



Climate Change & Nature Strategy 2022-2030

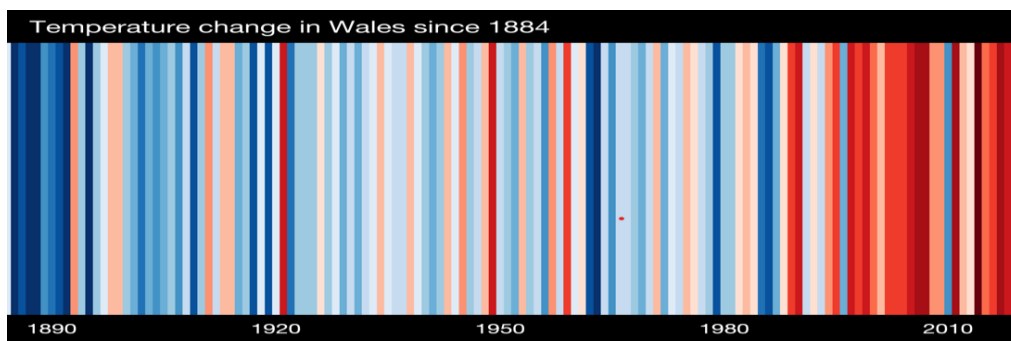


1. Introduction

Climate change is the long-term alteration of temperature and typical weather patterns largely caused by human activity, like burning fossil fuels, like natural gas, oil, and coal. Burning these materials releases what are known as greenhouse gases into the atmosphere. Human health and well-being is vulnerable to such change. This shift is expected to cause fluctuating weather-heat and fire, drought and flood, an increase in waterborne diseases, poor air quality, threats to wildlife and loss of food sources.

The image below shows how the temperatures across Wales are already increasing year on year, setting a clear trend towards a hotter climate which will bring significant consequences.

Wales Warming Stripes – 1884 -2020 (Professor Ed Hawkins MBE, University of Reading)
[#ShowYourStripes](#).



We all have a responsibility to act now. A public sector target of 2030, ahead of the Welsh Government's target of 2050 for the whole of Wales, will give us our best chance of keeping global warming below 1.5°C.

This is the tipping point at which the climate impacts we're already experiencing will go from bad to potentially catastrophic. We'll see natural systems cross danger points, triggering lasting changes such as extreme storms, heatwaves, mass loss of natural habitats and species.

It is also recognised that our wellbeing and that of future generations are dependent upon the state of the natural environment. Our natural environment in Wales is under considerable pressure from over exploitation, habitat loss, pollution, climate change as well as invasive non-native species.

2. So what are Swansea Council doing about it?

Legislation, Regulation and Policy

There is a range of well publicised legislation and policy helping to drive this change:

Globally

The international Paris Accord 2015 which seeks to keep global temperature increases well below 2 degrees.

The IPCC (Intergovernmental Panel on Climate Change) - In their Climate Change 2021 report, conclude that:

- there is still time to limit the worst effects of climate change
- stabilising the climate will require the globe to reach net-zero CO2 emissions by 2050
- human activities have already caused around 1.1°C warming
- the planet's climate is warming faster than anything experienced
- every part of our planet is already seeing multiple and increasing changes in their climate systems
- global warming is very likely to reach 1.5°C by 2040
- climate change is intensifying the water cycle affecting rainfall patterns
- coastal areas will see continued sea-level rise throughout the 21st century
- further warming will amplify impacts on frozen regions
- the ocean is warming and acidifying.

Nationally

In 2019 the UK Government amended the Climate Change Act 2008 by increasing the target for reducing greenhouse gas emissions in the UK to at least 100% lower than 1990 levels by 2050. This is otherwise known as the Net Zero target.

The Welsh Government Well-being of Future Generations Act 2015 which requires accountability for the impacts of long term decision making.

The Environment (Wales) Act 2016 supports finding ways to secure healthy, resilient and productive ecosystems for the future whilst still meeting the challenges of creating jobs, housing and infrastructure.

Welsh Government has set out its legal commitment to achieve net zero emissions by 2050, but is pushing to “get there sooner”. It recognises that climate change will impact us all, but the stark reality remains our most vulnerable communities will be hit the hardest. Welsh Government recognises that transition towards a Net Zero Wales must be fair and just, in order to achieve a green and clean future with good quality jobs and leaves no communities behind.

Swansea will strive to align with the Net Zero Wales Carbon Budget 2 (2021-2025), embracing the Team Wales approach.

The Welsh Government in recent years has developed a forward-looking legislative framework to encourage environmental improvements, including for the preparation of Nature Recovery Plans at national and local level. These plans which, are currently under preparation and continual review, are aimed at addressing the underlying causes of biodiversity loss by putting nature at the heart of decision-making and increasing the resilience of our natural systems (ecosystems). The Welsh Government became one of the first parliaments in the world to declare a Nature Emergency in June 2021.

Regionally

As part of the regional agenda the 4 local authorities – Carmarthenshire, Pembrokeshire, Neath Port Talbot and Swansea have progressed a new regional energy strategy. Further work is also progressing as part of the new CJC work programme.

