstrating the potential benefits to local residents and businesses.

Global Centre for Rail Excellence

5.8 The **Global Centre for Rail Excellence (GCRE)** will be a testing centre for rail infrastructure and rolling stock, located on a 1,000 hectare site which incorporates the Onllwyn coal washery site (in Neath Port Talbot) and the adjacent Nant Helen opencast coal mine (just over the county boundary, inside Powys). The project will include electrified testing tracks,

overhead line equipment and station infrastructure, as well as space for R&D, education and training and capacity for testing new rail technologies.

5.9 GCRE builds on the well-connected site availability previously highlighted as a key asset: there are few sites of this scale and configuration that can accommodate a facility of this type. It will also be important in bringing significant, higher value employment opportunities to the upper Dulais Valley, an area that has experienced few major opportunities for significant job creation in recent years.

Key actions

Delivering GCRE

GCRE is currently at the business case stage, although it is advancing at pace: the UK Government has committed £50 million to the scheme, and a joint venture has been created by the Welsh Government and NPT and Powys Councils to progress the project. Over the next few years, we will:

- Work with the consortium to establish the business case for the project and secure public and private investment to bring it forward.
- Ensure that the benefits of the project to local residents and businesses are maximised. Working with NPTC Group, schools and our regional universities, we will develop plans for skills and employment linked with the scheme, and we will work the operator of the GCRE and its customers to identify supply chain opportunities for local businesses.

Driving forward Neath Port Talbot's industrial decarbonisation opportunities

Chapter 2 highlighted the range of opportunities and assets associated with the decarbonisation of NPT's industrial base. Some of these are linked with wider regional activity, highlighting NPT's key position within the wider South Wales industrial 'ecosystem' (for example, the South Wales Industrial Cluster will develop a decarbonisation plan covering the whole region; and the FLEXIS demonstrator project at Port Talbot is part of a larger, university-led initiative). Given the industrial orientation of Neath Port Talbot's economy and the financial and regulatory pressure to reduce carbon emissions substantially over the coming decade, there is a clear advantage to NPT in being on the 'front foot' in supporting industrial collaboration and research and development opportunities.

Key actions

Taking forward the Decarbonisation and Renewable Energy strategy…

In 2020, Neath Port Talbot Council adopted a **Decarbonisation and Renewable Energy (DARE) Strategy.** This set out what the Council could do directly to support decarbonisation (for example, through its own building stock and fleet); the measures it

could take to promote behaviour change (for example, supporting active travel); the role it has in the planning system in respect of renewable energy schemes; and opportunities for innovation (e.g., through the Homes as Power Stations project and FLEXIS).

… and linking it with Neath Port Talbot's wider opportunities

We will continue to implement the DARE project. In addition, we will:

- Promote Neath Port Talbot as a leading location for investment and experimentation in low carbon technologies, building on the initiatives that are currently underway and institutions such as the Hydrogen Centre
- Collaborate with the universities and other partners (locally and across the region) to secure further investment in R&D and early-stage projects
- Linked with our second 'action area' in support of developing a more entrepreneurial economy, work with partners to increase awareness of relevant opportunities across the wider business base (and to increase the relevance of the support on offer.
- Working with NPTC Group and other partners (and linked with the Regional Learning and Skills Partnership), better understand the future skills and occupational demand associated with industrial decarbonisation, and use this to inform curriculum planning and to increase learner demand.

6. Quality and connected communities

This Plan is focused on ensuring sustainable economic opportunities across all communities in Neath Port Talbot. The Covid-19 pandemic accelerated trends that are likely to lead to more remote working and (for some people) a different balance between work and home life. This presents an opportunity for NPT residents and businesses to access work and markets across a wider geography. But it also reinforces the importance of investing in the quality of our towns and communities as key economic assets.

The case for action

6.1 Beyond its industrial base and business potential on which the previous two chapters have focused, Neath Port Talbot has significant 'quality of life' assets. These include the natural environment: within NPT, Afan Forest Park attracts around 170,000 visitors per year, with the Brecon Beacons National Park forming the county borough's northern boundary. There is good access to the coast and to the city offer in Swansea and Cardiff; NPT's towns and communities offer a rich heritage and have seen new investment in recent years; and we offer a world-class university presence both within the county borough boundaries and immediately beyond.

6.2 However, Neath Port Talbot could benefit from these assets more. Some of our natural assets remain relatively unknown, and in parts of the county borough, poor connectivity and the challenges of securing investment in key infrastructure presents a challenge.

Priorities for the future: investment and connectivity

6.3 Looking to the future, we want to create a network of high-quality and well-connected places, which recognise local distinctiveness and improve access to economic opportunity. That means investing in the physical assets of our town centres and the 'environmental infrastructure' across the county borough that can support sustainable economic growth, while addressing the connectivity and community infrastructure constraints that hold us back.

Investing in our town and community centres

6.4 Across the UK, town centres have been hit by structural changes in the retail market, which have been accelerated (although not caused) by the Covid-19 pandemic. At the same time, general town centre office demand (especially in 'secondary' centres) has been weak for some time, and while the shift towards greater home working has yet to stabilise, the likelihood is that some conventional commuting patterns will be permanently impacted.

6.5 In that context, there is a strong policy focus on the need to 'reimagine' and reinvest in our town centres to meet changing demand. As part of its 'Transforming Towns' agenda, the Welsh Government has adopted a 'Town Centre First' principle, encouraging investment in a wider range of non-retail amenities, as well as additional scope for flexible workspace to meet changing working patterns.

> **We must ensure we use creative opportunities to bring new economic opportunity and employment back to the centre of our towns as part of a wider offer including leisure, learning, local services and culture.**
>
> ***Welsh Government, Reconstruction and Resilience Mission***

6.6 Within our main town centres, there has been significant recent investment. In Neath, a major new leisure development is nearing completion. In Port Talbot, extensive regeneration has seen new office and residential development in the town centre, alongside the redevelopment of the transport hub at Port Talbot Parkway (which also makes a key contribution to the wider Harbourside development cited earlier).

Key actions

Investing in town centres

Building on the 'Town Centre First' principle, we will:

- Continue to invest (and attract investment) in our principal town centres and smaller communities, attracting and retaining a wider range of cultural and civic activities, improving transport accessibility and sustainability and, where possible, securing additional public sector uses as part of the wider national strategy to shift accommodation to more sustainable locations.
- Respond to the changing need for flexible workspace, linked with our actions to secure an increase in the overall stock of commercial premises to meet demand.

Celebrating our natural and built assets

6.7 Employment forecasts anticipate growth in the hospitality sector over the coming decade, reflecting national trends. Much of this will be responsive to local demand, but there are opportunities to expand the wider leisure economy: Neath Port Talbot has significant natural and landscape assets, some of which are perhaps not as widely recognised outside the county borough as they should be.

Key actions

Promoting Neath Port Talbot's visitor economy…

NPT's natural environment and heritage assets have the potential to contribute to the growth of the visitor economy (especially given the county borough's proximity to markets elsewhere in South Wales and in the south of England), but they are also important components of the local 'quality of life' offer. We will support the development of the county borough's leisure and tourism offer, and we will promote Neath Port Talbot as a place to live and work as a key part of our investment marketing approach.

… and unlocking the potential of our environmental assets

The development of the visitor economy also presents opportunities for job creation and business growth away from the M4 Corridor. These include the current proposals for a major adventure resort in the Afan Valley, which have the potential to be locally significant: we will support the development of further proposals to develop an environmentally sustainable and higher-value tourism offer and, linked with the approach outlined earlier, we will focus on the opportunity to link this with local employment and SME development.

It will be important that developing the *economic* potential of our natural environment is accompanied by investment to ensure that our natural assets are sustained and enhanced, retaining environmental quality, preventing over-exploitation and supporting the development of the farming and forestry sectors. This may also provide new business opportunities (commercial and in social enterprises) in natural resource management.

Improving connectivity

6.8 Despite the good transport links along the M4 and South Wales Main Line, transport connections across much of the county borough are weak. Limited public transport in particular acts as a significant barrier to work and learning opportunities, especially for those on low incomes (and especially for younger people), and limits our ability to respond to the environmental need for modal shift. It also impedes the sustainability of some of dispersed communities and their ability to retain younger workers.

6.9 The pandemic has also reinforced the need for continued investment in digital connectivity, especially in rural parts of the county borough that are reliant on a single infrastructure provider. In line with the focus of this Plan on increasing business opportunities in Valley communities, new approaches to aggregating local demand and enabling innovative solutions will be increasingly important.

Key actions

Planning for the long term

In the long term, there are ambitious plans for the development of the Swansea Bay and South West Wales Metro. These will take several years to come forward – but it will be important to make the case for investment and build the scope for integration with bus and active travel options.

Developing innovative solutions in the shorter term

In the meantime, there is a pressing need for shorter-term action to support access to work. The new national transport strategy, *Llwybr Newydd*, commits to improving the reliability of public transport services and to "extending the reach" of public transport, especially in rural areas, and we will work with the Welsh Government and with transport providers to deliver these ambitions. With community partners and employers, we will also support the development of community-based transport schemes, focused on connecting people with employment and learning.

Improving digital connectivity

While the market will respond to growing demand for connectivity across much of Neath Port Talbot, this demand is likely to outstrip viable supply, especially in rural communities. We will work with community partners, business and the Welsh Government to develop approaches to local demand aggregation to increase access.

Investing in community infrastructure

6.10 Finally, 'quality of place' is not just about our key town centres and prime natural assets: it is also about the environmental quality of the neighbourhoods and communities in which people live and work. That in turn is associated with the quality of the housing stock, public amenities, access to services, and so on – which itself impacts on local pride and access to opportunities. These issues will be central to the new Regeneration Strategy which will accompany this Plan, recognising the need for an integrated approach to economic wellbeing.

7. Future skills and opportunities

The three preceding themes focus on generating *demand* for new jobs and economic activity. But we also need to invest in workforce *supply*, ensuring that local residents have the skills to access employment and that there is good information about opportunities now and in the future.

The case for action

7.1 Neath Port Talbot has a significant workforce skills deficit, and there is evidence that this negatively impacts on the ability of local residents to access some of the higher-paying jobs that the county borough hosts. This presents a significant risk for the future, and with no growth expected in the working age population over the next 20 years, the ability to attract and retain talent is likely to be increasingly important.

7.2 At the same time, the 'transformational' trends described in Chapter 3 will have implications for skills demand in the economy, as industry gradually decarbonises and digital technology changes the nature of some occupations and leads to the creation of new ones. Increasingly, the ability to retrain and adapt will be key.

Priorities for the future: An adaptable and resilient workforce

7.3 In Neath Port Talbot, we are fortunate in having one of the country's leading providers of further education at NPTC Group: the Council works closely in partnership with NPTC Group, and creating a future workforce that is adaptable and resilient to opportunities and change requires a partnership approach with providers and employers. The Council also delivers several programmes, including through Adult and Community Learning, Skills and Training, the Youth Service, and employability programmes (Communities For Work and Workways Plus).

7.4 Building on this, and the increasing integration of existing services, future action will focus on **increasing employer-based routes to training**; developing the skills of the **adult workforce**; increasing **learner 'demand'** and knowledge in relation to future opportunities; and creating more opportunities to **access employment**, especially for those 'furthest away' from the labour market.

Increasing employer-based routes to training

7.5 The ability to recruit and retain a skilled workforce is part of Neath Port Talbot's offer to investors, and it is key to the success of many smaller, locally-based businesses. As well as

providing more opportunities for residents to reach their potential, we want to ensure that the workforce supply meets current and future employer need. Working in partnership:

Key actions

Supporting and accelerating Apprenticeships

Based in Neath Port Talbot, NPTC Group is the largest provider of Apprenticeships in Wales, and the Skills and Training Team within Neath Port Talbot Council is also a significant provider. We seek to increase the number of Apprenticeship opportunities available, working with employers as part of our coordinated package of business support, and supporting initiatives to drive up Apprenticeship take-up within the public sector.

Supporting progression to higher education

While average workforce qualifications in Neath Port Talbot are below the UK and national averages, we have a substantial university presence, with Swansea University's Bay Campus located in the county borough, the University of South Wales' hydrogen centre at Baglan, and the large university offer in Swansea close at hand. We will work with our universities (and with neighbouring authorities) to raise aspiration and create new opportunities for progression to higher education.

Strengthening the employer voice

Strong efforts have been made in recent years to strengthen the voice of employers in planning future technical skills provision – at regional level via the Regional Learning and Skills Partnership and locally through direct employer relationships with providers. We aim to build on this, combining it with better economic intelligence to:

- Identify skills gaps and training needs associated with NPT's priority investments, linked with South West Wales's Skills and Talent Programme
- Promote employer demand for training within the existing workforce, especially where this can support productivity improvements and the adoption of new technology.

Increasing learner demand

7.6 Alongside a strengthened employer voice, we want to raise awareness among the workforce of the job opportunities that are available locally and in our neighbouring counties, and the types of skills that these demand. This involves working with schools and other providers, and drawing on the practical experience of those firms in NPT with which we have established relationships to raise aspirations.

Creating routes to employment

7.7 Neath Port Talbot has seen significant success in recent years in reducing economic activity and unemployment. But worklessness remains a challenge and is especially concentrated in a number of communities, and in an economy which has seen major structural shifts in recent decades, employment often offers limited pay and opportunities for progression.

Key actions

Promoting re-training within the existing workforce

Within an ageing workforce, the ability to retrain over the course of the working life will become ever more important. Working with partners, we will increase awareness, and the take-up, of retraining opportunities in Neath Port Talbot, with the public sector leading by example and supporting the business community to invest in future workforce resiliemce.

Developing new access to work

For many people, access to employment is challenging, despite the county borough's success in supporting people to enter the labour market in recent years. Building on the success of programmes such as Workways + and Communities for Work, and in partnership with DWP, the community and voluntary sector and other agencies, we will seek to invest further in schemes providing additional support for people to access and sustain fair employment, and this will form part of our future approach to the Shared Prosperity Fund and similar funding programmes.

8. Moving forward

From the Plan to delivery

Flexibility

8.1 This Plan provides a framework for longer-term growth and investment in the Neath Port Talbot economy. However, the economy is dynamic: new investment ideas and opportunities will come forward, and it is possible that there will be economic shocks to which we will need to rapidly respond. It is therefore important that the Plan is seen as flexible tool to guide activity over the next few years.

8.2 Alongside the Plan, we will develop an **action plan**, containing specific, measurable actions which can clearly be implemented. We recognise that this action plan will evolve over time: some actions may be delivered quickly and result in positive change in the short term; others may be more developmental, and may require feasibility work before they can be brought forward. Our action plan will therefore be a 'living' document, subject to ongoing review in line with the overall priorities we have set out here.

Shared leadership

8.3 It is anticipated that Neath Port Talbot Council will 'own' the Plan. But as the action areas demonstrate, delivery will only be possible through partnership working with a range of other partners. These include the Welsh and UK Governments (as potential funders, but also, in view of the national significance of some of NPT's assets, as strategic partners); local strategic partners (such as skills providers) and our neighbours within the South West Wales regional arrangements. Crucially, the voice of business – both employers within NPT and external investors – will be essential in shaping the next stage of the Plan and its delivery.

Funding diversity

8.4 This Plan has not been prepared in response to any specific allocation of funding, and investment will come from a number of sources. This will mean adapting to some new ways of working: over recent decades, the European Structural Funds have provided important sources of capital and revenue funding in NPT, and there is substantial expertise in managing them. Going forward, the new Shared Prosperity Fund (and the other UK-wide funding streams that may come forward) will require a different approach: we will need to work pragmatically, in the context of our local strategy.

Measuring success: Key indicators

8.5 The action areas within this Plan will be taken forward to different timescales and with different funding arrangements. But indicatively, a series of measures that we would want the

Plan to deliver is set out in Table 8-1. In addition, potential delivery against the National Wellbeing Indicators is set out in Annex A.

Table 8-1: Indicative measures of success

Indicator	Description
Firm creation and survival	New business starts, and survival rates over time
Firm expansion	Additional turnover or employment as a result of business expansion
Jobs	Total jobs created/ safeguarded
GVA	Additional gross value added
Private investment	Private investment levered
Additional floorspace	Sq m commercial floorspace delivered
Access to employment	Additional people accessing employment
Carbon savings	Overall business CO2 savings

Source: SQW

Annex A: Well-being of Future Generations Act assessment

Contribution to the Well-being Goals

A.1 The Wellbeing of Future Generations (Wales) Act 2015 (WFGA) identifies seven Well-being Goals: a Prosperous Wales; a Resilient Wales; a Healthier Wales; a More Equal Wales; a Wales of Cohesive Communities; a Wales of vibrant culture and thriving Welsh language; and a Globally Responsible Wales. Guidance on the application of the WFGA states that policy should seek to contribute to all seven Well-being Goals, not just the one that most closely approximates to the central purpose of the initiative.

A.2 The table below summaries how this Plan contributes to the Well-being Goals:

Table A-1: Contribution of the Economic Recovery Plan to the Well-being Goals

Goal	Contribution
A Prosperous Wales	**Direct contribution** The Plan seeks to support economic growth, especially by taking forward transformational investment schemes, growing entrepreneurship and the SME base and improving 'place based' economic opportunities.
A Resilient Wales	**Direct contribution** The Plan should support economic diversification and resilience through growing the business stock, increasing opportunities for business expansion and supporting the development of the foundational economy.
A Healthier Wales	**Indirect contribution** The Plan is not directly concerned with health matters. However, greater prosperity (especially where more equally distributed) leads to better health outcomes.
A More Equal Wales	**Direct contribution** The Plan acknowledges the need to promote economic opportunities in disadvantaged areas, and proposes measures to support this.
A Wales of Cohesive Communities	**Indirect contribution** Better economic inclusion outcomes should improve cohesion. However, we would expect this to be developed elsewhere in the Wellbeing Plan
A Wales of Vibrant Culture and Thriving Welsh Language	**Indirect contribution** Measures to support the growth of the creative economy are implicitly identified, especially in relation to Quality Places.
A Globally Responsible Wales	**Indirect contribution** Achieving over time a decarbonised growth model will contribute to this The Plan also highlights openness to new ideas (and investment) from elsewhere

Annex B: Summary SWOT analysis

B.1 The Local Economic Evidence Base prepared in support of this Plan contained an analysis of Neath Port Talbot's strengths, weaknesses, opportunities and threats. This is summarised below:

Table B-1: Summary SWOT analysis

Strengths	Weaknesses
• Excellent connectivity by road and rail (especially in the south of NPT) and relatively good digital infrastructure • Established and distinctive industrial base and some large manufacturing firms • Good track record in taking forward major regeneration and business investment schemes in the context of a long-term approach • Recent evidence of labour market resilience: falls in economic inactivity and less impacted by C-19 than elsewhere • Strong economic relationships with neighbouring centres and positive history of joint working with neighbours • Proximity and good connections to concentrations of industrial activity across South Wales • Proximity to the 'knowledge base' (Swansea Bay campus within NPT and a range of university assets and programmes)	• Significant lag in workforce skills… • …. Reflected in relatively low pay and productivity (and in the inference that there is inbound commuting to higher-paid jobs and some outbound commuting to lower-paid jobs) • Continued economic activity gap, despite recent improvements • Persistent concentrations of disadvantage • Mismatch in some areas between capacity for additional employment and economic opportunity (especially in parts of the upper Valleys), linked with a continuing 'legacy' of deindustrialisation • Environmental challenges associated with the industrial base and transport infrastructure (although significant improvements in recent years). • Relatively modest business base, despite the presence of some large firms
Opportunities	**Threats**
• Nationally-significant strategic sites (e.g. at Baglan Bay) with potential for major development over time. • Capacity for development, linked with excellent connectivity and commercial interest. • Slight anticipated growth in the 'working age' population (in contrast to a diminution in Wales as a whole) and increasing opportunities for extended and more diverse working lives. • Significant potential to take a lead in the drive to decarbonise the economy, through existing assets (e.g.., the Hydrogen Centre at Baglan and renewable energy capacity) and scope for innovation and adoption within industry.	• Relatively high levels of dependency on a limited number of key industries. This dependency has reduced over recent years, but there is still vulnerability to disinvestment by larger firms and restructuring within industries as a result of global change (c.f., the changes in the structure of the automotive sector impacting on activities locally), with environmental and land-use, as well as employment implications. • Vulnerability of key parts of the industrial base (obviously the steel industry, although relevant to other parts of the economy as well) to technology change and pressures to decarbonise. This is partly about the costs of change, but also about the skills and management capacity to support adoption

Strengths	Weaknesses
• Opportunities presented by changing working practices to attract new uses to town centres and reduce dependence on traditional retail activities. • Potential to explore new approaches to community-led economic development, building on the more active use of local public sector procurement, small business growth in the foundational economy, and so on. • Opportunities to realise and enhance NPT's 'quality of life' offer, linked with its connectivity, rural environment and heritage. • Opportunities to build on the knowledge base (highlighted in Strengths above): much of Swansea University is within NPT, with potential for stronger industry links and the role of the universities as economic drivers themselves)	and adaption (and links with the risk of loss of skills and capabilities over time). • High costs of bringing forward some of NPT's major sites: while these present an opportunity (building on the strong track record highlighted earlier), the risk is that there is insufficient public investment to enable/ de-risk private sector activity. • Challenges associated with capturing the 'added value' of capacity within Neath Port Talbot (e.g., where industrial R&D can be decoupled from the industrial base; or where higher-paid/ higher-skilled jobs are taken by people commuting in from beyond the county borough. • Continued uncertainty of public investment as we transition away from European funding (with the risk of competition for resources with other parts of the UK, and the need to develop new investment models).

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About us

SQW Group

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SQW is a leading provider of research, analysis and advice on sustainable economic and social development for public, private and voluntary sector organisations across the UK and internationally. Core services include appraisal, economic impact assessment, and evaluation; demand assessment, feasibility and business planning; economic, social and environmental research and analysis; organisation and partnership development; policy development, strategy, and action planning.
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Action Plan

While there are many existing projects and programmes that will continue to play an important role in the area's economic recovery post pandemic, the aim of the following action plan is to support the delivery of the Neath Port Talbot Economic Recovery Plan and guide the Council and key delivery partners through the next 12-18 months as the economy eases out of "restrictions" and moves into the 'new normal' stage.

The plan is not intended to duplicate any actions that are already being implemented, but to introduce new activities and build on key areas of work that will impact our economic recovery. In addition, as the economic outlook is still relatively uncertain, the action plan will be considered a working document that will need to evolve if circumstances change.

Objective 1: Support our local business community				
Actions	**Partners** (lead in bold)	**Funding**	**Outcomes**	**How we will monitor outcomes**
Administer WG Covid-19 financial support grants for local businesses.				
Support indigenous growth projects that encourage the diversification of the economy and the creation of highly skilled and/or sustainable employment across all key business sectors.				
Work with partners to develop business support inventions that focus on the decarbonisation of industry and residential homes to stimulate economic growth and create new green/low carbon related job opportunities.				

Set up a Manufacturing/Engineering Business Forum to: - create a strategic platform for businesses to engage with the Council; - encourage businesses to communicate more effectively with each other; - identify opportunities for mutual benefits and cross-working; and - provide intelligence to help the Council develop sector specific action plans.				
Develop an action plan to support the manufacturing sector to include information, support and advice on: - Accessing UK and Welsh Government business support packages. - Upskilling digital technology/IT systems to help overcome supply chain issues. - Implement new working practices. - Consider diversification strategies. - Networking opportunities by trade bodies and tailored support packages for sub sectors such as aerospace and automotive.				
Support the delivery of the Council's DARE strategy by encouraging the delivery of projects to take advantage of the growth potential within the green/ low carbon economy and activities around the development of the port area.				

Deliver targeted business support to help the hospitality, tourism and retail sectors recover from the pandemic and create/safeguard future employment.				
Support businesses to improve their digital competency across all business sectors.				
Adopt a collaborative approach to supporting businesses within the foundational economy and bringing greater economic benefits to our valley communities.				
Work with key partners to support the re-opening and future sustainability of our town centres and the retail sector.				
Objective 2: Create an environment that encourages inward investment, indigenous growth and diversification of the local economy				
Launch the new Invest in NPT website to promote NPT as an ideal place for new investment and indigenous growth.				
Secure funding to develop the infrastructure to create an environment that encourages new business investment and the diversification of the local economy.				-
Work with City Deal/Welsh Government to bring forward high quality, affordable and accessible business space to attract new investment.				

Work with key organisations such as the Wales Hydrogen Trade Association, South Wales Industrial Cluster and academic partners to promote the area and increase our exposure both nationally and internationally.				
Encourage anchor businesses and regionally significant companies and their supply chains to become “Promotional Partners” with the Council to help to attract new investment to Neath Port Talbot.				
Focus on delivering objectives set out in the Council’s DARE Strategy to target and attract investment from low-carbon innovation; green energy and advanced manufacturing sectors.				
Objective 3: Deliver support to encourage new start-ups and help young businesses grow				
Utilise Council buildings such as Sandfields Business Centre and the Plaza to develop Enterprise Hubs to support new start-ups and growing businesses. Explore the potential to roll out the Business Centre model to Valleys locations.				
Work with partners to secure funding to develop low cost, flexible business premises on easy access terms to support new business start-ups.				
Increase support and advice for new business start-ups through:				

- Grants via the Council's Innov8 programme/UK Steel Enterprise Fund. - Delivery of Enterprise Clubs (practical advice and guidance to those considering self-employment). - Delivering 1-1 support; workshops, and growth support programmes in partnership with Business Wales, Town Square Spaces Ltd and the Rebel Business School.				
Develop and deliver a programme of support that encourages self-employment/ entrepreneurship within our valley communities via our dedicated Enterprise Development Officers.				
Objective 4: Deliver an effective Employment Support service that supports residents and local employers.				
Create an Employment Support Hub to help local residents improve their employability skills and support them into work.				
Review the provision of employability support within Neath Port Talbot to ensure a "joined up" approach to the delivery of services to residents and local employers.				
Explore further funding opportunities to enhance local employability provision, and develop collaborative bids across the Council departments.				

Support local residents to acquire the necessary skills needed to access employment opportunities in growing sectors such as health and social care, food and accommodation, transportation, ICT and green/low carbon related jobs.				
Provide work placements to young people within the Council and with local employers as part of the delivery of the new DWP Kickstart programme.				•
Objective 5: Deliver an effective Community Benefits Programme				
Ensure Community Benefits form part of the delivery aims of key construction, regeneration and infrastructure related projects to enhance local business supply chains, encourage apprenticeships, traineeships, work experience and paid work opportunities for local residents.				
Use the Neath Port Talbot Employer Support Group (ESG) as a single point of contact for internal and external organisations to collaborate on maximising opportunities for employment, training, upskilling and to support inward investment projects.				

Objective 6: Review the Council's procurement processes to ensure spend is maximising social and economic benefits.				
Identify ways in which procurement can be used to support business growth, create new jobs and safeguard existing employment.				
Identify procurement challenges faced by local businesses and develop an effective response to adopting a more business friendly approach to procuring.				
Work with local businesses to improve tendering/procuring skills.				
Use the Buy Local campaign to demonstrate how a change in procurement policy can benefit the local economy and encourage procurers to "think local" when procuring goods and services.				
Objective 7: Use communication channels to inform residents and local businesses on service delivery and make its quick and easy to access information and support				
Use the Front and Centre campaign and the new Invest in NPT website to promote NPT as a place for new investment and indigenous growth and to set the tone for the economic recovery of the county.				

Deliver social media campaigns and regular PR stories/case studies to promote business and employment support services.				
Revamp the existing Council's business support webpages to further promote and enhance council services and ensure local businesses know where to access support and information on funding, premises, exporting, events as well as informative information on key regeneration projects, procurement opportunities, etc.				
Promote the Work Station as a One Stop Shop for Employability Support, and explore options for similar hubs in other areas.				

Cyngor Castell-nedd Port Talbot
Neath Port Talbot Council

NEATH PORT TALBOT COUNTY BOROUGH COUNCIL

Regeneration and Sustainable Development Cabinet Board

25 February 2022

Report of Simon Brennan Head of Property & Regeneration

Matter for Decision

Wards Affected: All

South West Wales Regional Energy Strategy

Purpose of the Report

This report aims to seek approval of the South West Wales regional energy strategy so far as it relates to Neath Port Talbot County Borough Council.

Executive Summary

1. The overall objective of the regional strategy is to develop a strategic pathway for identifying key interventions to deliver on the South West Wales region's ambitions for decarbonising its energy system. Whilst ensuring that the region maximises the economic benefits from the transition to a low carbon economy enabling the region to achieve the correct trajectory for achieving net zero in 2050.

