



***CYD-BWYLLGOR CORFFOREDIG DE-ORLLEWIN
CYMRU***

2.00 PM DYDD MAWRTH, 15 MAWRTH 2022

O Bell Trwy Teams

1. Croeso a Chyflwyniadau
2. Datganiadau o fuddiannau
3. Cofnodion y Cyfarfod Blaenorol - Ionawr 25 2022 (*Tudalennau 3 - 4*)
4. Materion Llywodraethol a Gweinyddol - y Diweddaraf (*Tudalennau 5 - 12*)
5. Mabwysiadu dogfennau ychwanegol i'w cynnwys o fewn Cyfansoddiad Cyd-bwyllgor Corfforedig De-orllewin Cymru (*Tudalennau 13 - 52*)
6. Cynllun Cyflawni Economaidd Rhanbarthol De-orllewin Cymru (CCERh) (*Tudalennau 53 - 112*)
7. Cynllun Cyflawni Ynni Rhanbarthol De-orllewin Cymru (*Tudalennau 113 - 230*)
8. Cronfa Ffyniant Gyffredin (*Tudalennau 231 - 236*)
9. Eitemau brys

K.Jones
Prif Weithredwr

**Canolfan Ddinesig
Port Talbot**

Dydd Mercher, 9 Mawrth 2022

South West Wales Corporate Joint Committee

(Via Microsoft Teams)

Members Present:

25 January 2022

Carmarthenshire: Cllr E Dole

Swansea: Cllr R Stewart

Neath Port Talbot: Cllr EV Latham

Pembrokeshire: Cllr D Simpson

Brecon Beacons National Park: A. Edwards

Pembrokeshire National Park: Cllr P.Harries

Officers: W Walters, P Roberts, K Jones, W Bramble, C O'Brian, T. Jones, S.Curran, C.Griffiths, G. Jones, C.Moore, R.Arnold and M.Ronan.

1. Minutes of Previous Meeting held on January 13th 2022

The attendance to be amended for Pembrokeshire Coast National Park to state Tegwyn Jones Chief Executive and Cllr Paul Harries.

Cllr Aled Evans be amended to Aled Edwards.

RESOLVED: with the inclusion of the above amendments, that the minutes of the meeting held on 13th January 2022 be approved.

2. Budget for Financial Year 2022/23

The committee were presented with the proposed budget for the South West Wales Corporate Joint Committee for financial year 2022/23 and an amended Appendix A as contained within the circulated report and reminded that they were formally required to set a budget by 31st January 2022.

In its meeting on 13th January 2022, members of the committee had made key decisions in line with legislation and a draft budget was agreed. The levy apportionment on population was confirmed, which allowed the draft budget to be amended and members were asked to note that the proposed budget had dropped from £715,000 to £575,000 and certain elements had been moved around slightly. Members' attention was drawn to the nominal budget amount allocated for sub-committees at this stage as without knowing the exact work programme for the year it was difficult to allocate a precise figure.

The committee was asked to note the assumptions around calculations as detailed on page 13 of the report. In addition, it was noted that it would be inappropriate to put a levy on National Parks this year as the value is de minimus in terms of a charge.

The committee noted that the budget included provision for administrative support as well as building in a reserve.

It was queried if the original grant had been utilised to cover all expenditure and if there was any remaining. It was confirmed that there were elements of the grant still available and that it was administered by Swansea Council as it had been arranged before s.151 responsibility had been discharged to Carmarthenshire and that it will remain vested with Swansea for administration purposes.

RESOLVED:

- That the budget set out in the amended appendix A as circulated be approved
- That the budget requirement for the South West Wales Corporate Joint Committee as £575,411 be approved.
- That the Levy Charge based on population as contained within the report be approved.

CHAIRPERSON

Tudalen4

SOUTH WEST WALES CORPORATE JOINT COMMITTEE

REPORT OF THE CHIEF EXECUTIVE

REPORT TITLE: GOVERNANCE AND ADMINISTRATIVE MATTERS – UPDATE

Purpose of Report	<p>To apprise members of the South West Wales Corporate Joint Committee (CJC) of a range of ‘other’ requirements placed on the CJC following the issue of statutory guidance by Welsh Government.</p> <p>To seek members’ approval to progress a corporate identity for the CJC and to approve an initial media protocol to govern CJC activities.</p>
Recommendations	<ol style="list-style-type: none"> 1. That members of the South West Wales Corporate Joint Committee (CJC) note the ‘other statutory duties’ set out in the ‘Corporate Joint Committees: Statutory Guidance’ issued by Welsh Government. 2. That members of the CJC note and endorse the Chief Executive’s proposal to build the work required to meet these other statutory requirements into the Committee’s Forward Work Programme. 3. That members of the CJC authorise the Chief Executive to progress the development of a corporate identity for the CJC to a conclusion in consultation with the members of the CJC. 4. That members of the CJC approve the media protocol at Appendix 1 as an initial basis for governing media activities related to the activities of the CJC
Report Author	Karen Jones, Chief Executive
Finance Officer	Chris Moore
Legal Officer	Craig Griffiths

Background and Introduction

The Welsh Government has been clear that corporate joint committees will be public bodies and an important part of the local government family.

The Welsh Government has now issued statutory guidance that, alongside the CJC's Constitution, creates a framework for ensuring corporate joint committees demonstrate good governance. The guidance is not intended to be prescriptive about the form governance arrangements should take and provides for a proportionate approach to be taken which reflect local circumstances.

CJC's are subject to broadly the same powers and duties as constituent councils and the statutory guidance confirms what these requirements will be. The guidance relates to constitutional and operational arrangements; separate guidance will be issued by the Welsh Government for the statutory functions of CJs.

At this early point in the life of the CJC, it is also relevant to consider how media activity will be handled initially between the partners. Accordingly, a draft media protocol has been prepared for the consideration of the Committee – Appendix 1. The media protocol will be further refined as the Committee matures to reflect the role of the national parks authorities and any co-optees. Work is also underway to create a corporate identity for the Committee and a website landing page.

Summary of Statutory Guidance

There are six main sections within the statutory guidance:

1. Membership and constitutional arrangements
2. Staffing and workforce
3. Meetings and proceedings
4. Governance and Scrutiny
5. Funding, finance and budgetary matters
6. Other statutory duties

The Monitoring Officer is considering sections 1-4 and the Chief Finance Officer is considering section 5. Reports concerning any additional areas of work required to implement the guidance will be brought forward by the statutory officers, as necessary.

This report seeks to highlight the 'other statutory duties' set out in section 6 of the Guidance. Members of the CJC will need to consider how to promote and facilitate the underpinning principles and standards of the following duties in everything that it does:

Promote and carry out sustainable development – in practice this will mean applying provisions within the Wellbeing of Future Generations (Wales) Act 2015 and associated statutory guidance. The CJC will need to demonstrate how it is maximising its contribution to the wellbeing goals and embracing the five ways of working. It will also need to have due regard to the Act when carrying out corporate governance: corporate planning; financial planning; workforce planning;

procurement; assets; risk management; and performance management. Audit Wales has confirmed that the Auditor General will be required to audit compliance with these duties – a letter is expected in due course setting out how the audit arrangements will work in practice and associated fees.

Create and foster an atmosphere in which the Welsh Language can grow within the CJC and in the communities we serve – in practice this will mean contributing to the national aim to increase the number of Welsh speakers; increase the use of Welsh; and creating favourable conditions through infrastructure and context. The CJC is also subject to the Welsh Language Standards (No.1) Regulations 2015. A meeting has already been held with representatives of the Welsh Language Commissioner's Office where it was confirmed that the full process for determining which standards will be applied to the South West Wales CJC. As the process may take up to a year, the CJC is expected to take appropriate steps to embed the use of the Welsh language within the CJC and in the services the CJC provides from the outset. It is proposed to work with the Welsh Language Officers from the constituent authorities to develop the initial approach and then to put this before the Committee for consideration.

Equality – Amongst other things, the CJC will need to observe the 'due regard' duty on public bodies to: eliminate discrimination, harassment and victimisation; advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; and to foster good relations between people who share a relevant protected characteristic and persons who do not share it. CJCs must also consider how its decisions might help to reduce the inequalities associated with socio-economic disadvantage. The CJC is subject to the requirements of the Equality Act 2010 (Statutory Duties) (Wales) Regulations 2011. This means the CJC will need to set equality objectives every four years and publish information to demonstrate compliance with the duty on an annual basis.

Biodiversity and the resilience of ecosystems – CJCs will be required to seek to maintain and enhance biodiversity so far as is reasonably consistent with the proper exercise of their functions and in doing so promote the resilience of ecosystems. The duties under section 6 of the Environment (Wales) Act 2016 will apply and the CJC will need to prepare and publish a plan by 31st December 2022 setting out what has been done to comply with the section 6 duty and then every three years after.

Freedom of Information - the CJC is a body corporate and so will not automatically be covered by the Freedom of Information Act 2000. The Welsh Government has however made an application to the UK Government to add CJCs to the schedule of public authorities under Schedule 1 of the Act. In the interim, the Welsh Government expects the CJC to conduct itself as if it was subject to the Act although the Information Commissioner's Office will not have jurisdiction over a CJC or complaint until such time that the CJC is subject to the Act's provisions.

Child Poverty – the CJC will be required to make and demonstrate its commitment towards the eradication of child poverty in Wales. The CJC will need to prepare and publish a strategy setting out the actions it intends to take and the objectives it seeks to achieve.

National Parks – when performing any function in relation to or affecting land in a National Park the CJC must have regard to the purposes specified in section 5(1) of the National Parks and Access to the Countryside Act 1949. These purposes being conserving and enhancing their natural beauty, wildlife and cultural heritage and promoting opportunities for the understanding and enjoyment of the special qualities of National Parks by the public. The CJC must also comply with section 85 of the Countryside and Rights of Way Act 2000 - have regard in the exercise or performance of any function in relation to, or affecting, land in an area of outstanding natural beauty, for the purposes of conserving and enhancing the natural beauty of the area.

Consideration is being given to how these other statutory duties are best met. At the next meeting of the CJC a Forward Work Programme will be presented for consideration setting out the work activities that are considered necessary to comply with the various requirements.

Media Management and Corporate Identity

The CJC is a body corporate and consequently needs to be able to distinguish itself as an entity. The City and County of Swansea have been commissioned to develop a suitable 'corporate identity' and associated branding. The development costs for the branding are estimated to be modest – in the order of £1,000 and can be met from the grant provided by Welsh Government to support the constitution of the CJC if completed before the end of March 2022. Members are asked to consider authorising the Chief Executive to progress this work to conclusion, in consultation with the members of the CJC.

It is also important to agree the basis on which the CJC will manage the communication of its work. Given the number of partners involved, it is proposed that the arrangements be captured in a media protocol. An initial protocol is attached for consideration at Appendix 1. It will be refined as the CJC matures.

Financial Impacts

It is expected that the CJC will incur costs in complying with the various other statutory duties. The costs of complying with the requirements will be estimated and included in the next report to the CJC.

The development of the corporate identity can be met from the grant provided by Welsh Government if completed by 31st March 2022. The corporate identity development work is estimated to cost £1,000.

Integrated Impact Assessment

The CJC is subject to the Equality Act (Public Sector Equality Duty and the socio-economic duty), the Well-being of Future Generations (Wales) Act 2015 and the

Welsh Language (Wales) Measure, and must in the exercise of their functions, have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Acts.
- Advance equality of opportunity between people who share a protected characteristic and those who do not.
- Foster good relations between people who share a protected characteristic and those who do not.
- Deliver better outcomes for those people who experience socio-economic disadvantage
- Consider opportunities for people to use the Welsh language
- Treat the Welsh language no less favourably than English.
- Ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

The Well-being of Future Generations (Wales) Act 2015 mandates that public bodies in Wales must carry out sustainable development. Sustainable development means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the 'well-being goals'.

There is no requirement for an Integrated Impact Assessment for the governance elements of this report as the setting up of the CJC is underpinned by legislation and this report is formally drawing the Committee's attention to statutory guidance issued by Welsh Government which has a consequential impact on the Forward Work Programme of the Committee whilst also formalising an initial basis for managing communications between the bodies that have formed the CJC.

Workforce Impacts

There are no direct impacts arising from this report. Provision was made in the CJC budget to appoint an officer to support the business of the CJC. It is planned that the work described above can be accommodated within that role. A job description and person specification has been prepared and the post will be advertised as an internal secondment to constituent authorities within the near future.

Legal Impacts

The report identifies a range of statutory duties that the CJC will now need to have regard to in the conduct of its business.

Risk Management Impacts

The main risks associated with this report are considered to be as follows:

Failure to comply with the various statutory duties - will be mitigated by including specific work activities within the Forward Work Programme and the role of the Business and Portfolio Manager.

Costs of complying with the duties exceeds the approved budgets – a proportionate approach will be taken with cost estimates established and discussed with the Chief Finance Officer before work commences.

Consultation

There is no requirement for external consultation on this item.

Reasons for Proposed Decisions

To ensure that members of the CJC understand the range of other statutory duties placed on the CJC by the Welsh Government and the way it is proposed that these duties be approached.

To ensure that the CJC has its own corporate identity and that there is an appropriate working protocol agreed between the constituent councils to govern media management activities and foster collaboration between the members of the CJC.

Implementation of Decision

Immediate.

Appendices

Appendix 1 – Proposed Media Protocol

Background Papers

Welsh Government, Corporate Joint Committees: Statutory Guidance, 2022

South West Wales Corporate Joint Committee- Draft communications protocol

The South West Wales Corporate Joint Committee is made up of the four regional local authorities of the area (Carmarthenshire, Neath Port Talbot, Pembrokeshire and Swansea), as well as the national park authorities of the Brecon Beacons and Pembrokeshire.

Given the number of partners represented on the Committee, a communications protocol is needed to ensure that content including pro-active press releases, reactive statements & interview opportunities can be appropriately managed.

At the Corporate Joint Committee's first meeting in January 2022, it was agreed that Swansea Council would lead on communications for the Committee.

A communications officer at Swansea Council has been designated to lead on this activity, working under Swansea Council's head of communications and marketing.

Pro-active press releases, social media and reactive statements

- The designated lead communications officer will attend all meetings of the Committee – both forward planning and live – to determine opportune activities that maximise positive media/public exposure for the Committee
- Press releases and any other pro-active content drafted by the lead communications officer will require approval from the lead Leader & lead officer of the relevant CJC theme, as well as the Committee's lead Chief Executive Officer (Neath Port Talbot Council) and the Committee's chair (Swansea Council's Leader). The lead Leaders and officers for the CJC themes are:
 - Energy: Cllr David Simpson (Pembrokeshire Council) and Karen Jones (Neath Port Talbot Council)
 - Economic development: Cllr Rob Stewart (Swansea Council) and Wendy Walters (Carmarthenshire Council)
 - Strategic land use planning: Cllr Emlyn Dole (Carmarthenshire Council) and Will Bramble (Pembrokeshire Council)
 - Transport: Cllr Ted Latham (Neath Port Talbot Council) and Phil Roberts (Swansea Council)
- Press releases or any other pro-active content about the Committee's work as an entity will only require approval from the Committee Chairman and lead Chief Executive Officer
- Once approved, all press releases and other pro-active content will be sent, for information, to all Committee members. Bilingual, approved press releases will also be sent to communications officers at all partner organisations for potential upload to their websites

- All partners will be encouraged to post/share these positive press releases via their social media platforms. Social media posts relating to the Committee will also tag partner organisations for ease of sharing
- Any print/online media queries relating to the Committee shall be referred to the lead communications officer, who will draft responses for the approval of relevant Leaders/officers according to CJC theme, as well as the lead CJC Chief Executive and the Committee Chairman

Interview opportunities

- English language interview opportunities generated by positive news stories will be offered to the relevant Leader according to CJC theme. Welsh language interview requests will be offered to the Committee's vice-chairman
- The lead communications officer for the Committee will prepare briefing notes and key messages for these interviewees in advance of interview for approval from the relevant lead Leader & officer according to CJC theme, as well as the lead CJC chief executive and the Committee Chairman
- The above will also be the case for reactive interview requests from the media

Bilingual guidance

All media releases and information, either printed or online, for the CJC should be in Welsh and English to comply with the principles that accompany the Welsh Language Standards, with the Welsh language positioned so that it may be read first.

Boiler paragraph & key messages

To ensure consistency across communications, the following 'boiler' paragraph and key messages will be included in all pro-active communications content:

Boiler paragraph: The South West Wales Corporate Joint Committee is aimed at further driving economic prosperity across the region. The Committee is made up of the Leaders of Carmarthenshire Council, Neath Port Talbot Council, Pembrokeshire Council and Swansea Council, as well as senior representatives of the Brecon Beacons and Pembrokeshire National Park Authorities.

Key messages

The committee:

- Builds on strong regional working foundations already in place in South West Wales
- Will further boost economic prosperity in South West Wales, while enabling a unified, regional approach to key sectors like transport, energy and economic development to benefit local people, businesses and visitors

SOUTH WEST WALES CORPORATE JOINT COMMITTEE

15th March 2022

REPORT OF THE MONITORING OFFICER

Report Title: Adoption of additional documents to be included within the Constitution of the South West Wales Corporate Joint Committee

Purpose of Report	To adopt additional protocols and policies that will be included within the Constitution of the South West Wales Corporate Joint Committee
Recommendation	<p>(1) It is recommended that the CJC adopt:</p> <p>Appendix 1-Protocol regarding correspondence from MP and MS.</p> <p>Appendix 2- Local Resolution Procedure.</p> <p>Appendix 3– Members Gifts and Hospitality.</p> <p>Appendix 4– Nonattendance at meetings policy</p> <p>Appendix 5– Petition Scheme</p> <p>Appendix 6– Public Speaking Protocol.</p> <p>Appendix 7– Protocol on Member and Officer Relationships.</p> <p>and that the Constitution of the CJC be updated to reflect these additional documents.</p> <p>(2) Members note the future documentation that will be brought forward to the CJC for approval as set out in paragraphs 5 and 6 of this report.</p>

Report Author	Craig Griffiths
Finance Officer	N/A
Legal Officer	Craig Griffiths

Background:

1. At its meeting on the 13th January 2022, the Corporate Joint Committee adopted its constitution.
2. The purpose of the Constitution is to:
 - (a) enable the CJC to provide clear leadership to the community in partnership with citizens, businesses and other organisations, including its Constituent Councils and public bodies;
 - (b) support the active involvement of citizens in the process of CJC decision-making;
 - (c) provide a framework for good governance;
 - (d) enable decisions to be taken efficiently and effectively;
 - (e) create a powerful and effective means of holding decision-makers to public account;
 - (f) ensure that no one will review or scrutinise a decision in which they were directly involved;
 - (g) ensure that those responsible for decision making are clearly identifiable to local people and that they explain the reasons for decisions; and
 - (h) provide a means of improving the delivery of service to the community.
3. Members will note that the Constitution is similar in nature to what Constituent Councils operated under as the CJC is required to follow similar processes.

Ancillary Documents

4. Members are now required to adopt some additional constitutional documents which when taken together with the Constitution represent the suite of information that members must comply with as part of their role with the CJC.
 - (a) **Appendix 1** -Protocol regarding correspondence from MP and MS. The purpose of the document is to establish a protocol for when correspondence is received from Members of Parliament and Senedd Members and how any responses will be communicated to all members.
 - (b) **Appendix 2** - Local Resolution Procedure. Members have to date adopted a Model Code of Conduct. As part of this the Public Service Ombudsman for

Wales recommends that members have a local resolution procedure to allow any low level disputes between members to be dealt with without recourse to more formal action by the Public Service Ombudsman.

- (c) **Appendix 3** – Members Gifts and Hospitality. It will be important for the Monitoring Officer to log any gifts or hospitality that members may receive as part of their involvement with the CJC. It should be noted that this policy only applies in respect of gifts, material benefits and hospitality provided to Members in respect of their role with the CJC. Any gifts, material benefits and hospitality provided to Members in accordance with their role within their constituent authority shall be dealt with in accordance with that authority's policy.
- (d) **Appendix 4** – Nonattendance at meetings policy. CJC Members are expected to attend meetings that they have been assigned as part of their role. However, there will be occasions when they are unable to attend for a variety of reasons. The Modern.Gov Committee Management System allows the attendance to be recorded. To ensure that the record is accurate this policy sets out what Members should do to record their absence.
- (e) **Appendix 5** – Petition Scheme. The CJC is required by the Local Government and Elections (Wales) Act 2021 to make and publish a scheme setting out how the CJC intends to handle and respond to petitions (including electronic petitions). The petition scheme must set out how a petition may be submitted to the CJC, how and by and when the CJC will acknowledge receipt of a petition, the steps the CJC may take in response to a petition received by it, the circumstances (if any) in which the CJC may take no further action in response to a petition, how and by when the CJC will make available its response to a petition to the person who submitted the petition and to the public.
- (f) **Appendix 6** – Public Speaking Protocol. Any person (other than elected Members or employees of the of the constituent authorities that make up the CJC who resides or works in the locality of the authorities that comprise the CJC shall be entitled to ask a question at a meeting of the CJC or any of its sub-committees. The purpose of this protocol is to document the system of operation to allow for this.
- (g) **Appendix 7** – Protocol on Member and Officer Relationships. The purpose of this Protocol is to guide Members and Officers of the CJC in their relations with one another. Mutual respect between Members and Officers is essential to good local government. However, close personal familiarity between individual Members and Officers can damage this relationship and prove embarrassing to other Members and Officers. The relationship has to function without compromising the ultimate responsibilities of Officers to the CJC as a whole, and with due regard to such technical, financial, professional and legal advice that Officers can legitimately provide to Members. The Protocol seeks to set a framework that assists the working relationships between Members and Officers.

Next Steps

5. In order to meet other legislative objectives, members should note that reports and policies will be brought forward to the CJC at future meetings in respect of meeting obligations pursuant to the Freedom of Information Act 2000 and Data Protection Act 2018. These are the standard policies that the CJC will be required to have and are based very much on local authority policies and protocols.
6. Future reports will also confirm arrangements for the CJC to meet its obligations pursuant to the Equality Act 2020 (development of a strategic equality plan), the Wellbeing of Future Generations (Wales) Act 2015 (creation of wellbeing objectives/strategies), Welsh Language Wales Measure 2011 (creation of Welsh Language Standards) and the need to produce a Child Poverty Strategy.

Financial Impacts:

7. The financial impacts of adopting this Constitution and associated documents are incorporated into the budget for 2022/2023

Integrated Impact Assessment:

8. The CJC is subject to the Equality Act (Public Sector Equality Duty and the socio-economic duty), the Well-being of Future Generations (Wales) Act 2015 and the Welsh Language (Wales) Measure, and must in the exercise of their functions, have due regard to the need to:
 - Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Acts.
 - Advance equality of opportunity between people who share a protected characteristic and those who do not.
 - Foster good relations between people who share a protected characteristic and those who do not.
 - Deliver better outcomes for those people who experience socio-economic disadvantage
 - Consider opportunities for people to use the Welsh language
 - Treat the Welsh language no less favourably than English.
 - Ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.
9. The Well-being of Future Generations (Wales) Act 2015 mandates that public bodies in Wales must carry out sustainable development. Sustainable development means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the 'well-being goals'.

10. There is no requirement for an Integrated Impact Assessment for this report as the setting up of the CJC is underpinned by legislation and that this report is to establish governance arrangements in accordance with legislation. This will be kept under review with any future reports considering whether impacts require consideration.

Workforce Impacts:

11. There are no workforce impacts associated with this report.

Legal Impacts:

12. Part 5 of the LGE Act provides for the establishment, through regulations, of CJsCs and compliance will be had with this and other legislative obligations in the establishment of CJsCs. In particular the South West Wales Corporate Joint Committee Regulations came into force on 1st April 2021 and set out an initial framework for example, that the CJC should be established and the timeframes for the discharging of specific functions. However a series of further Regulations are being drafted and consulted on by Welsh Government. The Welsh Government has concluded its consultation on the Corporate Joint Committees (General) (No.2) (Wales) Regulations 2021. The Welsh Government is also currently consulting on draft statutory guidance. A third stage of Regulations will put in place further legislation for the operation of the CJsCs and its functions, which Welsh Government are currently being consulted on. A fourth stage will put in place any remaining provisions that a CJC might need.

Risk Management Impacts:

13. Failure to adopt these additional documents could expose each constituent council and national park authority to challenge) along with the reputational risks that such non-compliance will bring.

Consultation:

14. There is no requirement for consultation in respect of this report.

Reasons for Proposed Decision:

15. To ensure appropriate governance arrangements are in place for the CJC to make decisions and compliance is had to the legislative requirements that are applicable to the CJC.

Implementation of Decision:

16. This decision is proposed for immediate implementation

Appendices:

Appendix 1-Protocol regarding correspondence from MP and MS.

Appendix 2- Local Resolution Procedure.

Appendix 3– Members Gifts and Hospitality.

Appendix 4– Nonattendance at meetings policy

Appendix 5– Petition Scheme

Appendix 6– Public Speaking Protocol.

Appendix 7– Protocol on Member and Officer Relationships.

List of Background Papers:

None

MS and MP Protocols

1. Correspondence

There is a strongly held view that CJC matters raised by constituents should be dealt with by members of the CJC, but if a constituent insists on pursuing a matter with an MP/MS, then the following protocols will apply:

- (a) Queries or requests for information about the constituency matter, or any other local authority matter, should normally be made in writing to the Chief Executive.

A copy of the letter from the MP/MS will be made available to the CJC members, and notification of receipt of the letter shall be given to the Chief Executive of a constituent council where the matter affects their locality but not if it concerns a personal or confidential matter involving the constituent

A copy of the letter and draft response will also be forwarded to the Chair of the CJC. The final response, as agreed, will be sent by the Chief Executive. This will also be copied to all members of the CJC.

This protocol will apply to all MP/MS regardless of what constituency they represent.

2. Meetings

- (a) Requests for meetings should normally be made in writing to the Chief Executive
- (b) If an MP/MS contacts the Chief Executive for a meeting on specific local authority matters, or where it is proposed to MP's/MS's that a meeting be held, the Chief Executive and Chair of the CJC will be informed to determine whether such a meeting is to be held and who should be in attendance
- (c) If an MP/MS contacts a member of the CJC direct, or if one of those members proposes a meeting, then the

Chair of the CJC and Chief Executive will similarly be informed.

3. Invitations/Visits

Any invitations to an MP/MS to an event or visit organised by the CJC will be agreed first by the Chair and Chief Executive

NOTE: The reference to MP/MS also includes their staff; or any prospective candidate (MP/MS).

Local Resolution Procedure Member Complaints of Breaches of the Code of Conduct for Members

Scope of Procedure

South West Wales Corporate Joint Committee (“CJC”) Members have adopted this Protocol which is supplemental to the Protocol on Member/Employee Relations and the Code of Conduct requirements of the Constitution. The Welsh Government and the Public Services Ombudsman for Wales (“PSOW”) have indicated that Member against Member complaints should be dealt with locally and informally by the CJC.

This Procedure recognises that the freedom of expression enjoyed by Members is not absolute and the exercise of the freedom incurs responsibilities and may be subject to restrictions, notably the protection of the reputation and other rights of other Members and preventing unauthorised disclosure of information. The freedom to express their political opinions is not restricted by agreeing to this Protocol.

This Local Resolution Procedure may be utilised for low level disputes by a Member before a complaint is referred to the PSOW. The PSOW indicates that where a Local Resolution Process has been adopted by a CJC, he may not accept a complaint for consideration of an investigation relating to a low level complaint until or unless the Member has used the Local Resolution Procedure. If the complaint is not of a low level nature the Member may be referred to the PSOW.

This is an informal process and no indemnity will be granted to any Member for representation at the Local Resolution Panel.

Standards of Behaviour

1. Members should:
 - 1.1 Show personal respect to each other: when disagreeing with another Member's views, opinions or Member actions. A Member should not engage in abusive, insulting or improper personal comments about other Members or their family but, having regard to the Code of Members' Conduct ("the Code") requirement that decisions are made on the merits of the circumstances, should focus on the arguments put forward by other Members or the effectiveness of their actions. It is accepted that feelings can run high in debate but should the standards of behaviour have been breached, the culpable Member should apologise to the meeting when the breach is brought to their attention when the matter will be considered closed.
 - 1.2 Not publish malicious or false allegations or information or insulting personal comments against a Member: The growing propensity for personal comments to be made electronically to the world at large require a greater degree of control by the author, as once made it is difficult for the comments to be rescinded. The truth is only a defence if it is the whole truth and puts matters in context.
 - 1.3 Not release confidential information to the press or members of the public: there is no defence of public interest in the Code and there are avenues that should be explored to provide transparency in decision-making that would not disclose confidential/personal information which may cause harm to an individual or a company/organisation. The CJC is a regulatory body but also has powers to enhance the prospects of the community which may be harmed by unauthorised disclosure.

Local Resolution Procedure

- 2.1 In the event of a dispute arising, a Member who complains that another has breached the Code will be provided with the contact details of a Mediator appointed by the Monitoring Officer.