Locally

Following the Notice of Motion on Climate Change Emergency presented to Council on 27th June 2019, the Authority reaffirms its commitment to:

- Call upon the UK and Welsh governments to provide us with the necessary powers and resources to ensure Swansea Council becomes net zero by 2030.
- Publicise climate emergency and promote a greater awareness of the truth of climate change amongst the local population aiming for a county wide target of net zero by 2050
- Work with relevant experts in research and development to:
 - Review our current strategies and action plans for addressing climate change.
 - Identify any further policy changes or actions which we could undertake, within the scope of our powers and resources, to meet the challenge of climate emergency.
 - Seek the help of local partners such as Swansea University and other research bodies to, within one year, produce a report to share with the community, explaining work already underway and achievements already made, as well as targets for the future.
 - Update on further work undertaken by the Council in this area on an annual basis through the Council Annual Review of Performance Report section on corporate objective - Maintaining and enhancing Swansea's natural resources and biodiversity.
- The Council undertook a citizen's survey in March 2021, with excellent response, but the key message taken on board is 'Go Faster, Go Further'.



Climate Change Survey 2021

Overall survey results told us

"Go Faster! Go Further!"

967 people were surveyed

93%

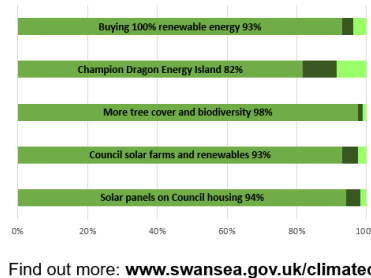
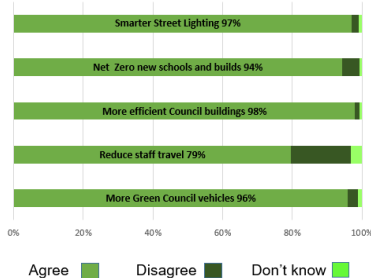
were concerned about climate change

A Twitter check of 396 people found

66%

were concerned about climate change

Percentage of agreement that these Council actions will help us reach a Net Zero Swansea



Agree Disagree Don't know

Find out more: www.swansea.gov.uk/climatechange

3. Nature Recovery

Swansea Council declared a Nature Emergency in November 2021. A Swansea Nature Recovery Action Plan is currently being prepared in collaboration with the Swansea Nature Partnership, a core ambition of which will be to reverse the current decline of nature within the City & County of Swansea and to increase the resilience of ecosystems. The aim is for Swansea to be nature positive by 2030, i.e., that current decline in nature is beginning to reverse. By 2050 the hope is that nature is thriving in Swansea, that nature is in recovery, valued, restored, sustainably managed, and wisely used.

4. The Vision

Swansea Council's commitment to addressing climate change is broken down into clearly defined work streams alongside its commitment to nature recovery. Nature recovery proposals will be set out in a separate action plan that sits alongside this strategy

The council will lead by example and be the focal point for response to climate and nature action across the whole city and county.

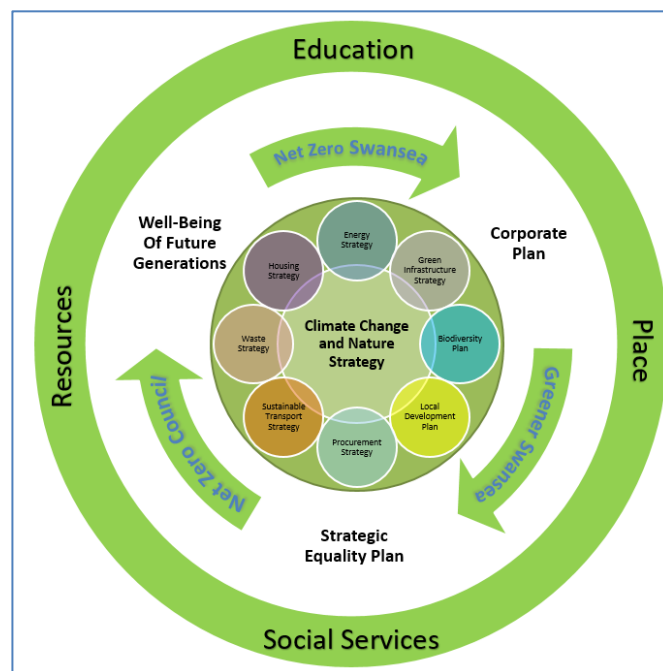
The council business will strive for net zero carbon by 2030, establishing monitoring processes for emissions and developing a robust action plan in order to achieve the target.

Working with partners, the council will call on the whole City and County of Swansea, its major employers, its citizens, community groups and businesses to contribute to achieving net zero carbon by 2050. There will be a need for collective leadership and a shared ambition.