2. The core principles of the regional energy strategy is to:

    a) Optimise the wide range of regional natural resources
    b) Transition to a low carbon economy, to improve lives for all and for benefits to be shared in an equitable way
    c) Lead by a proactive and effective regional delivery vehicle to ensure the vision translates into effective action

3. The South West Wales Energy Strategy will seek to deliver the following benefits to the economic region of South West Wales:

    - Raise the level of ambition regionally on energy
    - Secure cross-sector stakeholder support for a shared place-based energy system vision for the region

- Provide the evidence needed to demonstrate the economic benefit of investment in local energy systems
- Develop a regional pipeline of deliverable projects and programmes that will achieve the vision
- Assist the region becoming a leader on low carbon energy generation
- Demonstration of regional and cross sector collaboration
- Adoption of taking a whole system multi vector view
- Embracing and moving towards a net zero carbon economy
- Future proofing energy/carbon solutions and innovation.

Background

4. This regional energy strategy for the South West Wales Region was commissioned by the Welsh Government and supported by the Welsh Government Energy Service. It has been developed by the South West Wales Energy Core Group, a sub-group of the Regional Directors' forum from the four Local (Neath Port Talbot, Swansea, Carmarthenshire and Pembrokeshire) Authorities in South West Wales, with additional support from an Advisory Panel and regional stakeholders.

5. The overall objective of the regional strategy is to develop a strategic pathway for identifying key interventions to deliver on the region's ambitions for decarbonising its energy system. An Energy Vision scenario has been modelled to set out a potential decarbonisation route that will put the region on track to achieve a net zero energy system by 2050.

6. The strategy consists of the following key stages:
    - Development of a draft regional energy strategy
    - Individual approval of the strategy document by each Local Authority
    - Carryout workshops for each thematic theme
    - Formulation of governance structure for the strategy
    - Produce long list of actions/activity and prioritise
    - Develop list of implementation programmes and Identify resource and funding for effective delivery

7. The strategy will complement and support work already underway across each local authority and public sector body to decarbonise their organisational (internal) emissions. The strategy will help support accessing funding sources to achieve these ambitions.

South West Wales Regional Energy Strategy

8. The strategy's vision for South West Wales Region (SWW):

'Harnessing the region's low carbon energy potential across its on and offshore locations, to deliver a prosperous and equitable net zero carbon economy which enhances the well-being of future generations and the region's ecosystems, at a pace which delivers against regional and national emissions reduction targets by 2035 and 2050'

9. Core principles:

a) Optimise the wide range of regional natural resources
b) The transition to a low carbon economy needs to improve lives for all and for benefits to be shared in an equitable way
c) Led by a proactive and effective regional delivery vehicle to ensure the vision translates into effective action

10. The key strategic priorities are:

- **Energy efficiency**: a key priority for the region is to drive down energy demand.
- **Electricity generation**: encourage a mix of low carbon energy technologies to increase the reliability and stability of electricity generation.
- **Smart and flexible systems**.
- **Decarbonise Heat**: a 'whole system' and 'one heating problem to one heating solution' approach.
- **Decarbonise Transport**: lead the decarbonisation of transport and promote active travel behaviour.
- **Regional coordination**: Build a regional coordinated approach to infrastructure planning and delivery.

11. **Strategy Thematic Themes**
The key strategic priorities will be categorised and delivered under four thematic themes listed below, each theme has been assigned a Local Authority lead officer:

- **Housing** - Neath Port Talbot Council
- **Commercial and Industry** - Carmarthenshire County Council

- **Renewable Energy Generation** - Pembrokeshire County Council
- **Transportation** – City and County of Swansea

Approach

12. The Welsh Government Energy Service has supported the development and progression of the West Wales Regional Directors' forum to co-produce an Energy Strategy for West Wales over the past 10 months. The strategy demonstrates the level of effort and co-ordination required and local economic benefit achievable from delivering a zero-emission energy system by 2050 compared with a business-as-usual pathway. Similar commissions have taken place in North Wales, Mid Wales and South East Wales.

13. Decarbonisation is seen as a key priority for the region as evidenced within the Regional Economic Strategy and City Deal Programme, strengthened further by NPT Council's Decarbonisation and Renewable Energy (DARE) Strategy for transitioning towards a low carbon region and a green economy is seen as an important catalyst for change to unlock and support economic growth alongside skills and job creation post COVID.

14. It is important for Members to note that the energy theme and the South West Wales Energy Strategy is much broader than just the Swansea Bay City Deal, and as such will require broad collaborative ownership and a multi stakeholder approach to co-produce, lead and deliver elements within the strategy if we are to realise the ambitious vision set out within.

15. Accessing the external investment required to deliver the strategy will be a significant challenge and the proposed next step of developing an action plan will begin the process of identifying the regional interventions and asks required to deliver the vision and aims of the strategy.

Benefits of the Strategy

16. The South West Wales Energy Strategy will seek to deliver the following benefits to the economic region of West Wales:

    - Raise the level of ambition regionally on energy
    - Secure cross-sector stakeholder support for a shared place-based energy system vision for the region

- Provide the evidence needed to demonstrate the economic benefit of investment in local energy systems
- Develop a regional pipeline of deliverable projects and programmes that will achieve the vision
- Assist the region becoming a leader on low carbon energy generation
- Demonstration of regional and cross sector collaboration
- Adoption of taking a whole system multi vector view
- Embracing and moving towards a net zero carbon economy
- Future proofing energy/carbon solutions and innovation

Next Steps – Delivery of the South West Wales Regional Energy Strategy

17. To develop, progress and take the strategy forward the following steps and actions will be undertaken:

    - Sign off approval of the strategy by each Council within the region
    - Finalise regional governance structure for the strategy
    - Complete long list of actions/activity and prioritise for each thematic theme within the strategy
    - Development and resourcing of an effective action plan with deliverable programmes & projects
    - Carryout communication and branding exercise for successfully socialising the strategy throughout the Council and region

18. Responsibility for monitoring the regional energy strategy plan is likely to feature as part of the economic well-being function within the governance structures being developed to support the south west Corporate Joint Committee.

Financial Impacts

19. There are no financial impacts in respect of this specific strategy report, with financial impacts assessed as part of future reports submitted to members with regard to the strategy implementation plan and associated projects as part of the journey to net carbon zero.

Integrated Impact Assessment

20. An integrated impact assessment has not been undertaken at this stage of the strategy's development as it is not necessary to do so, should it be required once the strategy delivery plan is ready for

approval and the project enacted then a full impact assessment will be undertaken at that juncture.

Valleys Communities Impacts

21. The impact of the strategy and the subsequent journey to net carbon zero is anticipated to have a positive impact on all areas of the County Borough inclusive of valley communities. Similar to the financial impacts, the beneficial impacts of the strategy will be assessed as part of future reporting and submitted to members with regard to the strategy implementation plan and associated projects.

Workforce Impacts

22. None.

Legal Impacts

23. None

Risk Management Impacts

24. None.

Consultation

25. There is no requirement for external consultation on this matter, however there has been engagement and workshops with local, regional and national stakeholders.

Recommendations

26. It is recommended that members:

a) Approve the South West Wales Regional Energy Strategy as set out in Appendix 1 and endorse their support for the commencement of preparatory work on the action plan.

b) Approve that the South West Wales Energy Core Group, a sub-group of the Regional Directors' forum from the four Local Authorities (Neath Port Talbot, Swansea, Carmarthenshire and Pembrokeshire) work together to develop and agree a regional governance arrangements for the preparation of a South West Wales energy strategy delivery plan and that a report be brought back to members for approval for the same once completed.

Reasons for Proposed Decision

27. To invite Members to provide feedback on the strategy, which will assist the development and implementation of the strategy's action plan. The current strategy provides a high-level vision, priority areas, energy modelling and economic analysis which shall inform the development of the proposed action plan.

Implementation of Decision

28. The decision is proposed for implementation after the three day call in period.

Appendices

29. Draft south west wales energy strategy.

List of Background Papers

30. None.

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South West Wales Energy Strategy

(Draft)

Funded and supported by:

Llywodraeth Cymru
Welsh Government

Supported by:

Prepared by:

Gwasanaeth Ynni
Energy Service

Contents

Version:	Comment:	Issued:
V1.0	For issue	2020
V2.0	Accessibility updates	November 2021
V2.1	Minor amendments	December 2021

Executive summary

This regional energy strategy for the South West Wales Region was commissioned by the Welsh Government and supported by the Welsh Government Energy Service. It has been developed by the South West Wales Energy Core Group, a sub-group of the Regional Directors' forum from the four local authorities in South West Wales, with additional support from an Advisory Panel and regional stakeholders. In this report the use of "We" refers to this collective group of stakeholders.

The overall objective of the strategy is to develop a strategic pathway identifying key interventions to deliver on the region's ambitions for decarbonising its energy system. An Energy Vision scenario has been modelled to set out a potential decarbonisation route that will put the region on track to achieve a net zero energy system by 2050.

Our vision for South West Wales (SWW) is:

> *Harnessing the region's low carbon energy potential across its on and offshore locations, to deliver a prosperous and equitable net zero carbon economy which enhances the well-being of future generations and the region's ecosystems, at a pace which delivers against regional and national emissions reduction targets by 2035 and 2050.*

Our priorities for achieving this vision are:

1. Energy efficiency
2. Electricity generation
3. Smart and flexible systems
4. Decarbonise heat
5. Decarbonise transport
6. Regional coordination

The baseline energy assessment sets out the current energy use and generation in the region:

- South West Wales currently consumes around 36% of all energy consumed in Wales, more than its 22% share of the population partly due to the concentration of very large industrial sites within the region;
- Between 2005 and 2017, total energy consumption fell by 26%, including a 31% reduction from the commercial and industrial sector, which makes up 68% of the region's total consumption, and a 22% reduction from the domestic sector. The associated greenhouse gas emissions have fallen by 14% from 2005 to 2017;

- The region's total energy demand is dominated by the commercial and industrial sector, which makes up 68% of the total demand, with domestic demand accounting for 17% of total demand, and transport accounting for 15%.
- Renewable assets located in South West Wales currently generate the equivalent of 44% of the region's electricity consumption;
- South West Wales currently hosts 27% of Wales' renewable energy capacity, with 388MW of solar PV and 401MW of onshore wind;
- Of the 863MW of renewable energy installed capacity in the region, 146MW (17%) is locally owned;
- 46% of renewable generation in South West Wales is from onshore wind projects and 45% is from solar PV;
- 0.9% of homes in South West Wales have a heat pump or biomass boiler;
- Approximately 29,000 homes (~9%) are currently fuelled by oil, LPG, coal or other solid fuels;
- The average EPC rating is D and the region has the highest average energy efficiency ratings in Wales, with 71% of homes rated as EPC band D or above.
- Transport in the region is dominated by private car use with ~0.3% of cars pure electric, compared with an average of 0.6% of vehicles across Great Britain.
- In 2019, South West Wales hosted 128 public charging devices, including 11 rapid public chargers.

Note on scope: the baseline assessment and strategy is focussed on the energy system only, covering power, heat and transport. Very large industry is excluded due to a lack of data availability, and does not include greenhouse gas emissions or sequestration from non-energy related activity such as land use. The large industrial users should be included in the Zero2050: South Wales project led by National Grid.

Achieving our energy vision for South West Wales: to meet Welsh Government targets, and to be on track for net zero by 2050, South West Wales needs to reduce emissions from its energy system by 55% by 2035, split by sector as follows:

- 58% reduction in domestic heat and power emissions;
- 56% reduction in commercial and industrial emissions (excluding very large industrial use);
- 51% reduction in road transport emissions.

Figure 1: Summary of the Energy Vision's emission reductions by sector. Source: WGES analysis

The energy vision scenario modelling assumes a significant shift away from business as usual across these three sectors by 2035. The assumptions of the modelled future vision include:

Domestic:

- 85,000 homes improved from EPC band G, F and E to D, C and B;
- Over 78,000 heat pumps installed;
- 21,000 suitable houses accurately fitted with internal or external wall insulation;
- Over 140,000 other insulation measures in homes;
- 82,000 homes currently heated by fossil fuels to move to low carbon heating;
- Replacing heating systems in oil, LPG and solid fuel heated homes prioritised;
- No new methane gas connections for homes from 2025.

Commercial and industrial:

- A significant energy efficiency programme to reduce energy demand by 14%;
- A switch to alternative fuels, including hydrogen and electrification of heating;
- Decarbonising the electricity network through renewables and behind the meter renewable generation.

Road transport:

- 78% of vehicles driven in South West Wales in 2035 are electric, equivalent to 17,000 more electric vehicles per year by the mid-2020s, peaking at 38,000 per year in the 2030s. This is to be facilitated by the deployment of 9,500 public and on-street EV chargers;
- The creation of a hydrogen fuel cell electric vehicle refuelling network;
- A 10% reduction in private vehicle mileage by 2035;

- A slowing of the growth in total number of vehicles on the road, facilitated by increased use of public transport and active travel.

Renewable electricity generation:

- Offshore wind capacity increased from 50MW to 696MW
- 800MW of onshore wind installed (399MW of new capacity);
- 1,215MW of solar PV installed (827MW of new capacity) with 375MW on rooftops and 840MW ground mounted;
- 1,061MW of marine technologies, including 696MW floating offshore wind and 320MW tidal lagoon:
- Sufficient flexibility, including storage, and network infrastructure upgrades to enable low carbon generation and demand technologies to connect;
- The region to generate the equivalent of 147% of its total electricity consumption in 2035 from regional renewable sources.

These assumptions summarise the level of action required between 2020 and 2035 to be on track to achieve net zero by 2050. The energy modelling focuses on known decarbonisation technologies and actions that could be implemented by 2035 in order to demonstrate a potential decarbonisation route.

The scenario is not intended to be prescriptive. There are a number of potential pathways to achieve energy system transformation, including new opportunities from technology innovation that will certainly emerge as the transformation takes place. The rapid evolution of technologies and pathways means that there are some major uncertainties and varying opinions about the precise route forward. One such alternative which has been developed is the Energy Network Association's "Pathways to Net Zero". The Pathways to Net Zero report focuses on a hybrid heat pump first approach. Wales and West Utilities has completed extensive research into its 2021-26 business plan which builds on this approach, the details of which are described in later chapters.

What is clear is that all of the different pathways must achieve significant decarbonisation; should less action be achieved in any of the areas summarised above, other sectors will need to compensate with higher action to achieve the same results. The level of transformation described by the energy modelling actions is significant. More importantly, the modelling demonstrates the potential to be on a net zero pathway by using known and proven technologies and underscores the critical role of short- and medium-term action. Innovation will be essential to compliment this action and to develop technologies, skills, and practices that continue to achieve decarbonisation beyond 2035.

The economic impacts of achieving the energy system vision have been assessed in terms of job creation, gross value added (GVA) and the

investment (or spending) required for the energy transition, in comparison to business as usual.

The economic analysis demonstrates that almost £4 billion of additional investment/spending is needed to achieve the energy efficiency, electricity generation, and heat aspirations described in the energy vision between now and 2035. This represents approximately £286 million per year and will need to be financed from a range of sources including the private sector, households, and national and local government.

The energy system vision (ESV) scenario is estimated to result in an additional 16,000 net jobs, with an associated increase in GVA of nearly £1.6 billion, associated with the delivery of accelerated deployment of renewable electricity generation technologies and enhanced levels of energy efficiency. In addition, it is estimated that there will be over 900 more gross jobs associated with the provision of low-carbon heating technologies in the ESV scenario than the BAU scenario, associated with £200 million of GVA.

When considering the job figures presented its important to reflect on where these jobs will be located. The methodology focuses on direct jobs, a greater proportion of which are considered likely to be located in the region than indirect or induced jobs[1]. However, we are unable to comment on the specific location of the jobs estimated; a portion of the jobs are likely to be located in South West Wales and a portion may be held by persons residing outside of the region. The experience of Wales to date has been that many electricity generation jobs are held by those living outside of the region. This contrasts with energy efficiency jobs which are often held by local residents who provide services to the surrounding area. In order to help South West Wales benefit from jobs associated with future local electricity generation it will be important to first understand the reasons for any lack in local jobs and then to develop a policy response.

Note: please refer to the economic modelling chapter and technical annex for details on data sources, limitations and methodology.

Table 1. Estimated difference in jobs, GVA and investment between the energy vision scenario and business as usual, from 2020 to 2035

Energy vision scenario for:	Jobs**	**GVA**	**Investment required**
Electricity generation*	12,500 (net) **(+43%)**	£1,410m **(+39%)**	£3,280m **(+574%)**
Domestic heat	925 (gross) **(+66%)**	£200m **(+161%)**	£240m **(+73%)**
Domestic energy efficiency***	3,700 (net) (**+53%**)	£220m (**+53%**)	£780m **(+53%)**

[1] Direct jobs are typically associated with the manufacture, construction, and installation of equipment. Indirect jobs arise in the supply chain of the energy technology. Induced jobs related to jobs generated as a result of spending incomes earned from direct employment.

Total additional investment required to achieve the energy vision scenario	**£4,300m**
** Electricity generation jobs figures were calculated using direct job intensity indicators. Direct jobs are typically more likely to be held by residents local to an energy site. However, jobs related to manufacturing may be located outside of the region. Likewise, some jobs may be held by persons residing outside of the region who travel into the region to undertake these jobs. As such, it is not possible to comment on the geographic location of these jobs. The perceived experience of Wales to date is that many of the long term operational and maintenance jobs associated with these technologies are held by persons outside of the region who travel into Wales to perform their duties. In order to help the region benefit from jobs associated with future local electricity generation it will be important to first understand the reasons for any lack in local jobs and then to develop a policy response.* ***Impact on jobs is presented as either net or gross jobs depending on the available data.* ****Data on the percentage change in jobs and GVA for domestic energy efficiency is unavailable.* ****Data on the percentage change across all indicators for commercial and industrial energy efficiency is unavailable.*	

Green recovery from the Covid-19 pandemic: this strategy has been finalised in the midst of the COVID-19 pandemic. At the time of writing, the true economic and societal costs of the pandemic for South West Wales are not fully clear.

As we move from the immediate emergency response to considering our options for economic recovery, this energy strategy has the potential to play a significant role in helping South West Wales to recover and rebuild sustainably. It sets out a pathway for accelerating the shift to a decarbonised energy system in the region and demonstrates the potential for achieving far greater local economic benefits than could be achieved by returning to business as usual.

Next steps: Achieving a net zero energy system in South West Wales presents many challenges including, but not limited to, tackling deep retrofit in a large number of homes, reducing private car miles and enabling the low carbon vehicle roll-out including electric and hydrogen vehicles. There is an urgent need for action, using the Swansea Bay City Deal and more broadly engaging stakeholders from across the region to deliver transformational projects. However, decarbonisation also faces many potential benefits for the region, from enacting significant energy efficiency programmes to creating investment opportunities for local people and organisations. The transition to a decarbonised economy will also provide exciting opportunities in engineering, the digital and retrofit markets as well as local skills and employment.

There are three key next steps to help this strategy come to life and to create action: developing the governance structure, socialising the strategy throughout the region and developing an action plan.

Acknowledgements: We would like to thank all of the stakeholders who made valuable contributions to this work through their participation in workshops, completing surveys, providing data, and additional communication on the phone and by e-mail.

Acronyms and abbreviations

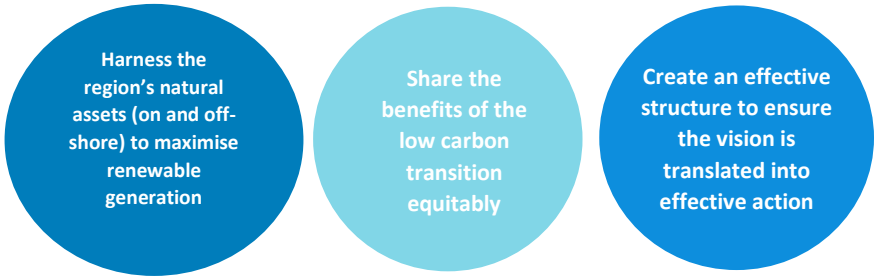
ASHP	Air Source Heat Pump
BEIS	The Department for Business, Energy, and Industrial Strategy
CCC	Committee on Climate Change
CHP	Combined Heat and Power
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CITB	Construction Industry Training Board
DNO	District Network Operator
DEFRA	Department for Environment, Food & Rural Affairs
DNS	Development of National Significance
ECO3	The Energy Company Obligation phase 3
EPC	Energy Performance Certificate
EV	Electric Vehicle
GSHP	Ground Source Heat Pump
GW	Gigawatt
GWh	Gigawatt hour
HGV	Heavy Goods Vehicle
HHP	Hybrid Heat Pump
kt	kiloton
kWh	Kilowatt hour
LPG	Liquid petroleum gas
MCS	Micro-generation Certification Scheme
MW	Megawatt
NAEI	National Atmospheric Emissions Inventory
NRW	Natural Resource Wales
PV	Photovoltaic
RHI	Renewable Heat Incentive
SME	Small and medium-sized enterprises
TWh	Terawatt hour
ULEV	Ultra Low Emissions Vehicle
WGES	Welsh Government Energy Service
WHQS	Welsh Housing Quality Standard
WPD	Western Power Distribution
ZILF	Zero Interest Loan Finance

Energy vision statement

Our Energy Vision

Harnessing the region's low carbon energy potential across its on and offshore locations, to deliver a prosperous and equitable net zero carbon economy which enhances the well-being of future generations and the region's ecosystems, at a pace which delivers against regional and national emissions reduction targets by 2035 and 2050.

Our vision is guided by three core principles

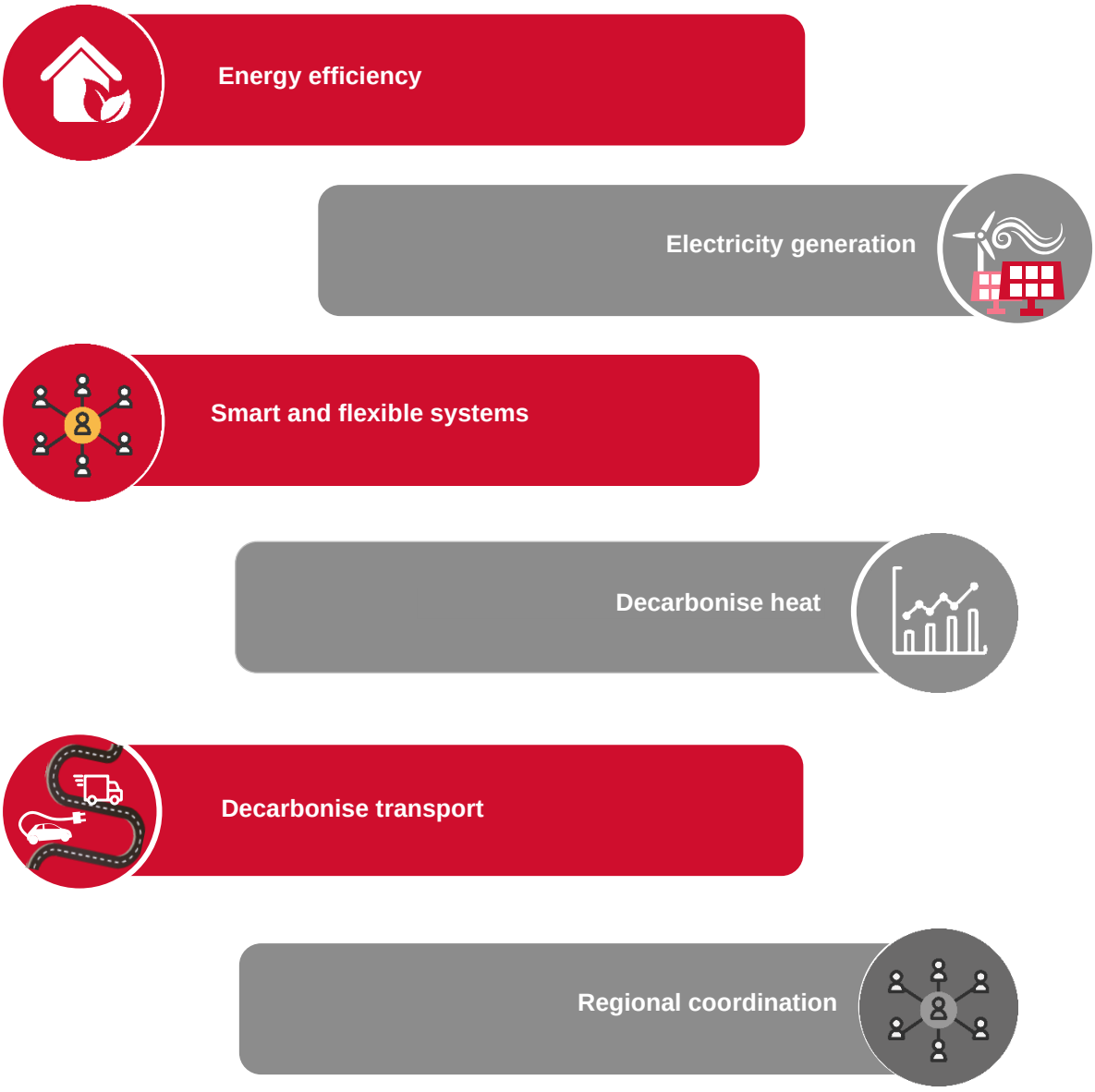


Core principles

- **Optimise the wide range of regional natural resources** such as solar, wind (on and off-shore, including floating off-shore wind (FLOW)), biomass, hydro and marine (including wave, tidal stream and tidal range technologies), to maximise low carbon electricity generation and help achieve a de-carbonised economy.
- The transition to a low carbon economy needs to **improve lives for all and for benefits to be shared in an equitable way**. The vision will support inward investment to the region; encourage the growth of sustainable local supply chains, including cutting edge research and development; the creation of resilient manufacturing, construction, operations and maintenance jobs; and affordable energy and energy efficient housing across the region.
- Led by a **proactive and effective regional delivery vehicle** - Our vision will be achieved by an effective regional delivery mechanism able to convert the vision into action.

Our priorities

To achieve our vision, we have defined the following six priority areas



Energy efficiency: a key priority for the region is to drive down energy demand

- Set the strategic direction to help homeowners become prosumers and homes as power stations (HAPS) which is an effective route to secure local renewable ownership
- Build effective supply chains to support HAPS and other new technology implementation
- Prioritise retrofitting needs and plan interventions with gaining a better understanding of the region through mapping EPC building ratings to focus resources on the least efficient buildings. This will also ensure minimum energy efficiency standards of privately rented properties being above EPC band E are being met
- Fully support the decarbonisation of the public sector by 2030
- Incorporate high levels of energy efficiency into the commercial value of buildings
- Provide advice and support to low income and low efficiency households, reduce fuel poverty and improve health and living condition of residents through the use of initiatives such as the Welsh Government Warm Homes programme (e.g. Arbed and Nest)
- Implement energy efficiency improvements on large industrial sites with the potential to demonstrate new and innovative solutions
- Energy efficiency should also benefit business parks, industrial estates, lighter industries and commercial businesses where significant energy saving potential exists
- Demonstrate how investment in a more energy efficient industrial sector can benefit non-industrial sectors
- Coordinate with industry groups e.g. South Wales Industrial Cluster (SWIC) to drive industrial efficiency
- Help building occupiers, communities and owners including public, private and RSLs, understand that energy efficiency measures will improve the quality of the indoor environment and also drive down energy related costs
- Support innovative solutions in energy efficiency, particularly those targeted on off-gas-grid areas
- All new homes should be built with a net-zero standard, as defined by the UK Green Building Council, and above a predefined EPC standard
- Encourage developers to improve standards where existing developments have planning permission that will not meet future regulations
- Promote the use of energy efficient appliances and lighting in the domestic and commercial sectors in order to reduce energy consumption
- Activities designed to decarbonise energy e.g. Carbon Capture Use and Storage (CCUS) and production of hydrogen (H_2), will in turn require more energy. Reducing

energy demand in all other energy-intensive activities will be key to allow for the decarbonisation of the industrial sector

Electricity generation: encourage a mix of low carbon energy technologies to increase the reliability and stability of electricity generation

- Maximise the range of energy sources exploiting different technologies such as PV, hydro, tidal, biomass, etc. as well as harnessing regional marine energy capabilities e.g. Simply Blue Energy and Total's 96 MW floating wind demonstration facility and the Swansea Bay Tidal Lagoon
- Seize the opportunity to develop a local supply chain for South West Wales to provide the foundation for, and then benefit from, long-term opportunities associated with the development of floating offshore wind and other renewable energy technologies
- Consider the private sector in developing renewable energy needs, particularly through alternative, public/private delivery models whilst considering local content as a pre-requisite
- Recognise the importance of local and community ownership of renewable energy assets and encourage community developers to play an active role in delivering additional capacity
- Aim to generate more than 100% of the region's electricity demand from low carbon sources on an annual basis, working towards meeting demand on a constant basis
- Invest in bulk energy storage systems, including batteries and hydrogen storage, to increase renewable energy utilisation and provide the electricity grid with the necessary flexibility for future demand
- Identify innovative storage methods and demand side response measures to enable a smoother demand profile
- Identify industrial land and space that can be harnessed for electricity generation e.g. rooftops for solar PV, onshore wind, and local capabilities/skills for H_2 production for local networks, transport and heating. Co-location of renewable technologies will also minimise land use
- Simplify and mainstream 'sleeving' / 'Energy Local' arrangements. Regional collaboration to deliver joint projects at sufficient scale to develop generation hubs (>100 MWp)
- Work with the National Procurement Service to support greater procurement of energy from locally generated renewable energy projects - could help de-risk development business cases
- Use planning powers to require developers to produce enough power for the dwellings/facilities being built, either on a community or plot by plot basis. Ownership of this action could be enforced via the planning system (Building regulations could also have a part to play in this)
- Support from local authorities for community energy projects to utilise their ability to spread knowledge, awareness and a feeling

of community ownership whilst contributing to decarbonising the energy mix
- Explore potential to develop an electricity system that enables energy trading using decentralised energy generation, storage and grid exports
- Investigate how to adapt the local road and port infrastructure capacity to meet the challenge of the increasing size of wind turbines and sub-structures.