- 2.2 The complainant Member will notify the Member who is the subject of the complaint of his intention to seek mediation of the dispute. Both Members will supply the Mediator with dates of availability, but with the intent that the mediation meeting will take place within six weeks from the date of the complaint being made.
- 2.3 The mediation meeting(s) will be confidential. It is hoped that this process will encourage the Members to attain consensus on resolving the complaint. Whatever is agreed will be confirmed by them to the Mediator but will not be further published unless agreed by both the Members.
- 2.4 If the mediation stage does not resolve the complaint, then the complaining Member may request that the matter be referred to the Local Resolution Panel within six weeks of the last mediation meeting. The Mediator will be asked to confirm whether resolution was attained but nothing further.
- 2.5 The Local Resolution Panel will comprise three members of the Standards Committee (with at least two being lay independent members). No Member shall serve who has had a previous involvement with the matter. The Panel will meet in private.
- 2.6 Both the complaining Member and the Member who is subject of the complaint will be entitled to appear and/or produce written or oral information relevant to the facts of the matter complained of. Either Member may be accompanied by a friend but shall not be represented by a Solicitor or Barrister.
- 2.7 The Local Resolution Panel will consider the information and have discretion to determine the facts and if they consider it appropriate to make such recommendation as would address the complaint, either there is:
- 2.7.1 No basis for the complaint
- 2.7.2 A basis for the complaint but no further action is necessary or

- 2.7.3 A basis for the complaint and an apology should be provided to the complainant Member in an appropriate manner or such other action that is within the power of the CJC.
- 2.8 The complainant Member may refer the matter to the PSOW and the PSOW will consider whether to investigate.
- 2.9 The Local Resolution Panel may also make recommendations to the Standards Committee regarding training or changes to any procedures which may have contributed to the complaint arising.
- 2.10 If the complaint is referred to the PSOW and an investigation report is produced the independent Member on the Standards Committee who was appointed to the Local Resolution Panel will not take part in any proceedings relating to that investigation report.

Policy On Members Gifts, Material Benefits, Advantages And Hospitality

1. Introduction

- 1.1. This Policy is made in accordance with the Statutory Code of Conduct for Members (“the Code”) as adopted by South West Wales Corporate Joint Committee (“CJC”). As such it applies to all Members including co-opted Members, of the CJC. Both Members and co-opted Members are referred to as ‘Members’ hereafter.
- 1.2. Members should complete their notification on the attached form and send it to the CJC’s Monitoring Officer within the time limit specified in this Policy. The completed forms will form the Register of Gifts and Hospitality (a copy of which is made available to the public on request).
- 1.3. Please note that this policy only applies in respect of gifts, material benefits and hospitality provided to Members in respect of their role with the CJC. Any gifts, material benefits and hospitality provided to Members in accordance with their role within their constituent authority shall be dealt with in accordance with that authority’s policy.

2. Statutory Basis

- 2.1. The statutory principles which are to govern Member conduct say that Members “must not put themselves in a position where their integrity is called into question by any financial or other obligation to individuals or organisations that might seek to influence them in the performance of their duties. Members must on all occasions avoid the appearance of such behaviour” (b)
- 2.2. Also the same principles state Members “must act solely in the public interest – they must never use their position as Members to improperly confer advantage on themselves or to improperly confer advantage on others” (c)
- 2.3. The CJC has adopted the Code without amendment.

- 2.4. The Code says Members “must avoid accepting from anyone gifts, hospitality (other than official hospitality, such as a Civic Reception or a working lunch duly authorised by the CJC) material benefits or services for themselves or any person with whom the Member is living that would, or might reasonably appear to, place them under an improper obligation” (d)
- 2.5. The Code further says Members must not in their official capacity or otherwise, use their position improperly to confer on or secure an advantage for themselves or any other person (e)
- 2.6. Members must give the notification of the acceptance of gifts, material benefits, advantages or hospitality by giving the information required on the relevant Form approved for the purpose. Such form must be returned to the CJC’s Monitoring Officer within 28 days of receipt.

3. **The Register**

- 3.1. The requirement to register applies to gifts and hospitality received as a Member but Members should consider the overall propriety of accepting the same bearing in mind the likely public perception.
- 3.2. The CJC’s Monitoring Officer is required by law to keep a Register of all notifications made by Members.
- 3.3. The Register will be open to public inspection during all normal office hours.
- 3.4. The Register will be kept at the Civic Centre, Port Talbot under the custody and control of the CJC’s Monitoring Officer.

4. **The Threshold**

- 4.1. Members must notify receipt of gifts, material benefits, advantages and hospitality **irrespective of value.**

5. **Civic Gifts**

5.1. The receipt by a Member of a gift accepted on behalf of CJC is not subject to the Code. Members should note that the CJC requires that a gift accepted by a Member on behalf of this CJC i.e. a civic gift, should be given into the custody of an appropriate officer (usually this will be the Mayor's Secretary who will keep a manifest of gifts received and will keep them in safe custody). If any decision is needed as to the disposal of civic gifts the Chief Executive shall determine what is to happen to them. For the avoidance of doubt disposal can be by donation to a charity (including the Mayor's Charity) or by giving the same for the use of the public, or a sector of the public, or to an organisation for Community purposes/or to a not for profit voluntary organisation whose main purposes are charitable/or Community based. If donated by CJC to another body or organisation as described, the recipient may auction, raffle or sell the gift and apply the monies received to fulfil their main charitable/or Community purposes.

6. **Matters which it is not necessary to disclose**

6.1. It is not necessary for Members to notify the CJC's Monitoring Officer of receipt of promotional gifts, pens, calendars, diaries, mousemats etc. of only a nominal value below the threshold and Members are discouraged from making such notification for registration.

6.2. It is encouraged that a Member record with the Monitoring Officer offers of hospitality or gifts declined and the appropriate form shall be utilise to achieve this.

7. **Hospitality**

7.1. The CJC regards working lunches or their equivalent as appropriate hospitality and a proper way of doing business provided that they are generally authorised by CJC and involve no extravagance and would be considered within the bounds of normal courtesy lunches i.e. following working parties, Committee meetings, partnership meetings etc. including Seminars, Conferences or similar events.

- 7.2. Likewise the CJC authorises the receiving of official hospitality – such as Civic Receptions, by Members as by persons living with them.
- 7.3. Otherwise the CJC requires that Members should only accept offers of hospitality if it is generally felt that the CJC interests are served by attendance or that it is appropriate for the Authority to be seen to be represented at the event. The same test should be applied by Members in judging whether it would be reasonable for a Member to attend a social function, sporting or similar event organised by outside persons or bodies. Members who are offered hospitality of a social nature must consider how the offer might be viewed from the perspective of a member of the public.
- 7.4. Hospitality covered by 7.1 and 7.2 will not need to be notified to the CJC's Monitoring Officer. However, hospitality mentioned in 7.3 must be notified in the usual manner to the CJC's Monitoring Officer.
- 7.5. Additionally, Members who wish to accept any form of hospitality covered by 7.3 above are advised to seek appropriate advice beforehand from the CJC's Chief Executive, Finance Officer or Monitoring Officer.
- 7.6. Acceptance by Members of hospitality through attendance at conferences, seminars and other similar events is permissible when it is clear that the hospitality is corporate rather than personal in nature and where it is clear that the CJC's position is not compromised.
- 7.7. Where visits to sites to view proposed developments or to view vehicles, equipment, any goods or service delivery or similar are required or Members attend any demonstrations relating to same including software/IT demonstrations Members must ensure that the cost of such visits are borne by the CJC to avoid jeopardising the integrity of any subsequent purchasing decision. Members may accept mere modest courtesy hospitality on the basis that purchasing decisions are not thereby likely to be compromised.

- 7.8. Members must not avail themselves of the services of contractors or suppliers engaged by the Authority where goods, labour, plant or similar are made available at cost, trade or discount prices. The only exception permissible is where such discounts are generally available to members of the public.
- 7.9. Members should be mindful of the timing of any acceptance of any gift, material benefits, advantages and hospitality in relation to decisions which the CJC may be taking affecting those providing the same.
- 7.10. When gifts, material benefits, advantages and hospitality have to be declined, those making the offer should be courteously, but firmly informed of the procedures and standards operated within the Authority.

8. Other Considerations

- 8.1. Members should balance the practicalities of operating in public life against any misconception which would arise with the public were Members to be perceived as being able to receive lavish or expensive gifts, material benefits or advantages and hospitality of a similar nature.
- 8.2. The CJC requires Members to refrain from accepting disproportionately generous offers which could create an improper obligation, particularly if linked into any actual or potential commercial transaction with the authority.

9. General

- 9.1. The threshold value for the notification and registration of gifts, material benefits, advantages and hospitality will be reviewed from time to time by CJC.
- 9.2. When Notification is required a separate notification for each class of receipt is to be given and Members should separately declare each receipt.

**SOUTH WEST WALES CORPORATE JOINT COMMITTEE
MEMBER'S CODE OF CONDUCT**

**Notification by a Member of the Receipt of a Gift/Material
Benefit/Advantage or Hospitality**

I, (full name)

Give Notice that I have received/declined the following gift, material benefit, advantage or hospitality

And (tick as appropriate)

In the case of hospitality I have paid the cost myself

When was the offer made?

Who was the offer made to?

Who was the offer made by?

.....

What was the nature of the gift, material benefit, advantage or hospitality?

Signed Date

Received Date

Note – This form must be submitted within 28 days of receipt of the gift, material benefit, advantage or hospitality

Policy for Members Submitting Apologies for Non-attendance at CJC Meetings

Background

CJC Members are expected to attend meetings that they have been assigned as part of their role. However, there will be occasions when they are unable to attend for a variety of reasons.

The Modern.Gov Committee Management System allows the attendance to be recorded

To ensure that the record is accurate this policy sets out what Members should do to record their absence.

Policy

When a Member is unable to attend a meeting they must submit their apologies prior to the meeting to ensure they are correctly recorded and to ensure that the meeting will be quorate. Any apologies submitted after a meeting has started will not be recorded unless there are exceptional circumstances.

The apologies should be communicated to staff within the Democratic Services Team.

There are 8 types of apology that can be recorded as follows:-

Type	Comments
Apologies	General category – Members are not expected to confirm their reason for absence unless they wish to
Apologies due to Council Business	Where clashes with Council meetings and external meetings occur.
Absence due to Member's own employment	Where the Member's employment prohibits attendance at that meeting
Apologies due to illhealth	Where the Member is unable to attend due to ill health (including hospital appointments)
Apologies due to maternity, paternity,	Where the Member is on maternity, paternity, adoptive or parental leave.

adoptive or parental leave	
Apologies due to carrying responsibilities	Where the Member has caring responsibilities that prevent their attendance
Apologies due to County Borough, National Park, Community and Town Council duties	Where a Member is unable to attend due to County Borough, National Park, Community/Town Council duties.
Absence without notification	Where an apology is not received then the Member will be listed as absent and this will show in the attendance record.

1. Introduction

- 1.1 The South West Wales Corporate Joint Committee (“the **CJC**”) welcomes petitions as a way in which our residents can make their concerns known and request that action be taken.
- 1.2 Petitions are documents (whether digital or physical) that contain details of issues that are important to communities that comprise the CHC as a whole, signed by local electors who are in support of the proposed action.
- 1.3 The CJC is required by the Local Government and Elections (Wales) Act 2021 to make and publish a scheme setting out how the CJC intends to handle and respond to petitions (including electronic petitions).
- 1.4 The petition scheme must set out:
- (a) how a petition may be submitted to the CJC
 - (b) how and by and when the CJC will acknowledge receipt of a petition
 - (c) the steps the CJC may take in response to a petition received by it
 - (d) the circumstances (if any) in which the CJC may take no further action in response to a petition
 - (e) how and by when the CJC will make available its response to a petition to the person who submitted the petition and to the public
- 1.5 This petition scheme was approved by the CJC on _____ and is now referenced as “the **Scheme**” for the purposes of this document.
- 1.6 The CJC commits to reviewing the Scheme every two years.
- 1.7 A copy of the Privacy Statement relating to this Scheme is available at www.npt.gov.uk
- 1.8 Any queries on this petition scheme should be addressed to:
- Monitoring Officer**
Neath Port Talbot County Borough Council
Civic Centre
Port Talbot
SA13 1PJ
Email: democratic.services@npt.gov.uk
Tel: 01639 763194

2. Guidelines for submitting a petition

2.1 A petition for the purposes of this Scheme must include:

- (a) a clear and concise statement of the concern and what the petitioners would like the CJC to do in response. Petitions, therefore, must relate to something for which the CJC is responsible or over which the CJC has some direct influence. If the CJC receives a petition that does not relate to something under the CJC's control or direct influence, it will be returned to the petition organiser with an explanation of the decision as to why we cannot progress the matter further.
- (b) the name and contact details of a petition organiser. For the purpose of taking a petition forward, a petition organiser must be nominated (this is usually the person who starts the petition).
- (c) the names and addresses of local electors (including the person(s) organising the petition). Where petitions are presented in paper form, they must include petitioners' actual signatures. Where an e-petition is submitted, a list of names and addresses will suffice. Only the person(s) organising the petition will be contacted in relation to the petition, but petitioners' addresses are needed for the purpose of verifying the number of petitioners.

Please note: where the term 'signatures' is used in this Scheme, read 'names, addresses and signatures of petitioners'.

2.2 Before submitting a petition, the CJC would encourage residents to seek a resolution to any issue by contacting the CJC to see whether an ordinary service request would resolve the issue

2.3 If a petition is submitted in relation to a consultation or a matter which is under the CJC's control but which is subject to a separate policy or procedure, this should be made clear in order that it can be progressed in accordance with the relevant procedures and included as part of the consultation responses being gathered.

2.4 Petitions should be accompanied by contact details, including an address, for the petition organiser who must also live or work in the locality of the authorities that comprise the CJC. This is the person that will be contacted to explain how the CJC will respond to the petition. ***The contact details of the petition organiser will not be placed on the website.***

2.5 If the petition does not identify a petition organiser, contact will be made with signatories to the petition to agree who should act as the petition organiser.

2.6 If your petition does not reach the minimum requirement signatures, particularly where the issue relates to a small locality, the CJC will advise the petitioners of other ways in which these views could be considered.

2.7 A form is available as Appendix 1, which sets out the main summary information required when submitting a petition.

2.8 If you want to submit a petition to a specific meeting of the CJC then you need to ensure that we receive a completed petition with details of the petition subject matter, number of signatures and your contact details by no later than **5:00** on the

10 working days before that meeting to enable it to be submitted.

- 2.9 Please note petitions submitted by the petitioner to meetings of the CJC will not be discussed in detail at that point, unless there is an agenda item specifically relating to that issue.
- 2.10 If a petition does not follow the guidelines as set out, the CJC may decide not to do anything further with it. In that case, you will receive a written explanation of the reasons.
- 2.11 Although petitions can run for the duration requested by the petition maker, the maximum period the CJC will allow petitions to remain open on their website for the purposes of an e-petition will be 6 (six) calendar months.

3. What petitions will not be accepted by the CJC?

3.1 The following petitions cannot be dealt with through this Scheme

- (a) Any matter relating to a planning decision, including about a development plan document or community infrastructure levy
- (b) Any matter where there is an appeals procedure in place
- (c) Any matter relating to a matter that could be considered by the CJC's Standards Committee relating to the standard of a member

3.2 However a petition that alleged a systematic failure to deliver services in the above area is within the scope of this Scheme)

3.3 A petition will not be accepted by the CJC if:

- (a) it duplicates another, concurrent petition. In this case, signatures will be added to the first such petition to be received by the CJC
- (b) it repeats a petition received within the previous six months, whether or not the petition organiser is the same in each instance
- (c) in the opinion of the CJC's Chief Executive Officer or Monitoring Officer, it is personal, rude, defamatory or vexatious in nature
- (d) it becomes apparent that any local elector's name, address or signature has been added to the petition without their explicit consent
- (e) it is not in relation to a matter for which the CJC has a responsibility and which affects the administrative area or citizens of the CJC;
- (f) It would require the disclosure of confidential or exempt information in response;
- (g) It relates to the personal circumstances or conduct of any officer and Member or conditions of service of employees;
- (h) It relates to an individual, particular group or business or the questioner's own particular circumstances;
- (i) It would be ultra vires or illegal for the CJC to consider;
- (j) It relates to a matter which is the subject of legal or enforcement proceedings or an appeal to a court or tribunal or to a Government Minister or the National Assembly or an investigation by the Public Service Ombudsman for Wales;
- (k) It relates to the activities and aims of a political party or organisation;
- (l) It would require the expenditure of a disproportionate amount of time, money or effort to prepare the answer.
- (m) It falls within the criteria set out in paragraph 3.1 above.

3.4 If the CJC reject your petition or you feel that the CJC has not dealt with your petition properly, please contact the CJC's Monitoring Officer who will review your complaint and will advise you of the action intended. Please provide a short explanation of your reasons in your communication with us:

Monitoring Officer
Neath Port Talbot County Borough CJC
Civic Centre
Port Talbot
SA13 1PJ
Email: democratic.services@npt.gov.uk

3.5 The decision of the Monitoring Officer or the appointed officer will be final and not subject to the internal complaints process though a complaint may be made to the Public Service Ombudsman for Wales should you remain dissatisfied.

4. What will the CJC do when it receives my petition?

4.1 An acknowledgement will be sent to the petition organiser within **3** working days of receiving the petition. It will let you know what the CJC plans to do with the petition and when you can expect to hear from the CJC again. A copy of your petition will also be forwarded to the CJC's Leader and the Chief Executive.

4.2 The petition will be published on the CJC's Petitions Register on the CJC's website (www.npt.gov.uk).

4.3 If the CJC considers it can meet what the petition asks for, the acknowledgement may confirm what action has been taken on the request and the petition will be closed.

4.4 If some other action is proposed or intended, the acknowledgement will explain this. If the petition has enough signatories to trigger a debate at a meeting of the CJC, then the acknowledgment will confirm this and advise when and where the meeting will take place. If the petition needs more investigation, you will be advised of the CJC's next steps.

4.5 The CJC reserves the right to verify signatories as required. Petitioners should ensure that a valid address and postcode is included for all petitioners that relates to a home address or work address. These details will be taken into account when identifying if there are enough signatories from people who live or work in the area to trigger a debate.

4.6 Any petition that is a duplicate or near duplicate of another petition that the CJC has already received will not normally be considered within a **6** month period although officers will exercise their discretion in individual cases. It is advised that details of previous petitions are checked on the website or contact the Monitoring Officer for advice at the start of your petition.

4.7 To ensure that people know what the CJC are doing in response to the petitions received, the details of all the petitions submitted, including those pending action will be published on the CJC's website, except in cases where this would be inappropriate

4.8 Please note that in the period preceding an election or a referendum, the CJC may need to treat any petitions received differently. Under such circumstances, the reasons for this will be explained to the organiser(s) of the petition.

4.9 The CJC's response may also depend on the number of people who have signed the petition. The table below sets out the thresholds:

Number of Signatories	Response
1-100	Response from the Chief Executive
101-500	Response from the Chair
500+	Referred for debate at a meeting of the CJC

- 4.10 Where the matter is placed before a meeting of the CJC the organiser(s) of the petition will be invited to address, or nominate another person to address, the relevant committee when a petition is considered for the first time giving 5 minutes to present the petition.
- 4.11 Following this first hearing, it will be debated by Members up to a maximum of 15 minutes whereupon, it is likely that the CJC will request an investigation into the issue which will return for further consideration when the investigation has concluded. If a meeting agrees with the statement and request for change cited in a petition, it may seek to resolve the issue by making recommendations to relevant service areas or decision-making bodies within the CJC or, where a petition relates to something over which the CJC only has direct influence, by making recommendations to other organisations.
- 4.12 The petition organiser will receive written confirmation of the outcome of the discussion and of the CJC's decision and any explanation in the event of CJC not being able to take the action which had been requested. This information will also be published on the CJC's website. The petition organiser will also be made of any future reports where the matter is to be considered unless they confirm otherwise that they do not wish to be informed.

5 E Petitions

- 5.1 The CJC welcomes e-petitions being created and submitted through its website via the website page www.npt.gov.uk/petitions and www.npt.gov.uk/deisebau
- 5.2 E-petitions must follow the same guidelines as for paper petitions and in addition:
- (a) Petition organisers and subscribers must provide a valid email address as well as their name and address; and
 - (b) The period for which the petition shall be open to subscription must be determined at the outset.
- 5.3 The petition organiser will need to provide their name, postal address and email address, and will need to decide how long the petition is to be open for signatories. It maybe that the ending of the petition would coincide with a relevant meeting or decision. It may be helpful to discuss this with Democratic Services. If so, please contact us via email at democratic.services@npt.gov.uk
- 5.4 When an e-petition has been submitted on the CJC's website, the petitions will be acknowledge within **3** working days and this will include a link to the petition. Upon the e-petition reaching its end date, it will be closed to further subscription and will then be dealt with as explained in Section 4.
- 5.5 When you create an e-petition, it may take **3** working days before it is published online. This is because we have to check that the content of your petition is suitable before it is made available for signature.
- 5.6 If it is considered that your petition cannot be published for any reason, the CJC will contact you within this time to explain. You will be able to change and resubmit your petition if you wish. If you do not do this within **3** working days, a summary of the petition and the reason why it has not been accepted will be published under the 'rejected petitions' section of the website.
- 5.7 When an e-petition has closed for signature, it will automatically be submitted to Democratic Services. In the same way as a paper petition, you will receive an acknowledgement within **3** working days.
- 5.8 E-petitions that have been created through websites other than the CJC's' can be submitted to the CJC but will still need to meet the criteria as set out.

Petition Template

Guidance Notes:

Please use this suggested template, additional pages should also include the petition subject at the top of the page.

The petition organiser must live, work or own a business in the locality that comprises the South West Wales Corporate Joint Committee

If you wish to sign this petition, please put down your address if you live, work or own a business in the locality of the South West Wales Corporate Joint Committee as this will count towards any threshold for debate at CJC meetings

Signatories from outside the locality will be taken into consideration in respect of the issue being raised, but will not count towards the numbers required for formal debates under the scheme.

Please also refer to the petitions scheme available at www.npt.gov.uk for further information about how we deal with petitions at the CJC.

Contact Details of the Lead Petitioner

(the person the CJC will contact with responses to the petition)

Full Name:	
Address for Correspondence:	1st Line: _____ 2nd Line: _____ 3rd Line: _____ Post code: _____
Home Telephone No:	
Mobile Number No; :	
Email address:	
Live/Work/Service user (please indicate all that apply)	

Signature	
------------------	--

PROTOCOL FOR PUBLIC SPEAK AT COUNCIL MEETINGS

1. A period of up to 15 minutes in each meeting shall be allowed for public questions commencing
2. Any person (other than elected Members or employees of the of the constituent authorities that make up the South West Wales Corporate Joint Committee (“CJC”) who resides or works in the locality of the authorities that comprise the CJC shall be entitled to ask a question at a meeting of the CJC or any of its sub-committees.
3. A question may only be asked if notice has been given by delivering it in writing or by electronic mail to the mailbox set up by the Monitoring Officer for such purpose no later than 5pm, 2 Working Days before the day of the meeting. Each question must give the name and address of the questioner and must specify the person to whom it is to be put (by name or title).
4. Where the questioner indicates that they wish to ask their questions in the Welsh language, welsh language translation will be sought for that particular question and answer. **In the event that Welsh language translation is not available, then this will be discussed with the questioner and alternative arrangements will be considered/sought.**
5. Where the questioner indicates any additional needs to enable the question to be put, the Monitoring Officer shall liaise with the questioner to ensure all appropriate needs are capable of being met in the delivery of the questions. In the event that reasonable adjustments are not able to be made, alternative methods of delivery of the question will be considered with the questioner.

6. At any one meeting no person may submit more than one question and no more than one such question may be asked on behalf of one organisation.
7. The number of questions that an individual can ask in a municipal year shall be limited to two (to ensure that all individuals have an opportunity to attend such meetings). In the event though that a person wishes to attend a meeting to ask a question over and above these two occasions, they shall be entitled to request it, provided their question is not rejected pursuant to clause 8 below.
8. The Chair of the CJC may reject a question, provided they have consulted with the Chief Executive, Monitoring Officer, (with the ruling of the Chair final) if it:
 - (a) is not related to matters for which the CJC has a responsibility;
 - (b) Comes from an individual who has been declared a vexatious complainant
 - (c) is in relation to matters which
 - (i) are defamatory, frivolous or offensive;
 - (ii) require the disclosure of confidential or exempt information; or
 - (iii) relate to the personal circumstances or conduct of any officer and Member or conditions of service of employees;
 - (iv) relate to an individual, particular group or business or the questioner's own particular circumstances;
 - (v) which are ultra vires or unlawful;
 - (vi) is substantially the same as a question which has been put at a meeting in the past six months;

(vii) relates to a matter which is the subject of legal or enforcement proceedings or an appeal to a court or tribunal or to a Government Minister or the Member of the Senedd or an investigation by the Public Service Ombudsman for Wales;

(viii) relates to the activities and aims of a political party or organisation;

(ix) is a statement or otherwise is not a genuine enquiry; or

(x) would require the expenditure of a disproportionate amount of time, money or effort to prepare the answer

9. The Monitoring Officer will make a record of each question received and a copy of the questions to be asked at a meeting will be open to public inspection and circulated to Members prior to the meeting. The questioner shall be given the opportunity to read their question orally.

10. Questions will be asked in the order in which notice of them was received, except that the Chair may group together similar questions.

11. If the questioner is absent or fails to identify themselves then the question will be deemed to be withdrawn or alternatively arrangements can be made with the local member for the issue to be raised on their behalf.

12. A questioner who has put a question in person may also put one supplementary question without notice to the Member who has replied to his or her original question. A supplementary question must relate to the original question or the answer given and be limited to one minute. The Chair may reject a supplementary question on any of the grounds set out above.

- 13.No more than five minutes will be allowed for a response to any one question.
- 14.Any question which cannot be dealt with during public question time, either because of lack of time or because of the nonattendance of the Member, to whom it was to be put, will be dealt with by a written answer and a copy of the answer will be recorded in the minutes of the meeting
- 15.An answer may take the form of:
 - (a) an oral answer given by the person to whom the question is addressed or another person nominated by them;
 - (b) where the desired information is in a publication of the CJC or other published work, a reference to that publication; or
 - (c) where the reply cannot conveniently be given orally, a written answer circulated later to Members of the CJC.
- 16.A person to whom a question is addressed may decline to answer provided that they state the reason for declining to answer.
- 17.The Chair shall have discretion to instruct that a composite answer may be given to any questions which are closely related or on the same subject matter, wherever he/she considers this appropriate. This shall not prejudice any right to ask a supplementary question, which may be available under the CJC Procedure Rules/Scrutiny Procedure Rules.
- 18.A copy of the questions that are to be asked at a CJC shall be included on the Agenda item for the corresponding Overview and Scrutiny Committee.

Protocol on Member/Officer Relations

The purpose of this Protocol is to guide Members and Officers of the CJC in their relations with one another.

Mutual respect between Members and Officers is essential to good local government. However, close personal familiarity between individual Members and Officers can damage this relationship and prove embarrassing to other Members and Officers.

The relationship has to function without compromising the ultimate responsibilities of Officers to the CJC as a whole, and with due regard to such technical, financial, professional and legal advice that Officers can legitimately provide to Members. The Protocol seeks to set a framework that assists the working relationships between Members and Officers.

1. Underlying Principles

The following general principles apply to all relations involving Members and Officers.

All relations shall be conducted:

- with respect for others and in a way which promotes equality
- with honesty and integrity
- acknowledging the duty to uphold the law and act in accordance with the trust placed in them by the public
- in a way that promotes objectivity, accountability and openness
- acknowledging the duty of confidentiality that exists in relation to information given in confidence and information which the CJC is entitled by law to treat as confidential
- with a view to establishing and promoting positive working relationships

2. Member/Officer Relationships generally

Both Members and Officers are involved in public service. However, their respective roles are quite different:

- Members are responsible to the electorate;
- Officers are responsible to the Chief Executive and to their respective Corporate Directors.

Individual Members are not permitted to give instructions to Officers unless specifically authorised to do so by the CJC.

An Officer's job, where it is part of his/her duties, is to provide appropriate advice to Members with impartiality. Such advice must be given in an equitable manner, irrespective of the political nature of the elected Member concerned.

For the effective conduct of CJC business there must be mutual respect, trust and courtesy in all meetings and contacts, both formal and informal, between Members and Officers. This plays a very important part in the CJC's reputation and how it is seen in public. It is very important that both Members and Officers remember their respective obligations to enhance the CJC's reputation and to do what they can to avoid criticism of other Members, or other Officers, in public places.

It is important in any dealings between Members and Officers that neither should seek to take unfair advantage of their position.

In their dealings with Officers (especially junior Officers) Members need to be aware that it is easy for them to be overawed and feel at a disadvantage. Such feelings can be intensified where Members hold senior official and/or political office.

A Member should not apply undue pressure on an Officer either to do anything that he is not empowered to do or to undertake work outside normal duties or outside normal hours. Particular care needs to be taken in connection with the use of CJC property and services.

Similarly, an Officer must neither seek to use undue influence on an individual Member to make a decision in his favour, nor raise personal matters to do with their job, nor make claims or allegations about other Officers.

Close personal familiarity between individual Members and Officers can damage the principle of mutual respect. It could also, intentionally or accidentally, lead to the passing of confidential information or information which should not properly be passed between them, such as personal details.