5. Governance

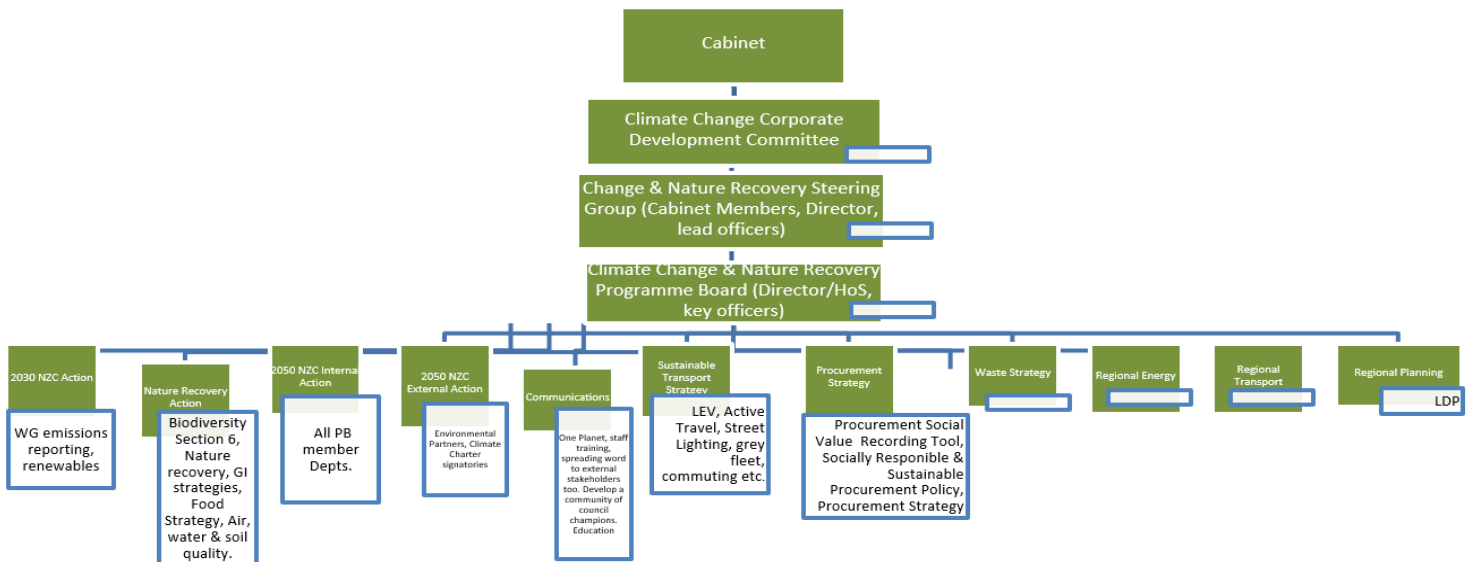
To enable the Council to continue to make progress one of the key actions from the NoM was to review the current policy framework and how this could contribute to the achievement of net zero carbon and climate emergency response.

Therefore it has been necessary to review over 100 Council policies that contribute to this agenda and distil these down to 8 key themes as outlined below.



The infographic demonstrates that these policies overlap to firstly feed into the core short term target of net zero carbon for the council emissions by 2030 and the longer term goal of achieving a similar aim for the whole of the city by 2050. These policies are then intrinsically wrapped up in the overarching requirements of the Corporate Plan, Strategic Equality Plan and Wellbeing of Future Generations Act (Wales) 2015.

Climate Change & Nature Recovery Governance



The governance structure represents a golden thread not only through the organisation, but externally with partners.

6. The journey so far

Swansea Council have achieved a great deal over several years to mitigate the impacts of Climate Change such as:

- Swansea Council procures its energy using Crown Commercial Services Framework Agreements, via the National Procurement Service (NPS), for its energy supplies. All electricity procured via the NPS framework is from 100% renewable energy sources; 41% sourced from Wales (Apr 20 – Mar 21); Gas – Total Gas and Power (TGP) procured as new gas supplier (from Apr 21), registered interest in purchasing 'Green Gas'- dependant on viability and cost impact.
- Refit Low Carbon Programme - Swansea Council is participating in the Welsh Government supported Re:fit Low Carbon Programme to implement energy efficiency saving opportunities in non-domestic buildings. A £1.3 million interest free loan has been secured from Welsh Government Wales Funding Programme (Salix) to deliver a Re:fit Cymru (Energy Efficiency) Phase 1 project comprising over 18 buildings which is projected to save an estimated 400 tCO₂e every year. Quantifying the energy savings delivered by the Energy Conservation Measures (ECMs) will be validated using the Measurement and Verification (M&V) process.
- Carbon Reduction Retrofit (phase 2): Working towards developing a business case to implement Energy Conservation Measures for Education Services - Schools.
- Swansea Council with the support of Welsh Government Energy Services are progressing towards the development of a 3MW Ground Mounted Solar PV farm located on a capped waste land filled area. It is predicted over the asset lifespan (35 years) that 101,302,731 kWh of renewable energy will be generated equating 28,454 t/CO₂. Part of this capital expenditure cost could be recovered as it would create revenue for the Authority, in the form of either Power Purchase Agreements (PPA) or private wire connection. There

is the potential opportunity of extending the Solar PV site in future years as current additional waste land is capped.

- Public Sector Hub: Cabinet are considering moving from the Civic Centre to a new public sector hub in the heart of the city centre as part of Swansea Bay Central Phase 2, the £1bn project to revitalise the St David's area of the city centre. This is an opportunity for the Authority to show its commitment towards meeting its net zero carbon aspirations by 2030 incorporating renewable technologies into the design specifications.
- Progressing work towards a world-leading Swansea Bay Tidal Lagoon, estimated electricity generation of 504,854 MWh, equating to carbon emission savings of 94,913 mT CO₂e.

6.1 Community Energy

Community energy covers aspects of collective action to reduce, purchase, manage and generate energy. Community energy projects have an emphasis on local engagement, local leadership and control and the local community benefiting collectively from the outcomes.