Smart and flexible systems:

- Support an increase in future electricity grid capacity, as well as other sources of flexibility such as microgeneration, energy storage and Demand Side Response (DSR) schemes, to accelerate the electrification of transport and heating
- Explore and encourage innovative energy storage technologies and local generation, to maximise the use of locally produced energy while avoiding some of the challenges posed by constraints in the current electricity grid infrastructure. Greenlink interconnector with Ireland could become a valuable source of flexibility and an energy trading channel
- Facilitate the installation of smart meters, DSR and energy storage, particularly for high energy users. Smart meters can support innovative markets and services including smart contracts (with time of use (ToU) and dynamic tariffs), DSR and system balancing. As domestic batteries are becoming financially viable, a further opportunity is in community scale, and managed, energy storage
- Hydrogen can play a flexibility role equivalent to natural gas without the emissions. We will have a world class gas grid, largely plastic, by 2030. We therefore have the transportation and storage capability already in place. That storage capacity gives great flexibility in terms of storage and use of hydrogen for industry, transport, home heating and back-up power generation
- Leverage the ‘Homes as Power Stations’ pilot scheme to raise awareness and support innovation in the field of energy efficiency and flexibility
- Use the Active Buildings model to further link electricity grid storage capacity and a flexible electricity system.

Heat: a ‘whole system’ and ‘one heating problem to one heating solution’ approach

- Encourage a whole system approach drawing on the expertise of academic research institutions such as the Active Building Centre at Swansea University, energy parks, IGEM, Ofgem funded projects and the Energy Networks Association.
- All off-gas-grid properties to be moved to decarbonised heating solutions. A Welsh delivery system bioLPG could be launched to

supply off-gas-grid homes across the region. Hybrid heating systems could be used to reduce gas demand and make BioLPG more viable due to reduced volume of demand.

- Design and apply a multi-faceted approach to heating using electric heat pumps, hybrid heating systems and heat networks to decarbonise the heat sector
- Acknowledge the rural nature of the region to identify the appropriate solution e.g. decarbonised heating solutions for off-gas-grid properties should be financially incentivised to overcome affordability issues
- Identify and exploit the long-term waste heat produced by industrial clusters, especially those close to densely populated areas, to provide low-cost hot water for domestic and commercial use via the local heat distribution networks
- Support energy efficiency measures for both commercial and residential buildings. For example, where appropriate encourage further external and internal wall insulation, double and triple glazing etc to homes across the region particularly to improve living conditions of low-income households
- Incorporate low carbon sources of heating such as heat pumps into the heating mix. For off-gas-grid areas microgeneration by means of micro-CHP, using low carbon fuels where possible, could provide a feasible future solution
- Ensure an appropriate level of local expertise is available to facilitate the development of these solutions
- Environmental levies could be shifted from electricity to heat to prioritise energy efficiency measures within residential households
- Determine potential heat decarbonisation pathways (e.g. hydrogen, biomethane, biomass and heat pumps) that the region is likely to follow to minimise redundant investment in different technologies whilst recognising that hydrogen and renewable electricity will have complementary roles in decarbonising homes, businesses, power and transport.

Transport: lead the decarbonisation of transport and promote active travel behaviour

- Encourage the use of public transport using schemes such as on demand bus services, EV car clubs, integration of different public transport modes under efficient governance, and transport hubs, such as the Integrated Transport Hub in Neath Port Talbot
- Further support the decarbonisation of public transport and work closely with TfW and the Swansea Bay and South West Metro to deliver an effective, integrated public transport system.
- Backing a shared ownership model e.g. mobility as a service (MaaS), which encourages a shift away from personal ownership of transportation towards mobility being provided as a service, will be an important part of achieving this transition given the

rural nature of parts of the South West region and its consequent high reliance on private vehicles

- Supporting the rollout of Electric Vehicles is critical especially as Wales has the lowest number of EV charging point per capita in the UK. Installing charging points where there is electricity grid capacity and collaborating with the Distribution Network Operators to ensure the increased EV demand is matched with an increase in electricity grid capacity is therefore essential
- Ensure that a strategic vision for modern EV charging infrastructure, and where appropriate hydrogen refuelling facilities, throughout the region will be adopted, facilitating a reduction in emissions from cars as well as allowing industry, with the appropriate incentives, to assist by moving to a ULEV fleet
- Large industry can support this by installing charging points, help balance the grid and produce H_2 for buses, trains and HGVs
- Given the region's high renewable energy potential, we will explore the opportunity for cost effective green hydrogen generation locally that could be used within hydrogen fuel cell vehicles to further support the decarbonisation of transport
- Where possible, active travel modes will be encouraged through dedicated cycle lanes and bicycle storage space at intermediate transport locations as has been the case for the cycling track built along the former railway in Pembrokeshire i.e. the Brunel Trail
- Support innovation in transport behavioural change with initiatives such as the Active Cycle Shelter projects developed by SPECIFIC to encourage the shift from ICE vehicle to active travel
- Develop cutting edge research capabilities through initiatives such as the Global Centre of Rail Excellence (GCRE) being developed in Onllwyn, Neath Port Talbot
- Local and regional regulation could also encourage more environmentally friendly behaviour. Enforcing speed limits such as on the M4 motorway, and encouraging Ultra Low Emission Zones (ULEZs), can significantly improve air quality within urban areas
- Explore the possibility of a network of regional multimodal transport hubs with similar ticketing systems and providing services such as car sharing, EV charging, public transport, combined delivery systems and bike storage
- Deliver an effective integrated regional public transport system through the Swansea Bay and West Wales Metro
- Encourage vehicle fleets such as taxis, buses, public sector vehicles to transition to EVs, or hydrogen where considered more appropriate.
- Demonstrate how the EV transition could generate a potential source of revenue for EV charging points providers (e.g. hospital EV charging points in car parks)
- Encourage collaboration between EV charging companies to allow users access to more chargers

- Understand the medium-term implications of Covid impacts e.g. working from home shifting consumption from the public estate to private homes

Build a regional coordinated approach to infrastructure planning and delivery

- Improve collaboration within the public sector when planning for new infrastructure: liaising with the DNO (Western Power Distribution), Wales & West Utilities, National Grid Electricity Transmission and National Grid Gas Transmission when considering new developments to understand their own grid extension plans and make better use of public money
- Support investment in transmission network upgrades to facilitate the expansion of renewable generation capacity and increase engagement with BEIS to ensure that the Celtic Sea area is considered as part of its offshore transmission network review.
- Align the development of the South West Wales regional energy plan with the Regional Economic Development Plan to better address the 20% productivity gains gap that exist between SWW and the UK.
- Support the development of physical port infrastructure which will be required to deploy the full range of marine energy technologies from South West Wales and to maximise the economic opportunity.

The energy system, energy use & emissions

1. Modelling an Energy Vision scenario

1.1 Aims of modelling an Energy Vision scenario

Scenario modelling has been undertaken to create a 2035 South West Wales Energy Vision scenario that would put the region on track for a net zero energy system by 2050. The modelling outcomes are unique to the region, taking advantage of local resources and opportunities, and input from local stakeholders, in particular through the online workshop organised on 30th March 2020 gathering over 40 participants from the public, private and third sectors, a supplementary online workshop on 19th February 2021 with members of the region's Energy Core Group and Advisory Panel, and individual interviews with representatives from key sectors.

The modelling presents a potential development scenario that is intended to:

- Highlight the scale of the net zero energy system challenge
- Identify existing opportunities and barriers
- Point to new opportunities and key decisions
- Provoke discussion and inspire action planning.

The scenario is not intended to be prescriptive. There are a number of potential pathways to achieve energy system transformation, including new opportunities from technological innovation and changes to energy demand that will certainly emerge as the transformation takes place.

The scenario focuses on known decarbonisation solutions that could be implemented by 2035, which would put South West Wales (SWW) on a pathway consistent with achieving net zero emissions by 2050. However, this does not mean that activity around innovative new technologies should not also be pursued. The modelling takes a whole system approach to energy, considering the interactions between heat, transport and electricity demand. For example, the impact of decarbonising heat through electrification is reflected through an increase in electricity demand.

1.2 Revising the 2018 Swansea Bay City Region Energy Vision study to reflect net zero ambitions

The Swansea Bay City Deal is an investment of up to £1.3 billion in a portfolio of major programmes and projects across the Swansea Bay City Region – which is made up of Carmarthenshire, Neath Port Talbot, Pembrokeshire and Swansea. The City Deal is being funded, subject to the approval of project business cases, by the UK Government, the Welsh Government, the public sector and the private sector.

In 2018, Regen worked with the Institute of Welsh Affairs' Re-energising Wales project to produce the Swansea Bay City Region Energy System

Vision study[2]. The project aimed to produce a credible energy system vision for the region in 2035.

Since the 2018 Energy System Vision was produced, many things have changed. A climate emergency was declared in Wales on 29 April 2019. In March 2021 the Senedd agreed to revise Wales's statutory climate commitment to net zero by 2050, in line with the CCC's December 2020 advice.
The modelling undertaken to support the development of this energy strategy builds on and extends the assumptions and stakeholder engagement from the 2018 Energy System Vision study. Its aim is to create an updated Energy Vision that puts the region on track to achieving a net zero energy system in 2050, in line with the new climate emergency commitments and heightened ambitions of stakeholders in the region. While the "absolute contraction" model used for this strategy results in a net zero position by 2050, it should be noted that the interim (2025 and 2030) targets within the CCC's Balanced Sixth Carbon Budget pathway are more ambitious than the targets at the same milestones within the "absolute contraction" model. However, this model has been used within the energy strategies of the other three Welsh regions and has been used in the South West to maintain consistency across Wales.

Stakeholder feedback on the overall level of ambition

A webinar was held on 30 March 2020 with a supporting online survey to understand stakeholders' views on the Energy Strategy and the level of ambition in particular. Stakeholders were asked to comment on the objectives of the 2018 Energy System Vision study and to indicate the level of support for each objective.

There was a desire from stakeholders for the region's aims to be ambitious. For example, stakeholders wanted South West Wales "to become the most energy efficient region of Britain" and "to transform the energy system for South West Wales into one that is highly efficient, flexible and low carbon, providing affordable power and transport to support a healthy and equitable society". There was strong support for the strategy to "include an ambition to be net zero by 2050".

Following a change in regional energy governance, from the Swansea Bay City Deal (SBCD) to an Energy Sub Group of the Regeneration Directors from the four local authorities in South West Wales, a supplementary online workshop was held on 19th February 2021 with members of the region's Energy Core Group and Advisory Panel, followed by individual interviews with representatives from key sectors.

[2] Regen - Swansea Bay City Region: A Renewable Energy Future

An analysis of decarbonisation trajectories shows that the level of ambition in the 2018 Energy System Vision needs to be increased for the region to be on track for a net zero energy system in 2050

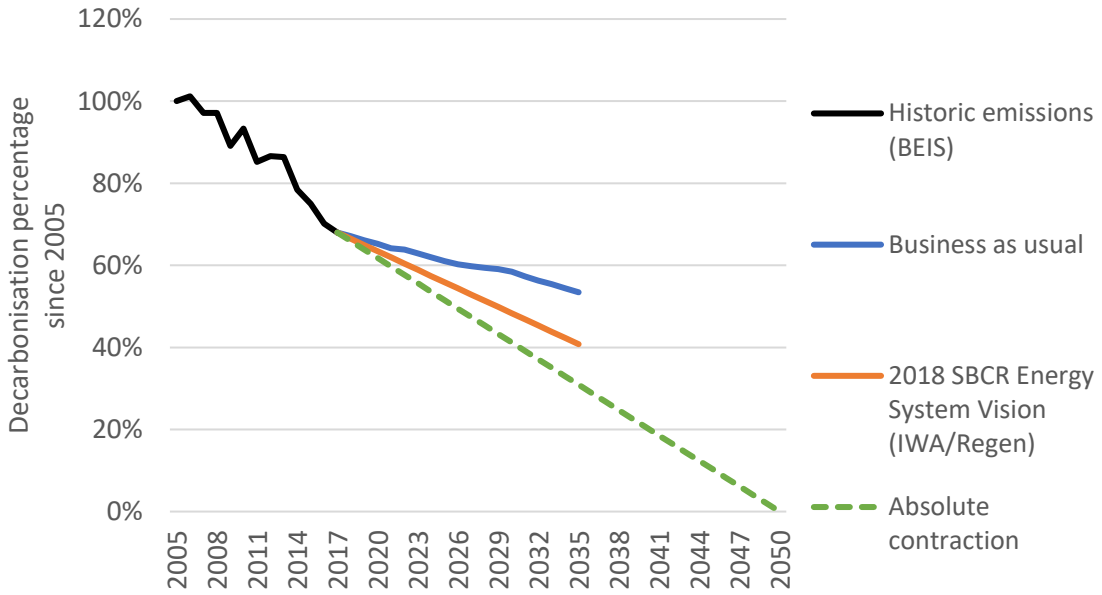


Figure 2: Business as usual and the 2018 Energy System Vision decarbonisation trajectories compared to a net zero absolute contraction method

1.3 Methodology in brief

The modelling sets an indicative decarbonisation trajectory to 2035. It has been created using a methodology that reflects the high-level methodology used by the Committee on Climate Change in its 2019 Progress Report to Parliament[3]. This absolute contraction method assumes a constant rate of decarbonisation is achieved between now and achieving net zero by 2050. This is used as a preliminary benchmark, pending 2020's more detailed assessment by the Committee on Climate Change, which will set out carbon budgets consistent with the new net zero target.

The methodology results in a bottom-up, stakeholder-informed Energy Vision for SWW

[3] Committee on Climate Change (2019) Progress Report to Parliament

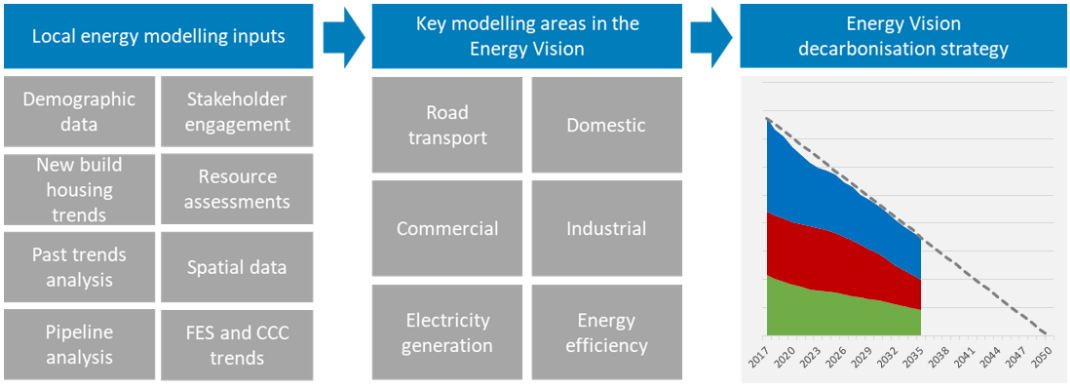


Figure 3: Outline modelling methodology

The SWW local energy modelling inputs, or baseline, was established by gathering and analysing national and local datasets of energy consumption, energy efficiency and generation. The baseline was run through a whole energy system model, applying assumptions about the level of uptake of measures and technologies that is possible by 2035 to create the Energy Vision scenario. Assumptions have been drawn from a range of sources, including:

- The 2018 SBCR Energy Vision study
- Engagement and workshops with local, regional and national stakeholders
- Committee on Climate Change reports[4,5]
- National Grid's Future Energy Scenarios[6]
- The project team's past work on future energy scenarios for Wales & West Utilities and for Western Power Distribution[7] and current work for both network operators on Net Zero South Wales.

[4] Ibid
[5] Committee on Climate Change (2018) Hydrogen in a low-carbon economy
[6] National Grid (2019) Future Energy Scenarios
[7] Regen (2019) Wales & West Utilities – Regional Growth Scenarios for Gas
Regen (2019) Future Energy Scenarios

Figure 4 shows a worked example of the modelling approach taken for domestic heat, showing the inputs and variables considered to create the level of decarbonisation required by the Energy Vision scenario.

Worked example: The modelling approach for domestic heat

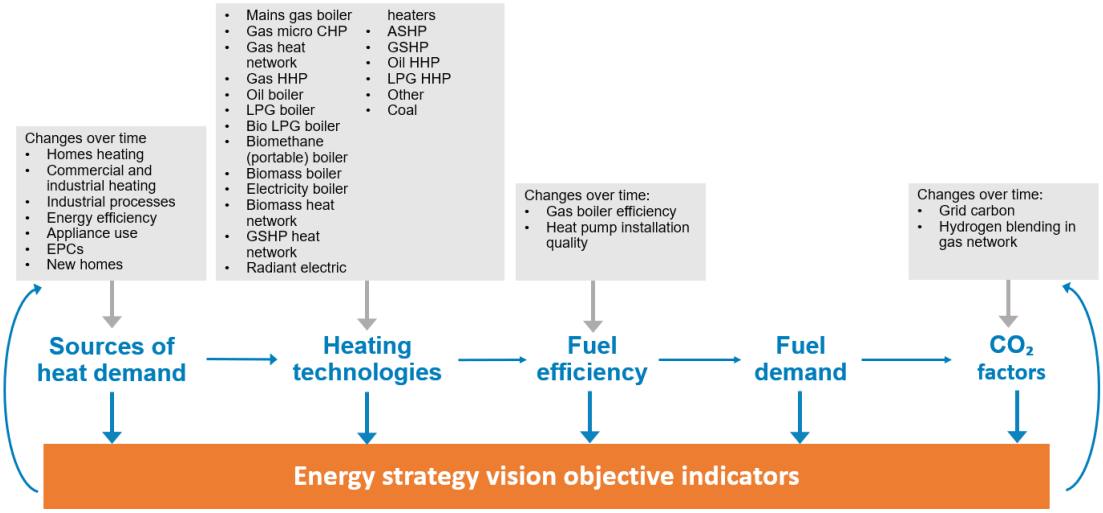


Figure 4: Diagram of the modelling approach for domestic heat

A note on scope

The strategy is focused on emissions associated with the energy system in SWW. As a result, the scope of the modelling is limited to the energy system, which includes transport, power and heat use. Emissions or sequestration from non-energy activity such as agriculture and land use are not considered in the model. Data limitations and issues around whether emissions are considered locally or nationally mean that some other emissions that are within the energy system are also not considered by the model. These include aviation, shipping and some very large industrial energy users.

Table 2: Summary of modelling scope

In scope	Out of scope: Energy emissions not considered regionally	Out of scope: Non-energy emissions
• Domestic heat, power and energy efficiency • Commercial and industrial heat, power and energy efficiency • Road transport • Local renewable energy generation	• Very large industry • Rail • Shipping • Aviation	• Non-energy agricultural emissions • Non-energy emissions • Land use change • Waste management • Chemical processes • Scope 3 emissions

2 Analysis of decarbonisation targets by sector

2.1 Baseline total energy consumption by sector

In total, SWW annually consumes around 31 TWh of energy[8], of which nearly half is consumed in very large industrial sites. Fuels used to generate electricity are not included in this analysis, which is focussed on final consumption.

In total, the region accounts for around 36% of all energy consumed in Wales[8], which is more than its 22% share of the Welsh population[9] due to the concentration of very large industrial sites within the region. Commercial and industrial demand makes up two thirds of the energy consumed in the region. The remaining third is split fairly evenly between domestic users and transport[7].

SWW has a significant amount of heavy industry such as Tata Steel, based in Port Talbot, and the Pembrokeshire Oil Refinery, hence its high commercial and industrial energy consumption. Although data on very large energy users is included in these baseline figures, these heavy industry sites fall outside of the scope of the energy vision modelling due to their national significance and commercial sensitivities, meaning that data on individual sites' energy use is not publicly available, which results in difficulties in creating viable decarbonisation pathways.

Energy consumption in SWW by sector and fuel, including very large industrial sites

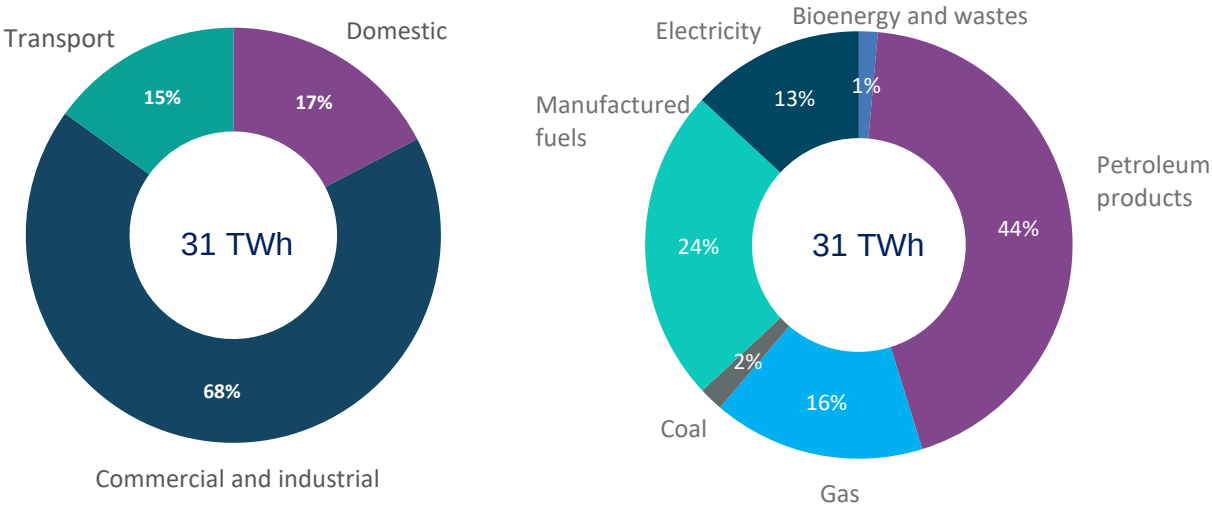


Figure 5: Breakdown of energy consumption in South West Wales, including very large industrial sites. Source: BEIS sub-national total final energy consumption, 2019.

[8] BEIS (2019) Sub-national total final energy consumption statistics: 2005 to 2017
[9] StatsWales (2019) Population estimates by local authority and year

Energy consumption baseline in SWW

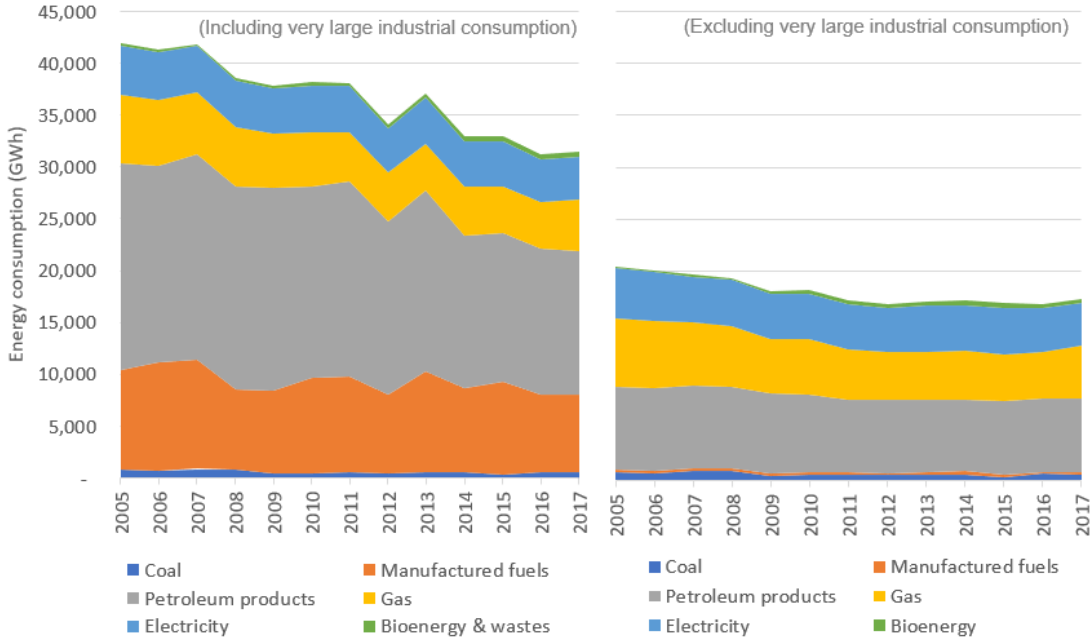


Figure 6: Trend of energy consumption in the South West Wales, by sector. Source: BEIS sub-national total final energy consumption, 2019.

Analysis of BEIS sub-regional data[10] shows that total energy consumption fell by 26% between 2005 and 2017. This is greater than the 18% reduction in energy demand experienced across Great Britain over the same period. The reduction rate has not been consistent across that period, as shown by Figure 6.

From 2005 to 2017, the commercial and industrial sector's energy consumption reduced by 31%, while the domestic sector's energy consumption reduced by 22%. This is likely to be the result of deindustrialisation and behavioural change/energy efficiency measures in each sector respectively.

[10] BEIS (2019) Regional and local authority electricity consumption statistics 2005 to 2018

Sectoral carbon emissions in SWW

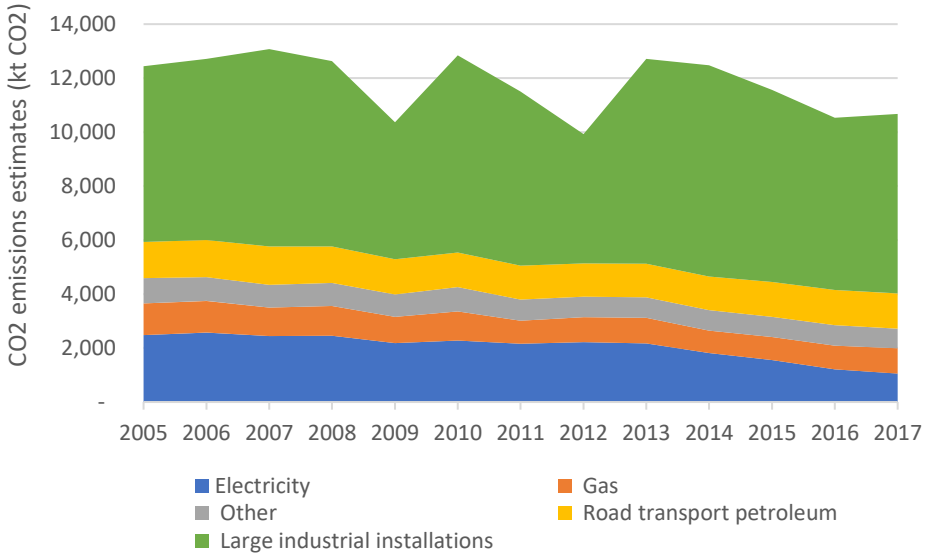


Figure 7: Estimated historic emissions in SWW show that large industrial consumption accounts for more than 50% of emissions in SWW Source: BEIS sub-national emissions

Emissions from energy consumption (including very large industrial consumption) reduced by around 14% from 2005 to 2017[11] as a result of falling demand and decarbonisation of the national electricity grid.