3. Roles of Members

All Members will:

- (i) collectively be the ultimate policy-makers and carry out a number of strategic and corporate management functions;
- (ii) participate in the governance and management of the CJC;
- (iii) represent their communities and bring their views into the CJC's decision-making process, i.e. become the advocate of and for their communities;
- (iv) deal with individual casework and act as an advocate for constituents in seeking to resolve particular concerns or grievances;
- (v) balance different interests identified within the electoral division and represent the electoral division as a whole;
- (vi) contribute to the continual improvement of CJC services
- (vii) be involved in decision-making;
- (viii) be available to represent the CJC on other bodies; and
- (ix) maintain the highest standards of conduct and ethics.

In carrying out their roles, Members should respect the political neutrality and integrity of all officers employed by the CJC.

Members should be aware of the need to declare interests when meeting with officers outside of formal CJC meetings as the Member's Code of Conduct equally applies in telephone calls, face to face meetings and virtual meetings

4. Roles of Officers

The role of Officers is to work for and serve the CJC as a whole. They shall be responsible for the day-to-day managerial activities and operational decisions which the CJC takes and should provide support to all Members in their several roles. Such support must be given in an equitable manner, irrespective of the political nature of the elected Member concerned.

The Chief Executive and Statutory Officers shall be entitled to offer advice at meetings of all member bodies if he/she thinks it is necessary to ensure that all relevant matters are taken into account.

Where an Officer feels that his/her political neutrality or integrity is being compromised in any way, he/she shall notify the Chief Executive.

Officers should at all times be aware of whether they occupy a politically sensitive or specified post. The Local Government and Housing Act 1989 (LGHA 1989), as amended by the Local Democracy, Economic Development and Construction Act 2009 imposes restrictions on the political activities of local government Officers and prevents an individual from having any active political role either in or outside the workplace. Further advice should be sought from the Head of Legal and Democratic Services where appropriate.

5. Relationship between Leader; Cabinet Members; Chairs/ Members of Scrutiny Committees; other Committees; and Officers

Whilst there is necessarily going to be a close working relationship between certain Members (e.g. the Leader of the CJC) and the Chief Executive, such relationships should never be allowed to become so close or appear to be so close, as to damage the professional relationship and prove embarrassing to other Officers and other Members.

Given the nature of the respective roles of Members and Officers, it is accepted that the Officers, while remaining politically neutral, will inevitably give advice on a wider range of issues and on a more regular basis. Officers are obliged to

respond positively to any requests from Members of Scrutiny and other Committees for appropriate advice and information relevant to any issues under consideration.

6. Other Individuals who are Members of CJC Committees

Other individuals who are members of CJC Committees, e.g. through co-option, shall follow and shall be treated in accordance with the underlying principles set out in this Protocol. Additionally, any duties of confidentiality which they owe to the body they are representing shall be respected.

Such individuals shall have the same right to advice from Officers on CJC related matters as Members have.

Conflicts of interest between a person's personal, professional or business interests and those of the CJC may arise from time to time. Such conflicts shall be declared and dealt with in accordance with the CJC's procedures.

7. Press and Media Relations

Officers dealing with the press and media, and any press/media releases that are issued, should not seek to further the interests of a political party or a particular Member other than as a representative of the CJC.

The CJC will follow such national codes and guidance on press and publicity as are in force from time to time.

8. Correspondence

Members may not commit the CJC to any contract or course of action, and should ensure in personal correspondence that personal or political views expressed cannot be taken by the recipient to represent those of the CJC.

9. Breach of protocol

If a Member considers that he has not been treated with proper respect or courtesy he may raise the issue with the Chief Executive. If direct discussion with the manager does

not resolve the complaint it should be referred to the Head of Service or Director responsible for the Officer concerned. Breach of the Protocol may give rise to disciplinary proceedings against an Officer if the circumstances warrant it.

If an Officer considers that a Member has contravened the protocol he should consult his line manager who will if necessary involve the Chief Executive. In certain circumstances breach of the Protocol may also constitute a breach of the Members' Code of Conduct. If the breach is sufficiently serious this may warrant a formal reference to the Monitoring Officer as a complaint to be considered for potential investigation by the Standards Committee. Many complaints will be capable of informal resolution. The Monitoring Officer or the Chief Executive will assist in this process if necessary.

SOUTH WEST WALES CORPORATE JOINT COMMITTEE

Report of the Chief Executive

Report Title: South West Wales Regional Economic Delivery Plan (REDP)

Purpose of Report	To brief the CJC on the Regional Economic Delivery Plan for South West Wales
Recommendation	To adopt the REDP as the regional strategy for the economic wellbeing strand of the CJC's work programme.
Report Author	Phil Holmes
Finance Officer	Chris Moore
Legal Officer	Craig Griffiths

Background:

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 Regional Economic Delivery Plan is attached at Appendix A

The REDP complements the new Welsh Government Regional Economic Framework (REF) and provides a further layer of detail below the REF, outlining the objectives and actions that will deliver against the high level vision in the REF.

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 South West Wales Corporate Joint Committee is able to exercise economic wellbeing powers. Formal adoption of the REDP by the CJC will enable the CJC to leverage opportunities to help deliver the missions set out in the Plan.

Financial Impacts:

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).

The nature of the funding sources identified above will change over time. Given the scale of the opportunity (and the regional challenge) in South West Wales, there is potential 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. Further work will be undertaken to establish the business case for such a proposal.

Integrated Impact Assessment:

The CJC is subject to the Equality Act (Public Sector Equality Duty and the socio-economic duty), the Well-being of Future Generations (Wales) Act 2015 and the Welsh Language (Wales) Measure, and must in the exercise of its functions, have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Acts.
- Advance equality of opportunity between people who share a protected characteristic and those who do not.
- Foster good relations between people who share a protected characteristic and those who do not.
- Deliver better outcomes for those people who experience socio-economic disadvantage
- Consider opportunities for people to use the Welsh language
- Treat the Welsh language no less favourably than English.
- Ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

The Well-being of Future Generations (Wales) Act 2015 mandates that public bodies in Wales must carry out sustainable development. Sustainable development means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance

with the sustainable development principle, aimed at achieving the 'well-being goals'.

Workforce Impacts:

Given the breadth and scale of the REDP proposed project pipeline, it is envisaged that dedicated resources will be required to manage and facilitate delivery. As an interim measure, during 2022/23 it is proposed that EARTH staff resources are deployed to ensure momentum is maintained with individual local authority partners contributing resources as required. Financial contributions required of the CJC for subsequent years will be considered as part of the CJC budget setting process.

Legal Impacts:

The CJC is able to exercise economic wellbeing powers and these are the powers under which the CJC is requested to consider adopting the REDP.

Risk Management Impacts:

The REDP has been prepared to assist the region's economic recovery from the impacts of Brexit and the Covid pandemic. A full SWOT analysis was undertaken to inform the production of the REDP and the project pipeline.

Risk management will be undertaken at a programme and project level.

Consultation:

The REDP was prepared by the four local authorities in South West Wales in partnership with Welsh Government. In preparing the REDP, consultation has taken place with over 50 stakeholders from business, local authorities and Welsh Government, Universities, Further Education Colleges, leaders within the region's Enterprise Zones and local business partnerships, and the third sector.

Consultation has included one-to-one consultations throughout the process; discussions at county-level economic partnership boards including Regeneration Swansea, 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.

Reasons for Proposed Decision:

The REDP identifies that 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 university presence.

The economic analysis shows:

- 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 322,000 jobs in the region, an impressive increase of 20,000 on the 2013 figure.
- The productivity gap with the rest of the UK has narrowed slightly over time but is still substantial, with regional productivity (GVA per filled job) standing at 80% of the UK level in 2018.
- Economic activity rates in South West Wales have improved at a faster pace than the rest of the UK over the past 15 years, but the rate continues to fall behind the UK average: the economic activity rate in South West Wales was 73.8% in 2018, compared with 78.9% across the UK.
- There has been a steady improvement in qualification levels with 35% of the working age population qualified to NVQ level 4+ (degree level) compared to 22% in 2004, and the proportion with no qualifications has halved over the same period, but in relative terms there is still a gap with the rest of the UK
- The business base grew in the years leading up to the pandemic but the number of enterprises relative to the working age population (enterprise density) and start up rates remain lower than the rest of the UK.
- There is a widely recognised gap between demand and supply for industrial premises, with low rental levels affecting the viability of private sector led developments.
- Across the region concentrations of disadvantage are significant, principally in the urban centres of Swansea, Llanelli, Neath, Port Talbot, Pembroke Dock and upper Western Valleys.

Overall, the review of economic performance suggests good progress over recent years, especially in terms of job creation, but there is a persistent gap in outcomes between the region and the rest of the UK. This reflects the 'structural' nature of many of the region's challenges linked to the long-term processes of industrial change (which in some respects are still ongoing), and are shared with other regions in Wales and the UK.

The review has also identified a series of distinctive strengths and opportunities in South West Wales, especially linked with the region's energy potential (particularly green energy and the net zero opportunity), university-industrial links, strong cultural identity, environmental assets and quality of life offer. The REDP aims to build on these distinctive regional strengths and opportunities to develop a more prosperous and resilient South West Wales economy.

Unlike the previous Economic Regeneration Strategy, which was predominantly focused on improving productivity, the REDP recognises that 'Transformational' growth opportunities need to be balanced with the conditions for incremental improvements in resilience, capacity and capability across the whole of the economy. This was a key theme that emerged from consultation with regional partners during the preparation of the Plan. While there are distinctive opportunities to pursue at the 'leading edge', long-term employment resilience and wage growth is going to depend on the sustainability, productivity and expansion of the wider stock of regional businesses.

To help plan for the future, the REDP sets out three 'Ambitions' which set out the nature of the South West Wales economy that we want to work towards.

These are:

- Resilient and sustainable
- Enterprising and ambitious
- Balanced and inclusive

The ambitions are supported by three complementary Missions, which will guide activity over the next ten years:

- Mission 1 – 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.).
- Mission 2 – 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.
- Mission 3 – 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.

The REDP sets out some initial key action areas to deliver against the ambitions and missions. These actions will form the basis of a 'living' action plan document, in the form of a project pipeline supplement, that will be regularly reviewed by regional partners and will evolve to embrace new investment proposals as they emerge.

The REDP has now been approved each of the local authorities in the region as the over-arching economic regeneration policy document to replace the 2013 Swansea Bay City Region Economic Regeneration Strategy.

The CJC is invited to formally adopt the REDP and to use the Plan when exercising its powers to promote economic wellbeing.

Implementation of Decision:

The four local authority regeneration directors will oversee the implementation of the Plan and be responsible for developing project pipeline business cases, ensuring staff resources are allocated, securing investment and overseeing delivery of the REDP. The Chief Executive will work with officers of the constituent councils to identify opportunities for the CJC to support the delivery of the Plan.

Appendices:

South West Wales Regional Economic Delivery Plan

List of Background Papers:

[Swansea Bay City Region Economic Regeneration Strategy](#)

Welsh Government South West Wales Regional Economic Framework: [South-west Wales regional economic framework \(gov.wales\)](#)

Mae'r dudalen hon yn fwriadol wag

South West Wales Regional Economic Delivery Plan



SQW



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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

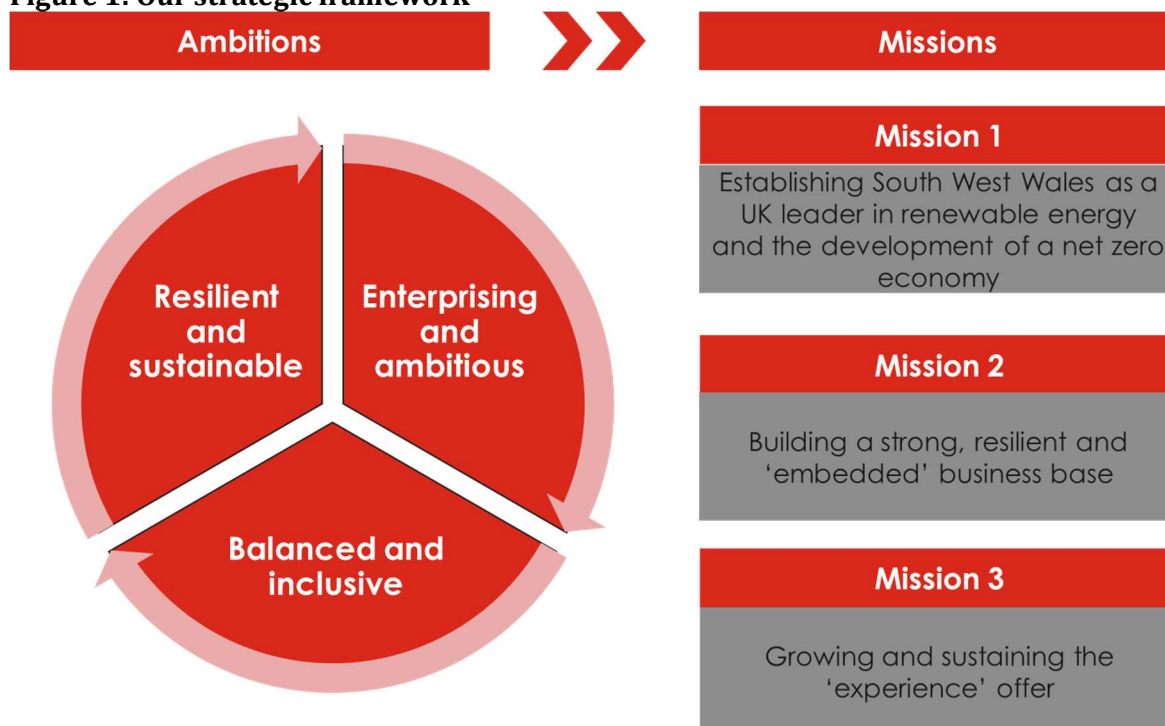
region itself, and 'out-of-region' links (for example, the South Wales Industrial Cluster and the links through to Cardiff Capital Region) will be of relevance.

- **'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”*.

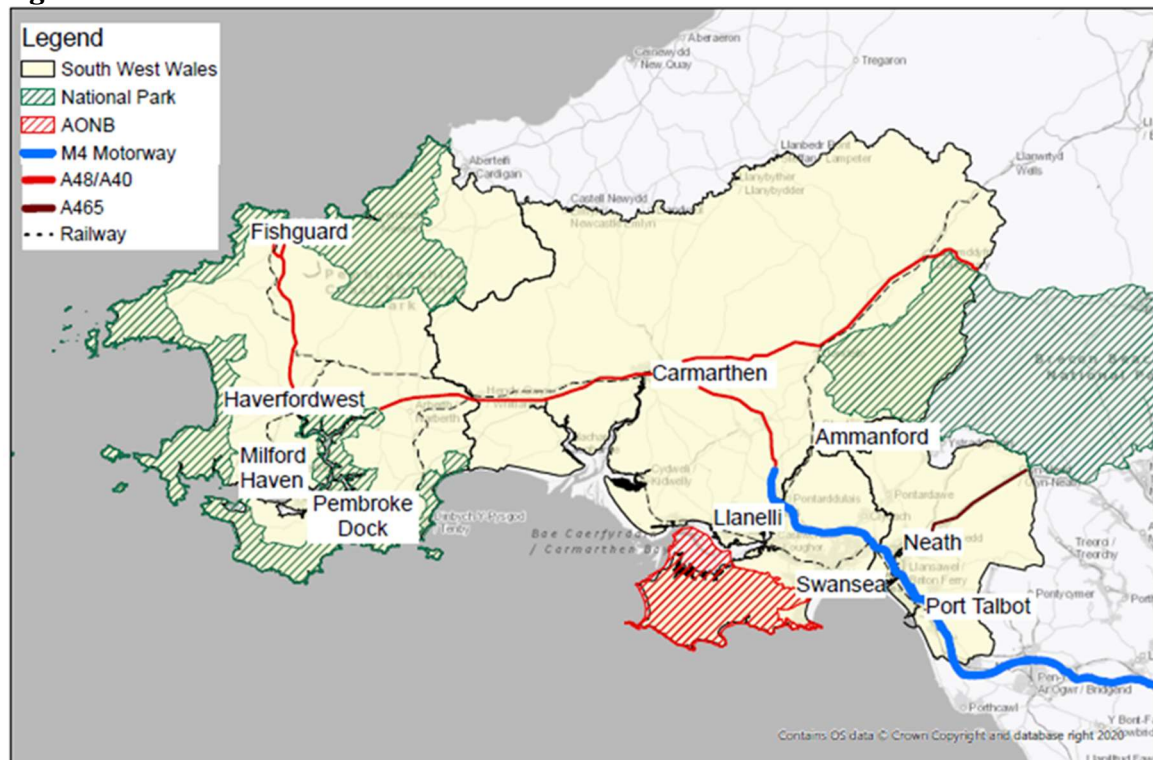
1. Introduction

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 language¹. 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 digitalisation⁴ and the adoption of an innovation strategy focused around meeting societal need⁵.
- 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 plan⁶. 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

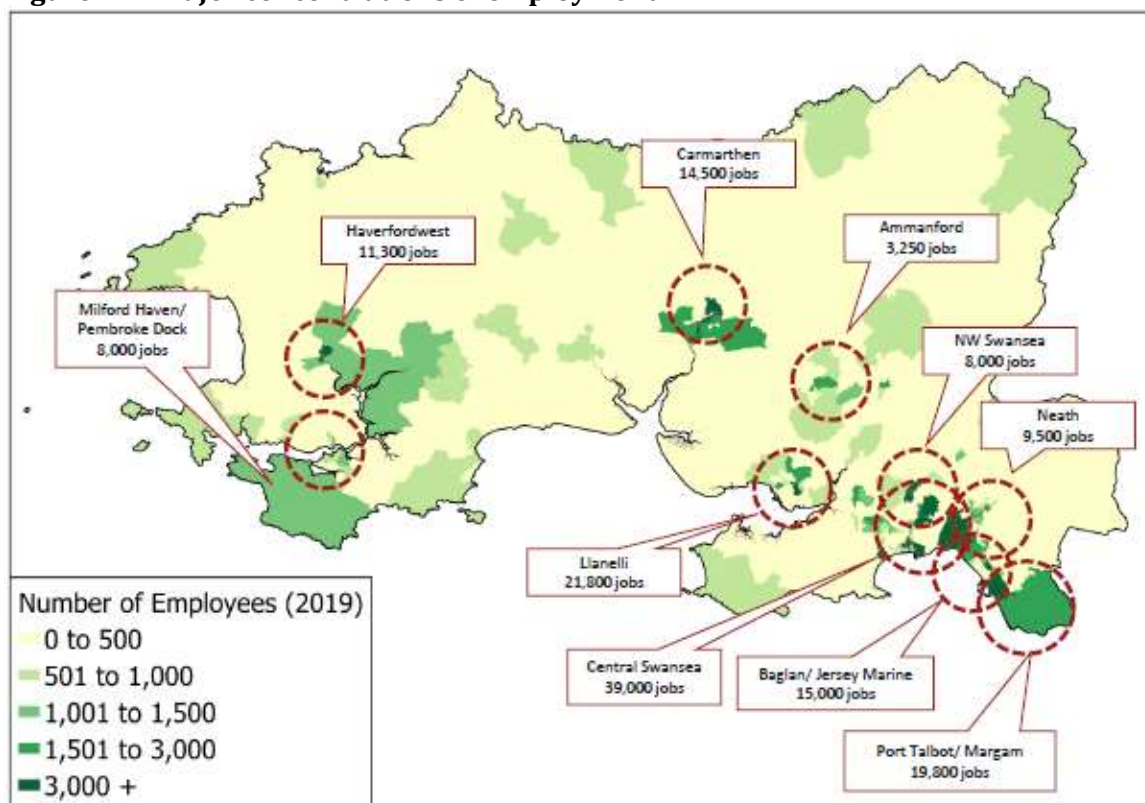
A distinctive heritage and a diverse economy...

- 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 housing⁷. 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 2020⁸. 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 size⁹. In South West Wales, the percentage of employments furloughed fell from 12.5% in December 2020 to around 5% in June 2021¹⁰, 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 averages¹¹. Notably, despite Swansea’s importance as a regional centre and inbound commuter destination, the city’s jobs density is low relative to Cardiff and Newport¹².

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.

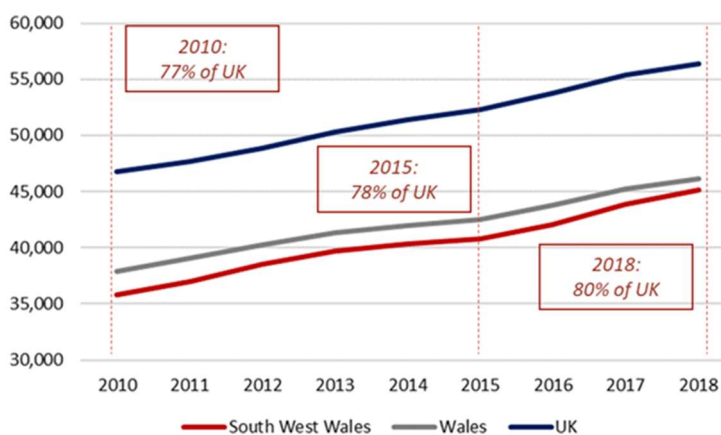
average pay¹³ and more opportunities for people to build careers and businesses in the region. But productivity can be seen as a somewhat abstract measure: a highly 'productive' economy might not necessarily be a sustainable or equitable one, and not everything that society values generates high levels 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 worker¹⁴. 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 on¹⁵. 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.**

- **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 economy¹⁶.

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

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 intelligence¹⁷.

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 UK¹⁸, and substantial variation across the region¹⁹.

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 significant rural/urban digital divide, with ultrafast penetration in Pembrokeshire among the lowest in the UK²⁰. 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 UK²¹. 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 opportunities²².

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' space²³.

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 pandemic²⁴.

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 work²⁵. 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 Swansea²⁷. 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) subjects²⁸. 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 UWTSU'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 above²⁹. 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 diverse³¹; and there are opportunities for productivity growth across the sectoral landscape³². 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 above³³.

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 targets³⁴. However, around 85% of the cut in emissions came from the power sector³⁵. 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 years³⁶.



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 creation³⁷. 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 a 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

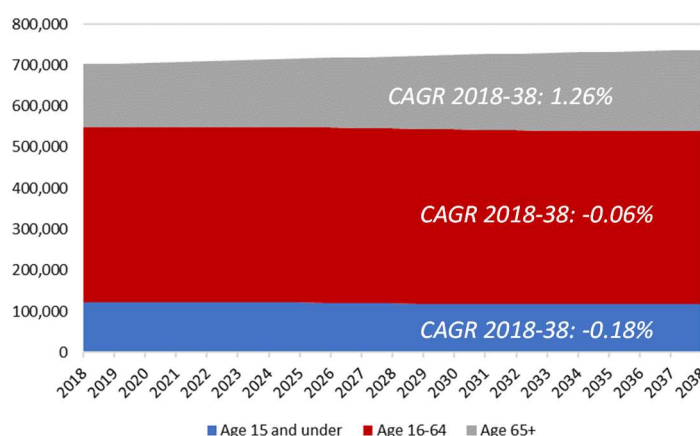
Responding to demographic change

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 period³⁸.

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).
- 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 coast³⁹. 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.

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



Source: StatsWales, 2018-based population projections

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 adaptation 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

Current assets	Next opportunities	Key challenges	Key actions
Concentration of onshore and offshore opportunities at different stages of market readiness Emerging Regional Energy Strategy and Welsh Government support University R&D assets and growing corporate capacity for industrial decarbonisation	Linking energy generation with industrial decarbonisation Making the most of opportunities presented by the existing knowledge/research base Translating early stage projects into investable propositions	Countervailing pressure of existing high carbon intensity industry Securing/ maintaining capacity to drive the strategic agenda, and major projects forward Competition from (and establishing collaborations with) other regions Securing Government support	Additional capacity to drive forward the agenda Progressing the region's major renewable energy generation projects Attracting and driving forward new industrial investment Decarbonising transport and the housing stock

Understanding the case for the Mission: the core rationale

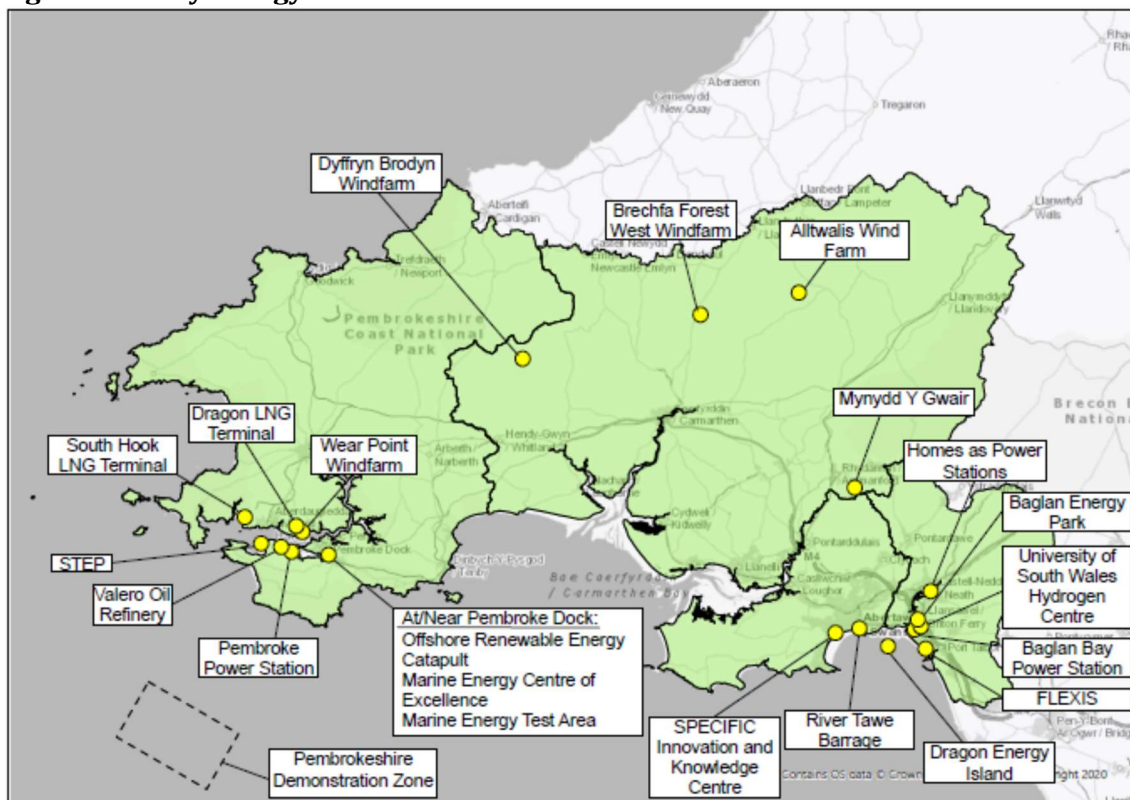
- 4.1** As set out in the evidence base the decarbonisation imperative is global, and in Wales is mandated by the UK and Welsh Governments' net zero commitments and the need to take urgent action now. There is a clear overall policy direction, which has been reinforced by the emerging suite of strategies at UK Government level ahead of COP26 in autumn 2021⁴⁰ 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



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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 years⁴³.

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

Current assets	Next opportunities	Key challenges	Key actions
<ul style="list-style-type: none"> Strong university-industrial links Local business networks, emerging clusters and some anchor businesses Growing policy interest in encouraging locally ‘embedded’ businesses and local supply chains Wales-wide institutions (e.g., Development Bank) 	<ul style="list-style-type: none"> Supporting dynamism (through entrepreneurship and early-stage expansion) Supporting resilience (through technology adoption, management capacity and succession) Supporting local supply chain development Building an effective (and broad) innovation ‘ecosystem’ 	<ul style="list-style-type: none"> Weak ‘infrastructure’ offer (e.g., commercial property, impeding start-up and expansion) Skills and capacity challenges Limited private sector support base Access to growth finance Barriers to commercialisation Limited business density and ‘leakage’ out of region 	<ul style="list-style-type: none"> Accelerated adoption and innovation support (linked with recommendations of Wales 4.0 in relation to business, skills and innovation support) ‘Progressive procurement’ within a local business and supply chain development system

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 Government⁴⁵ and the wide range of sector or thematic schemes (such as, in South West Wales, ASTUTE and RICE⁴⁶) 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 change⁴⁷. 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 Plan⁴⁸:
- 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 models⁴⁹.

- **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 process⁵⁰, 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**

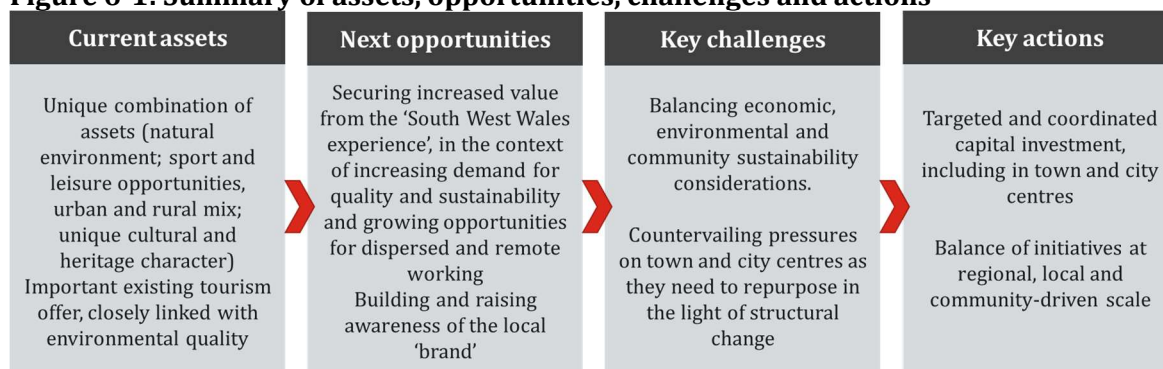
Despite the region's success in creating jobs, economic inactivity remains higher than in the rest of the UK. While in-work poverty is a significant issue - and one which our focus on productivity and resilience across all sectors seeks to tackle - there is strong evidence that being in work supports positive outcomes across a range of measures⁵¹. 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 identity⁵².
- 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	<ul style="list-style-type: none"> 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 <i>"resilient and sustainable; balanced and inclusive; and enterprising and ambitious"</i>?)
Options appraisal	<ul style="list-style-type: none"> Have a range of options been considered, and is there a clear case for the preferred option?
Value for money	<ul style="list-style-type: none"> Does the project represent good value, in terms of the outputs and outcomes it will achieve, relative to anticipated public costs?