6.2 Homes as Power Stations

Since the first development at Colliers Way, the More Homes development team, in partnership with Corporate Building Services (CBS) have developed the Swansea Standard which has incorporated Homes as Power Stations (HAPS) owing to Welsh Government (WG) Innovative Housing Programme (IHP) funding enabling Swansea Council to build exemplar homes, combining the latest innovative renewable technologies such as Solar PV, Tesla Batteries, Mechanical Ventilation Heat Recovery (MVHR) and Ground Source Heat Pump (GSHP).

With a building fabric first approach integrating the Swansea Standard; Swansea Council has been able to build homes that are super energy efficient; achieving the EPC rating of A and which are almost self-efficient in producing their own energy to decrease energy demand and tackle fuel poverty typically generating around 60% - 80% of the energy consumed.

The HAPS properties are being monitored in collaboration with Welsh School of Architecture (WSA) at Cardiff University. The research team will work in collaboration with industry, government, academia and the public on built environment projects and evaluate renewable energy supply, energy storage and energy demand reduction technologies to create a low carbon-built environment that is both replicable and affordable.

The HAPS developments have now been completed at The Parc Yr Helyg development in Birchgrove (September 2020) and Phase 2 of the Colliers Way, Penplas development (April 2021). The Hill View Crescent/Beacons View Road HAPS development is scheduled to be completed by early 2022. The latest HAPS standard development is due to start in West Cross.

In addition, Swansea Council have retrofitted to HAPS standard several bungalows at Ffordd Ellen, Craig Cefn Parc which are also being monitored by WSA.

6.3 District Heating System

The latest consultant study from 2018 showed that there is an opportunity for Swansea Council to deliver a viable city centre District Heating System network, but this would not be without cost or risk. The options for delivery include a wholly Swansea Council owned and operated model through a Special Purpose Vehicle (SPV), or a joint venture partnership with the private sector to reduce the risk (and return). Assumptions were made that certain city centre buildings would connect to the network and the construction costs of £11.5m (excluding inflation and fees but including contingency at 30%) could attract a return of 8.2% over a 20-year period. The risks revolve around lower than forecasted energy demand, lower

heat payments/tariffs, lower additional revenues and higher capital and operating costs, all of which would affect the Internal Rate Return (IRR) negatively. Since the biggest of these risks is demand, it should be noted that 55% of the energy demand came from three of our development sites (Copr Bay Phase 1, Sailbridge, Civic Centre), to date only Copr Bay has been developed, the other two are yet to come online.

The timescales of the District Heating System network proposal and the Copr Bay development weren't aligned with one another sufficiently enough for the heat network to be included within the Copr Bay scheme. Consideration was given to installing ductwork across Oystermouth Road during the Copr Bay construction which could be used in the future for district network pipework. Unfortunately the nature of the road construction, location of existing underground services and the additional complexities due to trench sizes and logistic issues with highway closures and noise considerations, there was no benefit in installing the ductwork during the Copr bay construction. That does not preclude the development from connecting to a heat network in the future, however. The heating solutions installed in Copr Bay could connect to such a heat network if one was established.

6.4 **Solar PV Schemes - Swansea Community Energy & Enterprise Scheme (SCEES) and Egni/AWEL Co-Operative**

These are schemes exploring how local people in some of Swansea's most economically deprived areas can benefit from community renewable energy projects. They have installed Solar PV systems on a number of Swansea schools with a total estimated renewable generation of electricity amounting to 946,211 kWh/year (assuming 85% Solar PV generation used by schools, this equates to 804,279kWh/yr at electricity corporate rates (£0.13/kWh), estimated financial savings of £104K).

As part of the Egni Co-operative's Solar PV proposal offer to Swansea Council, they have partnered with charity 'Energy Sparks' to provide educational and energy data visualisation programmes to several Swansea schools. Working in collaboration with Education Services and School ECO Clubs, Energy Sparks will provide access to their online energy analysis software to monitor the schools smart meter data to identify energy and financial savings, along with carbon emission reductions. The software will also show the Solar PV data generation from the Egni Co-op PV System. The programme is supported with an extensive list of built-in energy related activities and lesson plans categorised by education level (key stage); subject (Science) and topic (Climate Change).

6.5. **Swansea City Deal**

The Swansea Bay City Deal is a £1.3bn investment in 9 major projects across the Swansea Bay City Region – which is made up of Carmarthenshire, Neath Port Talbot, Pembrokeshire and Swansea together with the Abertawe Bro Morgannwg and Hywel Dda University Health Boards, Swansea University, the University of Wales Trinity Saint David, and private sector partners. 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. Over the next 15 years, the City Deal will boost the regional economy by £1.8bn and generate almost 10,000 new, high-quality jobs. The new Swansea arena is part of the council's £135m Swansea Central Phase One transformation scheme which includes almost 1,000 parking spaces. The arena's external skin will be covered in tens of thousands of LED lights. It is due to open in 2021/22.

6.6. In addition, Swansea Council have been in collaboration with Welsh Government and Swansea Bay City Region partners to 'draft' a Regional Energy Strategy plan for South West Wales which will be completed towards by the end of 2021.