[11] BEIS (2019) UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2017

2.2 Decarbonisation targets by sector

Stakeholders at the regional webinar and through the survey indicated their support for the region to aim for a net zero energy system in 2050.

Applying the absolute contraction methodology to the baseline total energy consumption shows that to be on track for net zero by 2050, SWW needs to achieve 55% decarbonisation of its energy system by 2035.

Applying an absolute contraction methodology to baseline demand in SWW

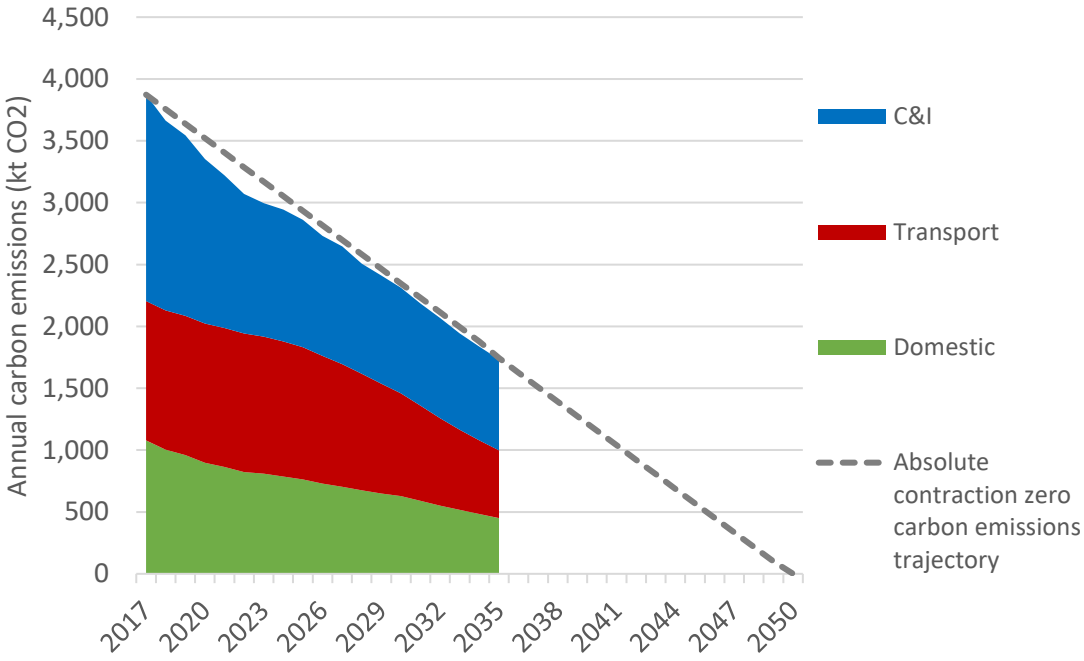


Figure 8: SWW's Energy Vision decarbonisation trajectory by sector to meet net zero 2050 under an absolute contraction methodology. Source: WGES analysis

Having analysed the measures that could be implemented in SWW by 2035, this 55% decarbonisation target can be split by sector into:

- 58% reduction in domestic heat and power emissions (including a 52% reduction in domestic heat emissions)
- 56% reduction in commercial and industrial emissions (excluding very large industrial use)
- 51% reduction in transport emissions.

This analysis excludes approximately 6,600 kt of emissions from large industrial consumption. Although not modelled, large energy consumption will also need to be decarbonised to achieve the area's net zero energy system aims. Actions to support the decarbonisation of heavy industry will be explored through the region's Energy Strategy Delivery Plan.

Figure 9: Summary of the Energy Vision's emission reductions by sector. Source: WGES analysis

3. Baseline and modelling results: Energy consumption by sector

3.1 Domestic energy consumption

A 58% reduction in emissions from domestic energy usage is needed to achieve the Energy Vision's aims. Domestic energy consumption can be split into heat and electricity:

- The decarbonisation of electricity consumption is covered in section 4.
- Domestic heat demand needs to achieve a 52% reduction in emissions; this requires the installation of significant numbers of both energy efficiency measures and low carbon heating technologies.

3.1.1 Baseline: domestic heat demand

Around 25,000 new homes have been built in the region since 2005[12]. Despite this, domestic heating demand has fallen by 34% in the region since 2005, reflecting the trend for Great Britain, which has resulted from more efficient heating appliances, combined with behavioural change and more energy efficient homes.

SWW contains a mixture of predominantly agricultural areas in Carmarthenshire and Pembrokeshire and more urban areas in Swansea and Neath Port Talbot, hence the pattern seen in figure 10.

[12] Welsh government, Household estimates for Wales - households by type by local authority, 1991 to 2017

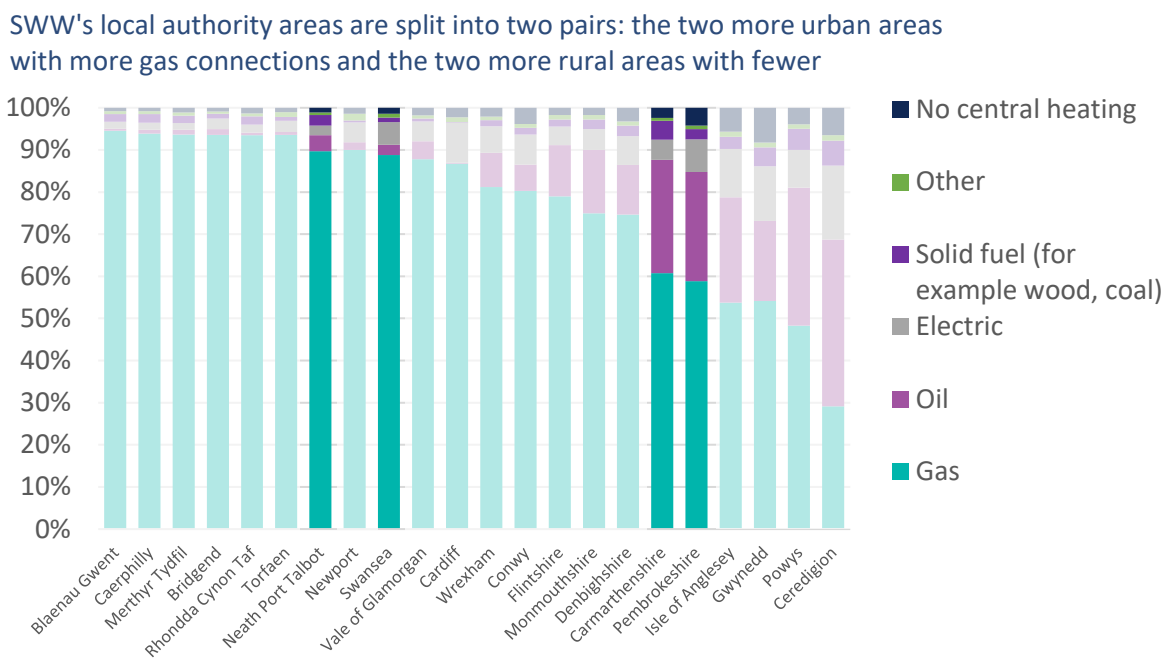


Figure 10: Proportion of homes heated by each heating fuel type, by local authority. Source: Census, 2011. MHCLG, Energy Performance Certificates[13].

South West Wales has the second highest uptake of biomass heating in Wales

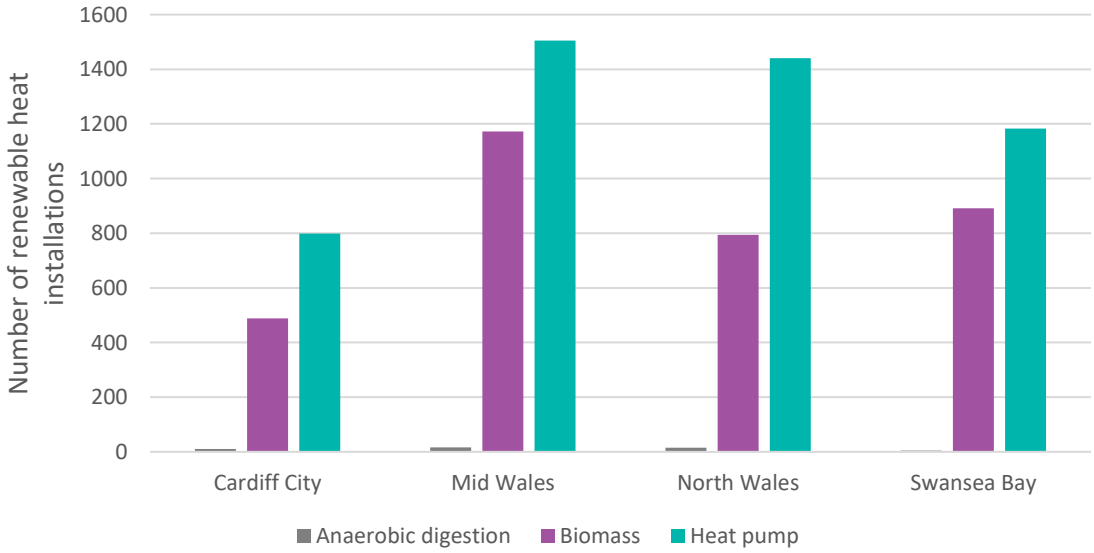


Figure 11: Renewable heat installations in Wales. Source: Energy Generation in Wales 2018

Overall uptake of renewable heat technologies has been limited in Wales to date. In SWW, 0.9% percent of homes have a heat pump or biomass boiler.

[13] To note, the Census data is now nearly 10 years old but EPC data and data on renewable heat shows little shift in heating types over that time.

SWW's domestic properties have an average EPC rating of D

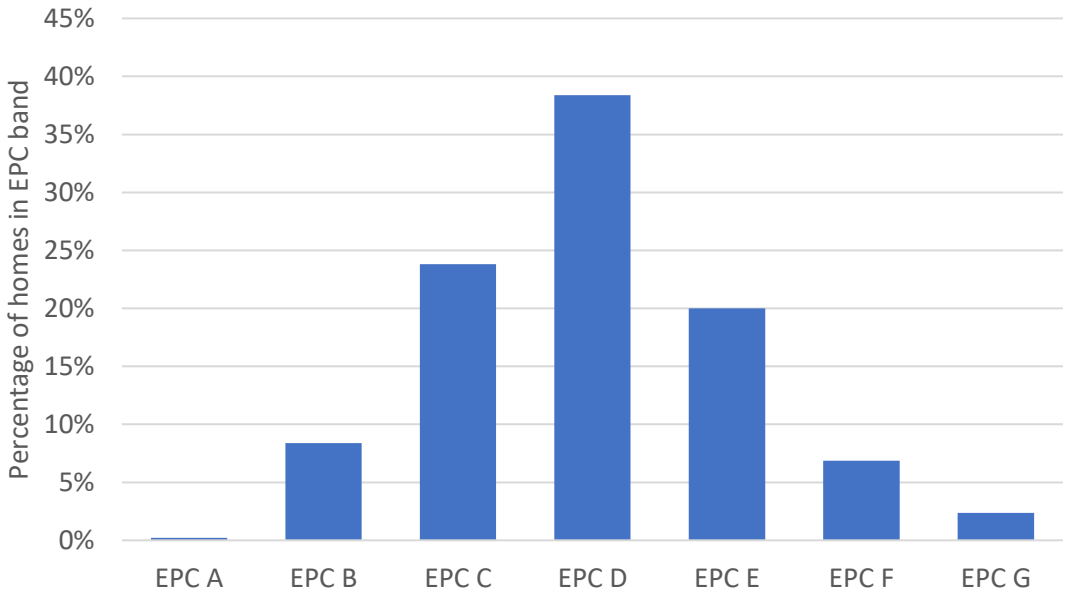


Figure 12: Proportion of homes in SWW in each EPC band. Source: MHCLG, Energy Performance Certificates

South West Wales has 71% of homes rated as EPC band D or better, slightly lower than the Great Britain (GB) figure of 77%. The average rating (mean, median and mode) is a D, and there are only around 600 A-rated properties.

3.1.2 Energy Vision scenario: domestic heat demand

Stakeholder views on the level of ambition: domestic heat demand

Through the engagement survey, stakeholders were presented with the objectives developed through the 2018 Energy System Vision Study and asked to comment and rate their agreement with the objective (Note the energy efficiency and decarbonisation of heat objectives tested include commercial and industrial use).

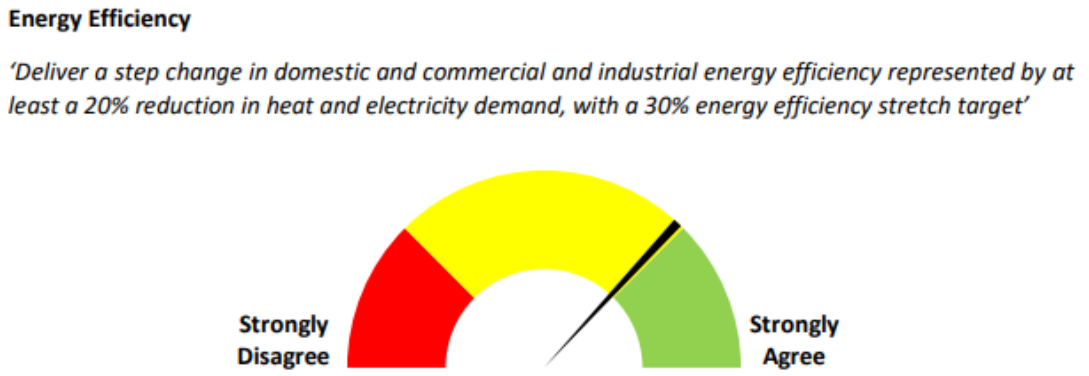


Figure 13 – Results of stakeholder engagement, highlighting stakeholder agreement with the energy efficiency objective.

While identifying the priorities for the region, stakeholders agreed that energy efficiency is the most important priority. Extensive retrofitting is required, with stakeholders placing a priority on retrofitting based on poorest EPC rating and homes experiencing fuel poverty, assisted through mapping of EPCs. The level of agreement with this objective was slightly lower than other objectives due to concerns about achieving the commercial/industrial efficiencies required.

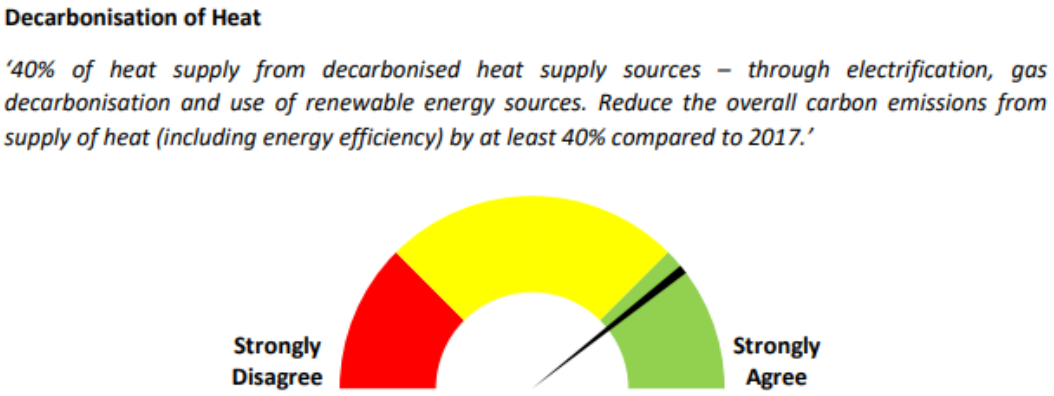


Figure 14 – Results of stakeholder engagement, highlighting stakeholder agreement with the decarbonisation of heat objective.

The decarbonisation of heat objective saw strong agreement, with comments suggesting different opportunities to decarbonise heat in the region such as through heat pumps, hydrogen or both, as well as tying the transition in with energy efficiency through retrofits.

3.1.3 Assumptions: domestic heat demand

The assumptions developed drew on those used in the 2019 Wales & West Utilities study, as well as stakeholder engagement.

Box 1: 2019 study assumptions regarding the decarbonisation of domestic heating

In a 2019 study with Wales & West Utilities (WWU), members of the Regen team worked with WWU and South Wales stakeholders to explore potential future scenarios for the gas network in Wales in 2035. Some of the key scenario-based results of the work include:

- Around 20% of homes could be heated by a heat pump by 2035, predominantly air source heat pumps in new build homes and hybrid systems with heat pumps alongside gas boilers in existing homes.
- Hydrogen offers a number of significant opportunities for Wales, particularly through the development of industrial clusters in North Wales and extending into the Wirral, and in South Wales in Pembrokeshire, Port Talbot and industrial zones around Cardiff and Newport. A number of hydrogen projects are planned and there is a high likelihood that hydrogen for industrial and transport applications will become an important fuel over the next decade. There is the potential that some hydrogen from these trial projects could be used to supply heat to adjacent homes and commercial buildings, however hydrogen is not expected to become economically viable or widely available for network distribution as a heating fuel before 2035.
- Biomethane from food waste and sewage in populous areas, alongside farm waste in more rural areas, could provide over 4% of energy supplied by the gas distribution network in the region by 2035. The proportion of biomethane that is injected into the mains gas network will depend on the availability of feedstocks and level of demand from other biomethane uses such as power generation.
- Currently, 0.8% of domestic and commercial properties are served by a heat network, typically fuelled by mains gas. By 2035, up to 5% of properties could be heated via a heat network, including low carbon networks driven by ground-source or water-source heat pumps or utilising waste heat from nearby industrial sites.
- Consumption of natural gas energy in Wales could fall by over 20% between now and 2035.

These findings have been built on in developing the SWW Energy Vision scenario.

WWUs' outlook regarding the potential for biomethane and hydrogen has evolved since the modelling was undertaken following the UK government evolution to a net zero target last year. Net zero scenario shows higher potential for biomethane and hydrogen. For example, biomethane levels in some parts of the WWU network will reach over 20% by 2021. This would facilitate the decarbonisation of homes using smart hybrid heating systems.

Source:[1] Regen (2019) Regional Growth Scenarios for Gas and Heat for Wales & West Utilities [13]

The following assumptions were used to create a decarbonisation pathway capable of reducing domestic heat carbon emissions by 52% by 2035:

- Significant further decarbonisation of the electricity grid through renewable generation, from approximately 0.266 $kgCO_2$/kWh now to 0.03 $kgCO_2$/kWh in 2035.
- 35% reduction in the energy demand of homes, facilitated by ambitious uptake of energy efficiency measures. This is an increased level of ambition from the 30% stretch target used in the 2018 Energy System Vision.
- 40% of heat supply from decarbonised heat supply sources. This is the same as the 2018 Energy System Vision, which was found to be ambitious and consistent with a net zero trajectory.
- Concerted effort to replace oil, LPG, and solid fuels with heat pumps, bio-LPG and electricity.
- Hybrid heating systems are considered a transition technology in hard-to-treat on-gas houses.
- No pure hydrogen heating within strategy timescales, except for early 100% hydrogen transition associated with industrial cluster activities, floating offshore wind and electrolysis and the potential BEIS Hydrogen Village trials.
- From 2025, there is no gas heating in new homes, with the uptake of ASHPs prioritised.

The role of biomethane

- Alongside the electrification of heat and energy efficiency improvements, the decarbonisation of gas through biomethane is expected to play a relatively small but important role in a future net zero energy system. The 2035 Energy Vision for South West Wales includes a role for blended biomethane, providing approximately 5% of mains gas domestic heating energy consumption.
- The amount of biomethane generation for domestic heat in the Energy Vision is less than in the previous 2018 Energy System Vision. Regen's 2019 Regional Future Energy Scenarios for Gas study for Wales & West Utilities involved detailed analysis of the potential for consumption of biomethane, both for mains gas biomethane injection and biomethane heat networks. Additional stakeholder engagement and a detailed mapping analysis of farm locations in relation to the gas network were undertaken, resulting in the conclusion that opportunities for biomethane consumption were lower than projected in the 2018 Energy System Vision study.
- It is assumed that biomethane will be generated from a variety of sources, including anaerobic digestion of farm residues, energy from waste and sewage sludge. The table below summarises the amount of

biogas energy consumption in the Energy Vision compared to other studies.

Table 3: 2035 biomethane consumption estimates by study

Biomethane consumption source	2018 SBCR Energy System Vision	2019 WWU Regional Future Energy Scenarios for Gas	2021 SWW Energy Vision (this study)
Mains gas biomethane injection	270 MWh	168 MWh	168 MWh
Via district heat networks	186 MWh	107 MWh	107 MWh
BioLPG		6 MWh	6 MWh

3.1.4 Decarbonisation pathway: Domestic heat demand

Existing homes

Achieving a 52% reduction in domestic heat emissions by 2035 requires a significant shift in the way homes are heated and their level of energy efficiency.

One pathway to achieve this would be to focus on improving the worst performing homes, eliminating all E, F and G EPC ratings and homes experiencing fuel poverty through efficiency improvements, as well as some improvements to homes with higher ratings. For example, a 52% reduction could be achieved if over 85,000 homes were improved from G, F and E to D, C and B, leaving just 1% of properties with an EPC rated E or worse.

Mapping EPC ratings within the region will help achieve this, as suggested during the various stakeholder engagement activities.

Upgrades to nearly all homes rated E, F and G required to deliver South West Wales' Energy Vision

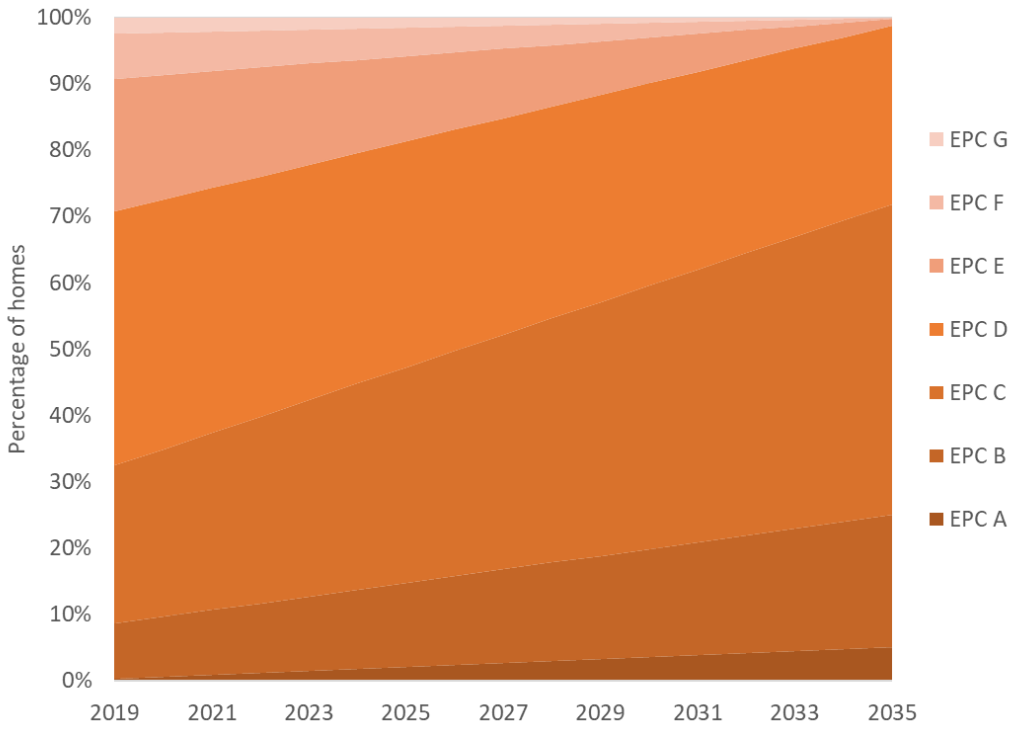


Figure 15: Estimated domestic EPC band changes to deliver the Energy Vision scenario. Source: WGES analysis

Around 82,000 homes, 27% of existing homes, would need to move from using fossil fuel heating to low carbon heating by 2035. Of these, approximately 29,000 are currently fuelled by oil, LPG, coal or other solid fuels, while the remainder are on mains gas.

The Energy Vision scenario assumes that the transition to low carbon heating will be dominated by a shift to air source heat pumps, with a supporting role for individual ground source heat pumps and, more significantly, shared ground loops. Other low carbon heat technologies also play a role with an increase in biomass boilers to account for off-gas oil and LPG boilers or a form of hybrid heating if insulation measures combined with ASHP are not appropriate. By 2035, over 78,000 heat pumps are assumed to have been installed in South West Wales, including over 13,000 heat pumps in new homes and around 6,000 homes connected to heat pump-driven heat networks.

Air source heat pumps are the main new low carbon heating source introduced by 2035 under South West Wales' Energy Vision scenario

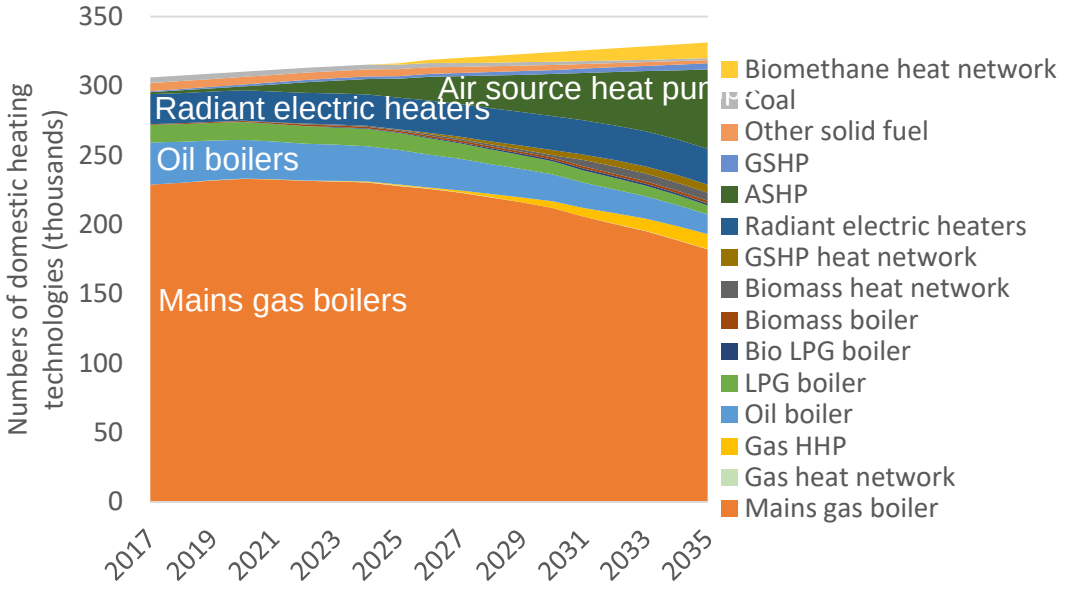


Figure 16: Breakdown of domestic heating technologies in the SWW Energy Vision scenario, including existing and new build houses. Source: WGES analysis

Despite these significant shifts to low carbon heat sources, gas boilers remain the dominant technology in existing homes in 2035; post-2035, there will need to be a focus on fully decarbonising these remaining on-gas homes.

New homes

The recent consultations from Welsh Government on Building Regulations Part L (latest consultation ended 17/02/21) is looking to lay down the standards for housing construction up to 2025 and exploring the standards that will be in place from 2025. The current proposals up to 2025 are to introduce a 37% reduction in carbon emissions for new homes (compared with current standards), delivered by raised fabric standards and low carbon/renewable sources, as well as to require heating systems that can be easily retrofitted for low carbon heating. The target outcome is that homes built from 2025 will emit 75% to 80% less carbon than those built to the 2014 Part L requirements[14]. The challenge will be to close the remaining gap to true zero carbon development.

[14] Welsh Government (2019) Welsh Government Consultation Document: Building Regulations Part L and F Review

The Active Building Centre in Swansea aims to provide the case for the national adoption of Active Buildings. These Active Buildings integrate innovative renewable energy generation, storage technologies and state of the art design, in order to create properties with the potential to substantially reduce both operational costs and energy demand. They are currently developing three test sites including Active Homes Neath.

The Energy Vision scenario relies on new homes being built with low carbon heating and high standards of energy efficiency from 2025, rather than building properties that will need retrofitting at a later date. This assumes that a 2025 standard is in place that effectively requires new homes to be decarbonised and does not allow them to have fossil-fuelled heating.

3.1.5 Scenario summary: domestic heat demand

Sector	Example outcomes Energy Vision scenario	Energy prize	Carbon saving potential
Domestic heat demand	21,000 houses fitted with internal or external wall insulation Over 140,000 homes fitted with other insulation measures Over 65,000 heat pumps 23,000 homes connected to low carbon heat networks Replacement of heating systems in oil, LPG and solid fuel heated homes prioritised No fossil gas in new homes from 2025	18% reduction in gross thermal energy demand 34% net decrease in domestic heating energy consumption, taking into account demand reduction and improved heat technology efficiencies, including the impact of heat pump performance.	422 kt CO_2 (52% reduction)

3.2 Commercial and industrial energy consumption

To note:

The baseline and scenario analysis for commercial and industrial consumption excludes analysis of very large industrial consumption (which accounts for around 70% of all commercial and industrial consumption). For further information, see section 1.3.