Consideration	Description
Affordability	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> • 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.

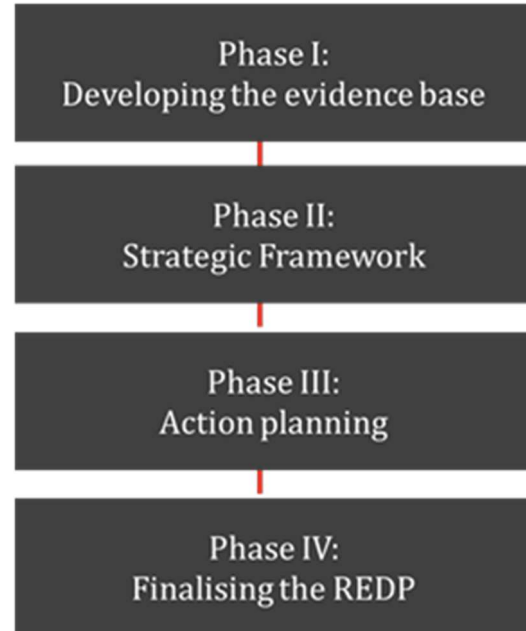
Indicator	Route to impact: Enabled through...
contracts (or on temporary contracts and not seeking permanent employment) and who earn more than 2/3 of the UK median wage)	
18. Percentage of people living in households in income poverty relative to the UK median	Measures to increase access to employment, 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:

- **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.

Figure C-1: Developing the Plan: Phases



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.

SOUTH WEST WALES CORPORATE JOINT COMMITTEE

Report of the Chief Executive

South West Wales Energy Strategy

Purpose of Report	To brief the CJC on the Regional Energy Strategy for South West Wales
Recommendation	To adopt the South West Wales Regional Energy Strategy as the framework for the CJC's work programme with further reports to be brought forward in due course identifying how it is proposed that the strategic intent will be delivered.
Report Author	Steven Jones
Finance Officer	Chris Moore
Legal Officer	Craig Griffiths

Background

As part of the response to the challenges and opportunities created by climate change, the 'net zero' decarbonisation agenda and the 'green industrial revolution', the Welsh Government has supported the development of regional energy strategies across Wales.

With the support of the Welsh Government Energy Service (WGES), a regional energy-planning group was established in January 2021. The core group consists of directors and lead energy officers from the four local authorities.

The core group is supplemented by a wider advisory and stakeholder group which over the last 12 months, has undertaken engagement, energy and economic modelling activity, that underpins the regional energy strategy which is attached at appendix 1. The timing of the strategy is significant given the recent international focus on COP26 and the publication of the Welsh Government's Net Zero Wales Plan (to be followed by a Net Zero Wales Skills Action Plan in Spring 2022). It should be noted that the strategy is cross-sectoral (public, private, third sector).

Main issues

According to the analysis the South West region is 'over-consuming' and, whilst consumption has – and is – reducing, the current trajectory is not on track to achieve the net zero targets by 2050 (2030 for the public sector).

Accordingly, the vision is to:

'Harness the region's low carbon energy potential across its on and off-shore locations to deliver a prosperous and equitable net zero carbon economy which enhances the well-being of future generations and the region's eco-systems, at a pace which delivers against the regional and national targets by 2030 and 2050'

The vision is supported by six regional priorities:

- Energy efficiency
- Electricity generation
- Smart and flexible systems
- Decarbonise heat
- Decarbonise transport
- Regional coordination

Across the region there has been progress made across all these priorities with major projects supported by the Swansea Bay City Deal complementing the work that each local authority is doing through their respective 'net zero' plans. In addition, the work that Public Service Board partners, communities and crucially, business and industry, are engaged in through a plethora of projects and initiatives – from neighbourhood micro-level up to macro-level transformational scheme – is helping to build momentum.

The scale of both the challenge and opportunity is also recognised as a key economic driver for the region. Consequently, the South West Wales Regional Economic Delivery Plan (see corresponding agenda item) and the (Welsh Government) Regional Economic Framework identify 'South West Wales as a UK leader in renewable energy and the development of a net-zero economy' as one of the three over-arching 'missions' for the economy.

All four local authorities have considered a draft version of the Regional Energy Strategy and agreed to support, although in the case of Pembrokeshire County Council the Cabinet resolved to 'note' the strategy in the absence of any clear indication of financial implications. However, the report to Pembrokeshire's Cabinet did clarify that 'there may be financial implications for the Council as the Strategy is implemented, and these will need to be considered at the appropriate time'.

Financial Impacts

Funding to take forward the South West Wales Energy Strategy will come from multiple sources including UK and Welsh governments, public sector partners, private sector businesses and investors, and local communities. Individual behaviour change will also contribute substantially, although this is difficult to monetise at the aggregate regional level.

Integrated Impact Assessment

The CJC is subject to the Equality Act (Public Sector Equality Duty and the Socio-Economic Duty), the Well-Being of Future Generations (Wales) Act 2015 and the Welsh Language (Wales) Measure, and must in the exercise of their functions, have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Acts
- Advance equality of opportunity between people who share a protected characteristic and those who do not
- Foster good relations between people who share a protected characteristic and those who do not
- Deliver better outcomes for those people to use the Welsh language
- Treat the Welsh language no less favourably than English
- Ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs

The Well-being of Future Generations (Wales) Act 2015 mandates that public bodies in Wales must carry out sustainable development. Sustainable development means the process of improving the economic, social, environmental and cultural well-being of Wales

by taking action, in accordance with the sustainable development principle, aimed at achieving 'well-being goals'

Workforce impacts

Given the breadth and scale of the Regional Energy Strategy, it is envisaged that a dedicated CJC funded resource will be required to manage and facilitate implementation, with individual local authority partners contribute resources as required. As an interim measure, during 2022/23 it is proposed that EARTH staff resources are deployed to ensure momentum is maintained.

Legal Impacts

There are no specific legal implications identified at this stage

Risk Management Impacts

The Regional Energy Strategy has been prepared to provide a roadmap towards the net zero targets. A detailed energy modelling and economic analysis has been undertaken to inform the production of the Strategy.

Risk management will be undertaken by stakeholders engaged in delivering projects that contribute to the strategy's vision and priorities.

Consultation

The Regional Energy Strategy was prepared by the Welsh Government Energy Service (WGES) and led by a core group of directors and lead officers from the four local authorities. In preparing the strategy, extensive consultation has taken place with a range of stakeholders under the guidance of an advisory board.

Reasons for Proposed Decision

To adopt a strategic approach to coordinating and facilitating the delivery of programmes and projects that will contribute towards the net zero agenda.

Mae'r dudalen hon yn fwriadol wag

South West Wales Energy Strategy (Draft)

Funded and supported by:



Llywodraeth Cymru
Welsh Government

Supported by:

1
Tudalen117

Prepared by:



Gwasanaeth Ynni
Energy Service

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South West Wales - Energy Strategy (draft)



Pembrokeshire County Council
Cyngor Sir Benfro



Version:	Comment:	Issued:
V1.0	For issue	2020
V2.0	Accessibility updates	November 2021
V2.1	Minor amendments	March 2022

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 jobs¹. 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
<p><i>* 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.</i></p> <p><i>**Impact on jobs is presented as either net or gross jobs depending on the available data.</i></p> <p><i>***Data on the percentage change in jobs and GVA for domestic energy efficiency is unavailable.</i></p> <p><i>***Data on the percentage change across all indicators for commercial and industrial energy efficiency is unavailable.</i></p>	

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

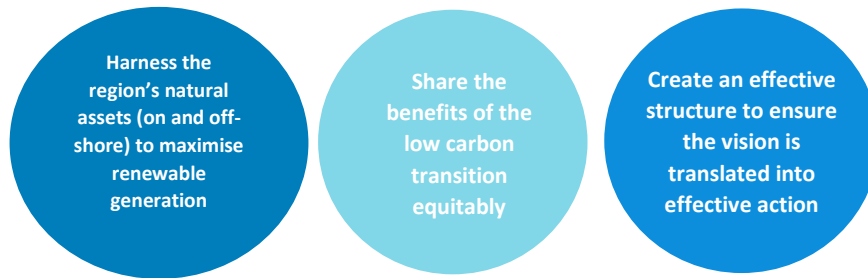
ASHP	Air Source Heat Pump
BEIS	The Department for Business, Energy, and Industrial Strategy
CCC	Committee on Climate Change
CHP	Combined Heat and Power
CO₂	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CITB	Construction Industry Training Board
DNO	District Network Operator
DEFRA	Department for Environment, 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



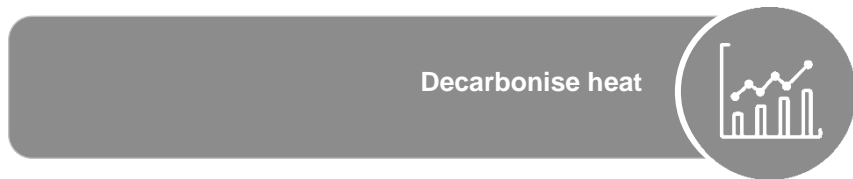
Energy efficiency



Electricity generation



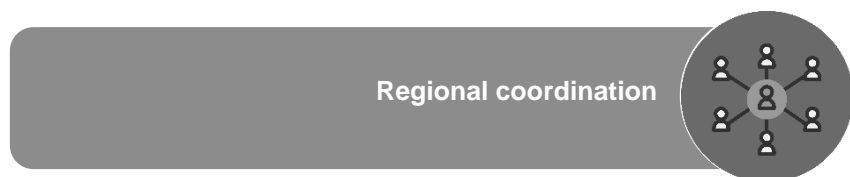
Smart and flexible systems



Decarbonise heat



Decarbonise transport



Regional coordination

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 (H₂), 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 H₂ 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 H₂ 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 study². 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

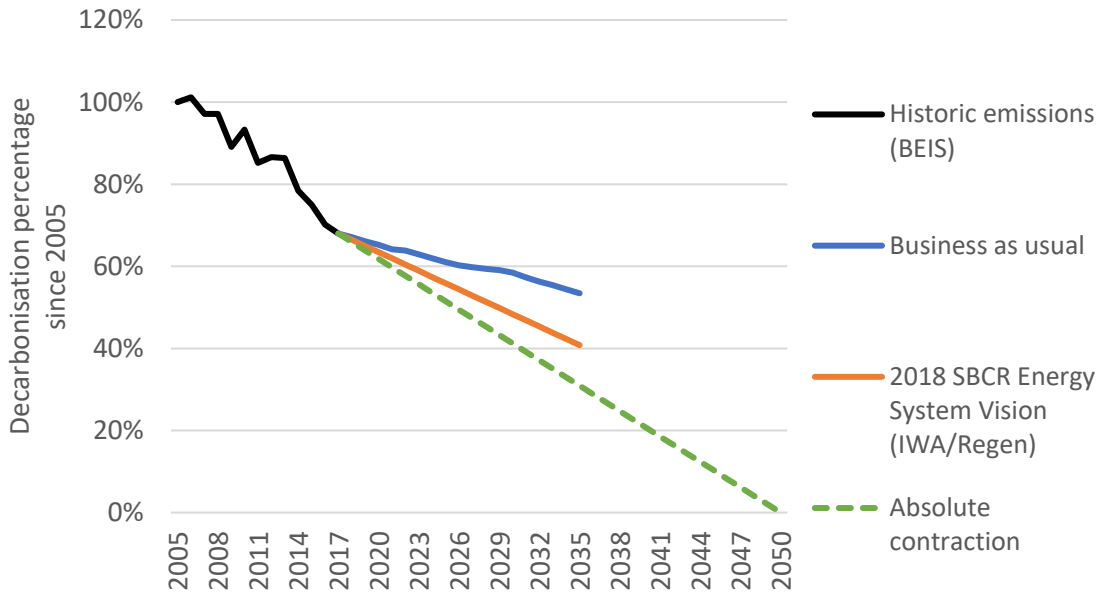


Figure 2: Business as usual and the 2018 Energy System Vision decarbonisation trajectories compared to a net zero absolute contraction method

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 Parliament³. 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](#)

South West Wales - Energy Strategy (draft)

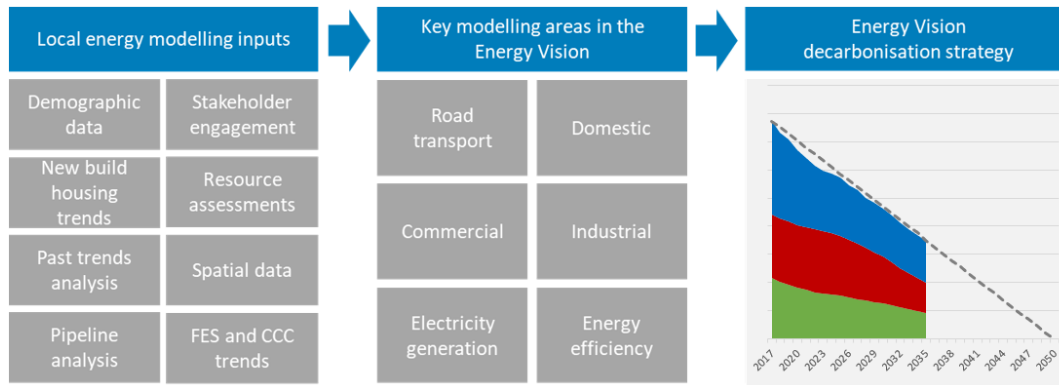


Figure 3: Outline modelling methodology

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 Scenarios⁶
- The project team's past work on future energy scenarios for Wales & West Utilities and for Western Power Distribution⁷ 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

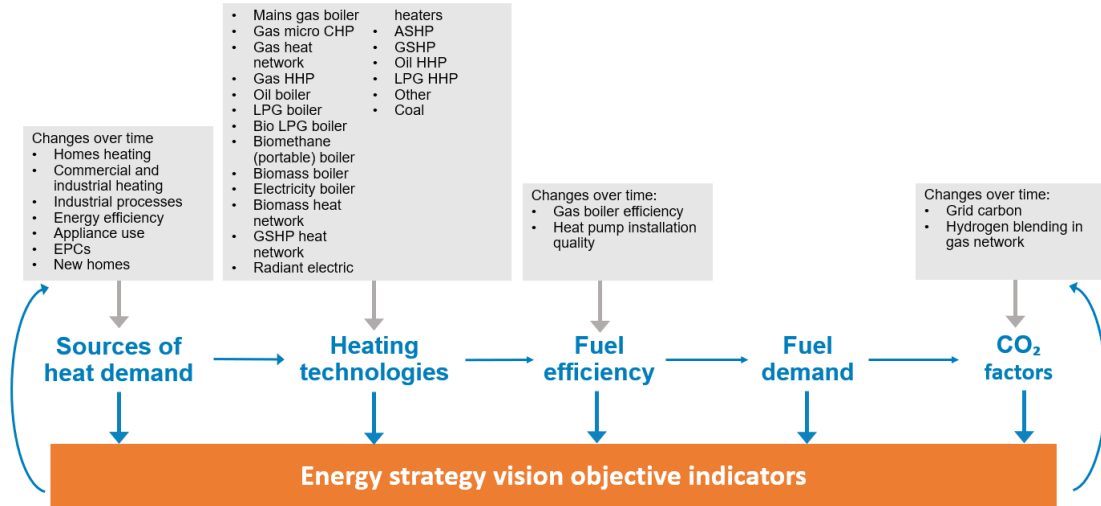


Figure 4: Diagram of the modelling approach for domestic heat

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
<ul style="list-style-type: none"> Domestic heat, power and energy efficiency Commercial and industrial heat, power and energy efficiency Road transport Local renewable energy generation 	<ul style="list-style-type: none"> Very large industry Rail Shipping Aviation 	<ul style="list-style-type: none"> 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 energy⁸, 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 Wales⁸, which is more than its 22% share of the Welsh population⁹ 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 transport⁷.

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

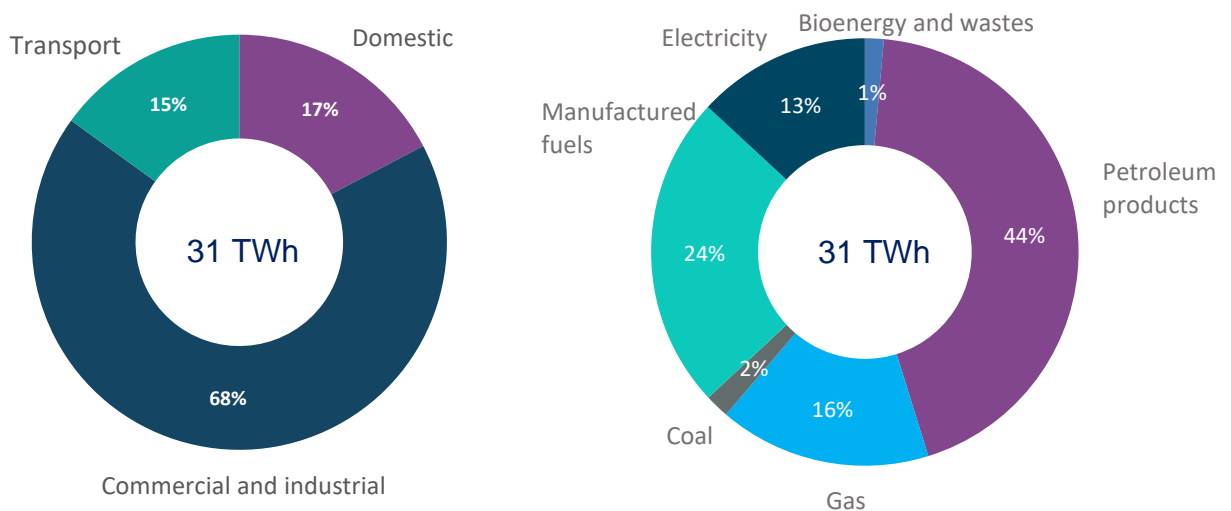


Figure 5: Breakdown of energy consumption in South West Wales, including very large industrial sites. Source: BEIS sub-national total final energy consumption, 2019.

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

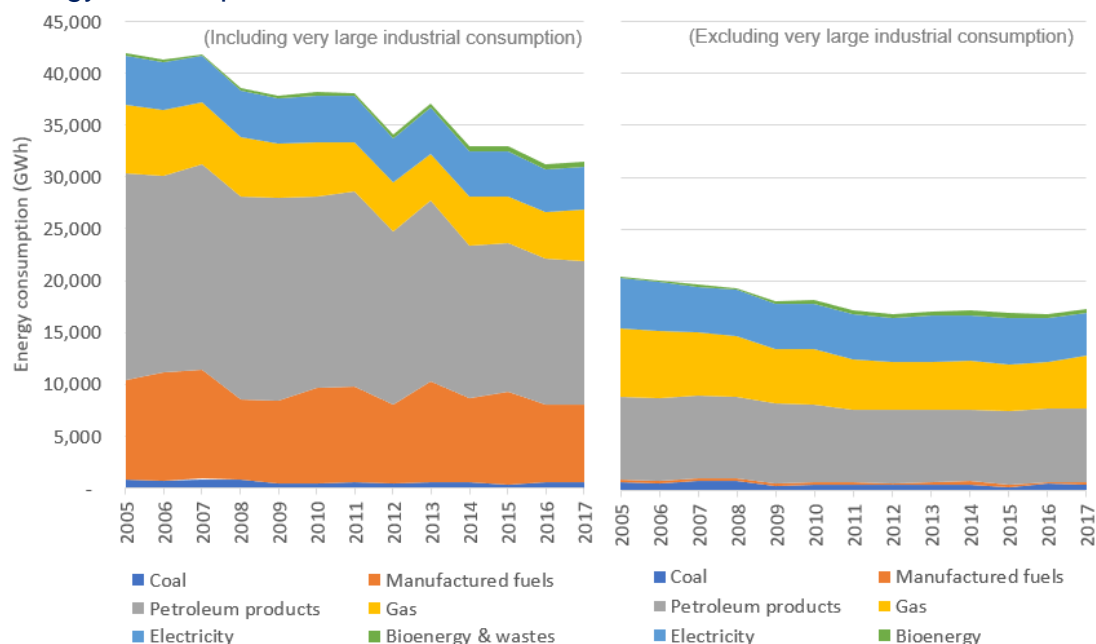


Figure 6: Trend of energy consumption in the South West Wales, by sector.
Source: BEIS sub-national total final energy consumption, 2019.

Analysis of BEIS sub-regional data¹⁰ 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

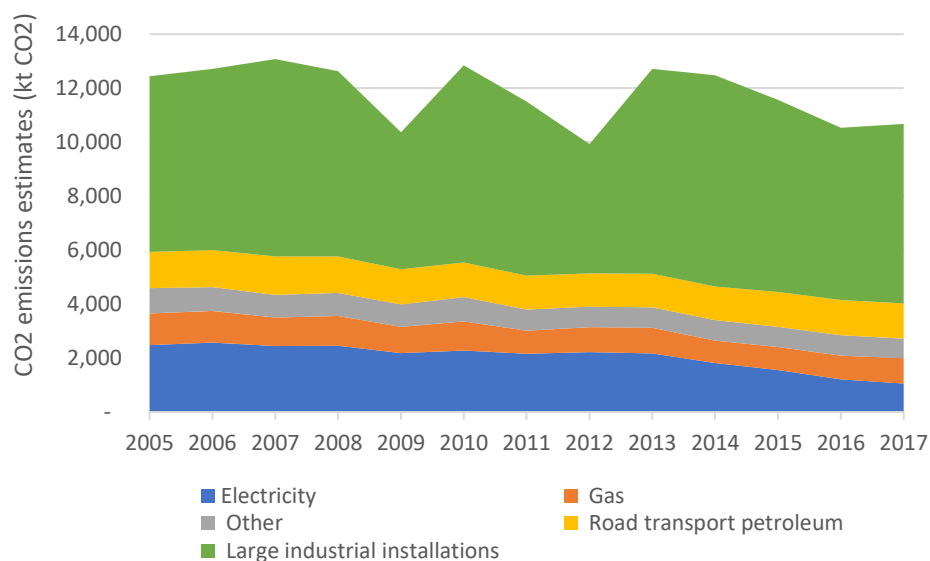


Figure 7: Estimated historic emissions in SWW show that large industrial consumption accounts for more than 50% of emissions in SWW Source: BEIS sub-national emissions

Emissions from energy consumption (including very large industrial consumption) reduced by around 14% from 2005 to 2017¹¹ 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

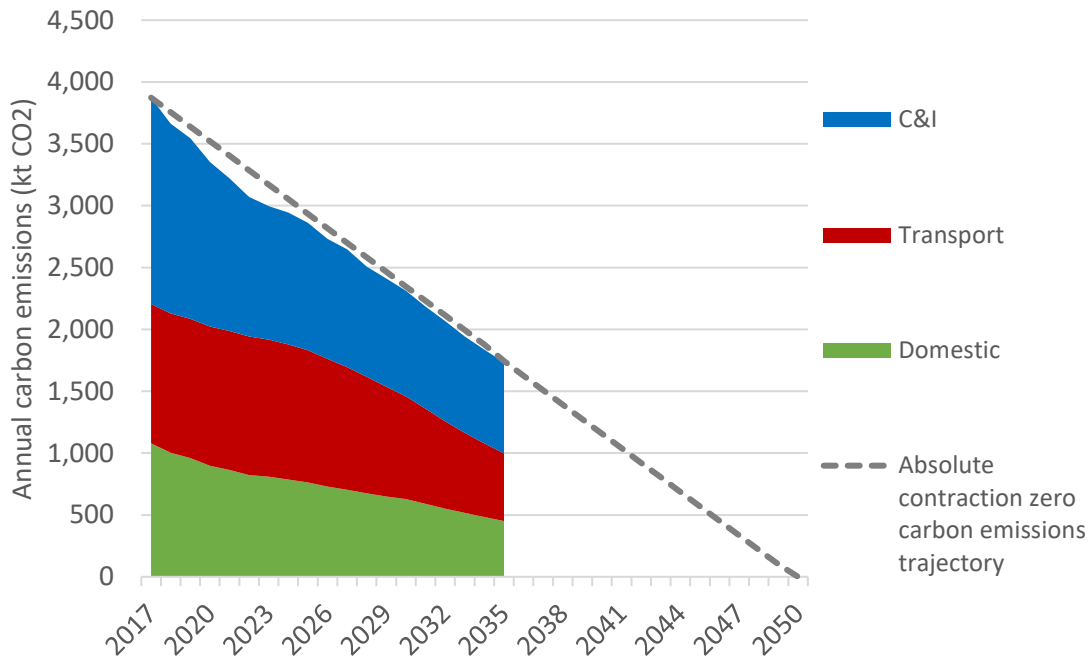


Figure 8: SWW's Energy Vision decarbonisation trajectory by sector to meet net zero 2050 under an absolute contraction methodology. Source: WGES analysis

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 2005¹². 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](#)

South West Wales - Energy Strategy (draft)

SWW's local authority areas are split into two pairs: the two more urban areas with more gas connections and the two more rural areas with fewer

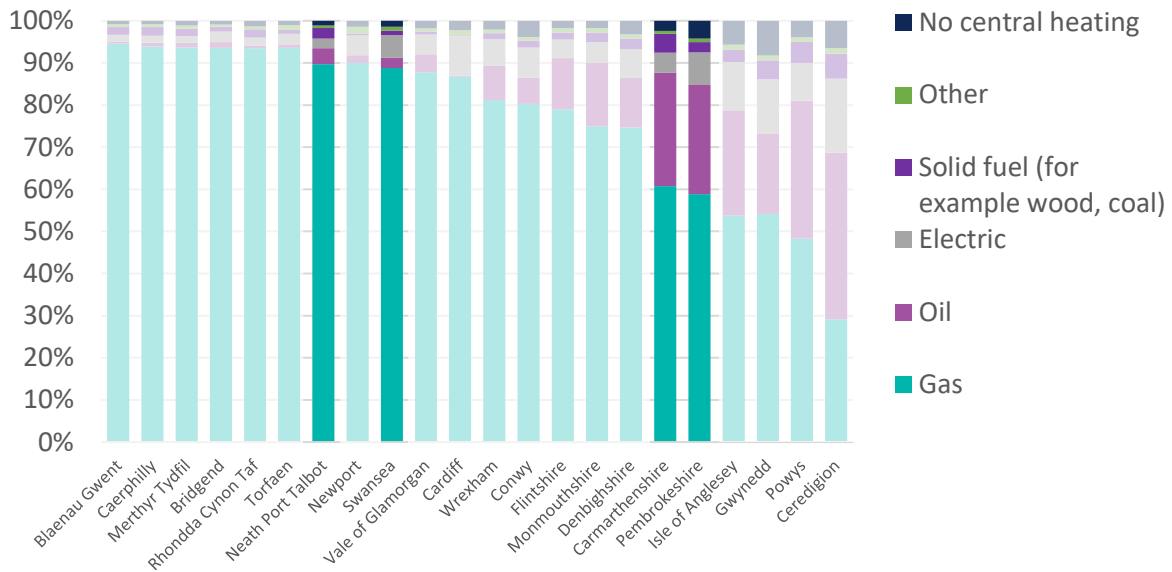


Figure 10: Proportion of homes heated by each heating fuel type, by local authority. Source: Census, 2011. MHCLG, Energy Performance Certificates¹³.

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

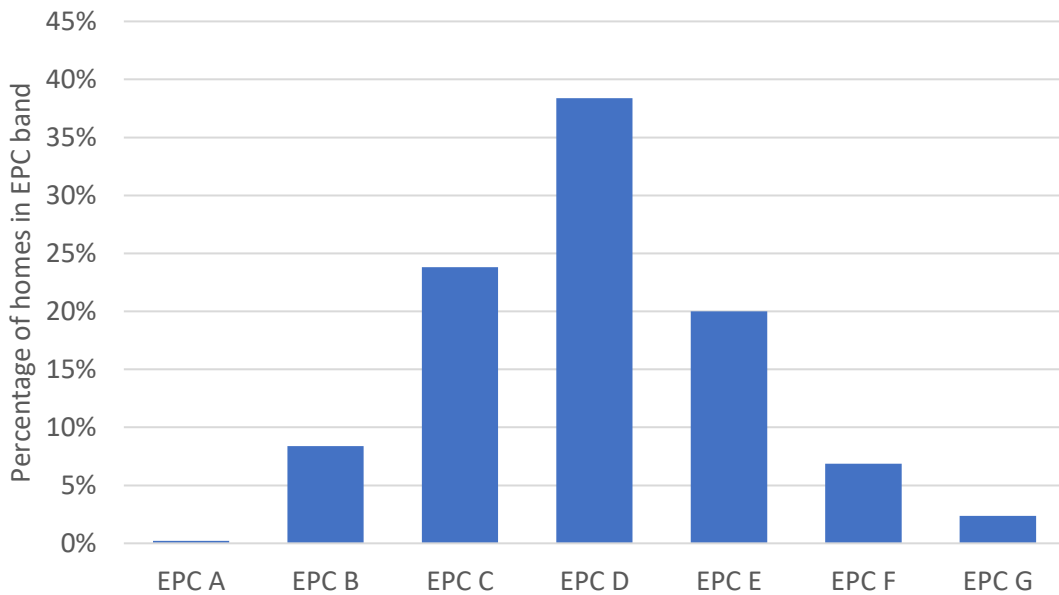


Figure 12: Proportion of homes in SWW in each EPC band. Source: MHCLG, Energy Performance Certificates

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).