- 6.7 Promoting Welsh & UK Government campaigns and programmes to increase energy efficiency amongst private tenants and home owners, reducing fuel poverty and reducing emissions.
- 6.8 The Blue Eden Tidal Lagoon formally launch in October 2021, along with other community owned renewable energy schemes, like SCEES, to deliver clean energy and benefit local schools and community buildings. The lagoon alone has an estimated electricity generation of 504,854 MWh, equating to carbon emission savings of 94,913 mT CO₂e.
- 6.9 Working with others nationally to urge Welsh Government to develop electric car charging infrastructure.
- 6.10 Being leaders of good practice in Wales through having Sustainable Development policies and approaches pre-dating the Well-Being of Future Generations Act.
- 6.11 Building the first council housing in a generation here in Swansea to a super-energy-efficient "Swansea Standard" that will enable all components to be procured locally and reducing emissions using solar battery storage and air source heat pumps.
- 6.12 Using innovation in construction for flagship projects such as Pentrehafod School, showcasing waste minimisation and sustainability.
- 6.13 Winning investment for innovative green technology, such as "Homes as Power Stations", as part of the City Region Deal.
- 6.14 Securing funding for a vast increase in Active Travel (walking and cycling) routes throughout the county and supported Swansea University's community cycle scheme.
- 6.15 Implementing agile working so that the workforce may reduce unnecessary travel.
- 6.16 Developing local procurement practices to reduce carbon footprint.
- 6.17 In Education, Swansea is an early joiner of the international EcoSchools programmes which encourages schools to promote recycling and reduce energy and water consumption.
- 6.18 Encouragement of Foundation Phase pupils to learn outdoors ensuring a respect for nature, biodiversity and eco-systems.
- 6.19 At KS4, developing partnerships with Universities to establish STEM workshops including the impact of climate change.
- 6.20 Recently incorporating care for the natural environment into the corporate plan as a new priority, recognising the hugely important contribution made by the extensive work of our Nature Conservation Team.
- 6.21 Working with Swansea Public Services Board to improve local services. The four statutory members of the Board are Swansea Bay University Health Board, Natural Resources Wales, the Fire and Rescue Service and the council who will continue to work collectively to improve local social, economic, environmental and cultural well-being as set out in the Well-being of Future Generations Act (Wales) 2015. For this part the focus will be on a Greener Wales.
- 6.22 Street lighting have upgraded 21,053 street lights to LED, along with the installation of City Touch, Central Management System commissioned to control the street light output around Swansea ring road (financial and carbon savings).

6.23 Council car parks have had electric vehicle charge points installed. A total of 16 dual-headed charge points have been installed, serving 32 recharging bays. With the exception of the two Park & Ride sites, the charge points provide 22kW 'fast' charging capabilities. The Park & Ride sites feature 7-22kW charge points (load balancing depending on how many vehicles are plugged-in at the same time). All charge points provide 100% renewable electricity to users. Users can access the charge points through an App or by calling a 24/7 customer service line (bi-lingual).

6.24 Active Travel. The total network has increased in length by 25% in the past three years, with over £12million of investment made in active travel infrastructure. Of the 72,000 households in Swansea, 60% now live within 500m of a dedicated off-road cycle route.

7.0 Swansea Council Net Zero Carbon by 2030

Swansea Council is monitoring its emissions and reporting annually to Welsh Government. It is taking all possible action to achieve net zero as demonstrated in the action plan:

Swansea Council Net Zero – 30 Actions by 2030

Buildings & Energy	Fleet & Mobile Equipment	Land Use
<ul style="list-style-type: none"> Decarbonise our public estate by reviewing our asset management strategy. Reduce the energy consumed across the council's buildings and estate. Encourage employee behaviour change through training and process improvement Decarbonise street lighting with more LED's Ensure all new buildings are constructed to the highest possible sustainability standards. 	<ul style="list-style-type: none"> Transition the Council's fleet to zero emission equivalents in accordance with the Welsh Government's expectation of light commercial vehicles by 2025 and other vehicles by 2030 Establish a fleet vehicle charge point infrastructure that supports this transition Optimise fleet vehicle use and efficiency Establish integrated data systems for GHG measurement Revise and approve the appropriate supporting policies, procedures and working practices Decarbonise Grey Fleet travel Decarbonise mobile plant equipment 	<ul style="list-style-type: none"> LDP policy reviewed to protect land soils and habitats rich in carbon Increase terrestrial Central Area GI to 26% Tree planting areas mapped county wide 1000s new trees planted 30% of protected sites (local nature reserves, etc.) in positive management for biodiversity
Waste	New Ways of Working	Supply Chain
<ul style="list-style-type: none"> Encourage circular economy values within Swansea Council – to minimise and prevent - reduce, reuse, recycle, wherever possible Reduce operational single use plastics wherever possible Reduce operational waste e.g. food, paper Encourage operational recycle and repair. Reduce Construction Waste 	<ul style="list-style-type: none"> Develop data monitoring processes Reduce commuting miles Deliver agile working policy Develop staff active travel plan Implement Healthy Travel Charter in Swansea Council Increase electric charging points 	<ul style="list-style-type: none"> Commit to Net Carbon Zero in our supply chain by 2050 Through forward planning and innovation develop new specifications for our contracts that deliver Net Carbon Zero Map and monitor our progress, with appropriate prioritisation and target setting

As the governance structure implies, 8 critical areas of the authority are working on their action plans in order to deliver the 2030 & 2050 targets.

i. Energy Strategy

Swansea Council recognise and understand the importance of effective energy and carbon management and the implications and risks of climate change, rising energy costs and the preservation of finite energy sources. The preservation of our natural environment on a regional and national level and safeguarding of the wellbeing of our communities for current and future generations is a vital aim of the Authority.