3.2.1 Baseline: commercial and industrial

Commercial and industrial energy demand, including large industrial users, in SWW has decreased by 31% since 2005 and emissions have decreased by 45%. The greater reduction in emissions when compared to the reduction in energy demand, is largely due to the decarbonisation of the UK's electricity grid.

South West Wales' commercial and industrial energy demand decreased by 31% between 2005 and 2017

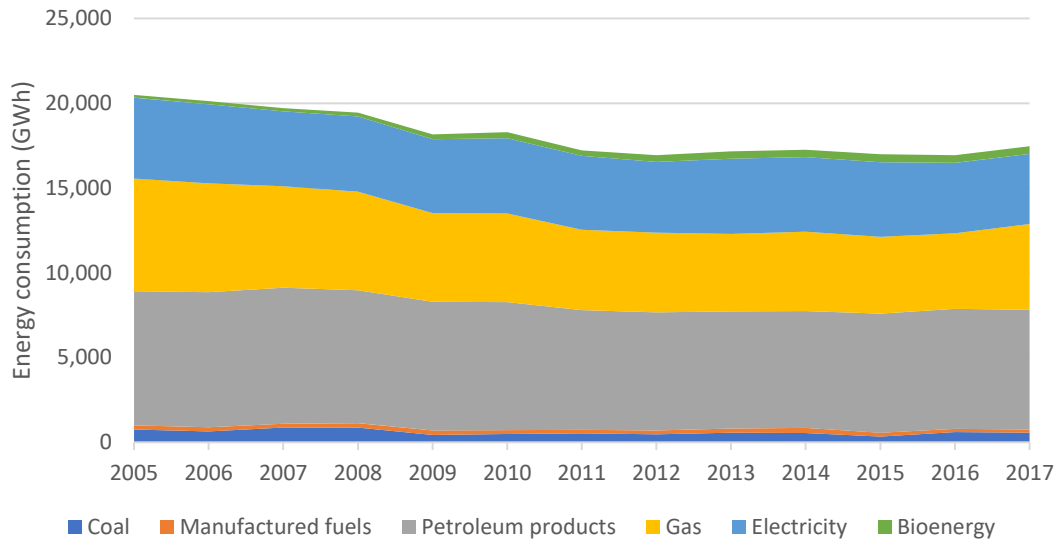


Figure 17: South West Wales' baseline commercial and industrial energy consumption, by fuel. Source: BEIS total final energy consumption (2019)

3.2.2 Energy Vision scenario: commercial and industrial

Stakeholder views on the level of ambition: Commercial and industrial

The objectives for energy efficiency and heat decarbonisation discussed with stakeholders via the engagement survey (shown in figures 13 and 14), cover both the domestic and non-domestic sectors.

Stakeholders commented that they were concerned about how energy efficiency and heat decarbonisation would be practically achieved in the commercial and industrial sector. They suggested setting separate, more realistic objectives for the industrial sector.

3.2.3 Assumptions: commercial and industrial

The assumptions used in the Energy Vision scenario reflect stakeholders' concerns around the difficulties in implementing energy efficiency measures and heat decarbonisation for this sector. The scenario sets out a pathway to achieve a 56% reduction in commercial and industrial emissions by 2035 through:

- A 14% decrease in energy demand through energy efficiency and process efficiency measures.
- Switching to low carbon fuels and heating, including electrification and use of low carbon hydrogen in industrial processes (Hydrogen industrial clusters are likely to be more prevalent in the out-of-scope, very large industrial sites).
- Significant further decarbonisation of the electricity grid through renewable generation, from approximately 0.266 kgCO_2/kWh now to 0.03 kgCO_2/kWh in 2035.
- An uptake of on-site renewable CHP generation is assumed across the Energy Vision, but are likely to be more prevalent in the out-of-scope, very large industrial sites.

3.2.4 Decarbonisation pathway: commercial and industrial

SWW's Energy Vision scenario includes a 14% decrease in commercial and industrial energy consumption by 2035

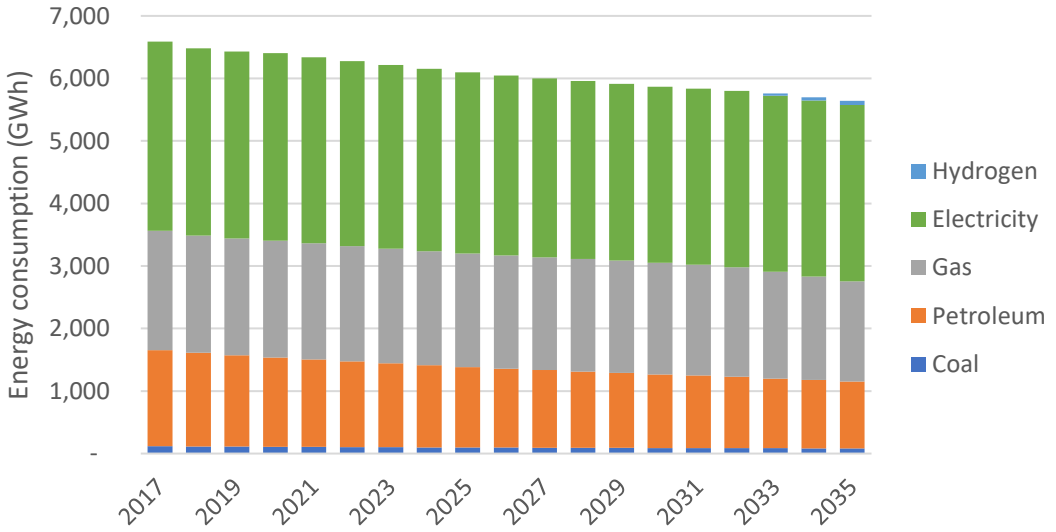


Figure 18: Energy Vision scenario commercial and industrial energy consumption, by fuel. Source: WGES analysis

Reaching a grid electricity average carbon intensity of 30 gCO_2/kWh[15] would in itself (with no additional demand reductions) achieve a 43% reduction in all commercial and industrial emissions in SWW, as shown in figure 19. This very low electricity carbon factor would depend on significant installation of new, low carbon generation capacity both in SWW and across the UK.

[15] Assumption based on Community Renewables and Two Degrees scenarios in National Grid (2019) Future Energy Scenarios

South West Wales' Energy Vision scenario results in a 56% decrease in commercial and industrial energy emissions by 2035, dependent in large part on decarbonisation of the electricity network

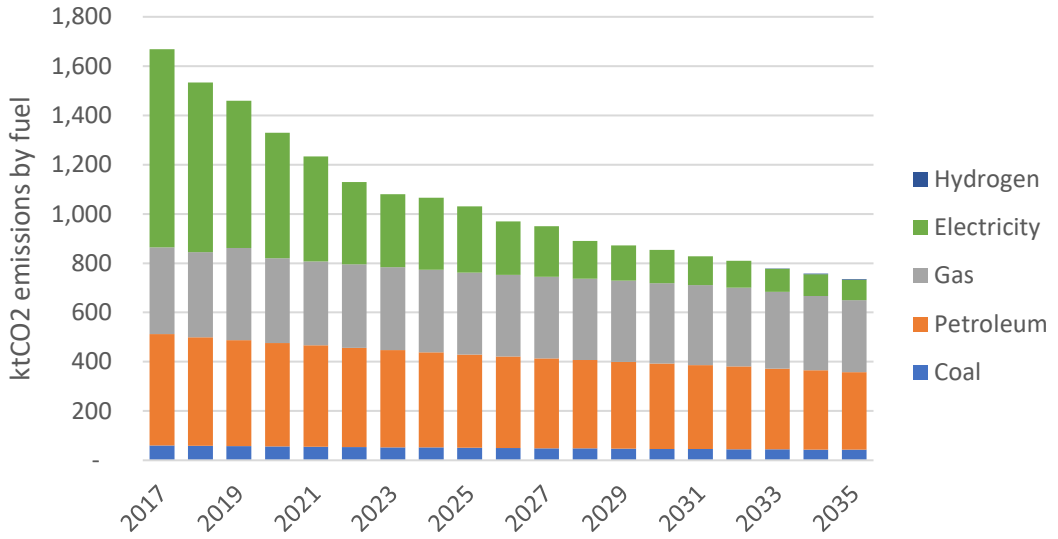


Figure 19: Energy Vision scenario commercial and industrial emissions estimates, by fuel. Source: WGES analysis

Use and production of hydrogen

South West Wales has long been the hub of hydrogen development in South Wales, with the Flexis hydrogen demonstration project based across Swansea and Neath Port Talbot. Due to the potential for hydrogen to decarbonise the heavy industry that dominates the southern coastline of Wales, there was significant support amongst stakeholders for exploring the role of hydrogen through the energy strategy.

Regen's analysis for Wales & West Utilities (see **Box 1** in section 3.1.3) found that before 2028, under some scenarios, there could be some use of hydrogen in the region in industrial clusters. Based on this and stakeholder interest, the modelling assumes the use of hydrogen for commercial and industrial processes beginning around 2030.

Welsh Government has established a Hydrogen Reference Group to bring together key stakeholders and provide a focus for encouraging hydrogen development and provide a core focal feedback to the Welsh Government. In January 2021 Welsh Government launched a consultation seeking views on the Welsh Government's commissioned 'Hydrogen in Wales'. This document sets out a proposed pathway and next steps for developing the hydrogen energy sector in Wales.

To ensure hydrogen use that aligns with the region's net zero ambitions, the hydrogen needs to be produced either through excess or dedicated renewable energy to power electrolysis (e.g. from wave and tidal stream projects and Floating Offshore Wind in the Celtic Sea) or through steam methane reformation with very efficient carbon capture and storage (e.g.

through the potential collaboration of the South Wales Industrial Cluster with the HyNet project in North West England). In order to be viable for widespread use, both methods of production will need to see cost reductions and technological development.

RWE launched the Pembroke Net Zero Centre (PNZC) in May 2021 as a major initiative for decarbonisation using hydrogen. Hydrogen consumption feasibility studies and green hydrogen production including floating offshore wind development in the Celtic Sea are core pillars of the centre's mission.

Milford Haven: Energy Kingdom (MH:EK) in Pembrokeshire is now conducting a £4.5 million project exploring the vital role hydrogen could play in a decarbonised energy future. The project is primarily delivering a Front End Engineering Design (FEED) study laying the foundations for what could be the first of many Smart Local Energy Systems, and seeks to make a strong business case for investment in hydrogen to the Government and engaged key stakeholders in the Waterway.

This is an area likely to see greater exploration within the region. Other potential projects include using the excess energy from solar and other renewable technologies at the Swansea Bay Technology Centre to produce hydrogen at the nearby Hydrogen Centre to fuel hydrogen vehicles[16].

Sector	Example outcomes Energy Vision scenario	Energy prize	Carbon saving potential
Commercial and industrial energy demand	Significant energy efficiency programme A switch to alternative fuels, including hydrogen and electrification of heating Decarbonisation of electricity network through renewables and behind-the-meter low carbon generation	30% reduction in coal and petroleum energy consumption 16% reduction in gas consumption 1% of demand supplied by hydrogen through industrial clusters 7% reduction in electricity demand	932 kt CO_2 (56% reduction)

[16] Supporting Innovation and Low Carbon Growth Project

3.3 Energy demand from transport

3.3.1 Baseline: transport

SWW has a high dependence on private cars for transport. Average annual vehicle miles in SWW are similar to those in other Welsh regions at 8,500 miles per car, 7% higher than the UK average (see figure 20).

Wales has significantly lower bus utilisation rates than England or Scotland

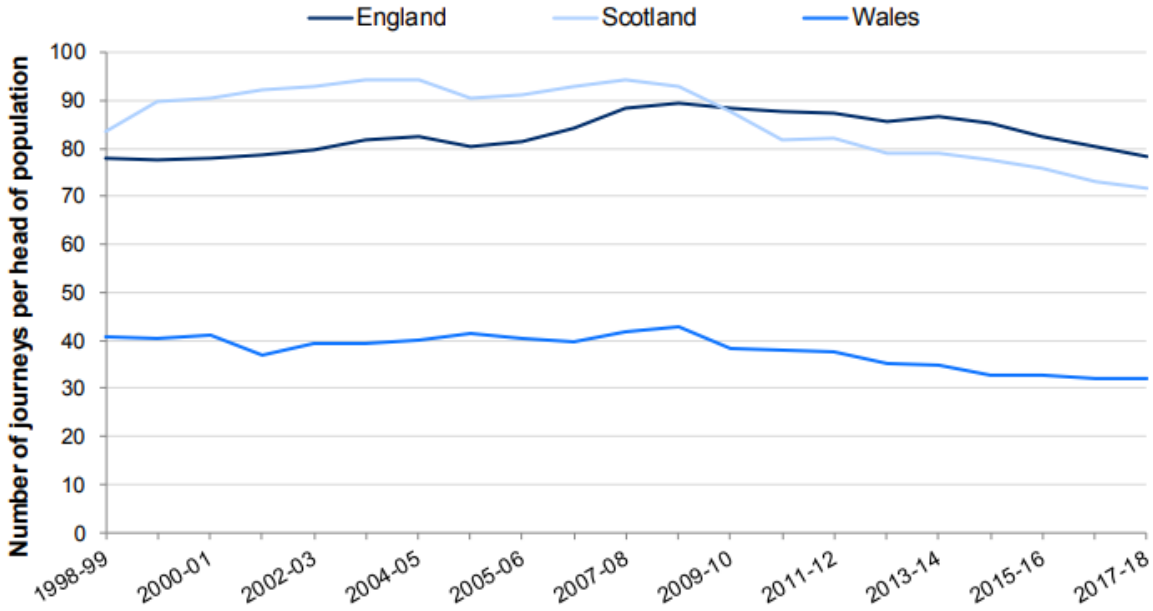


Figure 20: Passenger journeys per head on local bus services by country, 1998-2018. Source: Public service vehicles statistical bulletin, 2019

To date, SWW has seen a limited uptake of electric vehicles. Approximately 0.3% of cars registered in the region are pure electric, compared with an average of 0.6% of vehicles across Great Britain. SWW currently hosts 128 public charging devices, including 11 rapid public chargers [17]. The urban areas of Neath Port Talbot and Swansea host 6 and 10 devices per 100,000 people respectively. These figures are relatively low, as is the case across Wales, where there are half the number of public EV chargers per capita compared to Scotland. The region's chargepoint numbers are set to increase with Carmarthenshire and Swansea winning funding from the Office of Low Emissions Vehicles' off-street residential charging scheme.

[17] DFT (2019) Electric Vehicle Charging Device Statistics

3.3.2 Energy Vision scenario: transport

Stakeholder views on the level of ambition: transport

Decarbonisation of Transport

'Become a leading region for the reduction of vehicle emissions through:

- *the electrification of transport with 80% of new cars, and over 30% of all cars electric 2035*
- *growth and decarbonisation of public transport with 100% Ultra Low Emission Vehicles by 2035.'*

Figure 21 – Results of stakeholder engagement, highlighting stakeholder agreement with the decarbonisation of transport objectives.

Whilst a high level of ambition for decarbonising transport saw strong support, as indicated in figure 21, a lot of concern was also raised by stakeholders about how this was to be achieved. Improvements to charging infrastructure were seen as a priority, but there were also socio-economic, accessibility and geographic issues, such as the proportion of terraced housing and low incomes in the region. The regional approach to tackling these issues will be detailed further in the delivery plan for the Energy Strategy.

3.3.3 Assumptions: transport

Updating the 2018 Energy System Vision study with a net zero ambition has meant, in particular, increasing the level of decarbonisation that the transport sector needs to achieve; for example, the assumed proportion of electric vehicles in 2035 has increased from 30% to 78%. However, the greater level of transport decarbonisation in this study is supported by the UK government's ban on the sale of fossil fuel cars being brought forward to 2030, with the potential that it may be earlier still.

Achieving the 51% reduction in transport emissions by 2035 means that meeting the vision's objectives is a significant challenge for South West Wales. The Energy Vision scenario assumes:

- 78% of vehicles in South West Wales in 2035 are electric.
- A 10% reduction in private vehicle mileage in 2035 facilitated by significantly increased use of public transport and active travel.
- A slowing of the growth in total number of vehicles on the road, facilitated by increased use of public transport, car sharing and active travel.

3.3.4 Decarbonisation pathway: transport

With the region's large rural areas relying on private cars for transport, EVs will be a large part of the pathway to decarbonising transport. Low Carbon Swansea Bay's EV group is supporting the roll out of EVs in the region.

Hydrogen vehicles may also have a part to play, led by the Hydrogen Centre, particularly for HGVs, buses, coaches and trains.

South West Wales' Energy Vision scenario requires a significant decrease in the number of petrol and diesel vehicles

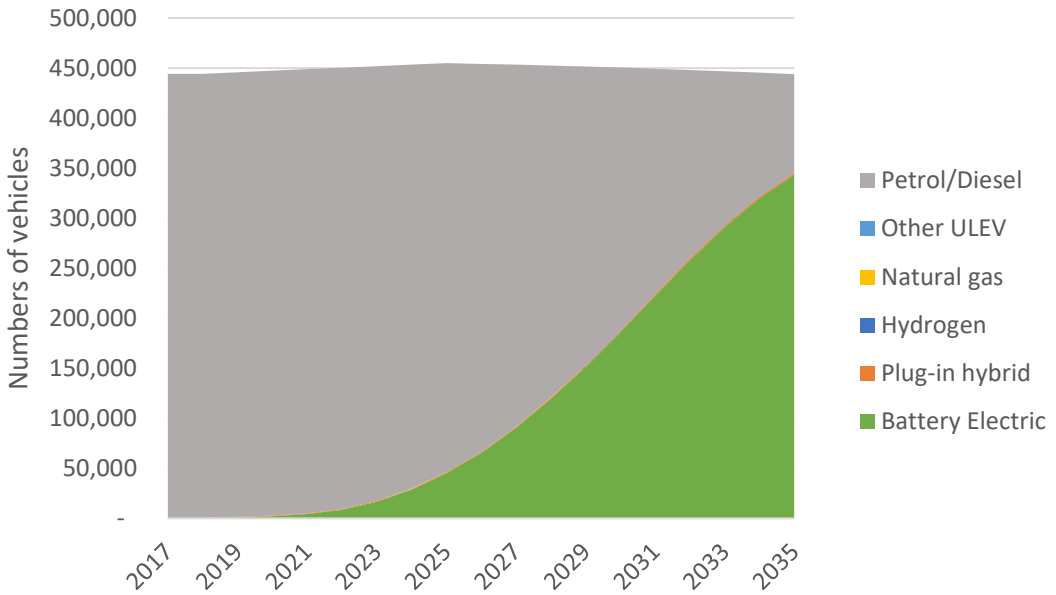


Figure 22: South West Wales' Energy System Vision road vehicle numbers, by vehicle fuel. Source: WGES analysis

The increased use of public transport in the region could be supported by the extension of services currently available in the south, such as a collaboration to extend the South Wales Metro from the Cardiff Capital Region. For such a large and rural region, there can be barriers to increasing public transport, but the requestable Bwcabus scheme in Carmarthenshire and EV car clubs present potential solution.

South West Wales' Energy Vision scenario results in road transport emissions reducing by around 49%

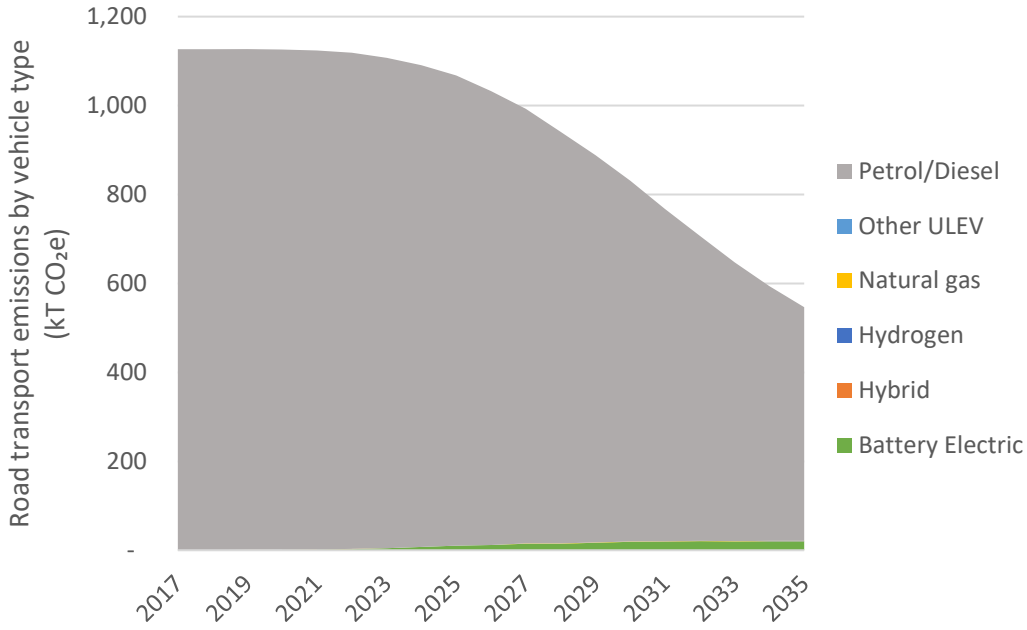


Figure 23: Energy System Vision road vehicle emissions, by vehicle fuel. Source: WGES analysis

3.3.5 Scenario summary: Transport

Sector	Example outcomes Energy Vision scenario	Energy prize	Carbon saving potential
Road transport	320,000 electric cars 9,500 public and on-street EV chargers 10% reduction in private vehicle mileage	2.5 TWh reduction in petrol and diesel energy consumption 0.6 TWh increase in electricity consumption	580 kt CO_2 (51% reduction)

Achieving these outcomes requires 17,000 EV sales per year by the mid-2020s, peaking at 38,000 per year in the 2030s before reducing to 30,000 per year by 2035. Peak sales of fossil-fuelled cars in SWW have historically reached 33,000 per annum[18]. Additional support, such as a scrappage scheme alongside a 2030 ban on new fossil-fuelled car sales[19], would be

[18] DFT (2019) Road traffic statistics (TRA) and Regen analysis
[19] The UK Government is due to consult on bringing forward the fossil-fueled vehicles ban to 2035 or earlier. The analysis assumes this is brought forward to around 2030.

needed to retire some fossil-fuelled vehicles earlier than their average lifespan, in order to achieve a peak of 38,000 EV sales per year in the 2030s.

4. Baseline and modelling results: Electricity demand and renewable electricity generation

4.1 Annual electricity demand

4.1.1 Baseline: annual electricity demand

Annual electricity demand in SWW is currently approximately 4.1 TWh[20]. It has fallen since 2005 when electricity demand was around 4.8 TWh[20].

Non-domestic electricity consumption constitutes 73% of all electricity consumption, approximately 11 percentage points more than the Welsh and GB average proportions. Almost all of the remaining electricity demand is used in domestic buildings and appliances.

4.1.2 Energy Vision scenario: projected annual electricity demand

Based on the assumptions developed through section 3, the scenario projection shows an overall net increase in annual electricity demand in SWW of 4% by 2035, compared to 2017. Increased energy efficiency measures and appliance efficiency lead to a continued decrease in base electricity demand; however, by 2025 this is overtaken by the increased demand resulting from the electrification of heating and transport. Peak demand increases may be higher, depending on whether time of use tariffs and other smart methods are successful in shifting demand across each 24-hour period.

[20] BEIS (2019) Regional and local authority electricity consumption statistics 2005 to 2018

In the SWW Energy Vision scenario, decreasing base annual electricity demand is outweighed by increasing demand from electrified heat and transport

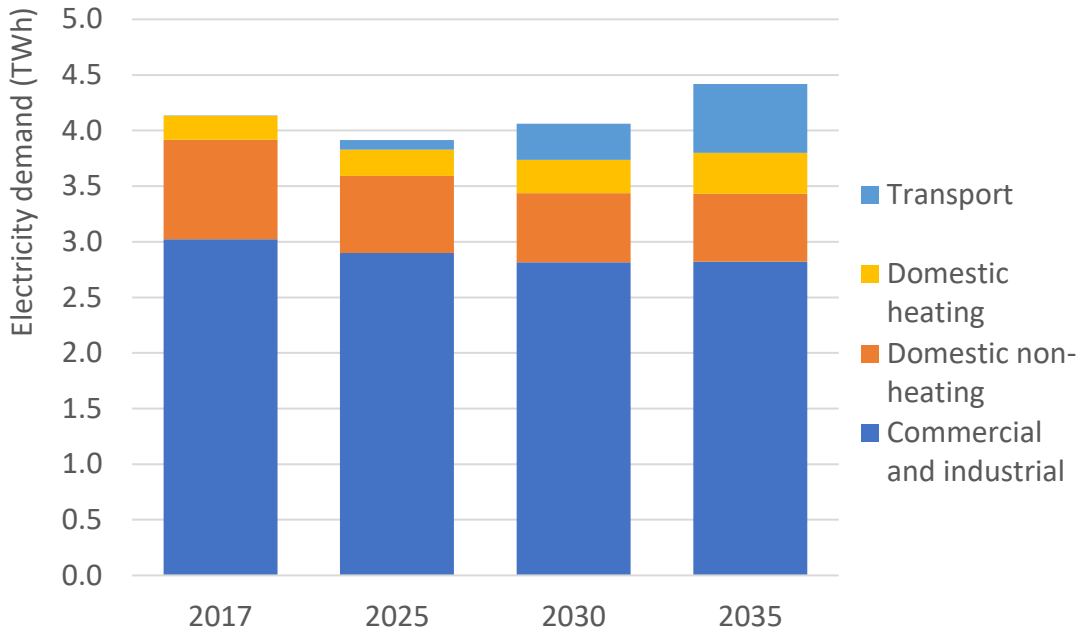


Figure 24: SWW's Energy Vision scenario demand by sector. Source: WGES analysis

4.2 Renewable electricity generation

4.2.1 Baseline: renewable electricity generation

In 2018, there was a total of 863 MW of installed renewable electricity capacity in the region, with 146 MW of this locally owned[21].

Renewable electricity generation in SWW is mainly from onshore wind and solar PV. Solar PV has a relatively high installed capacity with 388 MW, but, due to a lower capacity factor than wind, provides around 20% of renewable energy generation in the region.

South West Wales hosts approximately 60% of the Pen y Cymoedd wind farm (40% of the installed capacity is located in Rhondda Cynon Taf), the largest wind farm in England and Wales. This project, and nearly 280 others, contribute to onshore wind currently providing 55% of SWW's renewable electricity generation.

The majority of the remaining renewable electricity capacity in the region is made up of biomass generation projects.

[21] See Welsh Government (2019) Energy Generation in Wales, 2018 for definition of locally ownership.