Energy Efficiency

‘Deliver a step change in domestic and commercial and industrial energy efficiency represented by at least a 20% reduction in heat and electricity demand, with a 30% energy efficiency stretch target’



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.

Decarbonisation of Heat

'40% of heat supply from decarbonised heat supply sources – through electrification, gas decarbonisation and use of renewable energy sources. Reduce the overall carbon emissions from supply of heat (including energy efficiency) by at least 40% compared to 2017.'



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 kgCO₂/kWh now to 0.03 kgCO₂/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

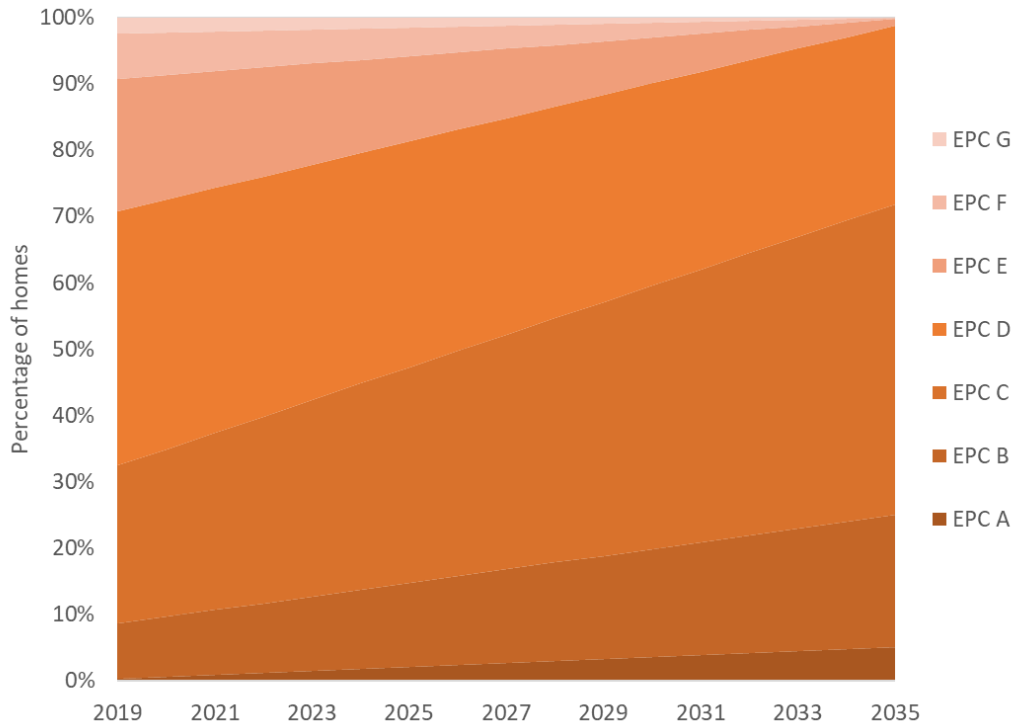


Figure 15: Estimated domestic EPC band changes to deliver the Energy Vision scenario. Source: WGES analysis

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

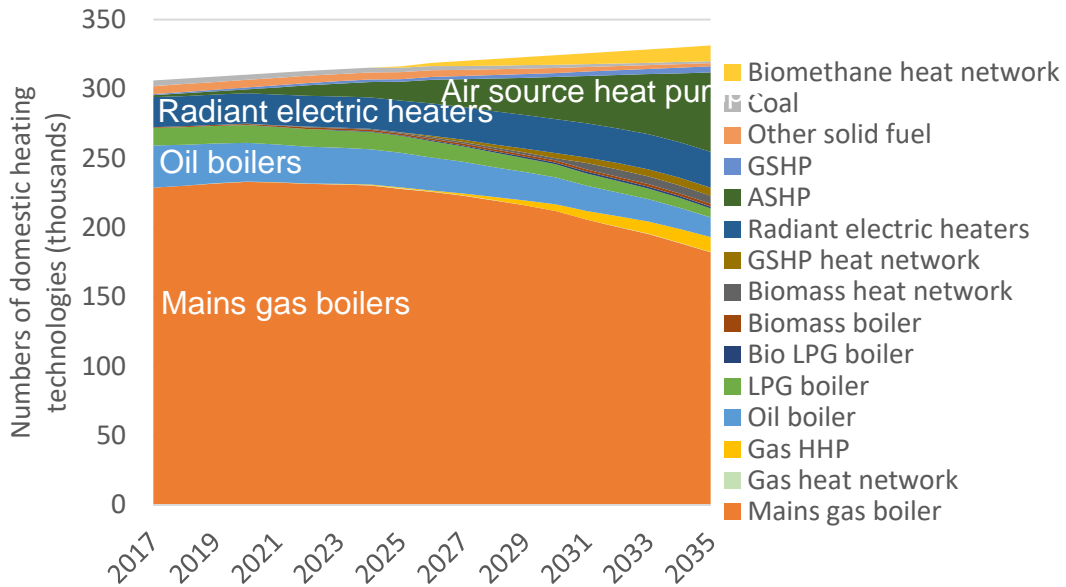


Figure 16: Breakdown of domestic heating technologies in the SWW Energy Vision scenario, including existing and new build houses. Source: WGES analysis

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 requirements¹⁴. 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

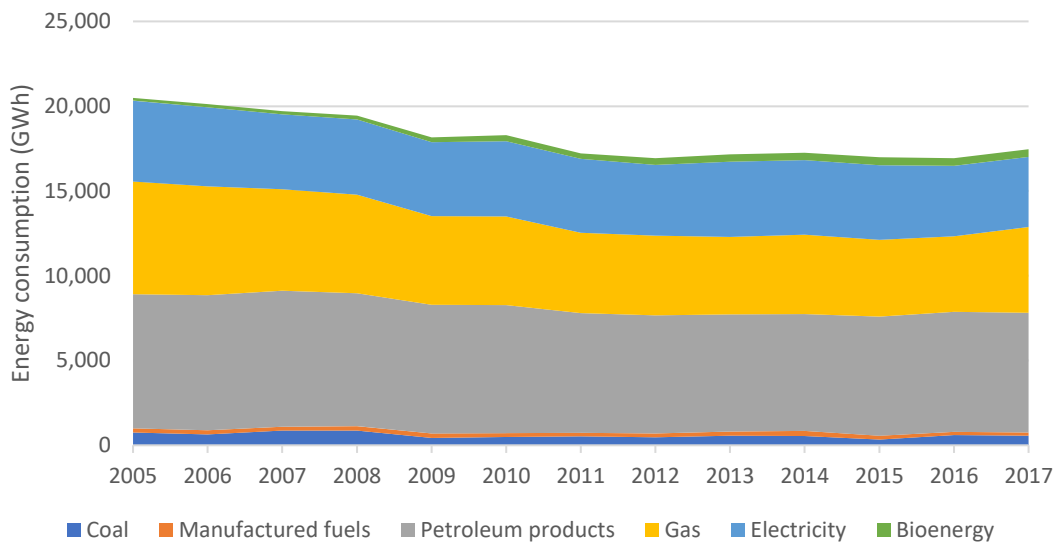


Figure 17: South West Wales' baseline commercial and industrial energy consumption, by fuel. Source: BEIS total final energy consumption (2019)

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 kgCO₂/kWh now to 0.03 kgCO₂/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

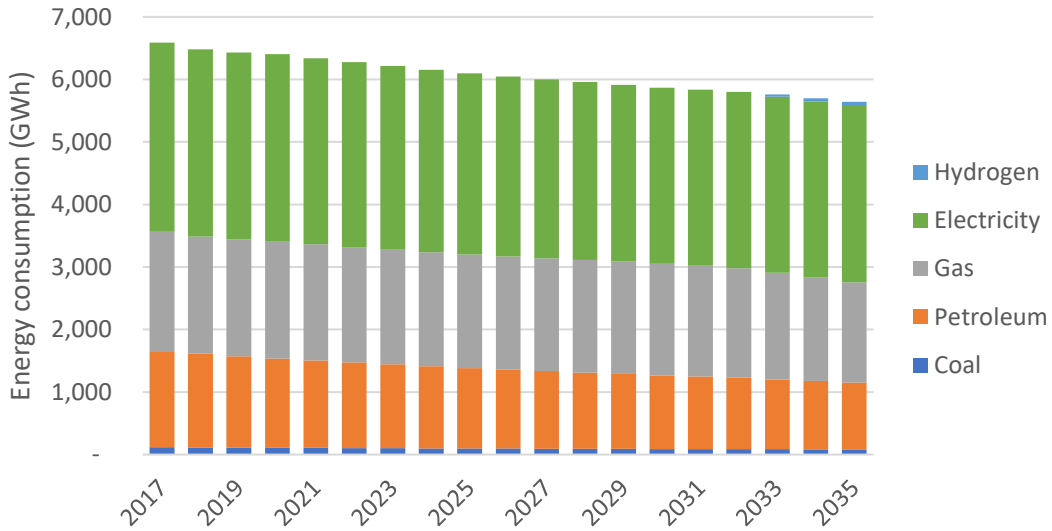


Figure 18: Energy Vision scenario commercial and industrial energy consumption, by fuel. Source: WGES analysis

Reaching a grid electricity average carbon intensity of 30 gCO₂/kWh¹⁵ 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

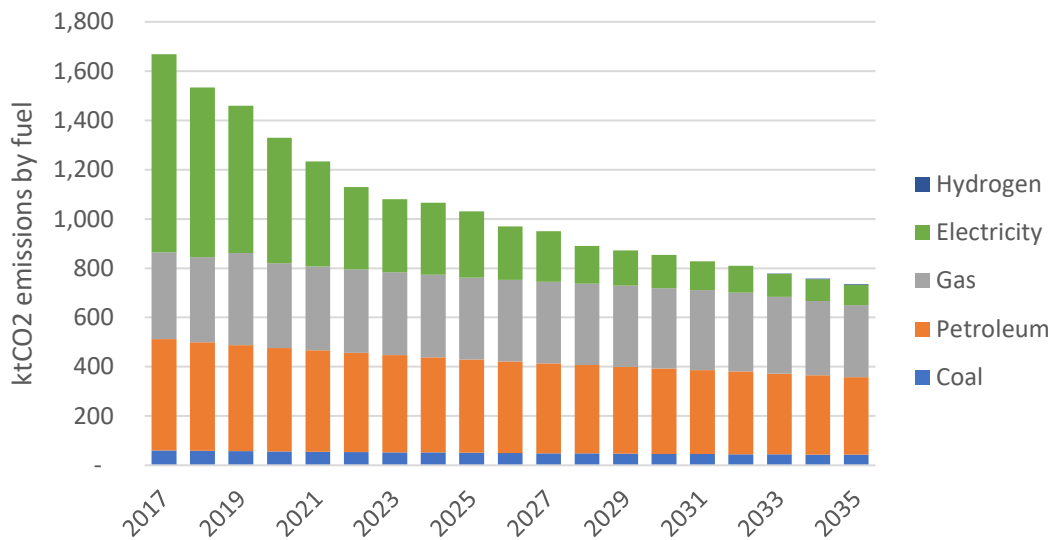


Figure 19: Energy Vision scenario commercial and industrial emissions estimates, by fuel. Source: WGES analysis

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 vehicles¹⁶.

Sector	Example outcomes Energy Vision scenario	Energy prize	Carbon saving potential
Commercial and industrial energy demand	Significant energy efficiency programme	30% reduction in coal and petroleum energy consumption	932 kt CO ₂ (56% reduction)
	A switch to alternative fuels, including hydrogen and electrification of heating	16% reduction in gas consumption	
	Decarbonisation of electricity network through renewables and behind-the-meter low carbon generation	1% of demand supplied by hydrogen through industrial clusters	
		7% reduction in electricity demand	

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

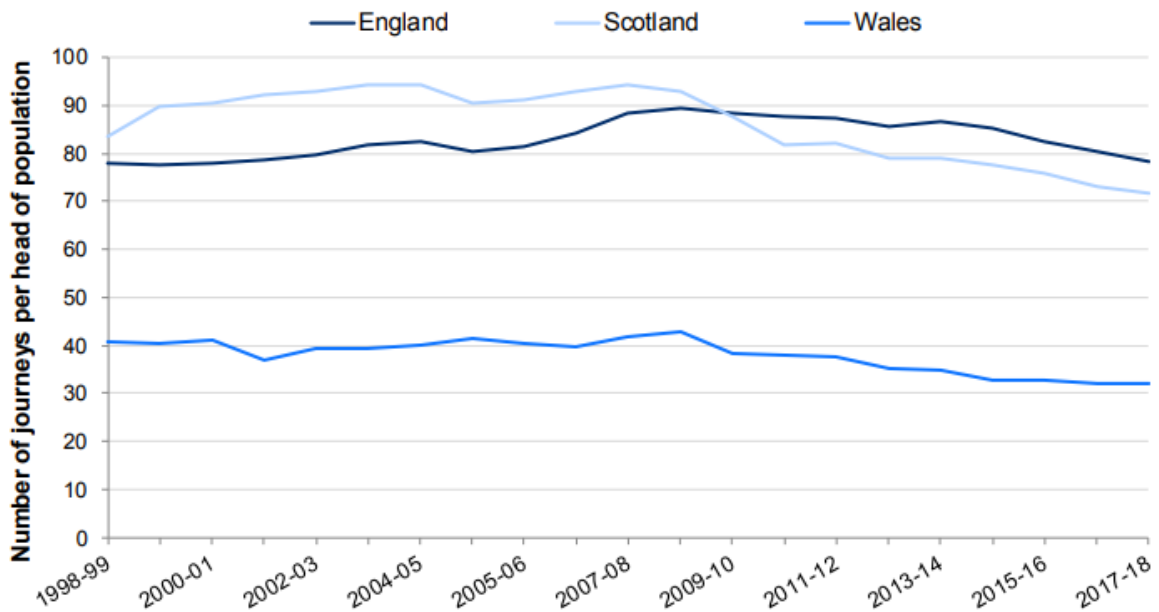


Figure 20: Passenger journeys per head on local bus services by country, 1998-2018. Source: Public service vehicles statistical bulletin, 2019

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 chargers¹⁷. 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

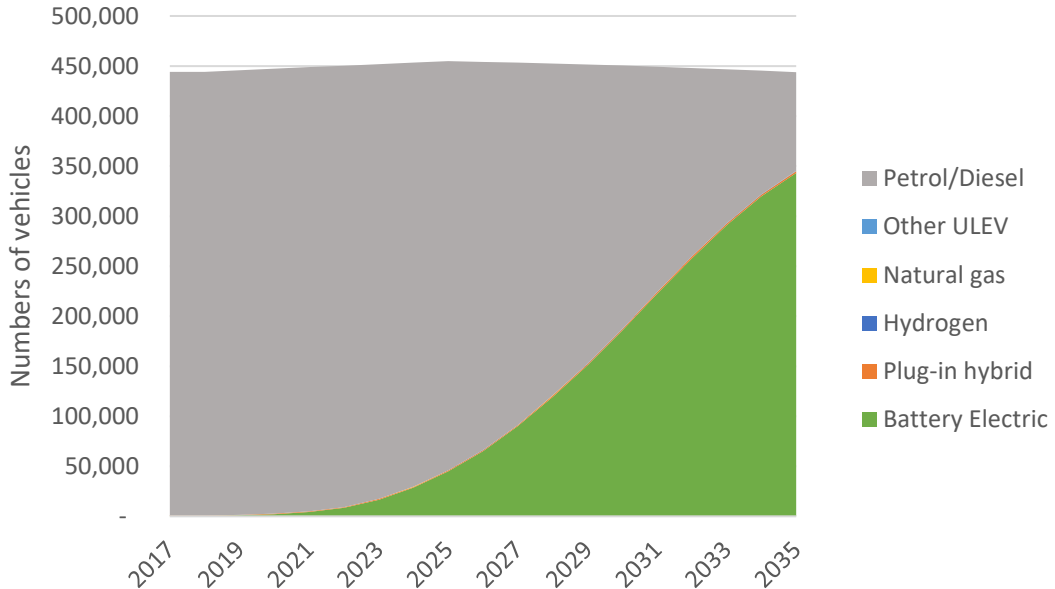


Figure 22: South West Wales' Energy System Vision road vehicle numbers, by vehicle fuel. Source: WGES analysis

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%

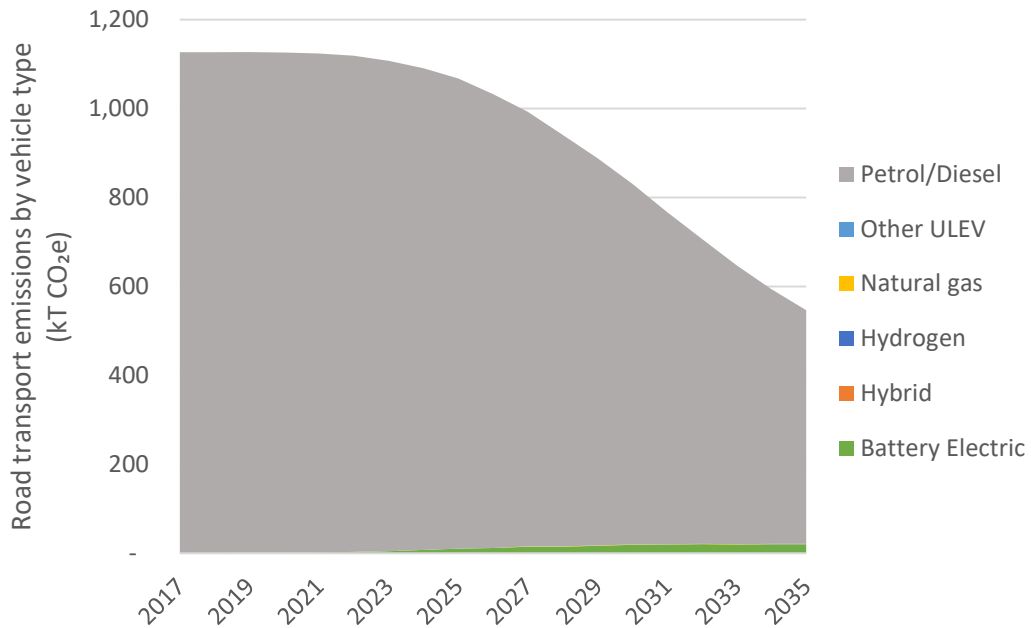


Figure 23: Energy System Vision road vehicle emissions, by vehicle fuel.

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 annum¹⁸. Additional support, such as a scrappage scheme alongside a 2030 ban on new fossil-fuelled car sales¹⁹, 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-fuelled 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 TWh²⁰. It has fallen since 2005 when electricity demand was around 4.8 TWh²⁰.

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

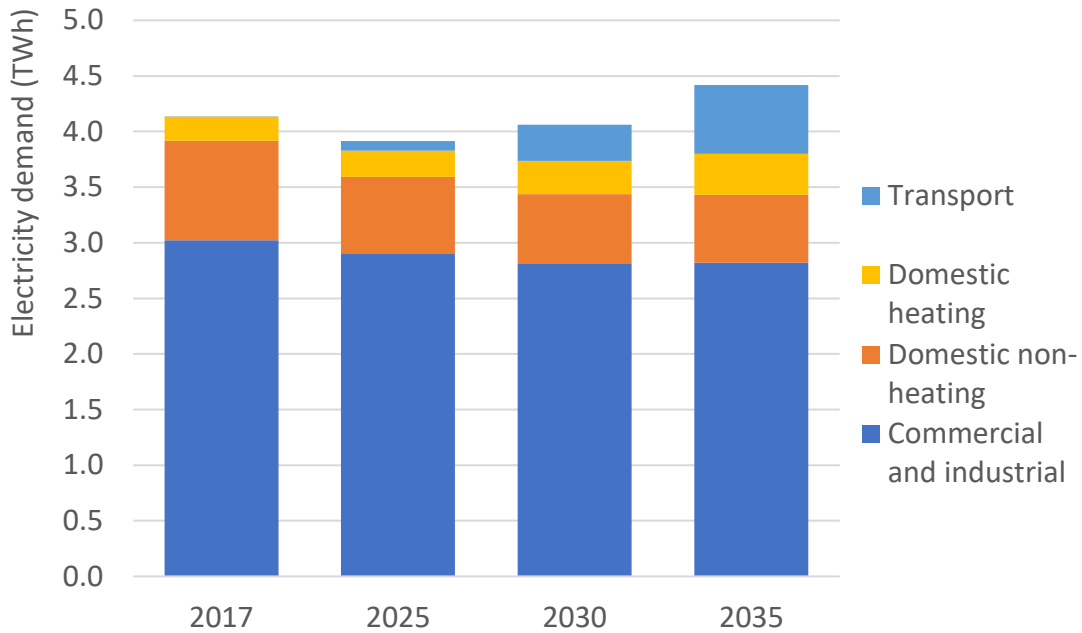


Figure 24: SWW's Energy Vision scenario demand by sector. Source: WGES analysis

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 owned²¹.

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

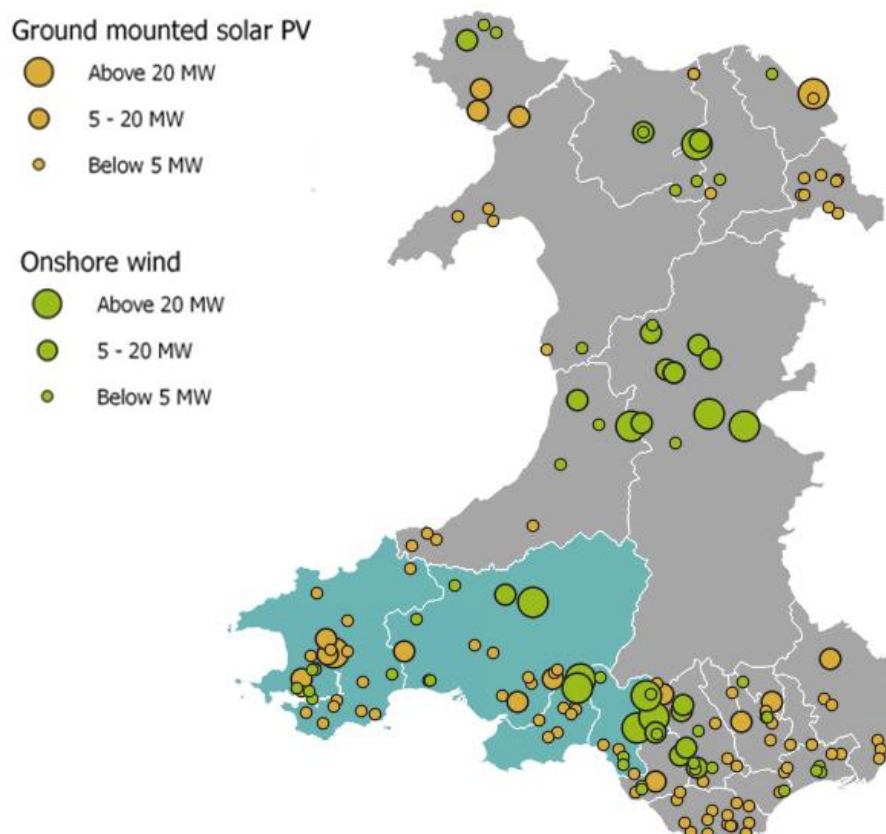


Figure 25: Solar PV and onshore wind projects (>1 MW) currently generating in Wales. Source: BEIS Renewable Energy Planning Database, 2019

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

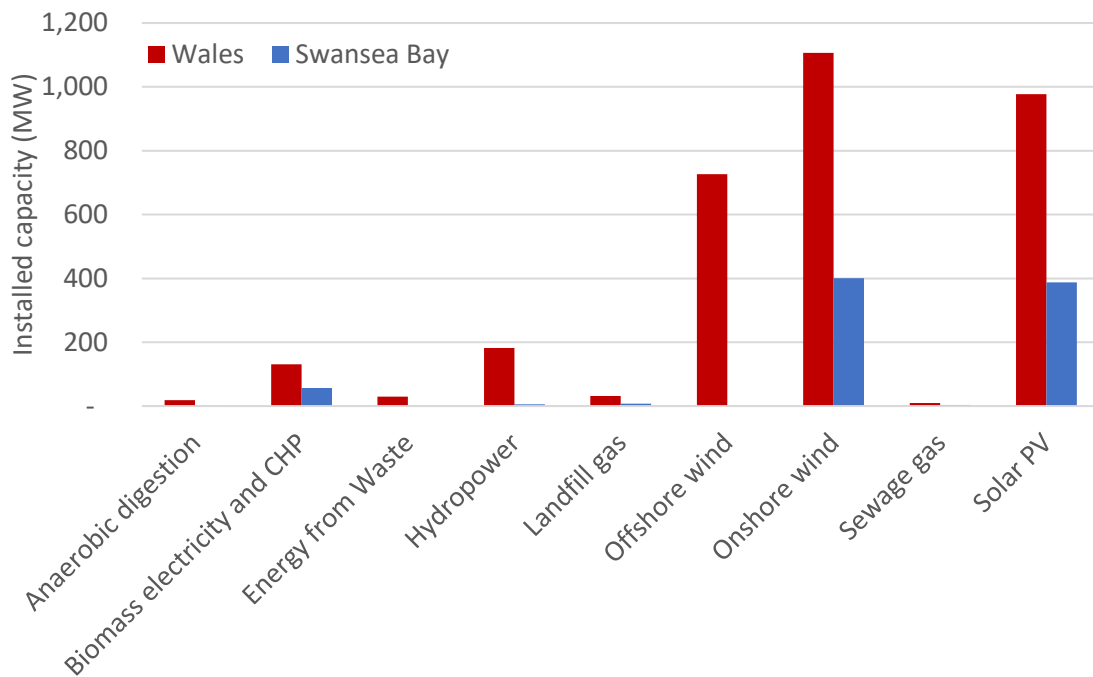


Figure 26: Renewable electricity capacity in Wales and SWW, 2018. Source: WGES analysis, Energy Generation in Wales 2018

55% of renewable generation in SWW is from onshore wind projects

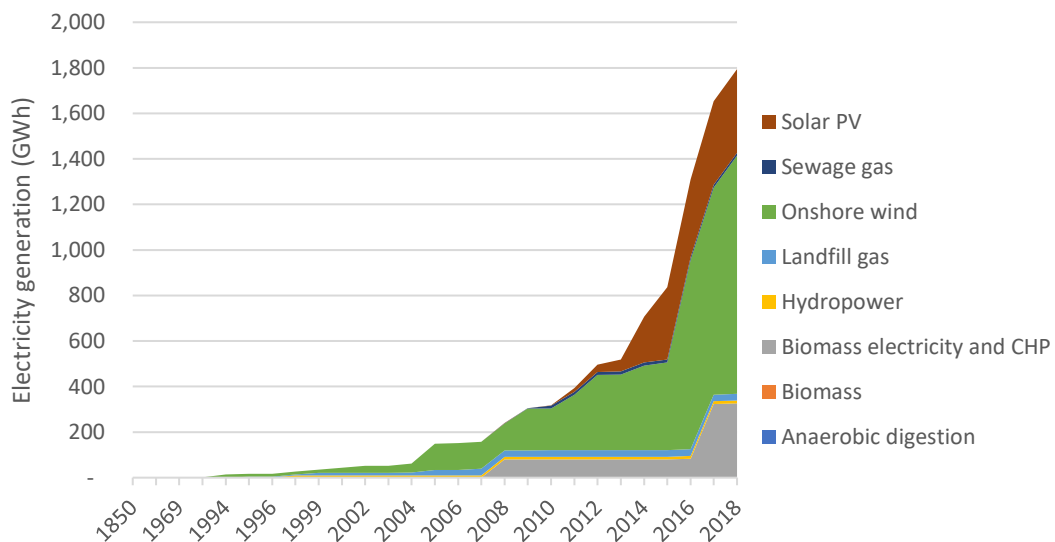


Figure 27: SWW's renewable electricity generation trends 2008-2018. Source: WGES analysis, Energy Generation in Wales 2018

SWW currently generates the equivalent of 44% of its electricity consumption from local renewable sources

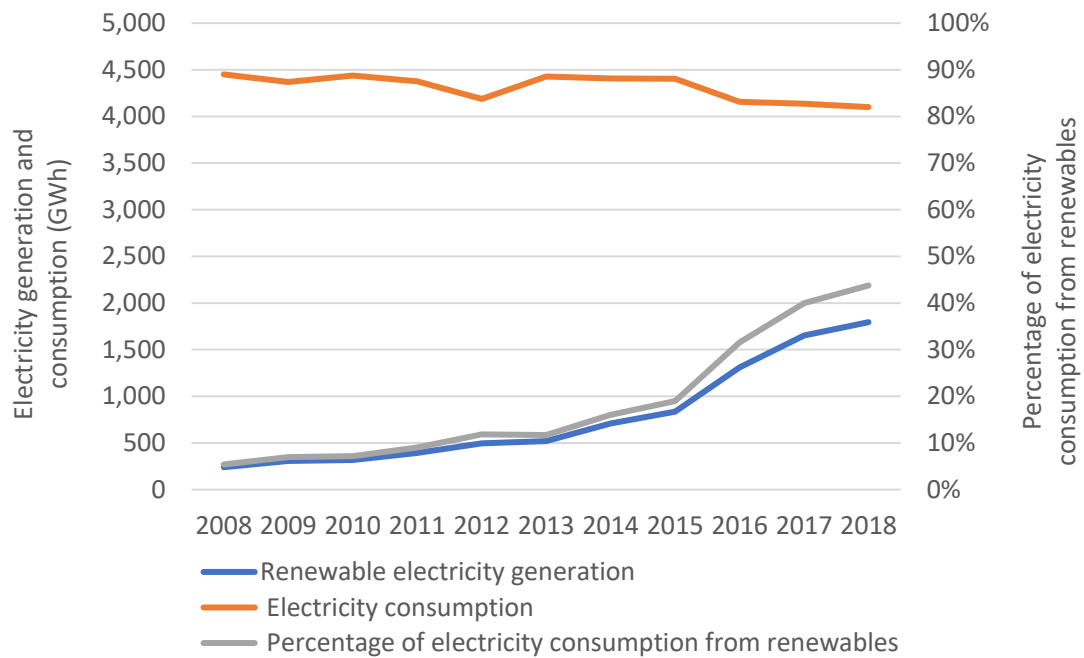


Figure 28: Percentage of electricity consumption from renewables in SWW.
Source: WGES analysis, Energy Generation in Wales 2018

4.2.2 Energy Vision scenario: renewable electricity generation

Stakeholder views on the level of ambition: renewable electricity generation

Renewable Energy Generation

'100% of consumption: Maximise use of regional energy resources to achieve a target of renewable electricity generation equivalent to 100% of electricity consumption on an annual basis. Deliver an overall carbon intensity < 50g CO₂e/kWh from local renewable generation and imported (or backup) electricity'

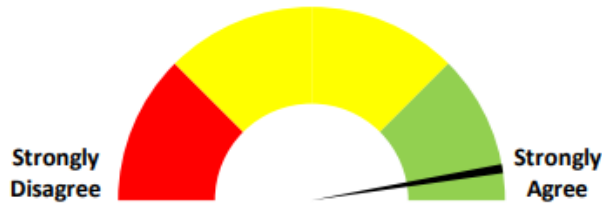


Figure 29 - Results of stakeholder engagement, highlighting stakeholder agreement with the annual renewable energy generation objectives.