It is within this context that the Energy and Carbon Management Strategic Plan was developed. The Energy and Carbon Management Plan provides a co-ordinated approach which will identify and analyse energy and carbon emissions from the delivery of the Authority's operational service deliveries and will:

- Provide an overarching programme that will align and integrate all legislations and policies that relate to energy, carbon management and climate change
- Clearly define Swansea Council's strategic ambition and intent for addressing energy and carbon management
- Quantify the Authority's baseline carbon emissions from its service property activities.
- Identify and evaluate energy saving projects towards reducing energy costs.
- Adaptable to the new Welsh Government Net Zero Carbon Reporting requirements.
- Adapt a low carbon / renewable technology way of working, reducing the dependency on conventional energy supplies.

ii. Green Infrastructure Strategy

This strategy, which was adopted in Feb 2021, considers how green infrastructure can be increased in area and quality in the central area of Swansea in order to make it better adapted to climate change and better for people and wildlife. Green infrastructure is a term used to describe all the greenspace, soil, vegetation and water (ranging from parks to roof gardens) that provide the ecosystem services that make our cities liveable.

The strategy sets out a vision for the central area in Swansea to be much greener, creating green spaces and using a combination of street-level features like street trees and rain gardens as well as vegetation on buildings, including green roofs and green walls. The intention is to double the amount of green infrastructure (with the exception of open water) within 10 years.

The focus is to create a green infrastructure network, centred on a Green Artery that will connect Swansea Station in the north, with the beach and marina in the south and the wider area, via existing, improved greenspaces including churchyards and Castle Square. Green infrastructure will be planned and designed to be multi-functional and will involve a partnership approach, using innovative solutions, including Supplementary Planning Guidance for green infrastructure and a Green Space Factor tool (GSF). Swansea Council is committed to using the GSF tool, designed for the Swansea Central Area, as a measure for the quantity and functionality of green space in development.

Work is now progressing on developing a countywide Green Infrastructure Strategy.

iii. Local Biodiversity Plan

Promoting Swansea's Natural Environment is a strategy and action plan for the protection, management, enhancement and promotion of Swansea's outstanding natural environment and biodiversity. It outlines a number of strategic actions required for the conservation of the wider biodiversity resource together with a set of detailed actions for the protection of priority habitats and species.

The Local Biodiversity Strategy and Action Plan (LBAP) has three key parts:

Part 1 Strategy This part provides a background to the biodiversity action planning process, identifies key issues affecting biodiversity in Swansea and priorities for future work. It proposes a number of broad actions to meet these priorities, and outlines procedures for measuring progress.

Part 2 Audit This part provides an overview of Swansea's biodiversity resource and contains information on protected habitats and species present in the County, together with draft proposals for the identification of a network of non-statutory Sites of Interest for Nature Conservation or candidate SINC.s.

Part 3 Habitat and species action plans This part provides detailed action plans for priority habitats and species which occur in the County in accordance with UK and Welsh Assembly Government Guidance. At the time of printing 23 Habitat Action Plans (HAP.s) and 98 Species Action Plans (SAP's) have been included. There are plans to add additional HAP's and SAP's in due course.

The Local Biodiversity Plan will be replaced by the Local Nature Recovery Plan once it is adopted. The Council's Section 6 Action Plan for 2023-2025 will form part of the Local Nature Recovery Plan. In complying with the Section 6 (Biodiversity Duty) under the provisions of the Environment (Wales) Act 2016, the Council is required to prepare and submit to Welsh Government, every 3 years, a report (Section 6 Monitoring Report) outlining what it has done to comply with the Biodiversity Duty. The Council's latest report is due to be submitted Dec 2022.

In addition, 'Biodiversity and Development' Supplementary Planning Guidance (SPG) was adopted in February 2021. The SPG specifically focusses on how the Council will follow a "stepwise approach" to implementing the biodiversity duty through its own planning decision making process. It will integrate greater obligations around biodiversity with some major developments approved subject to Section 106 agreements providing financial contributions towards practical on/off site mitigation and/or compensation measures against biodiversity loss and in support of maintenance agreements.

iv. Local Development Plan

The 2010-2025 Plan provides a clear planning framework to address key issues facing the County, providing certainty and the basis for efficient planning decisions. Its policies and proposals will enable the delivery of sustainable development, and ensure that social, economic, environmental and cultural well-being goals are all suitably balanced in the decision making process so that the right development occurs in the right place.

The Plan is underpinned by an extensive and up to date evidence base which, in combination with extensive public and stakeholder engagement undertaken during Plan preparation, has been used to identify the key opportunities, land use requirements, and issues for the County over the Plan period.