South West Wales hosts 388 MW of solar PV and 401 MW of onshore wind

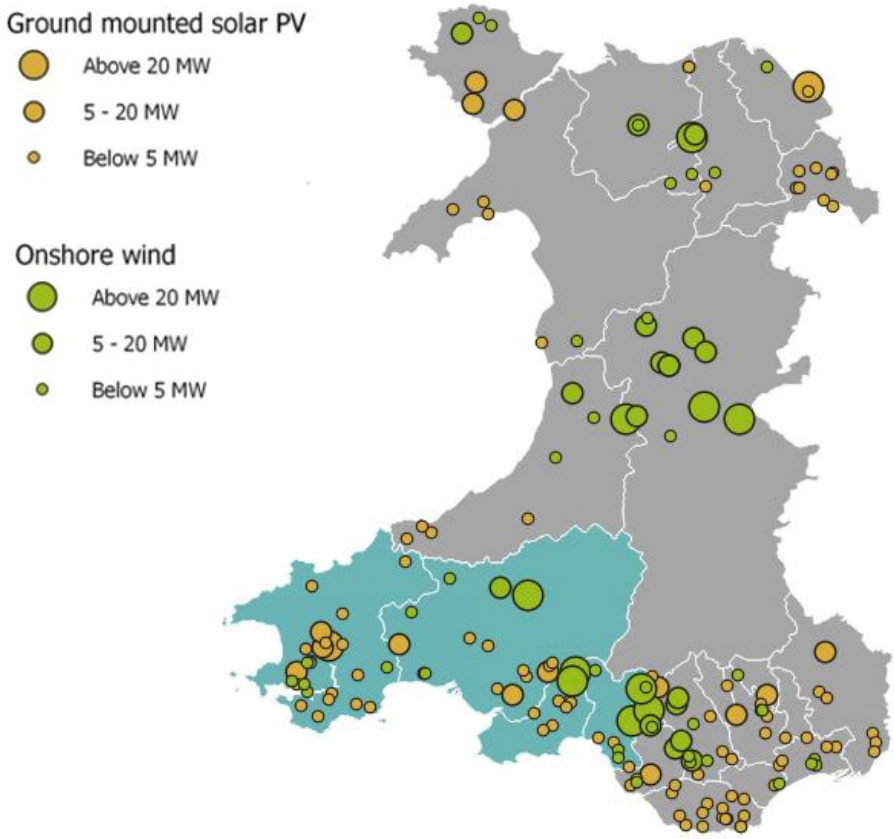


Figure 25: Solar PV and onshore wind projects (>1 MW) currently generating in Wales. Source: BEIS Renewable Energy Planning Database, 2019

Table 4: Baseline renewable electricity capacity in SWW

Technology type	2018 Number of projects	2018 installed capacity (MW)	2018 Estimated annual generation (GWh)
Anaerobic digestion	4	1	3
Biomass electricity and CHP	5	56	324
Hydropower	41	6	12
Landfill gas	5	8	29
Onshore wind	277	401	1,046
Sewage gas	2	4	13
Solar PV	12,111	388	367
Total	12,445	863	1,794

SWW hosts around 36% of Wales' onshore wind capacity and 40% of Wales' solar PV capacity.

SWW hosts 27% of current Welsh renewable electricity capacity

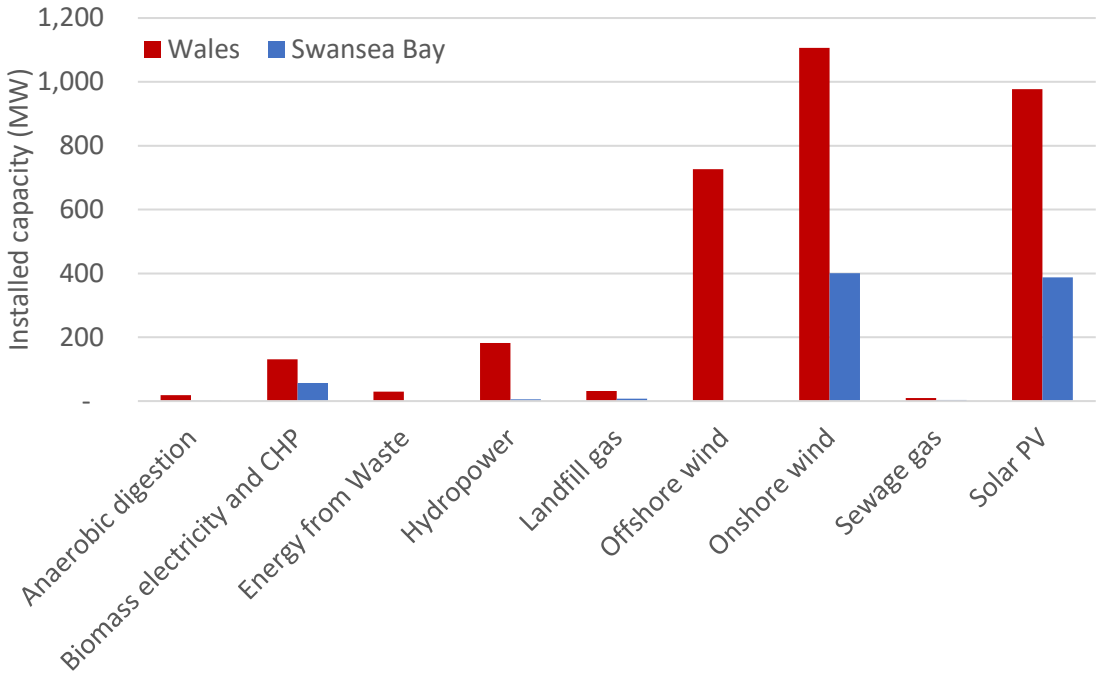


Figure 26: Renewable electricity capacity in Wales and SWW, 2018. Source: WGES analysis, Energy Generation in Wales 2018

55% of renewable generation in SWW is from onshore wind projects

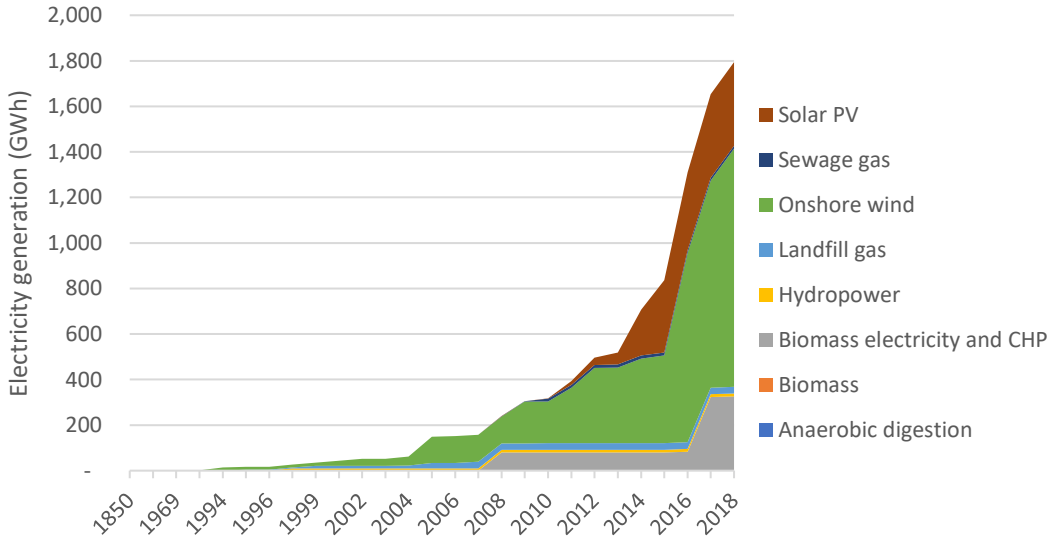


Figure 27: SWW's renewable electricity generation trends 2008-2018. Source: WGES analysis, Energy Generation in Wales 2018

SWW currently generates the equivalent of 44% of its electricity consumption from local renewable sources

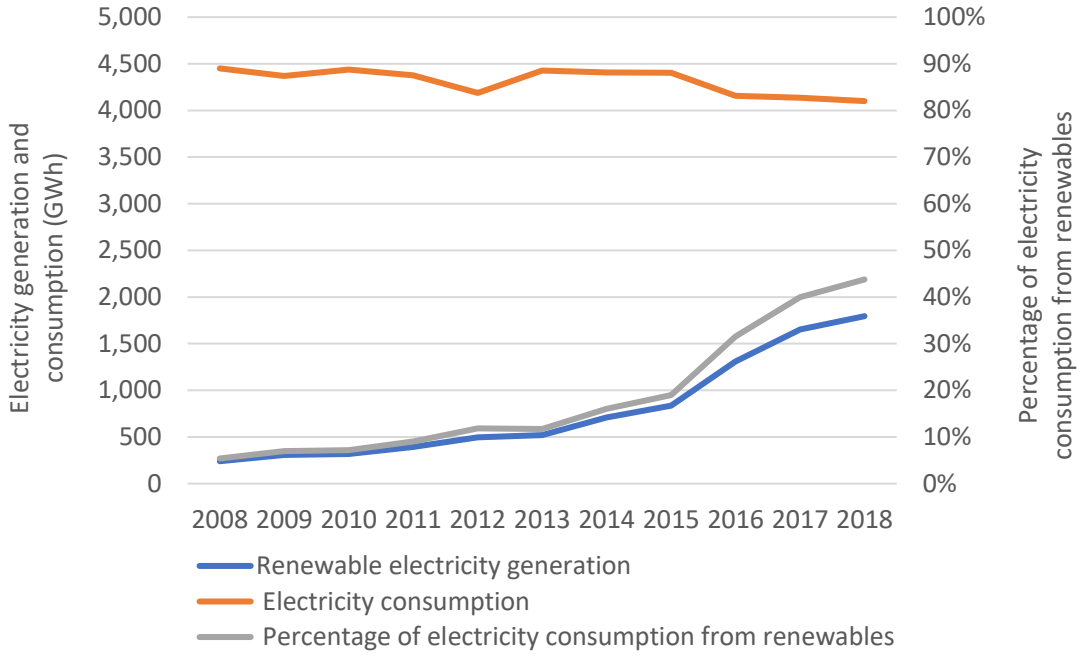


Figure 28: Percentage of electricity consumption from renewables in SWW. Source: WGES analysis, Energy Generation in Wales 2018

4.2.2 Energy Vision scenario: renewable electricity generation

Stakeholder views on the level of ambition: renewable electricity generation

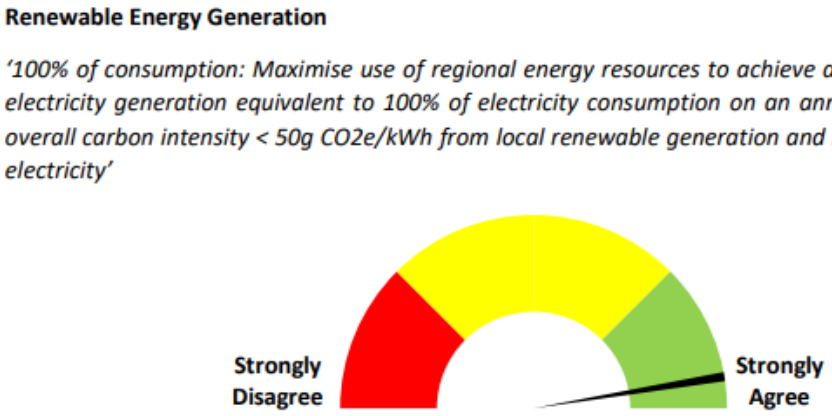


Figure 29 - Results of stakeholder engagement, highlighting stakeholder agreement with the annual renewable energy generation objectives.

As highlighted in Figure 29, there was strong support for the region's renewable electricity generation to be at least equivalent to its electricity consumption on an annual basis. The comments focussed on maximising the use of the region's renewable electricity generation resources.

4.2.3 Assumptions: renewable electricity generation

- Projections in this study for increases in low carbon generation in SWW are largely consistent with those in the 2018 Energy System Vision, with the exception of offshore wind which is increased from 50MW to 696MW.
- As a result, the Energy Vision scenario includes the ambition that the region generates at least the equivalent of 147% of its total electricity consumption in 2035 from regional renewable sources. This figure is less ambitious than some other parts of Wales, but has been arrived at by balancing the region's ambition against the available resources, investment requirement and potential grid capacity.

Potential benefits to the region in addition to supporting decarbonisation and contributing to meeting renewable energy targets, would include investment opportunities, job creation, supply chain stimulation and community benefit funds. If projects are developed by or invested in by the public and community sector there are additional potential economic and social benefits that could result, enabling the region to retain a higher proportion of the value created.

Box 2: A note on grid carbon factors

Achieving net zero carbon emissions across the UK requires the decarbonisation of the electricity grid. In line with industry best practice, the modelling for the Energy Vision scenario applies the UK grid carbon factor to electricity consumed in the region, rather than creating a regional factor based on electricity generated locally.

To be on track for net zero, the Energy Vision scenario assumes that an average UK grid carbon factor of 30 gCO_2/kWh has been achieved by 2035, in line with the assumptions used by National Grid's 2019 Future Energy Scenarios[1]. In order to achieve this level of grid decarbonisation, National Grid's Community Renewables and Two Degrees scenarios require a net increase of 68 and 74 GW of low carbon electricity capacity respectively across the UK by 2035. SWW has the natural resources and the ambition to play an increased role in delivering renewable energy deployment.

4.2.4 Decarbonisation pathway: renewable electricity generation

Figure 30 shows one pathway to achieving the renewable generation of the equivalent of 147% of electricity consumption in the region.

To enable SWW to meet the equivalent of 147% of its 2035 electricity consumption from local renewables requires a significant increase in generation and efficiency savings to offset new sources of electricity demand

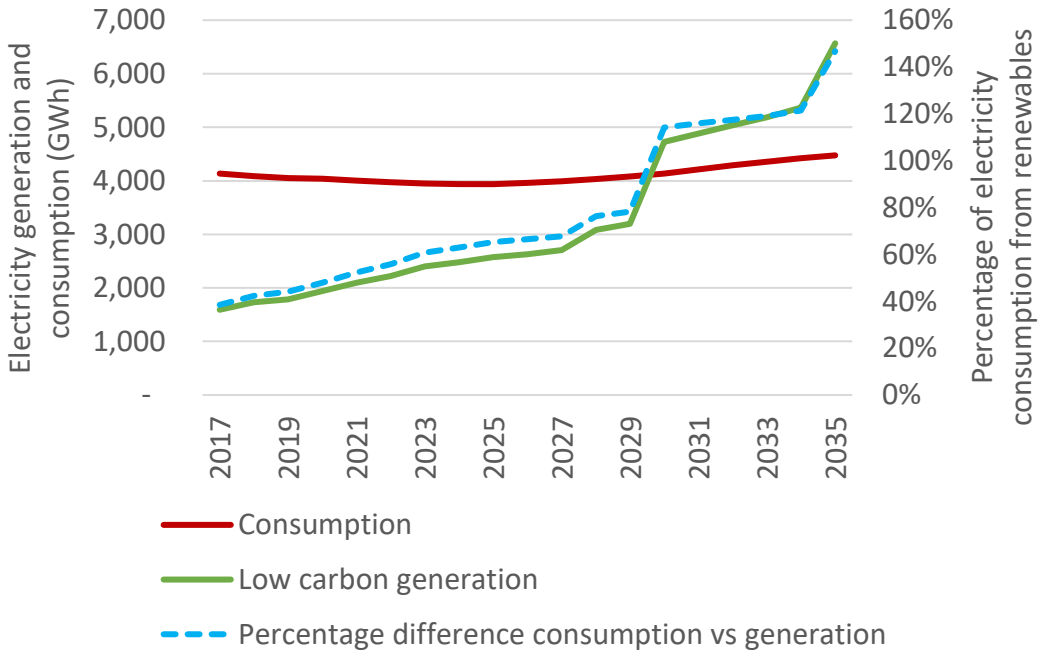


Figure 30: SWW's Energy Vision scenario electricity consumption vs low carbon generation. Source: WGES analysis

Offshore wind, onshore wind and solar PV are the main electricity generating technologies focussed on in South West Wales' Energy Vision scenario

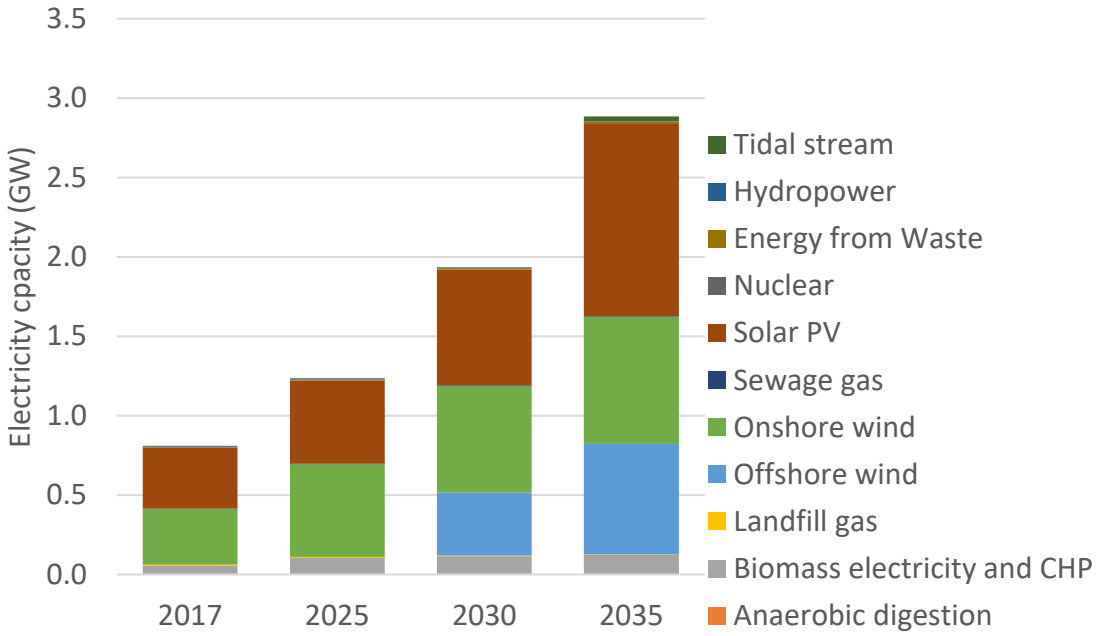


Figure 31: Renewable electricity capacity increases under South West Wales' Energy Vision scenario. Source: WGES analysis

Onshore wind

The Energy Vision scenario includes an increase in onshore wind capacity of 399 MW. This doubles the capacity within the region due to the availability of suitable sites. The capacity increase is made up of:

- a small number of projects currently in development
- new projects in the existing Strategic Search Area G (SSA)
- new projects in Priority Areas 8 and 9 as designated by Future Wales: The National Plan 2040
- new projects (made up of small numbers of large turbines) outside of areas designated by Future Wales and SSAs
- a number of small-to-medium-scale farm or community projects.

Solar PV

The Energy Vision scenario includes 827 MW of new solar PV, resulting in a total of 375 MW on rooftops and 840 MW in solar farms in 2035. Roof-mounted solar PV has an important role to play in the urban environment, particularly in engaging households and businesses in understanding the energy they consume as well as what they can generate.

Other renewables

The Energy Vision scenario also includes small increases in the deployment of anaerobic digestion (including biomethane-producing sites), and biomass electricity/CHP. Each of these technologies could have a small but significant

impact on local renewable energy generation with associated economic benefits.

Marine

Tidal Lagoon

The Swansea Bay Tidal Lagoon project is a strategic project, which could stimulate a new tidal energy industry. Given the level of local support and importance of the lagoon both for the energy and socio-economic development of the region, the lagoon has been included in the Energy Vision scenario. The planned installed capacity is 320 MW, which would generate over 500 GWh per annum.

The project is an important strategic project for the region's Energy Vision. If this project did not go ahead, and given the limitations and constraints on onshore development, more offshore wind would be needed in the energy mix to achieve the region's wider energy goal.

Nascent Marine Technologies

The Energy Vision Scenario modelling includes a small amount of tidal stream and wave energy from projects such as the Ramsey Sound tidal stream device and other wave and tidal projects further offshore, facilitated by Pembroke Dock Marine, a project developed as a part of the city deal.

In addition, the modelling includes an ambitious amount of floating offshore wind by 2035. This includes the Blue Gem Wind floating wind development off the coast of Pembrokeshire. The joint venture between Total and Simply Blue Energy has put in an application for its first demonstration site: the 96 MW Erebus project south of Pembroke Dock, which has received seabed rights.

In addition to the Erebus demonstration project, it is assumed that Blue Gem Wind's 300 MW Valorous project and an additional 300 MW of offshore wind could be commissioned within the strategy's time period.

Network infrastructure

At present, there are significant network constraints on the transmission network in the licence area that supplies South West Wales. In May 2016 WPD received notification from NGET (National Grid Electricity Transmission) to advise that due to a significant increase in levels of embedded generation

connecting in the South Wales region, NGET studies were highlighting concern around capacity and system overloads at peak times. This resulted in NGET imposing a restriction on all new thermal plant connecting at Grid Supply Points (GSPs) in the South Wales region. This NGET restriction did not apply to renewable types of generation such as solar and wind.

On 28th September 2020, WPD received an update from NGESO (National Grid Electricity System Operator). The update confirmed that due to a combination of factors (changes to the contracted background, the formal closure of large thermal plant on the system, the embedding of the Capacity Mechanism and new information on the market behaviours and the role of batteries in providing both flexibility and a range of other grid services), NGESO were able to lift the restriction upon new thermal plant connections in South Wales. Whilst the restriction on thermal plant has been lifted, any new connections will be subject to assessment by WPD via their standard design process and by NGESO via the Statement of Works/Appendix G process. These assessments could still highlight more local restrictions on both the WPD distribution network and NGET transmission system which could limit capacity availability in certain areas.

WPD's network capacity map shows significant further constraints for generation and demand customers across the region[22]. One method of working around network constraints would be through local flexibility and alternative connection agreements.

Storage and flexibility

SWW hosts Wales' largest battery storage project, the 22 MW Pen y Cymoedd Energy Storage project in Neath Port Talbot. Smaller-scale commercial behind-the-meter projects are known to be hosted in the region, in addition to tens of domestic battery projects[23].

Further deployment of electricity storage, alongside flexibility such as demand-side response provision or the creation of local energy markets, could support the decarbonisation of energy generation in SWW by enabling more renewables to connect to the network in constrained areas and supporting the business case for investing in renewables. These will be explored further through the delivery plan.

[22] WPD (2020) Network capacity map
[23] Welsh Government (2019) *Energy Generation in Wales*

4.2.5 Summary: renewable electricity generation

Sector	Example outcomes Energy Vision scenario	Energy prize	Carbon saving potential
Renewable generation	Sufficient flexibility, including storage, and network infrastructure upgrades to enable low carbon generation and demand technologies to connect 800 MW of onshore wind (399 MW of new capacity) 1,215 MW solar PV (827 MW of new capacity) 1,061 MW of marine technologies, including 696 MW floating offshore wind and 320 MW Tidal lagoon	Generating the equivalent of over 147% of electricity consumption in 2035	Contribution towards reduction of GB grid carbon factor

5. Summary

Under a 'Business as Usual' scenario, SWW is expected to achieve only 20% decarbonisation by 2035, far less than the 55% needed to be on track for net zero. Delivering the Energy System Vision scenario represents a very significant step up from a Business as Usual scenario and will only happen with significant local, regional and national commitment.

Potential Business as Usual and Energy Vision decarbonisation trajectories in South West Wales

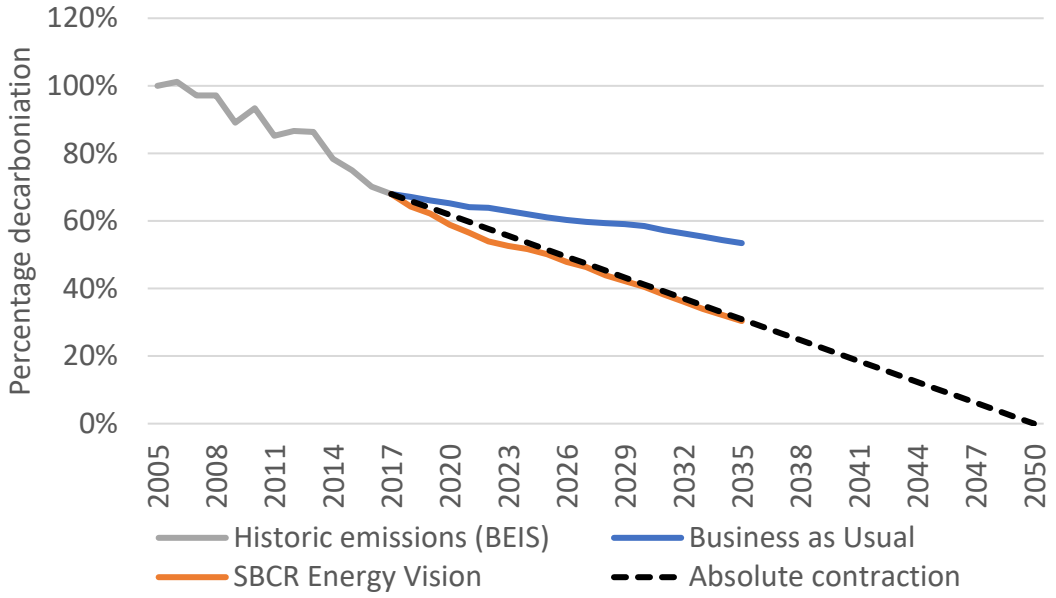


Figure 32: Decarbonisation trajectories in SWW. Source: WGES analysis

The Energy Vision scenario focuses on known, deployable technologies and behavioural change to 2035. Based on National Grid's 2019 Future Energy Scenarios[24] and the Committee on Climate Change[25], the scenario prioritises "clear, urgent, no regrets" actions. Table 5 summarises the results of the modelling, setting out key example outcomes to be achieved by 2035.

Some potential initial actions to set the region on course to achieve these outcomes have been mentioned in this chapter but will be explored further in the South West Wales delivery plan.

Beyond 2035, and to achieve net zero, further decarbonisation of all aspects of the energy system will be required. In some cases, this further decarbonisation is dependent on innovation, national policy and/or overcoming significant challenges.

[24] National Grid (2019) Future Energy Scenarios
[25] Committee on Climate Change (2019) 2019 Progress Report to Parliament

Table 5: Summary of Energy Vision scenario modelling results

Sector	Example outcomes Energy Vision scenario	Energy prize	Carbon saving potential
Domestic heat and energy efficiency	• 21,000 houses fitted with internal or external wall insulation • Over 140,000 other insulation measures in homes • Over 65,000 heat pumps • Replacing heating systems in oil, LPG and solid fuel-heated homes prioritised • No fossil gas in new homes from 2025, to avoid retrofitting at a later date	• 18% reduction in gross thermal energy demand • 34% net decrease in domestic heating energy consumption, taking into account demand reduction and improved heat technology efficiencies, including the impact of heat pump performance.	422 kt CO_2 (52% reduction)
Commercial and industrial energy demand	• Significant energy efficiency programme • A switch to alternative fuels, including hydrogen and electrification of heating • Decarbonisation of electricity network through renewables and behind-the-meter low carbon generation	• 30% reduction in coal and petroleum energy consumption • 16% reduction in gas consumption • 1% of demand supplied by hydrogen through industrial clusters • 7% reduction in electricity demand	932 kt CO_2 (56% reduction)
Road transport	• 320,000 electric cars • 9,500 public and on-street EV chargers • 10% reduction in private vehicle mileage	• 2.5 TWh reduction in petrol and diesel energy consumption • 0.6 TWh increase in electricity consumption	580 kt CO_2 (51% reduction)
Flexibility and renewable generation	• Sufficient flexibility, including storage, and network infrastructure upgrades to enable low carbon generation and demand technologies to connect • 800 MW of onshore wind (399 MW of new capacity) • 1,215 MW solar PV (827 MW of new capacity)	• Generating the equivalent of over 147% of electricity consumption in 2035	Contribution towards reduction in UK grid carbon factor

	• 1,061 MW of marine technologies, including 696 MW floating offshore wind and 320 MW tidal lagoon		

6. Economic assessment

6.1 Introduction

The changes required to develop a decarbonised future energy system have impacts that reach beyond reducing carbon emissions. Changing the technologies that we use to generate our electricity, use our energy and heat our homes, will also affect the economic landscape. Examples of these effects include changes in:

- the geographic distribution of jobs as energy generation becomes less centralised,
- the job intensity required to produce electricity because this is unique to each generation technology,
- the costs to install, construct, and operate new technologies, and
- how income and spending circulates around local economies as a result of these changes.

We have built on the energy system modelling described in the previous chapter to better understand the impact on net job creation and gross value added. Additionally, we have estimated the level of investment required to deliver the scenarios. The impacts we consider; job creation, gross value added, and investment required, are just some of the economic impacts related to the energy transition. Other impacts, such as the impact on the cost of supplying energy, and associated prices, are not included in the analysis.

6.2 Approach

We have used an indicator-based approach to estimate job creation, gross value added, and investment. This involved a literature review to identify the most appropriate methodologies such as jobs/MW, or GVA/employee. These indicators have been applied to the results of the energy system modelling and allow us to estimate the economic impact of changes in electricity generation, energy efficiency and domestic heating. A technical annex that accompanies this report provides additional detail on the calculations and sources used in our analysis.

In practice, this approach has an important limitation in relation to low carbon heating. There is significantly less data available to assess the number of jobs associated with the transition to low carbon heating than electricity generation or energy efficiency. This means that the low carbon heating jobs are not comparable with the electricity generation or energy efficiency jobs. We discuss this in more detail in the low carbon heating section below.

In terms of scope, the economic impact in terms of jobs, GVA and investment has not been calculated in relation to two sectors in the energy modelling i.e. transport, and commercial and industrial energy efficiency. The transport sector was excluded as the production and employment benefits associated with EV manufacture will not be

strongly influenced by the speed of customer switching to EVs in the same region. It is also assumed there will be no net change in jobs from the transition to EV manufacturing and assembly. Commercial and industrial energy efficiency has not been assessed as the energy modelling inputs do not allow us to identify energy efficiency impacts from other factors influencing energy demand change, such as the macroeconomic assumptions underpinning the future energy scenarios.