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 gCO₂/kWh has been achieved by 2035, in line with the assumptions used by National Grid’s 2019 Future Energy Scenarios¹. 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

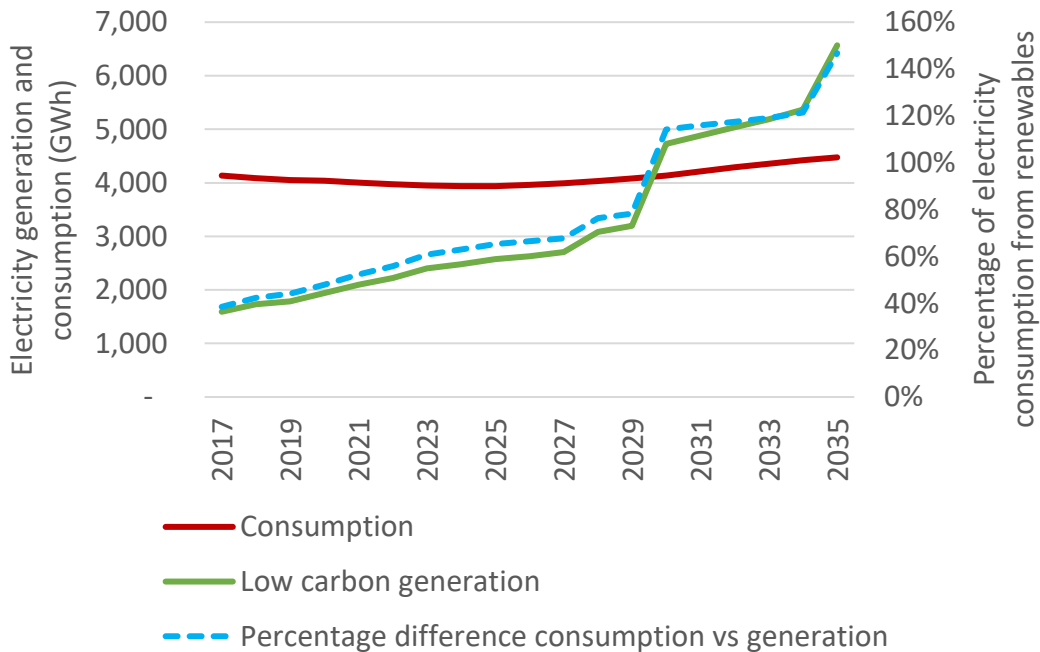


Figure 30: SWW’s Energy Vision scenario electricity consumption vs low carbon generation. Source: WGES analysis

Offshore wind, onshore wind and solar PV are the main electricity generating technologies focussed on in South West Wales' Energy Vision scenario

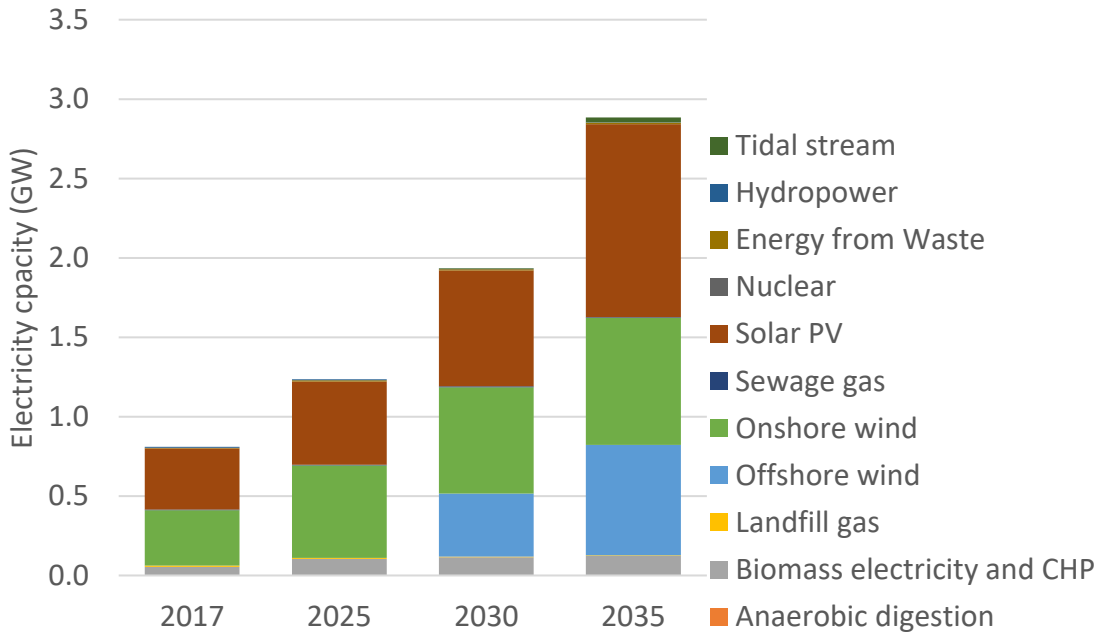


Figure 31: Renewable electricity capacity increases under South West Wales' Energy Vision scenario. Source: WGES analysis

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 NGENSO (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), NGENSO 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 NGENSO 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 region²². 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 projects²³.

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	<p>Sufficient flexibility, including storage, and network infrastructure upgrades to enable low carbon generation and demand technologies to connect</p> <p>800 MW of onshore wind (399 MW of new capacity)</p> <p>1,215 MW solar PV (827 MW of new capacity)</p> <p>1,061 MW of marine technologies, including 696 MW floating offshore wind and 320 MW Tidal lagoon</p>	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

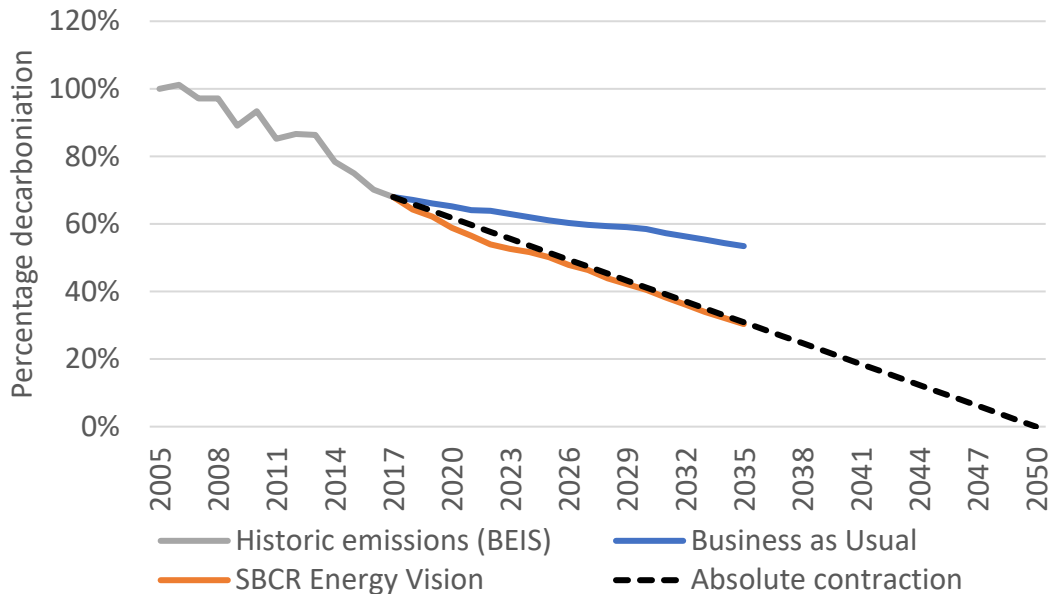


Figure 32: Decarbonisation trajectories in SWW. Source: WGES analysis

The Energy Vision scenario focuses on known, deployable technologies and behavioural change to 2035. Based on National Grid’s 2019 Future Energy Scenarios²⁴ and the Committee on Climate Change²⁵, 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 320,000 electric cars • 9,500 public and on-street EV chargers • 10% reduction in private vehicle mileage 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • Generating the equivalent of over 147% of electricity consumption in 2035 	Contribution towards reduction in UK grid carbon factor

	<ul style="list-style-type: none">• 1,061 MW of marine technologies, including 696 MW floating offshore wind and 320 MW tidal lagoon		
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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.

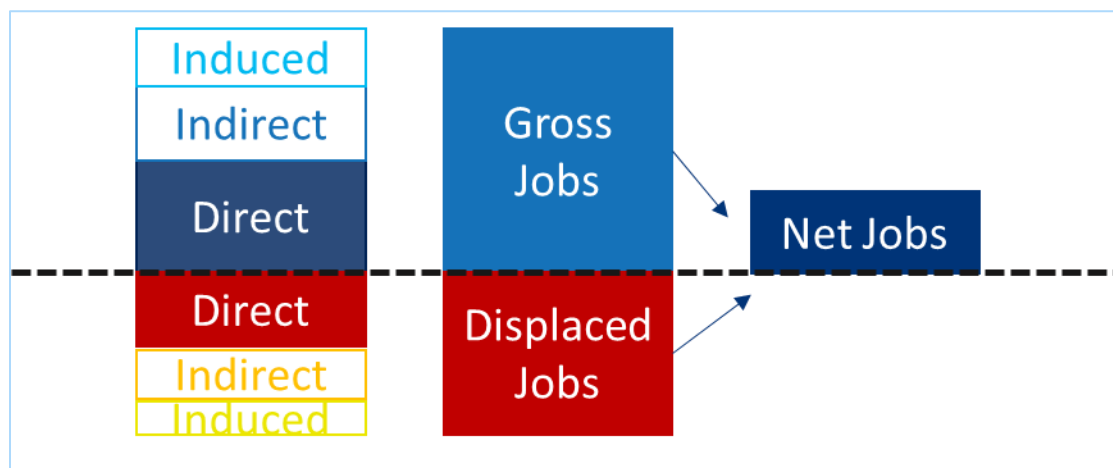
Finally, it is important to provide clarity on the definition of the term “jobs” within the context of this analysis and how this applies to each technology area. Political and media commentary on “jobs” often refer to gross jobs, which are the direct jobs related to a specific project or intervention. 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 Equivalent (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- 2035²⁷

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%
<p><i>*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.</i></p> <p><i>**All figures are rounded.</i></p>			

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.

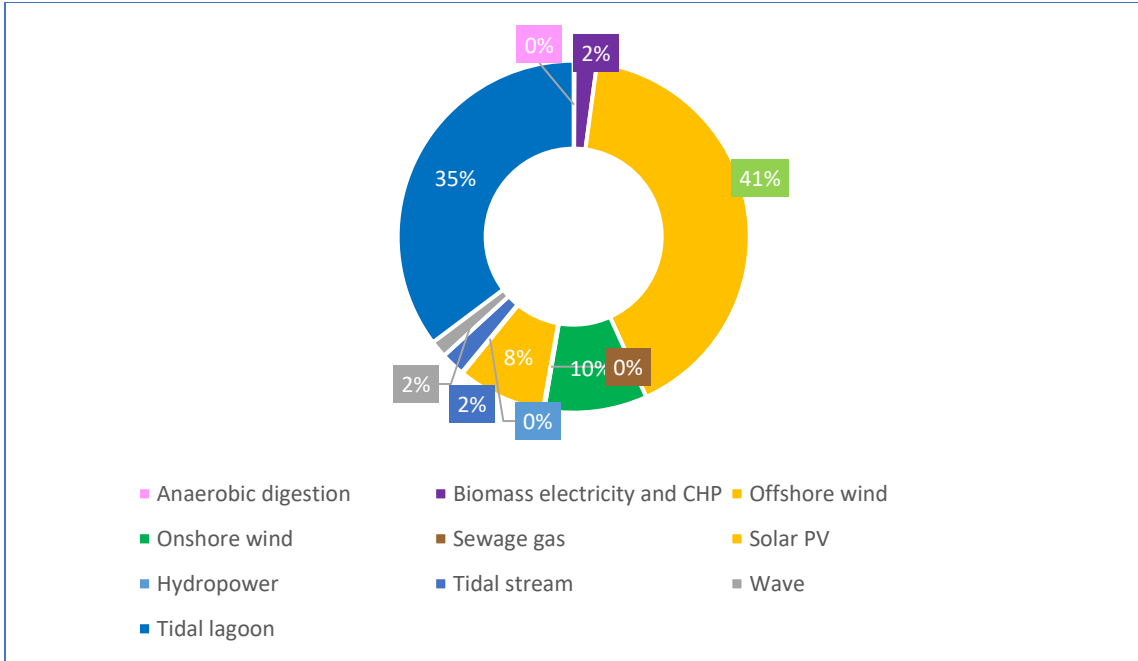


Figure 34: ESV investment in electricity generation required beyond the business as usual scenario (2020 – 2035)

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.

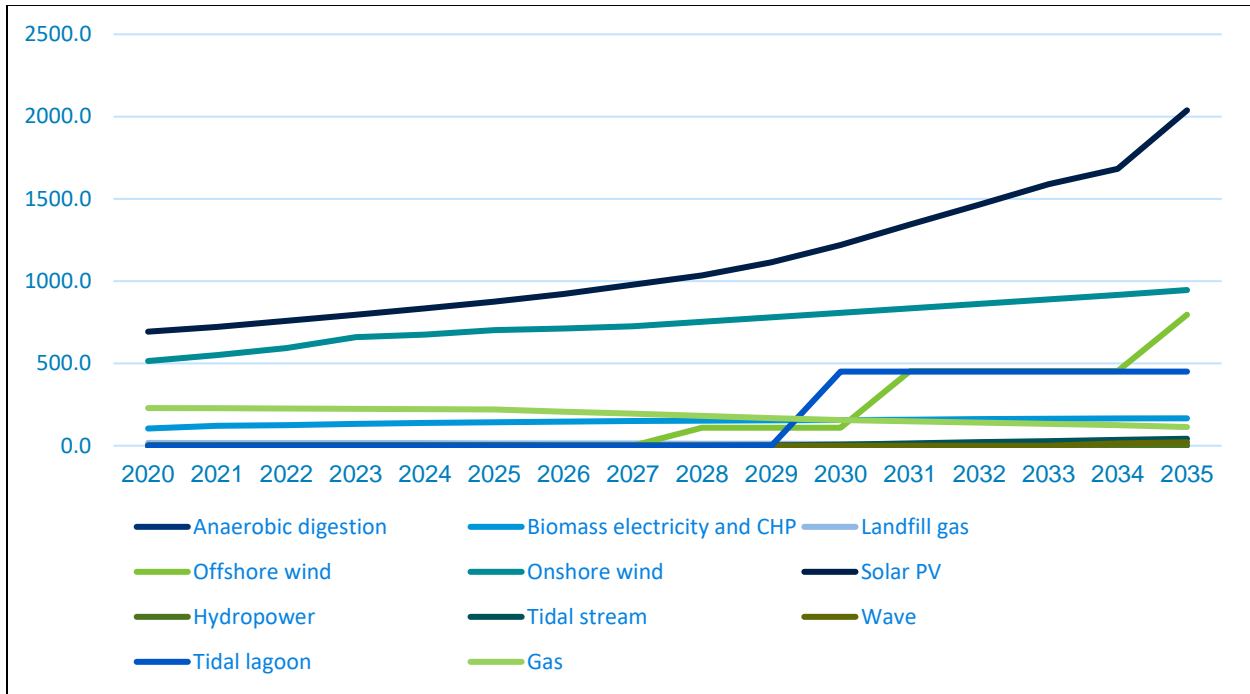


Figure 35: ESV electricity generation net jobs (2020 – 2035)

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%).

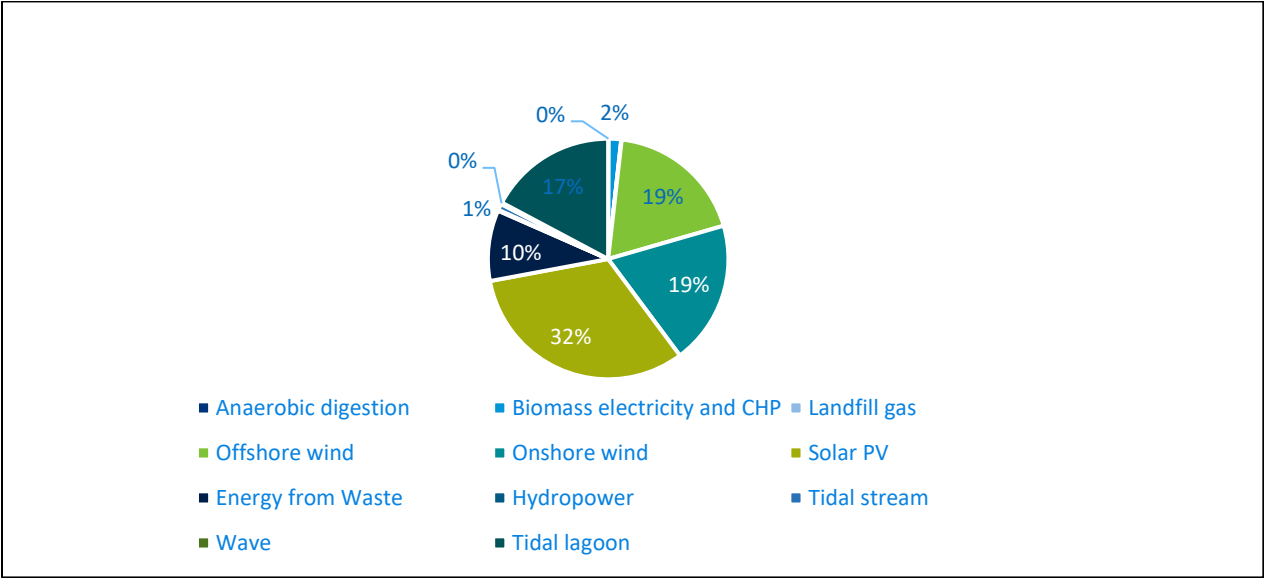


Figure 36: Additional Job distribution in the ESV scenario compared with the BAU scenario

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 -2035²⁸

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.

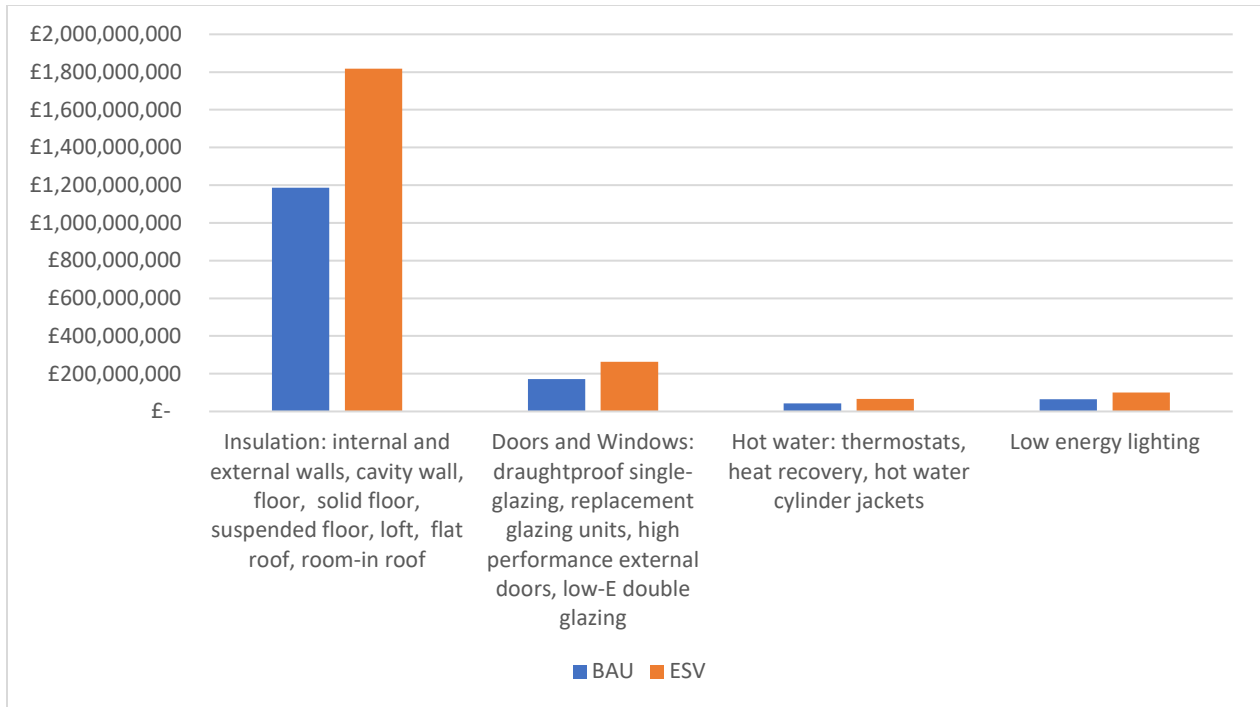


Figure 37: BAU and ESV domestic energy efficiency investment requirements 2020-2035

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.

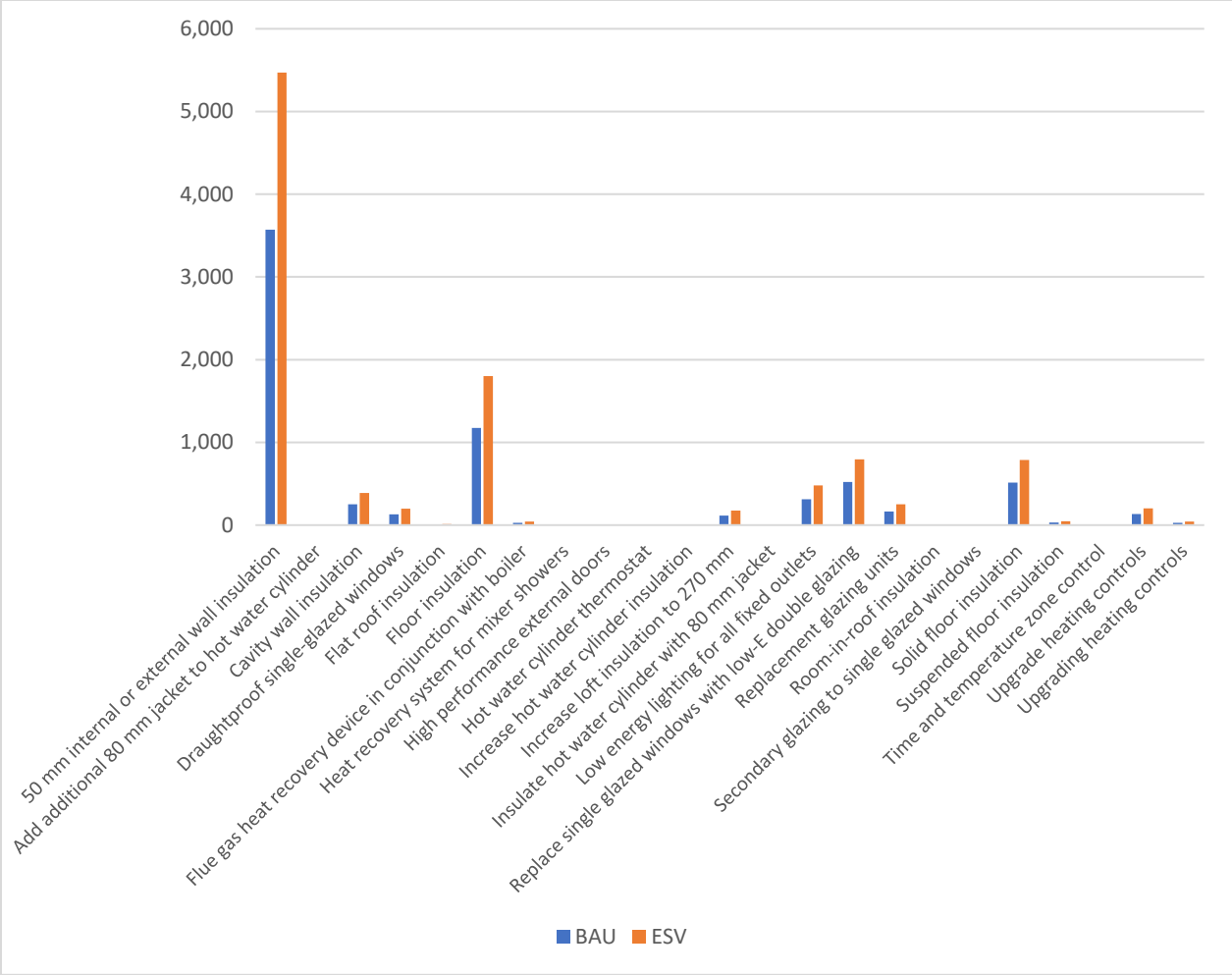


Figure 38: BAU and ESV net jobs per domestic energy efficiency measure 2020 – 2035

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- 2035²⁹

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.

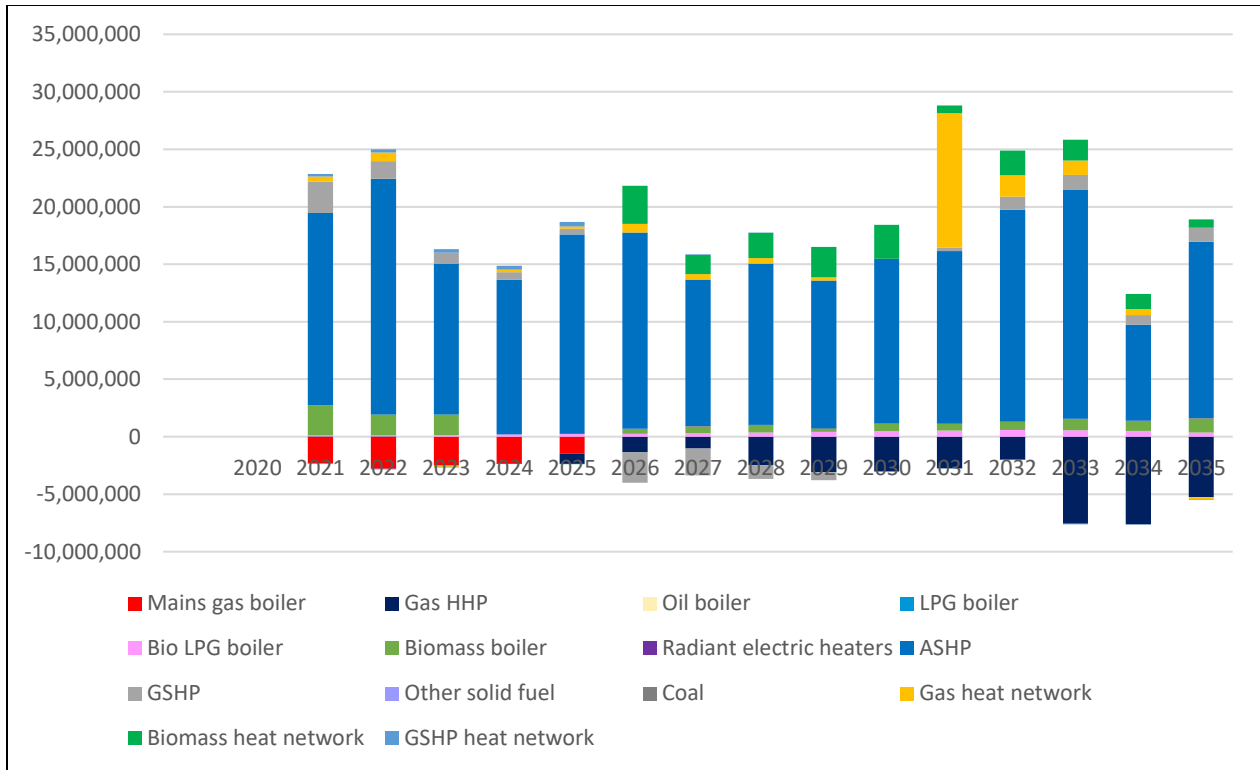


Figure 39: BAU and ESV domestic low carbon heating investment 2020 – 2035

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.