A Trees, Hedgerows and Woodlands SPG was adopted in October 2021. This document provides guidance on how the relevant policies of the Local Development Plan should be applied to planning applications with respect to all existing, retained and newly planted trees, hedgerows, and woodland on development sites. The requirement for biodiversity conservation and enhancement has also been included in the following SPGs which were adopted in 2021:

- Gower AONB Design Guide
- Placemaking Guidance for Residential Development

- Placemaking Guidance for Infill and Backland Developments
- Placemaking Guidance for Householder Developments

All available to view here: <https://www.swansea.gov.uk/spg>

v. Procurement Strategy

Swansea Council procurement is underpinned by maximising the economic, social, environmental and cultural benefits that may be obtained from buying power. Best value can be viewed as the optimum combination of whole-life costs in terms of not only generating savings and good quality outcomes for the organisation, but also benefit to society and the economy.

Procurement activity strives to deliver the goals of the Well-being of Future Generations Act through a holistic approach to procurement processes and including where relevant specific provisions within the procurement documents. There is commitment to strive to ensure that carbon reduction ambitions that underpin the sustainable development principle are integrated within procurement practice as appropriate.

vi. Sustainable Transport Strategy

A great deal of positive work has been carried out in this area to date with all activity becoming part of this overarching strategy. This includes how the council deals with its Council fleet, the grey fleet (personal mileage by employees), its emissions from street lighting, the continued promotion of active travel and the development of a local and regional sustainable public transport system.

Some specifics include:

- Continuation of planning for, and improving the active travel network. Refresh of the current Active Travel maps and consult on potential new routes for development, though a new Active Travel Network Map in 2021.
- Increase levels of active travel through promotion, engagement and encouragement of active travel with the general public, businesses, communities and educational establishments, through a behaviour change campaign, Swansea Bayways.
- Further roll out of EV charging infrastructure.
- Continue to deliver a 5 % year on year reduction in council fleet emission via its green fleet strategy.
- The development of the ULEV strategy will support further emissions reductions. Targets will gradually increase over time up to 10% per annum to align with technological advances in coming years.
- Seek to embed the reductions in grey fleet mileage which achieved 50% and 1 million miles less in 2020/21 to date.
- South West Wales Metro - Continue the development of business cases for investment in active travel, bus and rail projects across the region.
- Investigate low-emission public transport alternatives through work with partners, such as Transport for Wales and First Cymru to establish how vehicle emissions could be reduced in the future.

vii. Waste Strategy

The Council's existing strategy aligns to Welsh Government's recycling targets which aimed to achieve 64% recycling levels by 19/20 and this was achieved by Swansea. This target increases to 70% by 24/25 and the council is reviewing its option to achieve these increased levels.

In the meantime as part of the overall Climate change plan it will develop a new Waste Strategy which it will seek to align with the overarching Welsh Government plans over the coming 12 to 18 months.

viii. Housing Strategy (Decarbonisation)

Following the publication of the report, Better Homes, Better Wales, Better World (BHBWBW), Welsh Government set up a working group made up of the Welsh School of Architecture (WSA) and selected social landlords to further develop decarbonisation targets and prepare guidance for social landlords on decarbonising their housing stock.

Officers from the Housing Service have participated in the development of the study document and so are included in regular update meetings with Welsh Government's Decarbonisation Team and academics from WSA on latest developments.

Welsh Government has taken a view that a retrofit decarbonisation programme can be delivered as an extension to the existing Welsh Housing Quality Programme due for completion at the end of 2020. The revised WHQS programme that will commence in April 2021 will set a target achieving EPC A/SAP 92 to 231,000 socially owned properties by 2030, which represents almost 17% of the entire housing stock in Wales.

The next stage for Swansea will be to develop a long term Decarbonisation Strategy alongside the excellent work that is already being undertaken. Examples include:

New Homes 'Swansea Standard' are currently being developed as HAPS at Parc y Helyg, Birchgrove, Colliers Ways, Penplas development 1 and 2 and Hillview Crescent, Clase. The properties will not have a traditional gas supply, but will generate, store and then release their own electricity.

Homes as Power Stations (HAPS): The Council has retrofitted and transformed into HAPS 6 bungalows at Ffordd Ellen, Craig Cefn Parc which include external wall insulation, Ground Source Heat Pumps (GSHP), Mechanical Ventilation Heat Recovery unit (MVHRs), PV solar roofs and Tesla battery storage.

8. City & County wide Net Zero Carbon by 2050

All activity will be underpinned by the Well-being of Future Generations Act goals and ways of working, the Corporate Plan Priorities and the Strategic Equality Plan actions.

- i. The Well-being of Future Generations Act (Wales) 2015** This legislation places a duty on the Council to carry out sustainable development improving social, economic, environmental and cultural well-being. It sets out the sustainable development principle's five ways of working and seven national well-being goals.
- ii. Strategic Equality Plan** This sets out how the Council makes every effort to respect children's rights, promotes healthy lives, helps tackle poverty and

play its part in treating people and communities are treated with fairness, dignity and respect. It promotes equal opportunities for all, making a real difference to the lives of those living and working in Swansea.

iii. Corporate Plan- This details how the Council will improve well-being in practice. It lays out priorities for action in six well-being objectives and the steps to achieve them in line with the sustainable development principle.

Swansea Council is taking all possible action alongside Climate Charter signatories, PSB, citizens, schools, businesses, community groups and environmental partners to help deliver the Welsh Government ambition of Net Zero Wales by 2050.