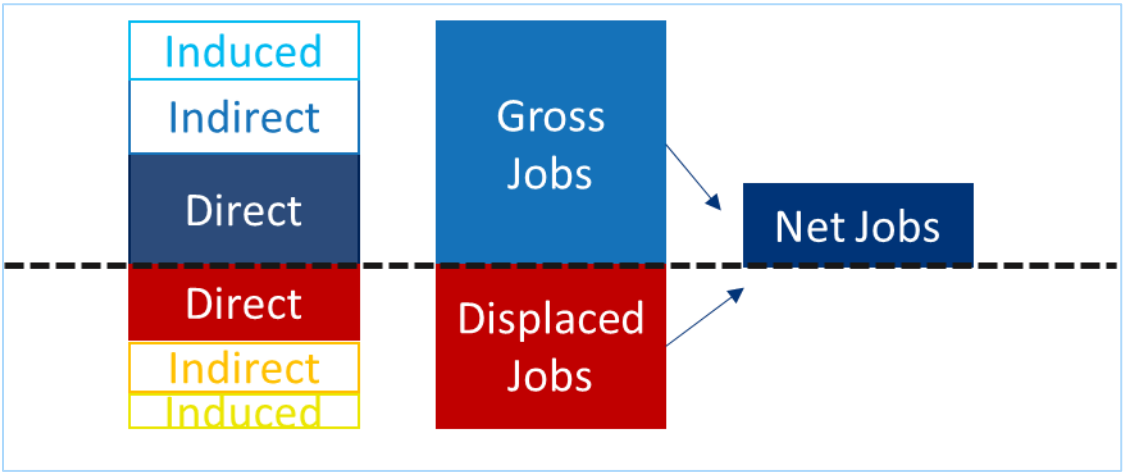
Finally, it is important to provide clarity on the definition of the term “jobs” within the context of this analysis and how this applies to each technology area. Political and media commentary on “jobs” often refer to gross jobs, which are the direct jobs related to a specific project or intervention. In examining the economic impact of the energy transition the accepted standard is to calculate net jobs – this considers the net impact of the job gains alongside the job losses associated with transitioning from one technology to another. Where data sources have made this possible, we have sought to present jobs estimates in net terms, in line with this best practice. We also define jobs in terms of Full Time Equivalents (FTE) wherever data allows.

Additionally, there is a difference between direct, indirect and induced jobs. In an energy context, direct jobs are typically associated with the manufacture, construction and installation of equipment. Indirect jobs arise in the supply chain of the energy technology. Induced jobs relate to jobs generated as a result of spending incomes earned from direct employment.

Figure 33, below, shows the relationship between gross, displaced, and net jobs. Indirect, direct and induced jobs are also shown. Indirect and induced jobs have not been filled with colour as these jobs are not taken into account in this analysis. [26]

[26] Adapted from UKERC. 2014. Low carbon jobs: The evidence from net job creation from policy support for energy efficiency and renewable energy.

Figure 33: Relationship between gross, displaced and net jobs (including direct, indirect and induced jobs)



Throughout this analysis we only calculate direct jobs as, depending on the area of decarbonisation, these have a higher probability of being local jobs than indirect or induced jobs. However, the analysis does not allow us to comment on the exact location of the job estimates. Some jobs are likely to be held by residents of South West Wales; other jobs may be held by those who travel into the region to perform their roles and others may be located elsewhere in the manufacturing supply chain.

6.3 Electricity generation

The results from assessing the economic impact related to the change in electricity generation technologies show that achieving the energy system vision scenario will require approximately £3,280 million of additional spending/investment over the period 2020 to 2035 (including c £1.4bn for offshore wind and c £1.2bn for the Swansea Bay Tidal Lagoon), equivalent to approximately £220 million per year, compared with the business as usual scenario. This spending/investment will be made by a wide range of parties included businesses (and their investors), households, as well as local and national government. The energy system vision scenario will also create an estimated 12,500 additional jobs and contribute approximately £1,410 million more in GVA than the business as usual scenario. These jobs may be located inside or outside of South West Wales, with the experience of Wales to date being that many electricity generation jobs are located outside of the region. In order help South West Wales optimise the benefit from jobs associated with future local electricity generation, it will be important to understand the reasons for the lack of local jobs and develop a policy response.

Table 6 summarises the estimated economic impact of the business as usual and the energy system vision scenarios. The figures shown in the table represent the total value from all years from 2020 through to 2035.

Table 6: BAU and ESV electricity generation economic impact 2020- 2035[27]

Scenario	Gross Direct Jobs including losses*	Discounted GVA**	Discounted Investment**
Business as usual (BAU)	28,800	£3,600m	£570m
Energy system vision (ESV)	41,300	£5,010m	£3,850m
Difference between ESV and BAU	12,500	£ 1,410m	£3,280m
Difference between ESV and BAU (percentage)	+43%	+39%	+574%

**Gross direct job figures have been calculated based on UK or international direct job intensity indicators per technology. These full-time equivalent indicators include both short term (construction) and long term (operations and maintenance) jobs. However, short term jobs are weighted against the lifetime of the plant. A significant proportion of direct electricity generation could be taken by local residents. However, to date this has not been the experience of Wales. If business as usual policies continue, it may be that a potentially significant number of these jobs will be held outside of the region.*
**All figures are rounded.

6.3.1 Investment

The energy system vision scenario requires approximately £3,280m of additional investment in new electricity generation. Figure 34 below shows the breakdown of this investment by technology. Offshore wind requires the most additional investment at 41% of the £3,275m. This is followed by tidal lagoon (35%), onshore wind (10%) and solar PV (8%).

[27] A discount rate of 3.5% is applied to calculate investment and GVA over the 2020 – 2035 time period.

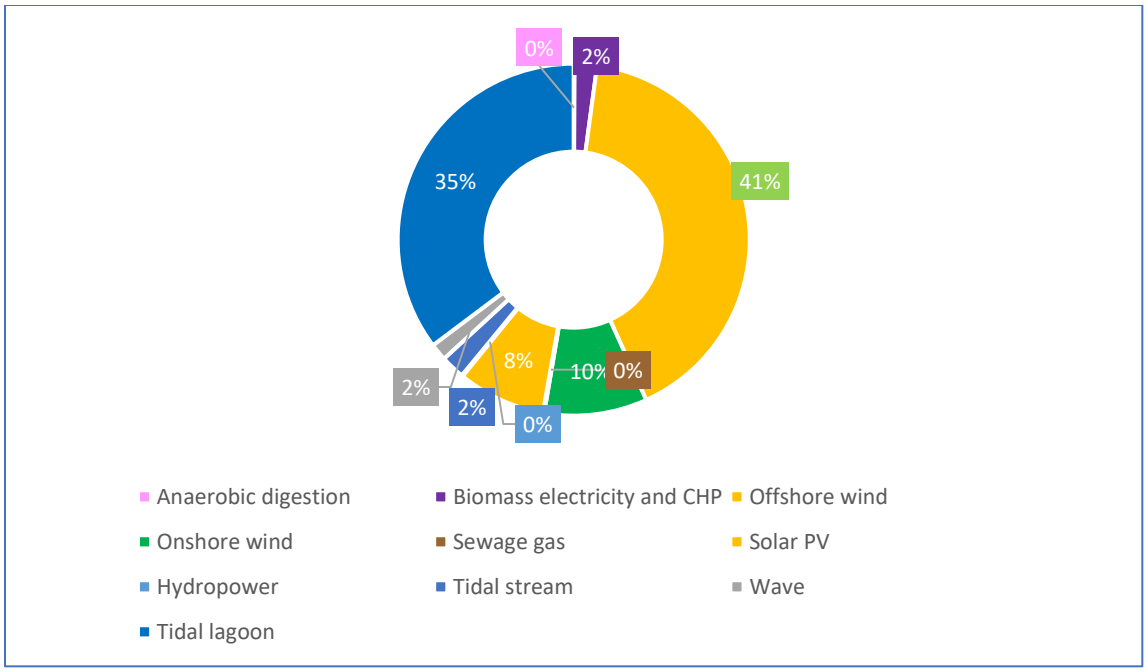


Figure 34: ESV investment in electricity generation required beyond the business as usual scenario (2020 – 2035)

6.3.2 Jobs

The jobs figures presented include both the jobs associated with increases in capacity and output from some generation technologies (for example offshore wind) as well as jobs lost as the capacity and output from fossil-fuel based generation technologies falls. The jobs calculated are direct jobs which means that they relate to the manufacturing, construction, operation, and maintenance of the plant and equipment. A significant proportion of these jobs could be taken by residents that are local to energy generation sites, whereas indirect or induced jobs are expected to be more geographically diffuse. However, the experience in Wales to date is that many renewable jobs are held by those living outside the region who commute to the region to undertake these jobs. The breakdown of jobs required in the energy system vision scenario is visualised on an annual basis in Figure 35 below.

It is estimated that in the energy system vision scenario electricity generation is responsible for just over 41,000 direct gross FTE jobs from 2020 to 2035.

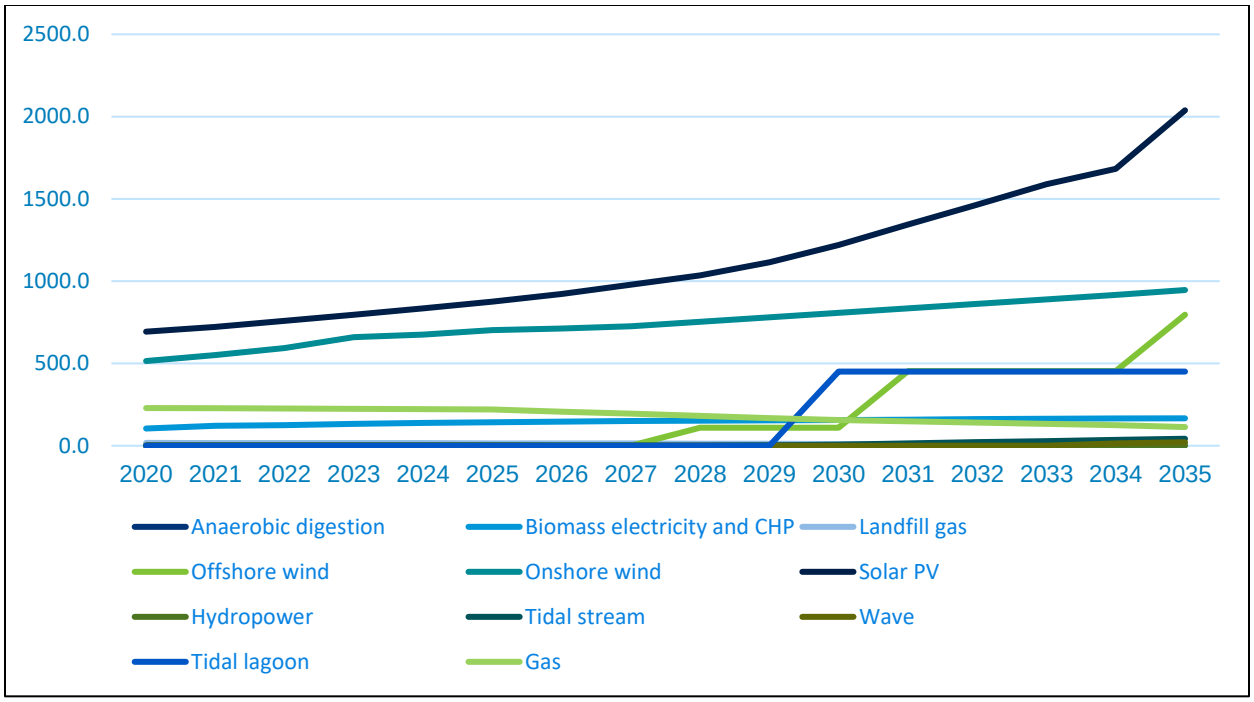


Figure 35: ESV electricity generation net jobs (2020 – 2035)

Figure 36 shows which technologies in the energy vision scenario support additional jobs in comparison with the business as usual scenario. The difference between the two scenarios represents the net additional jobs supported by the energy system vision in comparison with business as usual. Solar PV accounts for the largest difference in jobs

between the two scenarios (32%), followed by offshore (19%) and onshore wind (19%), and tidal lagoon (17%).

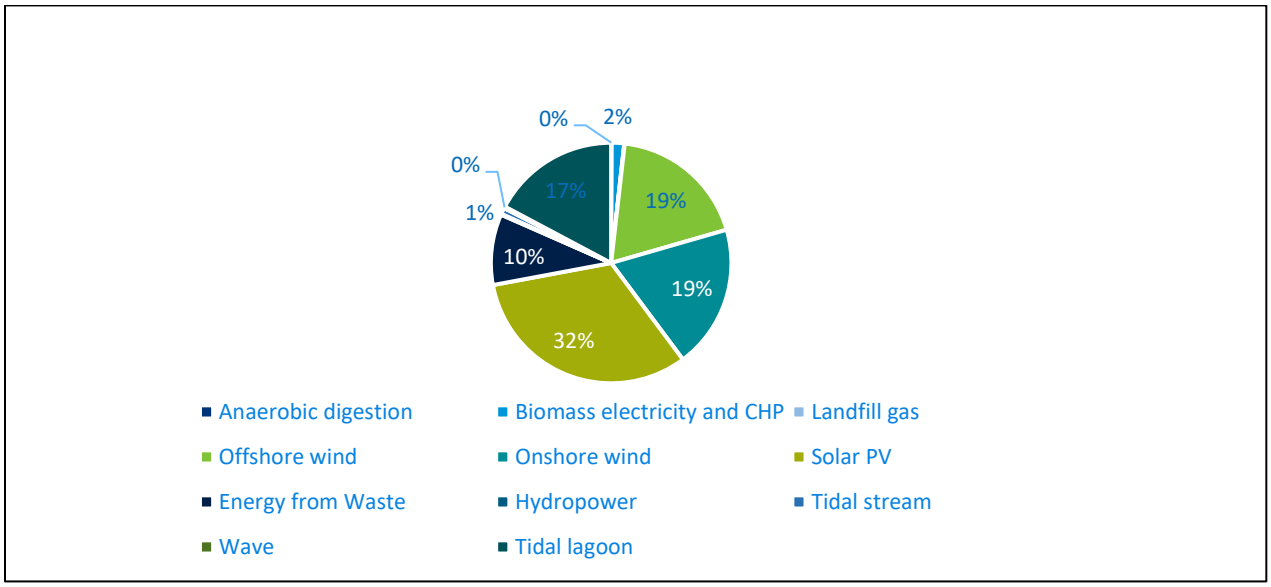


Figure 36: Additional Job distribution in the ESV scenario compared with the BAU scenario

6.4 Domestic energy efficiency

As with electricity generation, the increases in domestic energy efficiency associated with the Energy System Vision scenario relative to the BAU scenario, require more investment, support more jobs, and lead to an enhanced contribution to GVA. This reflects that the energy system vision sees a more dramatic shift in the number of homes achieving higher EPC ratings and the larger number of energy efficiency improvements needed to achieve this outcome. These figures are presented in Table 7.

Table 7 shows that the energy system vision requires approximately 1.5 times the investment and jobs compared with the business as usual scenario. Additionally, it supports approximately 1.6 times the GVA associated with the business as usual scenario.

Table 7: BAU and ESV domestic energy efficiency economic impact 2020 -2035[28]

Scenario	Net jobs**	Discounted GVA*	Discounted Investment*
Business as usual (BAU)	7,000	£415m	£1,470m
Energy system vision (ESV)	10,700	£635m	£2,250m
Difference between ESV and BAU	3,700	£220m	£780m
Difference between ESV and BAU (percentage)	+53%	+53%	+53%
* Figures are rounded. ** Net jobs figures do not include estimations of operation and maintenance jobs associated with the energy efficiency improvements.			

6.4.1 Investment

The majority of investment required to install the energy efficiency measures described by the BAU and ESV scenarios is related to insulation measures. The investment requirements can be seen in Figure 37.

[28] A 3.5% discount rate was applied to calculate the GVA and Investment over the 2020 – 2035 time period.

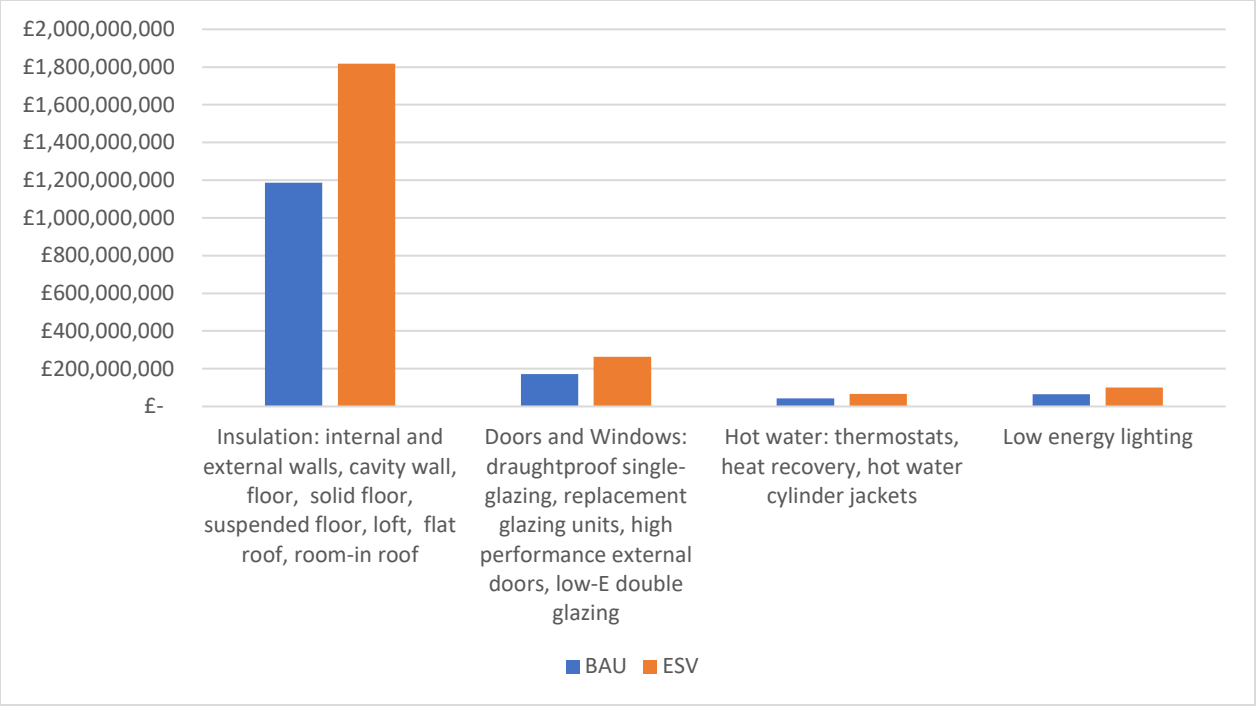


Figure 37: BAU and ESV domestic energy efficiency investment requirements 2020-2035

6.4.2 Jobs

3,700 additional net jobs are related to the energy system vision scenario in comparison with the business as usual scenario between 2020 and 2035. These are net direct jobs and take account of the fact that energy efficiency requires additional jobs to deliver and install the relevant technologies, but could also reduce jobs associated with the reduced need for energy production and supply. Like electricity generation, some energy efficiency jobs may be held by those residing in the region and other jobs may be held by people who travel into the region to perform these tasks.

The majority (51%) of the additional jobs in the ESV scenario relate to installation of 50 mm internal or external wall insulation, 24% of jobs relating to floor and solid floor insulation, and 7% of jobs relate to the replacement of single glazed windows with low-E double glazing. Figure 38 below shows the estimated jobs required to implement the energy efficiency measures that relate to the EPC changes between the BAU and ESV scenarios.

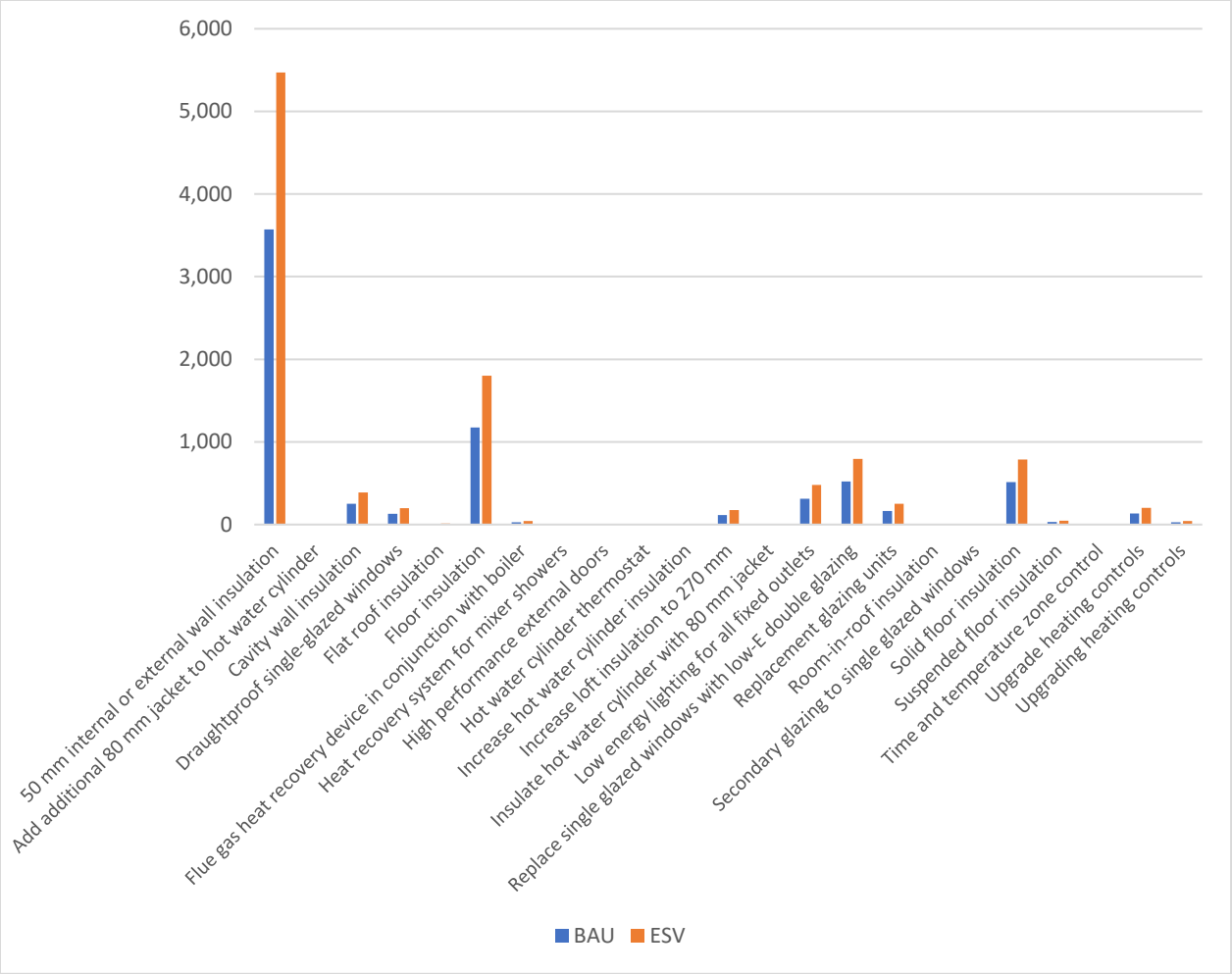


Figure 38: BAU and ESV net jobs per domestic energy efficiency measure 2020 – 2035

6.5 Domestic heat

The more intensive switch to low carbon heating in the energy system vision scenario requires additional investment, which increases the GVA associated with these activities. The GVA associated with heating technologies is 161% greater than in the business as usual scenario while the energy system vision scenario requires 73% more investment compared with the business as usual scenario. The ESV scenario also supports more jobs related to low carbon heating. However, due to a lack of data on jobs associated with traditional heating technologies, a comprehensive comparison in the jobs impacts from the switch to low-carbon heating technologies has not been carried out. Table 8 below summarises the economic impact of both scenarios and the difference between the scenarios. A comparison of the investment required in the BAU scenario and the ESV scenario is presented in Figure 39.

Table 8: BAU and ESV domestic heat economic impact 2020- 2035[29]

Scenario	Gross jobs associated with low carbon heating	Discounted GVA associated with all heating technologies	Discounted Investment associated with all heating technologies
Business as usual (BAU)	1,400	£ 120m	£ 335m
Energy system vision (ESV)	2,335	£ 320m	£ 575m
Difference between ESV and BAU	925	£200m	£ 240m
Difference between ESV and BAU (percentage)	+66%	+161%	+73%
*All figures are rounded.			

6.5.1 Investment

Figure 39 shows that the shift to low carbon heating in the ESV scenario happens faster and to a greater scale than in the BAU scenario. For example, between 2020 and 2035, the ESV sees approximately £17 million of additional investment per year in heat pumps, biomass boilers and radiant electric heaters compared with the business as usual scenario. At the same time, the ESV requires approximately £3.2 million less investment per year in gas boilers and gas hybrid heat pumps during this period compared with the business as usual.

[29] A 3.5% rate is applied to GVA and investment to calculate these figures over the 2020-2035 time period.

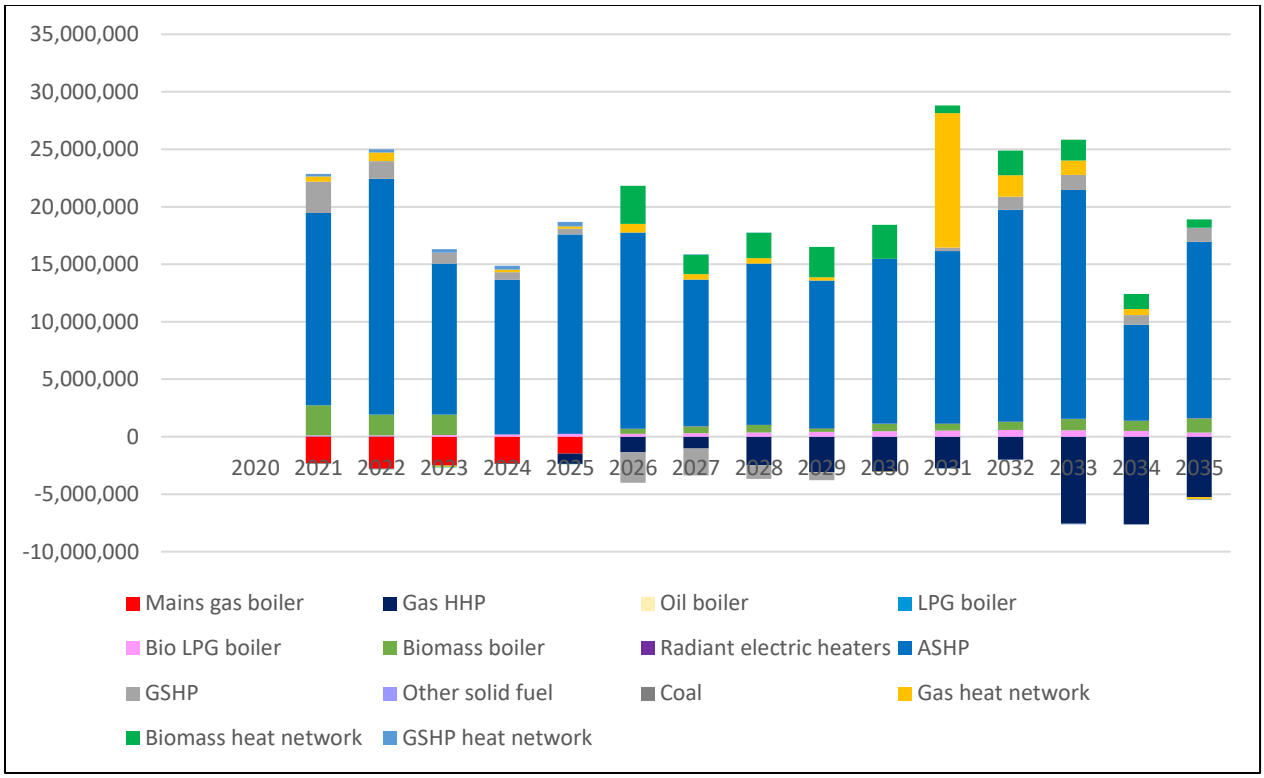


Figure 39: BAU and ESV domestic low carbon heating investment 2020 – 2035

6.5.2 Jobs

The job figures calculated for domestic heat differ from those calculated for electricity generation. Fewer studies quantify the jobs related to the installation of heating technologies than for electricity generation technologies. Given the limited number of studies, we use a jobs/£m turnover for non-heat network technologies, like heat pumps and biomass boilers, and use permanent jobs/annual GWh of heat generated for heat networks.