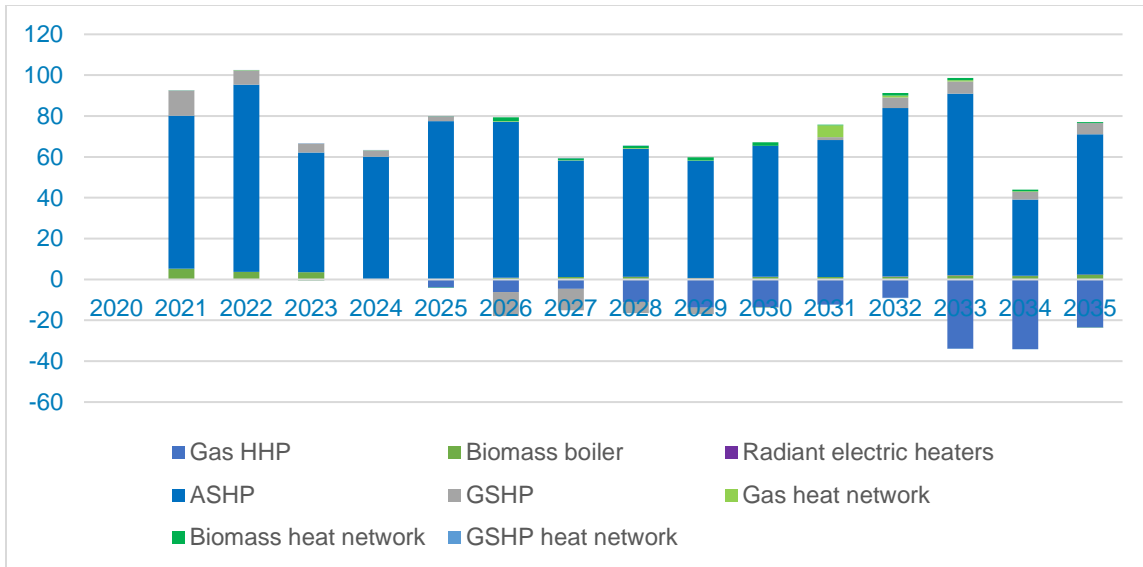


Figure 40. BAU and ESV domestic low carbon heating jobs 2020-2035

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.

Mae'r dudalen hon yn fwriadol wag



Gwasanaeth Ynni
Energy Service

Cefnogi ymdrech Cymru i greu economi carbon isel lwyddiannus
Supporting Wales' drive towards a successful low carbon economy

South West Wales Regional energy strategy

Technical Annex A: Energy modelling

Final

July 2021

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1. Introduction

This technical annex (annex A) provides detail on the methodology for the **energy modelling** presented in the regional energy strategy for South West Wales (SWW).

Technical annex B provides additional detail on the methodology used to assess the **economic modelling** results presented in the regional energy strategy.

All data sources referenced in this technical annex are listed in section 3.

1.1 Defining the ‘energy system’

The regional energy strategy is focussed on the greenhouse gas emissions associated with the energy system in the region, covering:

- **power**
- **heat**
- **transport**

The energy system modelling **does not** include emissions or sequestration from:

- non-energy activity such as agriculture and land use;
- aviation and shipping, where emissions are treated nationally / internationally rather than regionally;
- very large industrial energy users, due to data limitations.

1.2 Quantifying the energy system ‘baseline’

The energy system baseline year was set as 2017 due to data availability at the time of the modelling. The baseline was compiled using the following types and sources of data:

Type of data	Source
National and local datasets of energy consumption	01
Current standards of energy efficiency	02 - 03
Current energy generation data	04 - 13
Building heating technology data	14 - 18
Road transport data	19 - 26

1.3 Future energy system scenarios

The energy modelling covers two scenarios for the future energy system in 2035:

- 1) The **business as usual (BAU) scenario** describes actions that are expected to take place if the region's energy system continues to develop on the current trajectory; and
- 2) The **energy system vision (ESV) scenario** defines a series of actions that puts the region on a pathway towards net zero.

Table 2: Energy modelling scenarios		
Scenario	Summary	Source
Business as usual (BAU)	Based on National Grid's Steady Progression scenario, continuing existing trends, policies and deployment rates for reducing emissions from the energy system. This is a UK-wide scenario and does not reference specific Welsh, regional or local decarbonisation policies or programmes.	27
Energy system vision (ESV)	Unique to the region, reflecting local resources, opportunities and priorities informed by the regional stakeholders. Accelerates the trends in carbon emission reduction scenarios such as National Grid's Two Degrees and Community Renewables in order to be on track for a net zero 2050 scenario as per an Absolute Contraction emissions method.	

This annex sets out the **data sources**, **key assumptions** and **key modelling outcomes** for the energy system vision scenario (ESV) for South West Wales in 2035, showing how these compare to the business as usual scenario (BAU) for the region in 2035.

'**Data sources**' and inputs refer to any existing data sets that were used in the energy modelling. These sources are listed in section 3 of this technical annex and in the energy modelling data workbook, available on request.

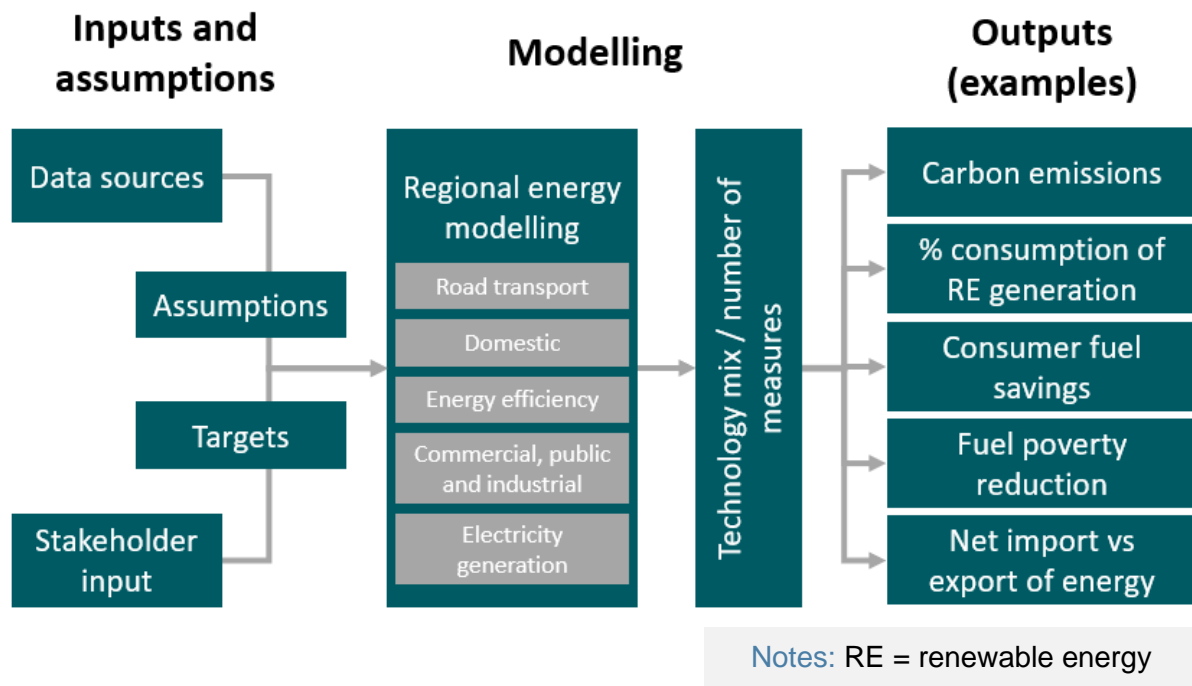
'**Key assumptions**' refer to the collection of conventions, choices and other specifications used in the energy modelling. Full assumptions are provided in the energy modelling data workbooks.

'**Modelling outcomes**' refer to any data produced through the modelling. Full outcome tables are provided in the energy modelling data workbooks and the SWW energy strategy.

All modelling outcomes presented in this annex relate to the 2017 baseline. For example, Table 4 shows a 52% reduction in domestic heat carbon emissions by 2035 in the energy system vision scenario. This is a 52% reduction from the 2017 baseline.

Figure 1 shows the overall approach to the energy modelling that was used to produce the energy strategy, including the interactions between the data inputs and assumptions, the modelling process and the outputs from the energy models.

Figure 1: Overall approach to energy modelling used in the energy strategy



Emissions resulting from the region's energy consumption are estimated based on industry standard values derived from BEIS conversion factors (source 32) and Defra conversion factors (source 33), in addition to baseline emissions (source 34). Projections of how emission factors could change over time, particularly for electricity and gas where informed by National Grid ESO's FES (source 27) and Regional Future Energy Scenarios for Gas (source 17).

Domestic energy consumption represents the most detailed part of the energy model. This is due the number of technologies involved, the relatively high proportion of total emissions, and the number of sub-sections that were modelled such as energy efficiency, domestic heat and domestic electricity consumption. As a result, the domestic energy consumption chapter in this annex is more detailed than the other chapters for energy generation, commercial and industrial energy use and road transport.

2. Energy modelling assumptions

2.1 Domestic energy consumption

This section covers the various components of domestic energy consumption, including domestic heat, domestic cooking and electrical appliances, and domestic energy efficiency.

The BAU and ESV scenarios assume the same housing growth rate from 2017 to 2035, based on the average build out rates for the region between 2008 and 2018.

Year	BAU	ESV	Source
2017 (baseline year)	306,043 homes		28
2025	317,306 homes		
2030	324,345 homes		
2035	331,384 homes		

The energy modelling explored three components of domestic energy consumption, linked to the housing growth rate:

1. Domestic heat
2. Domestic energy efficiency
3. Domestic electrical demand (non-heat)

	BAU	ESV	Source
Proportion of biogas blended with natural gas in the gas network (by energy)	5%	5%	17-18
Hydrogen blending in the gas network	0%	0%	
Average gas boiler efficiency	85%	90%	
Average heat pump coefficient of performance	3.19	3.26	

Notes: See “Box 1: Assumptions regarding the decarbonisation of domestic heating in SWW” and “Table 2. Regional Growth Scenarios for Gas and Heat compared with energy modelling” in the SWW energy strategy for further information on the content of biogas injection assumptions.

Table 5: Key modelling outcomes: Domestic heat technologies in SWW (2035)

	BAU	ESV
Proportion of domestic heat energy from low carbon sources	24%	37%
Change in domestic heat carbon emissions	-32%	-52%
Number of domestic heat pumps installed	53,900	78,100
Proportion of homes heated by heat pumps (Air source heat pumps (ASHP), ground source heat pumps (GSHP) and hybrid gas)	16%	24%
Proportion of homes heated from fossil fuel sources	76%	62%
Number of homes heated by heat networks	1,400	12,000
Proportion of homes heated by heat networks	<1%	4%
Proportion of new homes heated by gas, oil, LPG or other fossil fuels from 2025	0%	0%

Notes:

- Radiant electric heating is considered a low carbon heat source before 2035 in both the BAU and ESV scenarios due to decarbonised electricity supply.
- Baseline heating technology numbers were evaluated from a range of datasets, including MHCLG Energy Performance of Buildings Data (2), Welsh Housing Condition Survey (3), Census data (14), BEIS Renewable Heat Incentive statistics (15), and BEIS gas connections estimates (16).

Table 6: Key modelling outcomes: Domestic energy efficiency in SWW (2035)

	BAU	ESV
Number of homes in SAP band A, B, C & D	N/a*	327,415
Number of homes in SAP band E, F & G	N/a*	3,969
Number of thermal efficiency measures installed in homes	58,140	100,424
Change in thermal energy demand of homes	-12%	-18%

Notes:

- *Not projected; SAP band (or Energy Performance Certificate (EPC)) ratings are illustrative only. Thermal energy demand of homes is the key thermal variable. The key modelling variable with regards to domestic energy efficiency is the gross thermal energy demand of homes.
- The number of thermal energy efficiency measures installed in homes in the BAU and ESV is estimated by reviewing efficiency recommendations and their resulting energy savings published on EPC certificates.

**Table 7: Key modelling outcomes:
Domestic electricity consumption (non-heat) in SWW (2035)**

	BAU	ESV
Change in domestic non-heating emissions	-69%	-77%
Change in electric cooking energy	56%	88%
Change in appliance energy consumption	-4%	-39%

Notes:

- Non-heating domestic energy consumption predominantly comprises of appliances, gas cooking and electric cooking. Projections on appliance and cooking consumption are derived from the National Grid Future Energy Scenarios (27).
- While the home charging of electric vehicles (EVs) could be categorised as a domestic energy consumption, it is modelled and accounted for in the transport section.

2.2 Commercial and industrial energy consumption

Table 8: Key modelling assumptions: Commercial and industrial (C&I) energy consumption in SWW (2035)			
	BAU	ESV	Sources
Estimated change in coal energy consumption	-15%	-29%	29
Estimated change in petroleum energy consumption	-15%	-30%	29
Estimated change in gas energy consumption	-3%	-16%	27
Estimated change in electricity energy consumption	-2%	-7%	27

Notes:

- Without more local data evidence, change in coal and petroleum energy consumption within the scope of the commercial and industrial sector is modelled on CCC's Central scenario for the Fifth Carbon Budget (29). This is an area that can be built on with local studies, such as through the work of the South Wales Industrial Cluster (SWIC).
- Estimated electricity and gas energy consumption projections are unique to the region, but modelled on an accelerated trend seen in the ESO FES scenarios (27).

Table 9: Key modelling outcomes: Commercial and industrial (C&I) energy consumption in SWW (2035)		
	BAU	ESV
Change in energy consumption	-5%	-14%
Percentage of total C&I emission reduction that results from electricity consumption	88%	77%
Percentage of C&I decarbonisation that arises from reducing the electricity carbon factor	-42%	-72%

Notes: The BAU scenario has a higher percentage of emission reductions that result from electricity consumption since emission reductions from other fuels are less.

2.3 Road transport

	2017	2035	Source
Electric buses & coaches (miles/kWh, including vehicle and charging efficiency)	0.59	0.83	Calculated, based on 19-20
Electric cars (miles/kWh, including vehicle and charging efficiency)	2.9	4.08	22
Electric heavy goods vehicles (miles/kWh, including vehicle and charging efficiency)	0.43	0.61	Calculated, based on 19-20
Electric light goods vehicles (miles/kWh, including vehicle and charging efficiency)	1.92	2.70	22
Electric motorbikes (miles/kWh, including vehicle and charging efficiency)	4.02	5.66	Calculated, based on 19-20
<p>Notes:</p> <ul style="list-style-type: none"> ▪ Efficiency assumptions are consistent across both the BAU and ESV scenarios ▪ Calculated figures are based on a combination of published manufacturer efficiencies and fuel consumption calculations (Sources 19 and 20). ▪ The efficiency figures above include vehicle efficiency, in addition to charger efficiency. ▪ Vehicle usage and behaviour insights were gained from the UKPN Recharge the Future (23) and WPD Electric Nation (24) EV charging trials. 			

	BAU	ESV
Change in private vehicle mileage assumption	0%	-10%
Number of pure electric vehicles (incl. cars, motorcycles, LGVs, HGVs, buses & coaches)	67,244	343,179
Proportion of all vehicles that are electric	14%	77%
Change in road transport emissions	-10%	-52%
Proportion of cars that are pure electric	16%	89%

Notes:

- The 10% reduction in private vehicle mileage target was agreed with stakeholders at the region's consultation workshops. This percentage is less than the reduction in other regions, which has resulted in more EVs in the SWW Energy Vision by 2035.
- Baseline vehicle numbers were evaluated from a range of DfT vehicle licencing statistics and related datasets (19-21) and SMMT vehicle registration statistics (26).

2.4 Electricity generation

Table 12: Key modelling assumptions: Renewable electricity load factors (2035)		
	BAU and ESV	Source
Anaerobic digestion	66%	30-31
Biomass electricity and CHP	66%	
Hydropower (large-scale)	20%	
Hydropower (small-scale)	32%	
Landfill gas	47%	
Offshore wind	33%	
Onshore wind	27%	
Sewage gas	40%	
Solar PV	11%	
Nuclear	91%	
Energy from Waste	66%	
Tidal stream	40%	
Wave	50%	
Tidal lagoon	19%	

Notes:

- Where possible, a 5 year average load factor has been calculated from DUKES load factors (30) and BEIS renewable generation data (31) to represent an average load factor.
- Renewable electricity average load factors were calculated in 2019 and may have changed in the interim period.

Table 13: Key modelling outcomes: Electricity generation in SWW (2035)			
	BAU	ESV	Source
Proportion of electricity demand met by local low carbon electricity generation (including electric vehicle demand)	62%	147%	n/a
Electricity carbon intensity	62 grams CO ₂ per kWh	30 grams CO ₂ per kWh	27
New renewable electricity capacity	516 MW	2,398 MW	n/a

Notes:

- See “Box 2: A note on grid carbon factors” in the SWW energy strategy for more information on electricity grid carbon factors.
- Baseline electricity capacity figures were primarily evaluated from the Welsh Government’s Energy Generation in Wales 2019 report (9). Additional data and more granular insights were gained from a variety of sources (4-8, 10-13).

3. Data sources and references

Source	Reference	Category
1	BEIS, 2018. Sub-national energy consumption statistics	Energy system baseline
2	MHCLG, 2018. Energy Performance of Buildings Data: England and Wales	Energy system baseline
3	Welsh Government, 2018. Housing Condition Survey	Energy system baseline
4	BEIS, 2019. Feed-in Tariff Quarterly Reports	Energy system baseline
5	BEIS, 2019. Renewable Heat Incentive statistics	Energy system baseline
6	BEIS, August 2018. Renewable Energy Planning Database	Energy system baseline
7	Ofgem, 2019. ROC Register Public Reports	Energy system baseline
8	Ofgem, 2019. REGO Register Public Reports	Energy system baseline
9	Welsh Government, 2019. Energy Generation in Wales	Energy system baseline
10	Western Power Distribution, 2019. System Wide Resource Register connection offer data	Energy system baseline
11	EMR Delivery Body, 2018. Capacity Market registers	Energy system baseline
12	Carbon Trust, December 2018. Future potential for offshore wind in Wales	Energy system baseline
13	National Grid ESO, TEC register	Energy system baseline
14	Office for National Statistics, 2011. Census data	Energy system baseline
15	Ofgem, 2019. Renewable Heat Incentive Freedom of Information Request for project information.	Energy system baseline
16	BEIS, December 2019. LSOA estimates of properties not connected to the gas network	Energy system baseline
17	Regen, Wales and West Utilities, January 2019. Regional Future Energy Scenarios for Gas	Energy system baseline
18	Regen, 2019-2020. Net Zero South Wales 2050	Energy system baseline
19	Department for Transport Vehicle, December 2018. Licensing statistics: Tables VEH0132b, VEH0132c, VEH0132, VEH0130, VEH0105, VEH0101, TRA8902, VEH0124, VEH0150	Energy system baseline

20	Department for Transport, July 2013. Vehicle mileage and occupancy	Energy system baseline
21	Department for Transport, October 2019. Bus statistics	Energy system baseline
22	WhatCar, February 2020. Fuel economy research	Energy system baseline
23	UK Power Networks, May 2019. Recharger the Future	Energy system baseline
24	Western Power Networks, 2018. Electric Nation charging data	Energy system baseline
25	Department for Transport, November 2018. TAG Data Book	Energy system baseline
26	SMMT, 2019. EV and AFV registrations	Energy system baseline
27	National Grid ESO, 2019. Future Energy Scenarios	Energy modelling scenarios
28	Welsh Government, 2017. Household projections for Wales	Housing projections
29	CCC, 2015. Sectoral scenarios for the Fifth Carbon Budget	Energy modelling scenarios
30	Dukes, 2019. Load factors for renewable electricity generation (DUKES 6.5)	Generation estimates
31	BEIS, 2019. Renewable electricity by local authority, 2014 to 2019	Generation estimates
32	BEIS, 2018. Greenhouse gas reporting: conversion factors 2018.	Emission estimates
33	DEFRA, 2018. GHG conversion factors	Emission estimates
34	BEIS, 2019. Sub-national total final energy consumption data.	Emission baseline

Disclaimer

The Welsh Government Energy Service (“**WGES**”) is funded by the Welsh Government with the aim of developing energy efficiency and renewable energy projects that contribute to public sector decarbonisation and national energy targets. The WGES is delivered by the Carbon Trust, Energy Saving Trust and Local Partnerships (the “**Delivery Partners**”). This report (the “**Report**”) has been produced by the Delivery Partners and, whilst the views expressed in it are given in good faith based on information available at the date of this Report:- (i) these views do not necessarily reflect the views of the Welsh Government, which accepts no liability for any statement or opinion expressed in the Report; (ii) the Report is intended to provide general guidance only, rather than financial, legal or technical advice for the purposes of any particular project or other matter, and no-one in receipt of the Report should place any reliance on it in substitution for obtaining their own advice from an appropriate third party advisor; and (iii) any person in receipt of this Report should therefore obtain their own financial, legal, technical and/or other relevant professional advice insofar as they require specific guidance on what action (if any) to take, or refrain from taking, in respect of any project, initiative, proposal, involvement with any partnership or other matter to which information contained in the Report may be relevant; and (iv) the Delivery Partners accept no liability in respect of the Report, or for any statement in the Report and/or any error or omission relating to the Report

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Gwasanaeth Ynni Energy Service

Yn cefnogi ymgyrch Cymru dros economi carbon isel lwyddiannus.

Supporting Wales' drive towards a successful low carbon economy

Regional energy strategies

Technical annex B:

Economic modelling

- Cardiff Capital Region
- North Wales
- Mid Wales
- South West Wales

Final version

March 2021

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1. Introduction

This technical annex (annex B) provides additional detail on the methodology for the **economic assessment** presented in the regional energy strategies for Cardiff Capital Region, North Wales, Mid Wales and South West Wales.

Technical annex A provides additional detail on the methodology used to produce the **energy modelling** results presented in the regional energy strategies.

All data sources referenced in this technical annex are listed in section 6.

1.1 Scope: activities covered by the economic assessment

The economic assessment estimates the jobs, gross value added (GVA), and investment related to the actions detailed in the energy modelling scenarios for the region (see annex A).

The energy modelling covers two scenarios for the future energy system in 2035:

- 1) The **business as usual (BAU) scenario** describes actions that are expected to take place if the region's energy system continues to develop on the current trajectory; and
- 2) The **energy system vision (ESV) scenario** defines a series of actions that puts the region on a pathway towards net zero.

1.2 Direct, indirect and induced jobs

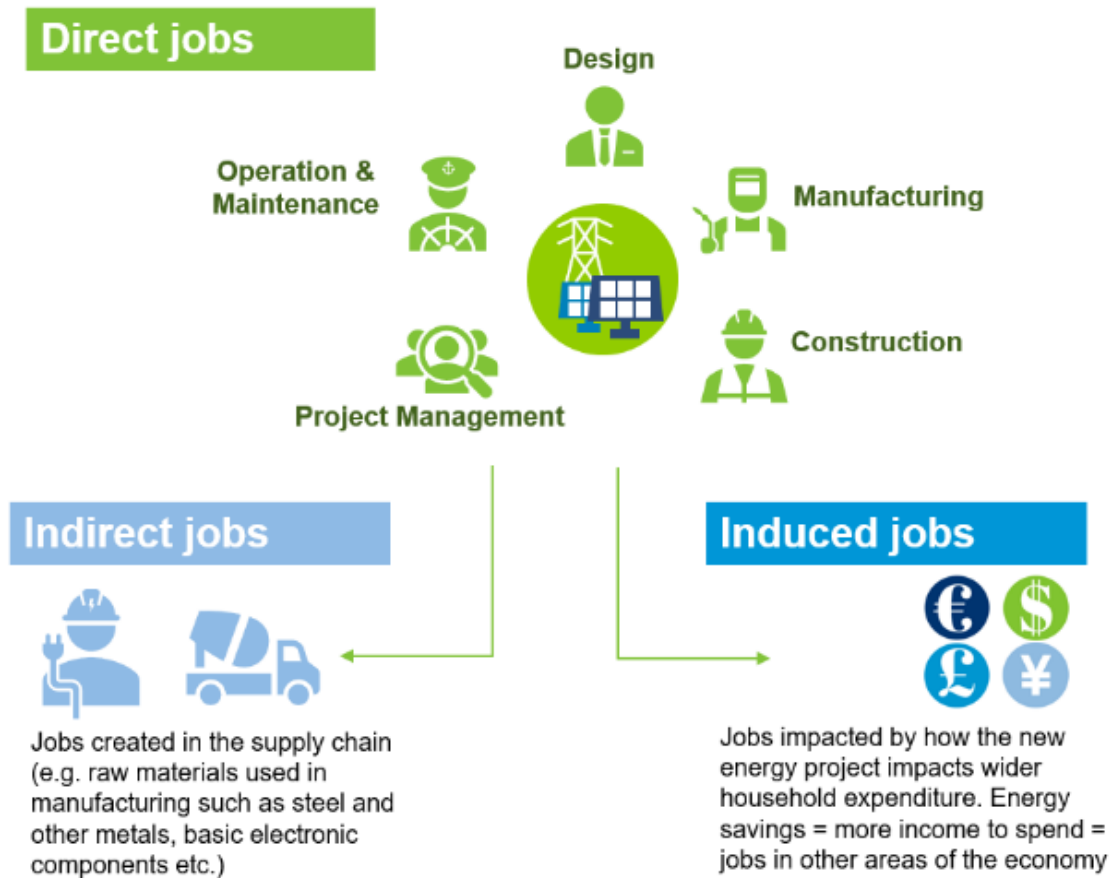
We distinguish between 'direct', 'indirect' and 'induced' jobs in the context of the energy system (Figure 1).

Direct jobs are typically associated with the design, manufacture, construction, installation, operation and maintenance of equipment required for the energy system transition.

Indirect jobs arise in the supply chain of the energy technologies.

Induced jobs are the jobs linked to the impact of the energy system transition on wider household income and spending i.e., where savings are made on household energy costs, a household potentially has more available income to spend on other goods and services, generating jobs in other sectors producing those goods and services.

Figure 1: Direct, indirect and induced jobs



1.3 Location of jobs

It is not possible to specify exactly where the various types of jobs will be located, geographically. Some jobs are likely to be located in Wales and other jobs may be held by people based elsewhere.

Our methodology focuses on direct jobs, a greater proportion of which are considered likely to be located in the region than indirect or induced jobs.

The experience of Wales to date has been that many electricity generation jobs are held by those living outside of the region (e.g., manufacturing jobs associated with making solar panels in Asia). This contrasts with energy efficiency jobs which are often held by local residents who provide services to the surrounding area (e.g., an installation job for a local heating technology expert).

1.4 Gross jobs, net jobs and Full Time Equivalent (FTE)

Gross jobs are the direct jobs related to a specific project or intervention.