**EXAMPLE Net Zero Wales
Swansea 2050**

Electricity & Heat Generation	Transport	Residential Buildings
<ul style="list-style-type: none"> • Complete first phase of Blue Eden • Develop Energy Parks e.g. Tir John Solar Farm • Support delivery of Regional Energy Plan • Support delivery of Local Area Energy Plan 	<ul style="list-style-type: none"> • An integrated and affordable public transport system • Safe active travel networks across the county to recognise work and leisure hubs 	<ul style="list-style-type: none"> • More EV charging points • Residents aware of and able to access advice and funding for home improvements to cut carbon emissions • More Homes built to Swansea Standard • Decarbonisation of Housing Stock • Create an Energy awareness hub • Aim for 30% of (non –residential) Council buildings with wildlife features
Industry & Business	Agriculture	Waste & Circular Economy
<ul style="list-style-type: none"> • Engagement across the county using Swansea Project Zero branding with a strong support network that instils pride and creates a critical mass of businesses actively cutting carbon emissions and participating in the circular economy. 	<ul style="list-style-type: none"> • More opportunity for healthy, local food production and sales 	<ul style="list-style-type: none"> • Achieve Welsh Government recycling targets • Promote the waste hierarchy and prevent, reduce, or reuse materials wherever feasible • Continue to monitor technologies and engagement with partners to recycle a wider range of waste material types • Plastic Free Swansea County to be promoted
Education and Engagement	Enriching our Natural Resources	LULUCF
<ul style="list-style-type: none"> • Engagement across the county using Swansea Project Zero branding to instil pride and create a critical mass. • All schools actively reducing their carbon and saving energy through behaviour change and educational initiatives • Collaboration with Youth Groups to enable the ‘youth voice’ to be heard • Environmental Project Partners successfully running projects on behalf of SC and actively engaging with citizens and community groups to increase community climate resilience and reduce community carbon emissions • All SC staff to be given training on CC&NR as part of induction with service area/job role specific training available 	<ul style="list-style-type: none"> • Deliver Local Area Nature Recovery Action Plan • Deliver Biodiversity/Section 6 Plan • Deliver county wide green infrastructure strategy 	<ul style="list-style-type: none"> • More land available for CSA and allotment use • More community orchards

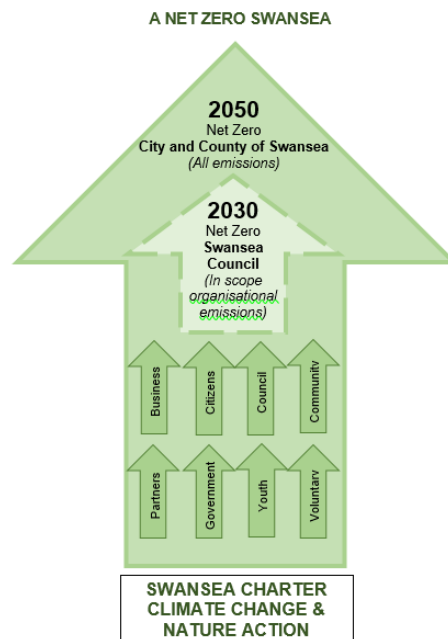
All activities must align to create a long term Climate Change and Nature Strategy and demonstrate the commitment asked of the Notice of Motions.

Governance accounts for Regional, Welsh, National and European directive alongside the additional policies and strategies sitting at Council level that will support delivery.

This approach aligns with the council’s pledged to “Act in Response to the Climate Emergency” within its Corporate Plan 2020-23, aiming for carbon neutrality by 2030

9. Wider communication and engagement.

This will be established through a variety of routes as per below.



There will be a continued commitment to engage with **local people, groups and businesses** and help them be smarter and better prepared for the impacts of climate change and nature recovery. This will be enhanced via the Climate and Nature Charter and online pledge wall.

Swansea Council recognises that it must lead by example and use its 'Sphere of Influence' to reach out to as many citizens and businesses as possible. The Leader and Cabinet Members have signed the charter, and a more generic version for Swansea Citizens and public sector, business, charities, schools, groups etc. will be used, alongside the more simplistic pledge wall as mechanisms to seek wider buy in across the whole city and county.

Involving partners will be paramount to success, and will help support Swansea Council's ambition to lead by example. Agreed strategies will provide structure and governance to ensure delivery.

Listening to and acting on community groups, school groups ideas will help shape the strategy.

Swansea council will commit to making long term and embedded behaviour change via training and support not only within its own authority but also across the City and County, for all citizens. We want everyone to shape Swansea's vision for reaching net zero carbon.

We can make changes on a huge scale if we all make small changes to how we move, shop, eat, think and live, together.

Reducing emissions and recovering nature needs businesses and households to change. We must use more renewable energy sources such as wind, solar and geothermal. We also have to change how we use energy, by cutting down on the power we use. We need

to be more mindful of food sources, the nature surrounding us, its recovery and how our communities need to adapt for the future.

Swansea Council cannot make Swansea net zero carbon on its own. We need everyone in Swansea to act now and consider what they can do to reduce their impact on the planet. We all need to take action at home, in the workplace, and across the county as a whole.

The Council is well placed to work with others. We can make the most of Swansea's collective potential and create solutions together. There will need to be major investments. We will have to make changes to existing systems of how we use and interact with energy. We must change how we live our lives. We will have to redefine how we manage and interact with our environment.

Above all, to meet this challenge, we need collective leadership and shared ambition.