Moreover, due to a lack of quality data, our estimate of jobs related to heating technologies only relates to low carbon heating and does not include changes in jobs associated with the installation of more traditional heating technologies such as gas boilers.

Figure 40 below shows the difference in low carbon heating jobs between the ESV scenario and the BAU scenario. As with electricity generation and energy efficiency, some of the jobs presented may be held by residents of South West Wales while other jobs may be held by those residing outside of the region.

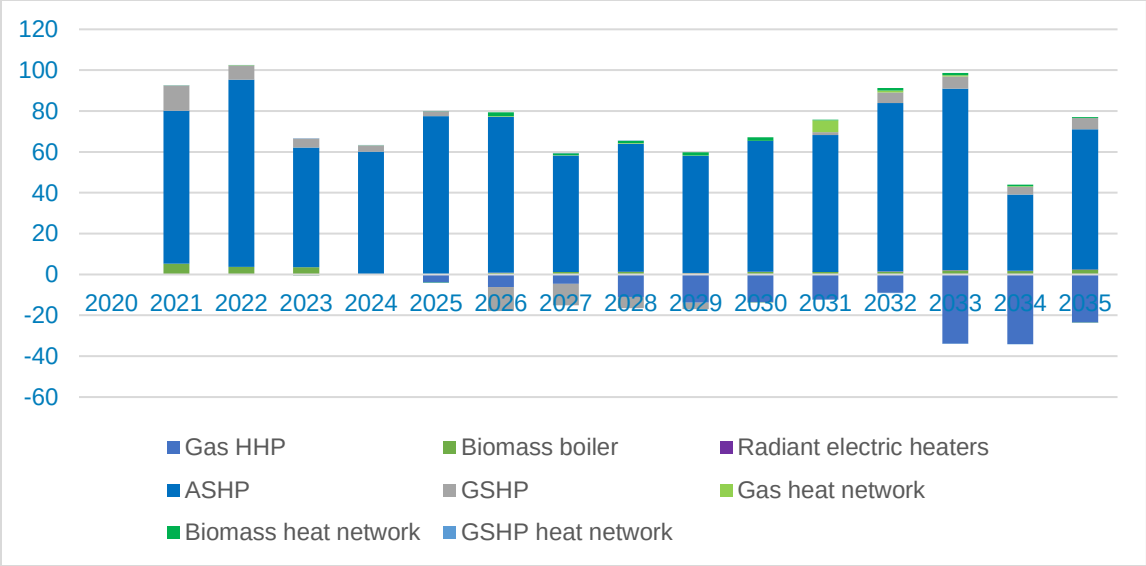


Figure 40. BAU and ESV domestic low carbon heating jobs 2020-2035

6.6 Summary

Across all technologies, the higher level of effort related to decarbonisation and the energy transition in the energy system vision scenario requires more investment/spending when compared with the business as usual scenario. The economic analysis demonstrates that over £4 billion of additional investment/spending is needed to achieve the energy efficiency, electricity generation, and heat aspirations described in the energy vision between 2020 and 2035. This represents approximately £286 million per year and will need to be financed from a range of sources including the private sector, households, and national and local government.

In terms of jobs, the ESV scenario is estimated to require over 16,000 additional jobs to deliver the accelerated deployment of renewable electricity generation technologies and the enhanced levels of energy efficiency. These additional jobs are associated with approximately £1,600m more GVA (discounted at 3.5% over the period 2020-2035). In addition, it is estimated that there will be over 900 additional gross jobs associated with the provision of low-carbon heating technologies in the ESV scenario than the BAU scenario, associated with approximately £200m of GVA.

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Cyngor Castell-nedd Port Talbot
Neath Port Talbot Council

NEATH PORT TALBOT COUNTY BOROUGH COUNCIL

REGENERATION AND SUSTAINABLE DEVELOPMENT CABINET BOARD

25 February 2022

Report of the Head of Property and Regeneration
Simon Brennan

Matter for Decision

Wards Affected: Glynneath

Waterfall Country Park and Ride Evaluation

Purpose of the Report

1. To provide an evaluation of the Waterfall Country Park and Ride Pilot scheme which was delivered between July 2021 and September 2021.

2. To establish whether the Waterfall Country Park and Ride Pilot should continue to be funded for a further two summer seasons in order to attempt to ease parking pressures at Pontneddfechan whilst a permanent solution is further scoped out.

Executive Summary

3. This report provides a summary of available data relating to the operation of the Waterfall Country Park and Ride pilot project which highlights usage data and visitor feedback.

4. The report also summarises general feedback in relation to the car park location at Lancaster Close and summarises the costs associated with delivery of the scheme during the summer of 2021.

5. The report sets out two options for the future of the Park and Ride Pilot Project for Members' decision. Option 1: Do not extend the pilot, or Option 2: Extend the pilot for two further seasons.

Background

Waterfall Country Visitor Pressures

6. Over the past few years, parking pressures have created significant issues for residents within Pontneddfechan. The coronavirus pandemic; coupled with stay home/ local guidance and the popularity of visitor generated content on social media platforms, has further intensified visitor pressures.

7. Neath Port Talbot CBC sits on the Waterfall Country Partnership which aims to achieve a co-ordinated approach to the management and future promotion of the range of waterfalls which make up 'Waterfall Country'.

8. The partnership consists of a range of partners including; Brecon Beacons National Park, Natural Resources Wales, Neath Port

Talbot Council, Powys County Council, Rhondda Cynon Taf Council and the new community organisation 'Waterfall Country Cymru' which includes members from the range of Community Council's which are located within the Waterfall Country boundary.

9. In order to ease these issues the Waterfall Country Partnership has explored the feasibility of a range of large and small scale measures to manage parking across the waterfalls area. One such measure, which was agreed for implementation by Members in May 2021, was the introduction of a Park and Ride service for the summer of 2021.

Waterfall Country Park and Ride Service

10. The Park and Ride Service offered the following provision between 17th July 2021 and 5th September 2021;

- Started at Lancaster Close Car Park in Glynneath, stopping at each bus stop between this location and the Village Hall in Pontneddfechan (and back again). 10 stops in total. The full round trip took no more than 16 minutes.
- Operated half hourly between the hours 9:00-12:00 and 14:00-16.30 on Saturdays, Sundays and Bank Holiday Monday during the summer holidays.
- Was free to use in 2021 with the intention of starting to change parking behaviours.
- Research was undertaken during the pilot to build up data on how the service is used and what charges would be tolerated in future years.

Usage Data

11. Appendix 1 provides a detailed breakdown of the usage of the Park and Ride Service during the period of operation (17 days).

12. In total, across the period of operation, the service was used 456 times (please note this includes return journeys from Pontneddfechan to Glynneath).

13. The average number of uses of the service per day was 26.

14. The most used services were at 14:00, 11:30 and 15:45 daily.

15. The busiest date of operation was Sunday 8th August with 67 passengers throughout the day. It was noted that the Brecon Beacons overflow car parks in other locations were closed on this date.

16. The Brecon Beacons National Park (BBNPA) overflow car parks were also closed on the following dates due to waterlog issues; 7th, 14th, 15th and 22nd of August.

User Research

17. As part of the pilot BBNPA commissioned a research company, called Strategic Research and Insight, to undertake a survey to gain the views of users of the service and their price sensitivity to paying for the service.

18. The results need to be treated with an element of caution due to the small sample size achieved, however 25 detailed face-to-face surveys were conducted as part of the research exercise.

19. The results of the survey indicate that;

19.1. In general, awareness of the Park and Ride scheme seemed to be found through social media or word of mouth. Some users had heard about it through other means, such as the

Brecon Beacons website, National Trust, posters and billboards on-street, and even the Tourist Information Centre in Brecon.

19.2. The service typically took visitors to sites they appeared to already be familiar with, with 14 passengers having visited six times or more in the last 5 years, and more commonly stopping at Pontneddfechan to visit Sgwd Gwladys (18 passengers).

19.3. The top five reasons for using the service were;

- Convenient to home (9) – indicating use by local residents
- To enjoy the scenery/ added to the experience (7),
- Curiosity/ saw it advertised (6),
- Less stress (6)
- Don't drive (5).

19.4. Visitors who had purposely wanted to use the service largely rated the service 'location' as 'very good' (22), and they too thought the 'safety and security' is 'very good' (21). 'Ease of parking' didn't seem to be an issue and neither did 'finding a seat' or 'driver knowledge'. However, 'signage' seemed to be a problem for some (8), with these visitors rating it 'very poor' or 'poor'.

19.5. Whilst 24 of the visitors surveyed said they would 'very likely' use the park and ride service again, they gave some suggestions as to what would boost their likelihood of using it. The top five ideas were:

- Goes to the start of the Four Falls trail (12) – outside of NPT

- Extended service (7)
- Run later into the evening (7)
- Better signage (5)
- Additional stop options (4).

19.6. 22 of the 25 respondents said that they would be prepared to pay to use the park and ride. The average price they are prepared to pay is £3.25.

19.7. Research has shown that there is a general consensus of the 25 visitors surveyed that they would use the park and ride service again.

Park and Ride Location

20. In addition to the convenient location of Glynneath, just off the A465; part of the motivation for locating a park and ride service at Glynneath was to direct more footfall, and visitor spending, into the town centre.

21. Lancaster Close Car Park was identified as the preferred base for the Park and Ride service in consultation with the local Members for Glynneath.

22. This car park, which offers approximately 40 spaces had been selected as it is generally under utilised on Saturdays, Sundays and Bank Holidays and it was felt that locating the service here would direct more footfall into the town centre.

23. Prior to commencement of the service it is understood (via comments on social media and to local Members) that the local community were somewhat concerned about the selected location at Lancaster Close. Concerns related to the suitability of the car

park for the perceived high number of cars that would use the service and concerns about visitor parking behaviour.

24. The car park did not reach capacity on any of the 17 days of the Park and Ride's operation and whilst this may be because usage was relatively low, there were plans in place to direct cars to alternative parking spots within the town should Lancaster Close reach capacity.

25. Positive feedback was also received (on social media and directly to staff on site) relating to welcoming the potentially increased footfall within the town centre and utilising the car park for the purpose of the Park and Ride.

26. Glynneath Leisure Centre Car Park was also originally considered as a possible location for the Park and Ride base, however this car park was deemed unsuitable as the facility is already busy during weekends and bank holidays and there would not be sufficient car parking capacity remaining to cater for users of the Park and Ride Service.

27. Some antisocial behaviour was experienced at Lancaster Close during weekdays when the Park and Ride service was not operational, however it is understood that this is an ongoing issue at this location.

28. The nature of antisocial behaviour included;
    - Traffic cones which were in place to enable sufficient turning capacity for the bus were regularly moved, damaged or stolen from the site.

- Temporary signage, which consisted of two weighted display boards were vandalised and damaged beyond repair.

29. The cost associated with the above damage was minimal, however significant amounts of staff time were required to regularly visit the site to ensure the safety of car park users by removing damaged items.

30. Overall, despite instances of antisocial behaviour, the location at Lancaster Close Car Park was able to cope well with the demands seen for the service last summer, and is capable of handling higher volumes of cars.

31. If Members opt to extend the Park and Ride pilot to run for a further two seasons, the Lancaster Close car park should be utilised, particularly in consideration of the following;
    - The car park did not reach capacity at any point during the pilot exercise.
    - There is scope, subject to securing funding, to expand the car parking provision at this location if the service was to become established.
    - There would be a significant cost associated with the design and installation of signage to any new temporary location (circa £10,000).
    - Operation of the service from the Lancaster Close site can be monitored for any negative community impact if the service is delivered in future years.

Delivery Costs

32. In total the cost for delivery of the Park and Ride Pilot Project was £13,831.87, this can be broken down as follows;

Table 1: Park and Ride Costs

Item	**Cost**
Delivery of the park and ride bus service	£3,561.50
Design and installation of Highways signage leading to Lancaster Close Car Park (one off capital cost)	£9,969.87
Promotional signage and digital marketing	£300.00
TOTAL	**£13,831.37**

33. The Welsh Government Hardship Fund funded £13,531.37 of the total cost of this scheme.

34. The £300 cost of promotional signage and marketing were covered through existing NPTCBC marketing budgets and by Waterfall Country partners.

35. If members opt to extend the Park and Ride Pilot into future years and to do so from the original base at Lancaster Close Car Park, the associated costs would not need to take account of Highways signage as this signage has been put in storage for future use.

36. The anticipated costs for the delivery of the service across a similar period in future years could be estimated in the region of **£5,500 to £7,000 per year**. This cost includes the operation of the service itself (subject to quotation), the installation, removal and storage of Highways signage, onsite timetable displays and promotional activities.

37. Although the costs per journey, based on 2021 data, would still be high, it is anticipated that as the service builds momentum visitor usage will increase.

Community Impact

38. Although value for money is an important consideration as part of this evaluation, the potential positive impact of the service on the community of Pontneddfechan should also play a part in decision making.

39. Due to the relatively low level of usage among visitors during 2021 it was not possible to evidence a significant impact on the reduction of traffic levels heading into Pontneddfechan.

40. Also worth noting is the increased availability of paid for parking options on land at Pontneddfechan during 2021, this parking provision is very much part of the overall solution to parking pressures within Waterfall Country.

41. During 2021, due to extensions to permitted development rights as a result of the Covid19 pandemic, the local landowner was able to offer their field for parking for an additional 28 days (56 days in total). The same allowance does not apply in 2022 where permitted development rights will revert back to 28 days.

42. The return to the 28 day limit under permitted development could result in a lack of supply of paid for parking provision for some of the summer season, any reduction in parking provision at Pontneddfechan will further compound pressures for local residents.

43. It is understood that local members received positive feedback from residents in relation to the pilot and there was a marked reduction in complaints from local residents during the summer of 2021. Complaints are likely to increase should no alternative parking provision be offered.

Options for Member Consideration

44. There are two options available to members for consideration:

45. **Option 1: Do not extend the pilot exercise for the Waterfall Country Park and Ride Service.**

46. Option 1 would not see the service run again in 2022 or 2023 and visitor parking options would continue to be offered on the Highway (all year) and on private land (for up to 28 days per year).

47. Option 1 is the lowest cost option, however the Council is likely to see an increase in complaints from residents due to irresponsible parking, and the visitor experience at Pontneddfechan may be affected by lack of parking provision.

48. **Option 2: To extend the Waterfall Country Park and Ride Pilot for a further two summer seasons**.

49. Option 2 would offer visitors a free of charge Park and Ride service from Lancaster Close Car Park on Saturdays, Sundays and Bank Holiday Monday during the school summer holiday in 2022 and 2023.

50. Option 2 would require NPTCBC to at least part fund the scheme as the service has not yet established as a viable paid for parking option.

51. Option 2 would provide alternative parking arrangements for the summer of 2022 and 2023 and would provide local residents with some reassurance that alternative options are available to visitors whilst a permanent parking solution is scoped out.

52. If Option 2 is agreed by Members, it is proposed that the service;

- Should be part funded by NPTCBC for the 2022 and 2023 summer seasons whilst the service builds momentum. In this instance officers would approach Waterfall Country partners for a contribution to the cost of delivery.
- A visitor giving mechanism is developed whereby users can make a donation to the cost of their journey (subject to reasonable costs for a solution to be developed).
- Further research, with a wider audience and larger sample size, is undertaken to establish price sensitivity and likely future use.
- That the service is offered as an alternative parking option for visitors to Waterfall Country whilst proposals for a permanent parking solution are fully scoped out.

Financial Impacts

53. There are no associated financial impacts if Option 1 is selected.

54. If Members select Option 2 the estimated costs for the scheme will be in the region of **£5,500 to £7,000 per year** (subject to quotation). NPTCBC would meet some of this cost via the Tourism budget, with the remaining costs to be sourced from partners.

Integrated Impact Assessment

55. A first stage impact assessment has been undertaken to assist the Council in discharging its legislative duties (under the Equality Act 2010, the Welsh Language Standards (No.1) Regulations 2015, the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016. The first stage assessment has indicated that a more in-depth assessment is not required.

56. The proposal will not have any adverse impacts on people with protected characteristics. If Option 2 is selected by Members the proposal will have a positive impact on wellbeing objectives and sustainable development principles.

Valleys Communities Impacts

57. If Option 2 is selected by Members the proposal will have a positive impact on the town of Glynneath.

58. If Option 2 is selected by Members the Park and Ride pilot will act to ease some of the weekend parking pressures in the village of Pontneddfechan during the summer of 2022 and 2023.

59. If Option 2 is selected by Members, locating the pilot Park and Ride service within Glynneath town centre will encourage footfall into the town centre and encourage visitors to spend money within the local economy.

Workforce Impacts

60. No impacts.

Legal Impacts

61. No impacts.

Risk Management Impacts

62. If Option 2 is selected by Members a detailed risk assessment will be carried out in relation to the running this service in close consultation with the NPTCBC Health and Safety Officers.

Consultation

63. This proposal has been subject to ongoing consultation with the local Members for Glynneath who have expressed support for the original Park and Ride pilot project.

64. This proposal has been discussed with the Waterfall Country Partnership which consists of members from Brecon Beacons National Park, Natural Resources Wales, Neath Port Talbot Council, Powys County Council, Rhondda Cynon Taf Council and the community organisation 'Waterfall Country Cymru' which includes members from the range of Community Council's which are located within the Waterfall Country boundary.

Recommendations

65. Having had due regard to the first stage Integrated Impact Assessment, it is recommended that Members **approve Option 2**, to extend the Waterfall Country Park and Ride Pilot project to run from Lancaster Close Car Park on Saturdays, Sundays and Bank Holiday Monday for the school summer holidays of 2022 and 2023.

Reasons for Proposed Decision

66. By extending the Waterfall Country Park and Ride Pilot project NPTCBC will be able to offset some of the foreseeable parking pressures which may be experienced at Pontneddfechan during the forthcoming summer seasons.

67. Although there is a significant cost to NPTCBC, and our partners, associated with delivering Option 2, by continuing the scheme whilst a permanent option is scoped out we have the potential to improve the quality of life of local residents and improve the visitor experience within Waterfall Country.

68. If the pilot project ends after one year of operation we will not have sufficient data (both qualitative and quantitative) on which to base a more comprehensive evaluation of the measure as part of an overall solution to parking pressures within Waterfall Country.

Implementation of Decision

69. The decision is proposed for implementation after the three day call in period.

Appendices

70. Appendix 1: Waterfall Country Park and Ride Usage Data

71. Appendix 2: First Stage IIA Screening Form

List of Background Papers

72. First Stage IIA Screening Form: Waterfall Country Park and Ride Evaluation (Appendix 2)

73. Proposed Waterfall Country Park and Ride Pilot Report, Regeneration and Sustainable Development Board, 14th May 2021.

Officer Contact

74. Karleigh Davies, Tourism Manager, k.davies16@npt.gov.uk

Waterfall Country Park and Park and Ride Usage

Weather	*Hot & Dry*	*Hot & Dry*	*Dry/ Sunny Spells*	*Dry/ Sunny Spells*	*Cloudy/ light rain*	*Dry/ Sunny Spells*	*Heavy Rain*	*Cloudy/ light rain*	*Cloudy/ light rain*	*Sunny/ Rain*	*Dry/ Sunny Spells*	*Dry/ Sunny Spells*	*Hot & Dry*	*Hot & Dry*	*Dry/ Coudy*	*Hot and Dry*	*Hot and Dry*	***PASSENGER JOURNEYS***
	Sat	**Sun**	**Sat**	**Sun**	**Sat**	**Sun**	**Sat**	**Sun**	**Sat**	**Sun**	**Sat**	**Sun**	**Sat**	**Sun**	**Mon**	**Sat**	**Sun**	**TOTAL PASSENGER**
Time	**17/07/2021**	**18/07/2021**	**24/07/2021**	**25/07/2021**	**31/07/2021**	**01/08/2021**	**07/08/2021**	**08/08/2021**	**14/08/2021**	**15/08/2021**	**21/08/2021**	**22/08/2021**	**28/08/2021**	**29/08/2021**	**30/08/2021**	**04/09/2021**	**05/09/2021**	**JOURNEYS**
9.30	1	0	0	1	0	2	1	0	0	0	0	0	1	0	0	1	0	**7**
9.45	1	0	1	0	1	0	1	0	1	0	0	2	0	1	0	1	0	**9**
10.00	0	0	1	4	1	0	1	0	2	0	2	0	1	0	0	6	0	**18**
10.15	0	0	2	0	1	0	0	0	0	0	0	0	1	0	0	1	0	**5**
10.30	0	0	1	2	3	0	0	0	0	0	0	0	0	6	0	0	0	**12**
10.45	0	0	1	0	1	0	5	0	0	0	0	0	0	0	0	0	0	**7**
11.00	0	2	0	0	1	0	0	0	0	0	2	0	0	0	0	7	0	**12**
11.15	0	0	0	0	3	0	5	0	0	0	0	0	0	0	0	7	0	**15**
11.30	0	0	1	3	1	18	0	0	0	0	2	0	2	6	6	0	0	**39**
11.45	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	**5**
12.00	0	0	3	4	4	2	0	0	0	0	3	2	4	2	2	3	0	**29**
12.15	0	0	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0	**6**
12.30	0	0	0	0	0	0	0	2	0	4	0	0	10	2	0	0	0	**18**
12.45	0	0	0	1	0	0	1	0	0	0	2	1	0	4	2	1	0	**12**
14.00	0	4	6	0	0	0	7	27	2	0	0	4	2	2	6	0	0	**60**
14.15	0	0	1	9	3	5	0	0	2	2	0	0	0	2	0	0	0	**24**
14.30	0	0	0	0	3	1	3	6	0	0	0	0	0	4	0	0	0	**17**
14.45	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	2	**8**
15.00	0	0	0	0	1	0	6	1	0	0	4	0	1	0	6	0	0	**19**
15.15	0	0	1	0	1	0	0	0	2	0	0	0	0	0	3	0	0	**7**
15.30	0	2	2	0	1	1	0	0	0	2	0	5	1	0	2	0	1	**17**
15.45	0	0	7	0	3	0	0	4	0	0	1	6	6	5	2	0	2	**36**
16.00	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
16.15	0	4	0	0	2	0	5	10	2	0	0	0	0	2	5	0	1	**31**
16.30	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	1	**7**
16.45	0	0	0	2	5	0	0	16	0	5	0	0	3	0	0	2	0	**33**
TOTAL PASSENGER JOURNEYS	**2**	**14**	**30**	**27**	**38**	**34**	**36**	**67**	**11**	**16**	**16**	**20**	**36**	**38**	**34**	**30**	**7**	**456**

Data not collected on 17/07/2021

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Appendix 2

Impact Assessment - First Stage

1. Details of the initiative

Initiative description and summary: Waterfall Country Park and Ride Pilot Project This report provides an evaluation of the Waterfall Country Park and Ride Pilot Project, including an analysis if usage data, visitor feedback and costs. The report presents two options to members with a recommendation to continue to deliver the service for the school summer holiday period of 2022 and 2023.
Service Area: Tourism, Regeneration and Economic Development
Directorate: Environment

2. Does the initiative affect:

	Yes	No
Service users	**x**	
Staff		**x**
Wider community	**x**	
Internal administrative process only		**x**

3. Does the initiative impact on people because of their:

	Yes	No	None/ Negligible	Don't Know	Impact H/M/L	Reasons for your decision (including evidence)/How might it impact?
Age		X				The proposal will have no impact
Disability	X				L	The proposal includes the provision of low floor buses which comply with the Passenger Services Vehicle Access Regulations 2000, this will enable passengers with access needs to use the service to access the eateries and facilities in Pontneddfechan village. However, it should be noted that access along the Sgwd

						Gwladys waterfall walk at Pontneddfechan is unavoidably limited due to the very nature of the pathways and waterfalls as geological features; the pathways are steep, narrow, muddy and uneven in places. Within wider Waterfall Country (outside the village of Pontneddfechan) there are accessible options available for visitors, such as Aberdulais Falls (subject to National Trust plans for reopening).
Gender Reassignment		X				The proposal will have no impact
Marriage/Civil Partnership		X				The proposal will have no impact
Pregnancy/Maternity		X				The proposal will have no impact
Race		X				The proposal will have no impact
Religion/Belief		X				The proposal will have no impact
Sex		X				The proposal will have no impact
Sexual orientation		X				The proposal will have no impact

4. Does the initiative impact on:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence used) / How might it impact?
People's opportunities to use the Welsh language			**x**		**L**	The proposals will have no impact, all signage and promotional materials will be produced bilingually as standard.
Treating the Welsh language no less favourably than English			**x**		**L**	The proposals will have no impact, all signage and promotional materials will be produced bilingually as standard.

5. Does the initiative impact on biodiversity:

	Yes	No	None/ Negligible	Don't know	Impact H/M/L	Reasons for your decision (including evidence) / How might it impact?
To maintain and enhance biodiversity		X				The proposal will have no impact
To promote the resilience of ecosystems, i.e. supporting protection of the wider environment, such as air quality, flood alleviation, etc.			X		L	The scheme is designed to manage the number of cars travelling through the village of Pontneddfechan, there may therefore be a small positive environmental impact.

6. Does the initiative embrace the sustainable development principle (5 ways of working):

	Yes	No	Details
Long term - how the initiative supports the long term well-being of people	x		For a number of years visitor parking pressures have created significant issues for residents within Pontneddfechan. The aim of the pilot park and ride service is to establish the impact that such a scheme can have, both on the quality of life of local residents (by easing these pressures), and the overall visitor experience within Waterfall Country. By extending the pilot for two more summer seasons NPTCBC will be able to mitigate the foreseeable parking pressures which the local community is likely to experience whilst a permanent solution is scoped out.

Integration - how the initiative impacts upon our wellbeing objectives	x		The proposal will enhance opportunities to take part in outdoor activities which in turn enhances health and wellbeing within the local community. The tourism economy within Neath Port Talbot creates jobs and investment opportunities for local people. However, the quality of the visitor experience at Waterfall Country is constrained by a lack of appropriate infrastructure which limits the potential of the area as a visitor destination and impacts negatively on local communities. The park and ride pilot is part of a range of proposals being brought forward by the Waterfall Country Partnership to manage visitors more effectively and limit the negative impact of visitors within local communities.
Involvement - how people have been involved in developing the initiative	x		The proposal has been developed through a feasibility study conducted by the Waterfall Country Partnership. The partnership consists of; Brecon Beacons National Park, Natural Resources Wales, Neath Port Talbot Council, Powys County Council, Rhondda Cynon Taf Council and the new community organisation 'Waterfall Country Cymru' which includes members from the range of Community Council's which are located within the Waterfall Country boundary. Local members for Glynneath have been in regular communication regarding the park and ride pilot and were supportive of the original pilot. Local members were keen to see a pilot service run during 2021 in order to alleviate some of the pressures that their communities are seeing in relation to visitor parking.
Collaboration - how we have worked with other services/organisations to find shared sustainable solutions	x		The proposal has been developed through a feasibility study conducted by the Waterfall Country Partnership. The partnership consists of; Brecon Beacons National Park, Natural Resources Wales, Neath Port Talbot Council, Powys County Council, Rhondda Cynon Taf Council and the new community organisation 'Waterfall Country Cymru' which includes members

			from the range of Community Council's which are located within the Waterfall Country boundary.
Prevention - how the initiative will prevent problems occurring or getting worse	X		An extension to the pilot project will help to establish if a park and ride service is feasible and practical at this location in the long term. At the centre of this pilot project is an attempt to alleviate some of the parking pressures at Pontneddfechan, in particular whilst a permanent solution is scoped out. In the longer term the intention would be to widen the geographical area which is covered by the service to benefit wider communities within Waterfall Country where similar visitor pressures are being felt. Research will be conducted with users of the service and their feedback will shape the future design of the service.

7. Declaration - based on above assessment (tick as appropriate):

A full impact assessment (second stage) **is not** required	x
Reasons for this conclusion	
The proposal to extend the delivery of the pilot park and ride service between Glynneath and Pontneddfechan will not have any adverse impacts on people with protected characteristics. The project has a positive impact on wellbeing objectives and sustainable development principles.	

A full impact assessment (second stage) **is** required	
Reasons for this conclusion	

	Name	Position	Date
Completed by	Karleigh Davies	Tourism Manager	07/02/2022
Signed off by	Simon Brennan	Head of Property and Regeneration	07/02/2022

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