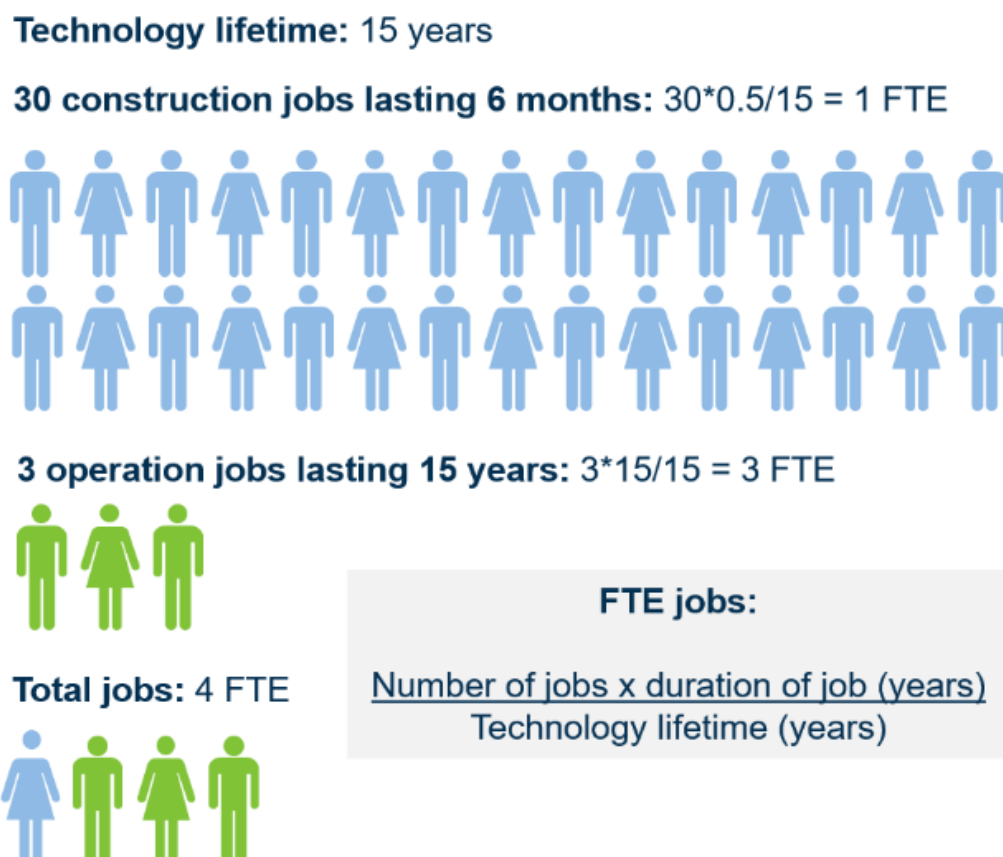
Net jobs reflect the net impact of the job gains alongside the job losses associated with transitioning from one technology to another.

Where possible, we present 'net jobs', in line with the best practice for economic impact assessment. The only case where this was not possible, due to limited data availability, was for the jobs associated with low carbon heating technologies; these are presented as 'gross jobs'.

To determine net jobs from gross jobs figures, the number of 'displaced' jobs are subtracted from the 'total' jobs in a given year. This method was used to try to better estimate the specific effects in a regional geography.

Some jobs associated with the energy transition will be **short term jobs** and others will be **long term jobs**. We deal with this by defining jobs in terms of **Full Time Equivalents (FTE)**, wherever data allows. This is derived from the number and duration of jobs and the lifetime of the technology (Figure 2).

Figure 2: Calculating Full Time Equivalent jobs



1.5 (Approximate) Gross Value Added (aGVA)

We use the following definition for **approximate gross value added** (aGVA):

“...the amount that individual businesses, industries or sectors contribute to the economy.

Generally, this is measured by the income generated by the business, industry or sector less their intermediate consumption of goods and services used up in order to produce their output, labour costs (for example, wages and salaries) and an operating surplus (or loss).”

Source: Office for National Statistics (Source 01)

1.6 Indicator-based approach

The energy modelling is a key input for the economic assessment. The energy modelling considers different areas of the energy system (Table 1).

We have used an **indicator-based approach** to estimate the job creation, GVA and investment associated with ‘business as usual’ and the ‘energy system vision’. This involves reviewing literature to identify the most appropriate benchmarks such as jobs per megawatt (MW), or GVA per employee. These benchmarks are then applied to the energy model outputs.

1.7 Discount rate

‘Discounting’ is a method for comparing current costs and benefits with future costs and benefits. This is done by converting the values of costs and benefits in different time periods into a comparable ‘present value’, by applying a ‘discount rate’ to future costs and benefits.

We have applied a **discount rate of 3.5%** to technology costs and GVA calculations, where appropriate in the economic analysis. This aligns with HM Treasury Green Book guidelines (Source 02).

Table 1: Energy modelling areas, description of inputs, and which areas are assessed for economic impact

Energy modelling area	Description of energy modelling inputs (for 2020-2035)	Included in economic assessment?
Electricity generation	Installed capacity (MW) and electricity generation (gigawatt-hours per year - GWhpa) by technology	Yes
Domestic energy efficiency	<ul style="list-style-type: none"> • Number of homes in each Energy Performance Certificate (EPC) rating • Estimated number of energy efficiency measures required to achieve a shift to higher EPC homes • Change in thermal demand of existing homes • Change in thermal demand of new homes • Change in non-heat electricity use (e.g. appliances, lighting) 	Yes
Domestic heat	Number of homes using each heating technology	Yes
Commercial and industrial energy consumption	Changes in commercial and industrial energy consumption by fuel	No*
Road transport	Changes in vehicle numbers and type	No**

***Commercial and industrial energy consumption:** The energy modelling inputs are insufficient to estimate jobs, GVA, or investment. The energy modelling impacts 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.

****Road transport:** There was insufficient data to relate the uptake of EVs in the region with impact on jobs, GVA and investment. As such, road transport has not been assessed.

2. Electricity generation

2.1 Jobs assumptions

To estimate the number of jobs associated with each scenario in the energy modelling, a benchmark of either jobs per installed capacity (per megawatt, MW) or jobs per annual energy generation (GWHPa) is applied, depending on whichever benchmark is available (Table 2).

Average gross direct jobs per	Jobs per installed capacity or generation		Source
Anaerobic digestion	MW	2.926	03
Biomass electricity and CHP	GWHPa	0.25	04
Landfill gas	GWHPa	0.6	04
Offshore wind	MW	1.144	05
Onshore wind	GWHPa	0.5	04
Solar PV	GWHPa	1.75	04
Nuclear	GWHPa	0.18	06
Energy from waste	MW	2.926	05
Hydropower	GWHPa	0.25	04
Tidal stream	MW	1.408	03
Wave	MW	1.408	03
Tidal lagoon	MW	1.408	03
Coal	GWHPa	0.15	04
Gas	GWHPa	0.12	04

Note: For source 4, estimates are taken from charts in the UKERC study; tables with exact figures were not provided.

2.2 GVA assumptions

To estimate the GVA related to the energy generation projects and activities, we build on the jobs estimates and apply a GVA/ employee benchmark (Table 3).

Approximate gross value added at basic prices ¹ / Total employment average during the year	Source	
2008 – 2017 average	£157,198	08

¹ Eurostat defines 'basic price' as 'the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, by the producer as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer' (Source 07).

2.3 Investment assumptions

To calculate the investment related to the electricity generation asset changes described by the energy modelling, we have applied a benchmark which combines pre-development and construction costs/ installed capacity to new generation.

The BEIS 2016 report 'Electricity Generation Costs' (Source 09) provided cost data for all technology areas except for tidal lagoon. Due to limited data on tidal lagoon costs, we have referenced the BEIS TLP Tidal Lagoon Programme: Factsheet (Source 10).

There is a slight mismatch in the structure of the energy model inputs compared to the main data source. The energy model inputs provide the year that energy generation comes online, however the base data relates to the year the project is commissioned. Acknowledging this, we have applied the discount factor to an estimated year the project is commissioned, and we match the estimated year of commission with the appropriate BEIS costs for that year. However, when it comes to interpretation this means that we present the total investment costs, but we do not break these costs down by year.

3. Domestic energy efficiency

3.1 Investment calculations and sources

To estimate the investment required, the average installed cost per dwelling for each measure was applied to the number of dwellings implementing the measure in a given year (Table 4).

Table 4: Assumptions: Installed cost per dwelling for energy efficiency measures		
Measure	£	Source
50 mm internal or external wall insulation	£ 8,500	11
Add additional 80 mm jacket to hot water cylinder	£ 50	
Cavity wall insulation	£ 900	
Draughtproof single-glazed windows	£ 5,000	
Flat roof insulation	£ 400	
Floor insulation	£ 2,500	
Flue gas heat recovery device in conjunction with boiler	£ 800	
High performance external doors	£ 500	
Hot water cylinder thermostat	£ 50	
Increase hot water cylinder insulation	£ 50	
Increase loft insulation to 270 mm	£ 400	
Insulate hot water cylinder with 80 mm jacket	£ 50	
Low energy lighting for all fixed outlets	£ 225	
Replace single glazed windows with low-E double glazing	£ 5,000	
Replacement glazing units	£ 5,000	
Room-in-roof insulation	£ 400	
Secondary glazing to single glazed windows	£ 5,000	
Solid floor insulation	£ 3,000	
Suspended floor insulation	£ 2,000	
Time and temperature zone control	£ 250	
Upgrade heating controls	£ 250	

Note: Source 11 did not include prices per dwelling for three types of energy efficiency measures. We did not find peer reviewed sources for these measures. Instead, we relied on websites that are commonly consulted by households to obtain price information (Table 5).

Table 5: Assumptions: Price per dwelling for domestic energy efficiency measures		
Measure	£	Source
Flue gas heat recovery device in conjunction with boiler	£ 800	12
Low energy lighting for all fixed outlets*	£ 225	13
Heat recovery system for mixer showers / waste water heat recovery systems	£1,000	14
* assumes 30 light bulbs per home		

3.2 Jobs calculations and assumptions

To calculate the jobs associated with the energy efficiency measures installed in dwellings, we applied a benchmark for gross jobs/ investment (Table 6). Because a net jobs/investment benchmark is not available, a net job: gross job ratio is applied as shown in Table 7. This accounts for the reduction in jobs associated with a reduction in energy and electricity production.

Table 6: Assumptions: Gross jobs/ investment for average home weatherization (weatherproofing) and commercial retrofits		
		Source
Direct jobs/\$USD million	4.55	15
Direct jobs/£GBP million ²	6.69	15-16
Note: The gross jobs/investment benchmark does not include long term operation and maintenance jobs. However, it is considered to be the most robust source available and we expect the long-term jobs associated with the energy efficiency measures described to be minimal.		

Table 7: Assumption: Domestic energy efficiency jobs: Net jobs as a percentage of gross jobs		
Type of jobs	Jobs/ £million	Source
Net energy efficiency jobs (including indirect and induced)	10	04
Gross energy efficiency jobs (including indirect and induced)	14	04
Net jobs as a percentage of gross jobs (calculated)	71%	Table 7

² OECD 2019 purchasing power parities comparing US and UK currency of 0.68 was applied to convert USD to GBP (Source 16).

3.3 GVA calculations and sources

To estimate the GVA related to these energy efficiency measures, we apply a GVA/ employee benchmark to the jobs estimates (Table 8).

Table 8: Assumption: GVA/ employee for 'Construction' and 'Manufacturing'*		
Approximate gross value added at basic prices / Total employment average during the year		Source
2008 – 2017 average	£59,350	07, 17-18
<p>*We recognise that there is not a 'perfect' match between energy efficiency activities and the standard industrial classification (SIC) codes used in the Annual Business Survey (ABS) (Source 17). The Office for National Statistics Low Carbon Renewable Economy (LCREE) data set (Source 18) places most jobs associated with LCREE in the construction (36% of jobs) or manufacturing sectors (37% of jobs). As such this assessment combined and averaged overall construction and manufacturing SIC figures from the ABS.</p>		

4. Domestic heat

4.1 Investment calculations and sources

We calculate the investment related to heat network and non-heat network heating technologies differently due to data availability. For non-heat network technologies, an average capital and installation cost per dwelling is applied to the dwellings that have switched to that technology in a given year. Table 8 below shows the costs and sources used.

Table 8: Assumptions: Non-heat network capex and installation costs per dwelling		
Technology	Capex and installation costs/ dwelling (£)	Source
Mains gas boiler	£2,656	19
Hybrid heat pump (HHP)	£6,500	20
Oil boiler	£3,056	19
Liquid petroleum gas (LPG) boiler	£1,800	21
Bio LPG boiler	£1,800*	21
Biomass boiler	£14,700	22
Radiant electric heaters	£153	23
Air source heat pump (ASHP)	£9,005	24
Ground source heat pump (GSHP)	£14,931	24

* Due to lack of data, bio LPG boilers assumed to be the same price as LPG boiler

For heat networks, investment costs are estimated based on both thermal demand of the connected homes as well as the number of homes connected. This is due to data availability of different heat network capital costs (Table 9 and Table 10). Table 12 sets out the heat network distribution losses and operating hours assumptions.

Table 9: Assumptions: Heat network generation plant capital costs per capacity		
Type	Capex £/ MW	Source
Gas heat network	£844,000	25
Biomass heat network	£410,508	
GSHP heat network	£1,500,000	

Table 10: Assumptions: Heat network heat interface unit (HIU) and distribution pipework costs per dwelling		
Heat network other plant and equipment	Capex/ dwelling (£)	Source
Domestic HIUs	£2,000	25
Distribution network investment costs	£1,624	26
Total per dwelling costs	£3,624	Table 11

Table 11: Assumptions: Heat network distribution losses and operating hours		
Parameter	Assumption	Source
Heat network distribution losses	10%	27
Average heat network operating hours per year	5,000 hours/year	28

4.2 GVA calculations and sources

To estimate the GVA related to domestic heating measures, we build on the investment estimates and apply a GVA/ turnover benchmark for non-heat network technologies (Table 13) and a GVA/ capex benchmark for heat network technologies (Table 14).

Turnover is a sufficient estimation for non-heat network heat technologies as they are more likely to be purchased in the year of installation. Heat networks differ in this regard because high capital costs must be recovered over a long period of time. As such, we consider GVA/ capital a more appropriate benchmark for heat networks.

Table 13: Assumption: GVA/ turnover for 'Manufacture of gas; distribution of gaseous fuels through mains'		
Approximate gross value added at basic prices / Total turnover		Source
2008 – 2017 average	0.317	07-08

Table 14: Assumption: GVA/ Total capital expenditure for 'Manufacture of gas; distribution of gaseous fuels through mains'

Approximate gross value added at basic prices / Total capital expenditure		Source
2008 – 2017 average	3.35	07-08

4.3 Jobs calculations and sources

Estimating jobs related to heating technologies is limited significantly by lack of data. Net job benchmarks are not available and robust benchmarks for the traditional heating technologies, such as gas and coal boilers, are not available. As such, this analysis focuses on estimating the gross jobs associated with the transition to low carbon heating technologies.

Employment associated with low carbon heating is substantially less studied than jobs associated with low carbon electricity or energy efficiency. Should more studies on low carbon heating jobs be released, we would be able to compare benchmarks and increase the level of confidence as they relate to these results. As with investment and GVA, our approaches differ for heat network and non-heat network technologies (Tables 15 and 16).

Table 12: Assumptions: Non-heat network low carbon technology jobs/£ million turnover

Technology	Jobs/£ m turnover	Source	Jobs/£ m turnover	Source
Hybrid heat pump (HHP)	4.47	18	9.48	28
Biomass boiler	1.97		11.88	
Radiant electric heaters	4.47		n/a	
Air source heat pump (ASHP)	4.47		9.48	
Ground source heat pump (GSHP)	4.47		9.48	

* Source 18 was used in the analysis. Source 28 is shared to demonstrate variance in the two key data sources available. One possible reason for this variance is that source 28 may include indirect and induced jobs in addition to direct jobs; however, the source does not go into sufficient detail to allow for this comparison. Given the variation between the two key sources available as well as the uncertainty regarding which types of jobs were counted, we chose to use source 18 as the conservative option.

Table 13: Assumptions: Permanent jobs/GWh heat generated

	Jobs/ GWh	Source
Heat networks (gas, biomass, and GSHP driven plant)	0.21*	29

*Only includes permanent jobs; does not include construction or installation jobs

5. About the authors

This technical annex and the economic modelling and analysis which supported the regional energy planning was prepared by the Welsh Government Energy Service.

The Energy Service appointed John Ward, Managing Director of Pengwern Associates, to provide technical and quality assurance to the economic modelling process and outputs. John is a Visiting Senior Fellow at the Grantham Research Institute on Climate Change and the Environment. He holds an MSc in Economics (Distinction) from University College London and a BA (Hons) in Philosophy, Politics and Economics from the University of Oxford.

The economic modelling and analysis was reviewed and refined in discussion with members of the Welsh Government's Climate Change, Energy and Economist teams.

6. Data sources and references

Source	Reference	Category
01	Office for National Statistics. 2018. Annual Business Survey technical report: August 2018.	All: GVA
02	HM Treasury. 2020. The Green Book: Central Government Guidance on Appraisal and Evaluation.	All
03	Rutovitz, J., Dominish, E. and Downes, J. 2015. Calculating global energy sector jobs: 2015 methodology. Prepared for Greenpeace International by the Institute for Sustainable Futures, University of Technology Sydney	Electricity generation: jobs
04	UKERC, 2014. Low Carbon Job: The evidence for net job creation from policy support for energy efficiency and renewable energy	Electricity generation / Domestic energy efficiency: jobs
05	Ram M., Bogdanov D., Aghahosseini A., Gulagi A., Oyewo A.S., Child M., Caldera U., Sadvoskaia K., Farfan J., Barbosa LSNS., Fasihi M., Khalili S., Dalheimer B., Gruber G., Traber T., De Caluwe F., Fell H.-J., Breyer C, 2019. Global Energy System based on 100% Renewable Energy – Power, Heat, Transport and Desalination Sectors. Study by Lappeenranta University of Technology and Energy Watch Group, Lappeenranta, Berlin	Electricity generation: jobs
06	WEI, M., Patadia, S., Kammen, D.M. 2010. Putting renewables and energy to work: How many jobs can the clean energy industry generate in the US? Energy Policy (38) 919-931	Electricity generation: jobs
07	Eurostat, 2017. https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Basic_price	All: GVA
08	ONS, 2019. Annual Business Survey. Non-financial business economy, UK: Sections A to S	Electricity generation: GVA
09	BEIS, 2016. Electricity Generation Costs	Electricity generation: investment
10	BEIS, TLP Tidal Lagoon Programme: Factsheet	Electricity generation: investment
11	European Climate Foundation, 2016. RAP, Association for the Conservation of Energy. Buildings and the 5th Carbon Budget.	Domestic energy efficiency: investment
12	Thegreenage.co.uk, 2020. Flue Gas Heat Recovery Systems	Domestic energy efficiency: investment
13	Thegreenage.co.uk, 2020. Price of lightbulbs	Domestic energy efficiency: investment
14	Thegreenage.co.uk, 2020. Waste Heat Recovery Systems	Domestic energy efficiency: investment

15	Garrett-Peltier, H. 2017. Green versus brown: Comparing the employment impacts of energy efficiency, renewable energy, and fossil fuels using an input-output model. Economic modelling (61) 439 -447	Domestic energy efficiency: jobs
16	OECD. Purchasing power parities (PPP).	Domestic energy efficiency: jobs
17	ONS, 2019. Annual Business Survey (ABS) Non-financial business economy, UK: section f: construction and section c: manufacturing	Domestic energy efficiency: GVA
18	Low Carbon and Renewable Energy Economy (LCREE) survey estimates, UK, 2014 to 2018. UK Renewable Heat FTE/turnover	Domestic energy efficiency: GVA
19	BEIS, 2017. What does it cost to retrofit homes? Updating the Cost Assumptions for BEIS's Energy Efficiency Modelling	Domestic heat: investment
20	Carbon Trust, 2020. Interview with Will Rivers (heat pump expert)	Domestic heat: investment
21	Price your job. The Installation Cost of LPG Gas Central heating	Domestic heat: investment
22	RHI Monthly official statistics tables August 31 2018. Average Median Capex (10 - 45kW)	Domestic heat: investment
23	The Renewable Energy Hub UK. How Much do infrared heating systems cost	Domestic heat: investment
24	RHI Monthly official statistics tables August 31 2018. Average Median Capex (4-15kW)	Domestic heat: investment
25	Committee on Climate Change, 2015. Research on district heating and local approaches to heat decarbonisation. A study for the Committee on Climate Change.	Domestic heat: investment
26	O.Gudmundsson, J.E. Thorsen, L.Zhang. 2013. Cost analysis of district heating compared to its competing technologies. Outer City averages - Euros converted to GBP on 03/06/2020	Domestic heat: investment
27	Carbon Trust, 2020. Interview with Dr. Jonathan Williams (heat network expert)	Domestic heat: investment & jobs
28	European Commission. 2019. Competitiveness of the heating and cooling industry and services. Part 1 of the study on the competitiveness of the renewable energy sector. Heat Pumps or biomass Employment/ (turnover in euros * exchange rate)	Domestic heat: jobs
29	Turner and Townsend. Report Expected outcome calculations methodologies. Leeds City Region Energy Accelerator. West Yorkshire Combined Authority.	Domestic heat: jobs

Disclaimer

The Welsh Government Energy Service (“**WGES**”) is funded by the Welsh Government with the aim of developing energy efficiency and renewable energy projects that contribute to public sector decarbonisation and national energy targets. The WGES is delivered by the Carbon Trust, Energy Saving Trust and Local Partnerships (the “**Delivery Partners**”). This report (the “**Report**”) has been produced by the Delivery Partners and, whilst the views expressed in it are given in good faith based on information available at the date of this Report:- (i) these views do not necessarily reflect the views of the Welsh Government, which accepts no liability for any statement or opinion expressed in the Report; (ii) the Report is intended to provide general guidance only, rather than financial, legal or technical advice for the purposes of any particular project or other matter, and no-one in receipt of the Report should place any reliance on it in substitution for obtaining their own advice from an appropriate third party advisor; and (iii) any person in receipt of this Report should therefore obtain their own financial, legal, technical and/or other relevant professional advice insofar as they require specific guidance on what action (if any) to take, or refrain from taking, in respect of any project, initiative, proposal, involvement with any partnership or other matter to which information contained in the Report may be relevant; and (iv) the Delivery Partners accept no liability in respect of the Report, or for any statement in the Report and/or any error or omission relating to the Report.

Mae'r dudalen hon yn fwriadol wag

SOUTH WEST WALES CORPORATE JOINT COMMITTEE

REPORT OF THE CHIEF EXECUTIVE

REPORT TITLE: UK SHARED PROSPERITY FUND

<p>Purpose of Report</p>	<ol style="list-style-type: none"> 1. To draw the UK Government's White Paper 'Levelling Up' and associated pre-launch guidance for the UK Shared Prosperity Fund to the attention of the members of the South West Wales Corporate Joint Committee (CJC). 2. To note the consultation and engagement being undertaken by the UK Government with partners including local authorities to develop arrangements that maximise UK Shared Prosperity Fund in each nation. UK Government would support delivery on a regional footprint in Wales – based on the four economic regions/City and Growth Deal regions. 3. To note work underway to assess the role the CJC might have in delivering the UK Shared Prosperity Fund which is a central pillar of the UK Government's Levelling Up agenda .
<p>Recommendations</p>	<ol style="list-style-type: none"> 1. That members of the South West Wales Corporate Joint Committee (CJC) note the UK Government's proposals to 'Level Up' and the features of the UK Shared Prosperity Fund outlined in the pre-launch guidance. 2. That members of the CJC note that the Chief Executive will work with officers across the region and engage with the UK Government team but the current assessment is that the CJC is unlikely to be the best mechanism for drawing down the funds.
<p>Report Author</p>	<p>Karen Jones, Chief Executive</p>

Finance Officer	Chris Moore
Legal Officer	Craig Griffiths

Background and Introduction

The UK Government published its White Paper ‘Levelling Up’¹ on 2nd February 2022. At the same time, the UK Government published pre-launch guidance related to the long awaited UK Shared Prosperity Fund with a full Prospectus on the Fund with details of governance, statutory and regulatory requirements is expected to be published in the Spring.

The White Paper sets out 12 UK-wide missions to frame delivery of the levelling up agenda to 2030 alongside specific policy interventions that build on the 2021 Spending Review. The aim is to end the geographical inequality that is a feature of the UK economy by:

- boosting productivity, pay, jobs and living standards by growing the private sector, especially in those places where they are lagging;
- spreading opportunities and improving public services, especially in those places where they are weakest;
- restoring a sense of community, local pride and belonging, especially in those places where they have been lost; and
- empowering local leaders and communities, especially in those places lacking local agency.

The UK Shared Prosperity Fund (SPF) will focus £2.6billion investment in restoring local pride: improving communities and place, people and skills, and supporting local business. Local leaders will be empowered to direct funding toward their own, locally identified priorities by March 2025. All areas of the UK will receive an allocation of the Fund. Local authorities are encouraged to work in their ‘delivery geographies’ to start preparing for the launch of the SPF. South West Wales / Swansea Bay is identified as one of the delivery geographies in Wales.

Pre-launch Guidance² – Key Points

The primary goal of the UK Shared Prosperity Fund is to build pride in place and increase life chances across the UK. Key features include:

- Each place across the UK will receive a conditional allocation from the Fund;
- To access their allocation each place will need to prepare an Investment Plan identifying the measureable outcomes that will be delivered and the interventions that will be prioritised;
- The Investment Plan will need to take account of the wider investment landscape – for example the Levelling up Fund;
- Places will need to sign up to indicators which will be used for monitoring purposes;

¹ <https://www.gov.uk/government/publications/levelling-up-the-united-kingdom>

² <https://www.gov.uk/government/publications/uk-shared-prosperity-fund-pre-launch-guidance/uk-shared-prosperity-fund-pre-launch-guidance>

- There will be flexibility for places to identify a mix of investment activity across three themes: communities and place; local business; and people and skills;
- Working with other places will be welcomed where this meets the needs of places, achieves better outcomes and value for money;
- Each area will need to invest a ring-fenced amount in the Multiply programme – an initiative to drive up standards of adult numeracy. Further details are to be provided by the Department of Education in due course;
- The Fund will establish new relationships between the UK Government, local government and partners across the UK;
- Local government will be given responsibility for managing an area's allocation;
- In Wales the UK Government would support delivery across strategic regional areas based on existing City and Growth Deal footprints;
- Local authorities for each geography will be invited to collaborate in developing Investment Plans and delivering the Fund;
- The Welsh Government will be invited to play a role in the development and delivery of local Investment Plans;
- A lead authority is envisaged for each area and that authority will be able to use part of the Fund to cover the cost of administering the Fund;
- A mix of revenue and capital funding will be made available;
- Comprehensive and balanced local partnerships will be a core component of how a Fund will be administered locally;
- MPs should be involved in the planning and development of the Investment Plans at every stage;
- A full prospectus will be issued in the Spring.

Officials from the UK Government are engaging with local authorities to seek both feedback on the detail included in the pre-launch guidance but also to help and encourage local authorities to begin preparatory work. Key messages from the early engagement suggests that each local authority needs to be clear about the local priorities that they would wish to see included in the Investment Plan. UK Government officials are advising that the Investment Plan itself will most probably need to be based on the existing regional economic footprint and the plan will incorporate local priorities but also activities where collaboration across the region has been identified as beneficial.

The UK Government is unlikely to specify the governance arrangements for the SPF at a local/regional level. Accordingly, it will be necessary for options to be assessed to determine what would be optimal. Given that the UK Government will be commissioning the Investment Plans in the spring with the expectation that they will be submitted for summer 2022, work needs to begin in earnest. Directors of Regeneration within the region will play a key role in working up local and regional proposals for consideration in collaboration with other stakeholders. Once the Prospectus is published, further advice can be provided on the preferred governance for the work.

Financial Impacts

The UK Shared Prosperity Fund will replace existing EU funding programmes and is therefore critical to supporting further economic growth in the region.

The cost of administering the Fund will be able to be met from the Fund.

A decision will need to be taken on the most suitable governance arrangement for managing the Fund. At the present time, the VAT position of CJs in Wales would create a barrier to the CJC providing the governance for the Fund. However, once the VAT position is resolved, the CJC would be a viable option for governing the Fund.

Integrated Impact Assessment

The CJC is subject to the Equality Act (Public Sector Equality Duty and the socio-economic duty), the Well-being of Future Generations (Wales) Act 2015 and the Welsh Language (Wales) Measure, and must in the exercise of their functions, have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Acts.
- Advance equality of opportunity between people who share a protected characteristic and those who do not.
- Foster good relations between people who share a protected characteristic and those who do not.
- Deliver better outcomes for those people who experience socio-economic disadvantage
- Consider opportunities for people to use the Welsh language
- Treat the Welsh language no less favourably than English.
- Ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

The Well-being of Future Generations (Wales) Act 2015 mandates that public bodies in Wales must carry out sustainable development. Sustainable development means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the 'well-being goals'.

There is no requirement for an Integrated Impact Assessment for the governance elements of this report as the setting up of the CJC is underpinned by legislation and this report is formally drawing the Committee's attention to a White Paper and pre-launch guidance issued by the UK Government.

Workforce Impacts

Work will need to be initiated prior to the publication of the Prospectus so that each local authority and the region more broadly is well positioned to submit an

Investment Plan within the timetable outlined by the UK Government. This work will be progressed through existing regional structures. There is no direct impact on the CJC at this time.

Legal Impacts

The Fund will need to be administered by a constituted body.

Risk Management Impacts

The main risk identified is that the CJC will not be able to provide governance of the Fund as the VAT status of CJs in Wales is unresolved. This would suggest that any collaborative bid would need to be arranged through a lead local authority rather than through the CJC mechanism.

Consultation

There is no requirement for external consultation on this item.

Reasons for Proposed Decisions

To ensure that members of the CJC understand the main features of the UK Government's proposals as contained in the White Paper 'Levelling Up' and the pre-launch guidance for the UK Shared Prosperity Fund. To make members of the CJC aware of the impact the current VAT status of CJs and the implications of this for governance of any collaborative funding bid.

Implementation of Decision

Immediate.

Appendices

None

Background Papers

White Paper – Levelling Up, February 2022

Department for Levelling Up, Housing and Communities – pre-launch guidance Shared Prosperity Fund, February 2022