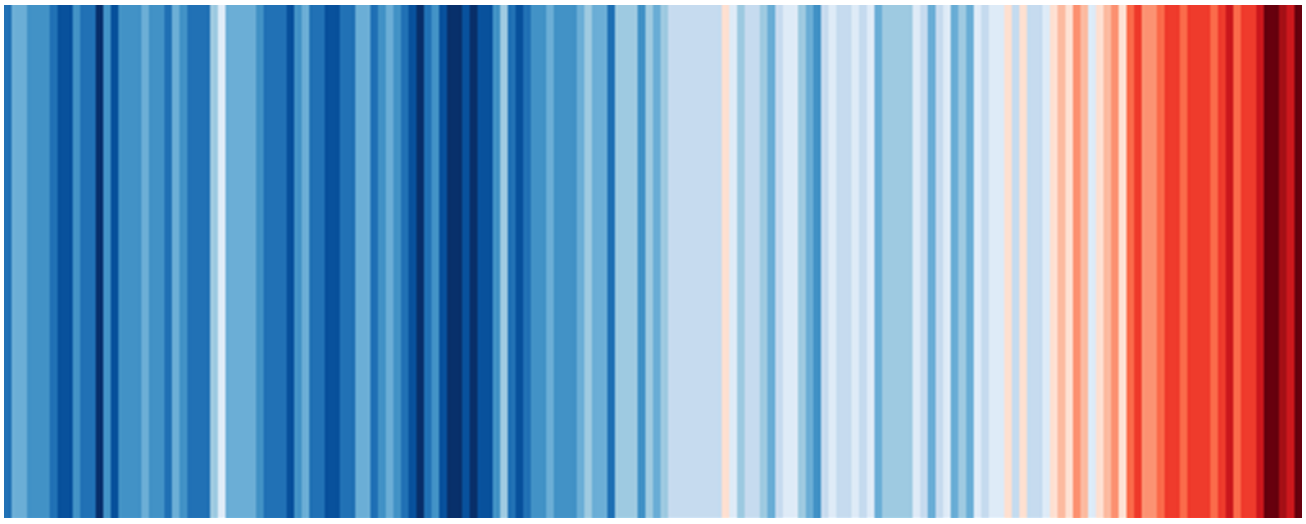
Newport City Council Organisational Climate Change Plan 2022-27 Introductory Annual Report 2021-22



This document is available in Welsh / Mae'r ddogfen hon ar gael yn Gymraeg

NEWPORT CITY COUNCIL
CYNGOR DINAS CASNEWYDD

Contents

1 FOREWORD

To be added

Councillor Jane Mudd
Leader of the Council

Councillor Yvonne Forsey
Cabinet Member for Climate Change & Biodiversity

2 BACKGROUND

The Newport City Council Organisational Climate Change Plan runs from 2022-27. This is our introductory Climate Change Plan Annual Report for 2021-22 we did prior to the plan commencing.

2.1 Ecological & Climate Emergency

In November 2021 the council declared an Ecological and Climate Emergency which specified that a clear Organisational Climate Change plan would be developed, in consultation with our citizens.

2.2 Climate Change Plan 2022-27

In March 2022, the council's Cabinet agreed our Organisational Climate Change Plan 2022-27 that sets out the themes, priorities, actions, and milestones that we need to take as a council over the next five years to:

- Reach net zero carbon as an organisation by 2030.
- Review the services we provide to ensure they support the city's journey to net zero and adaptation to climate change.

This is a key document for the council and will shape our council's climate change mitigation and adaptation journey over the next five years. An animation gives an overview of the plan.

2.3 How was the plan developed?

A Climate Change Project Board was set up to lead on the development of the plan. Staff and managers from across the council were involved in writing of a consultation draft of the plan using the Route Map for Decarbonisation as a framework.

A public consultation took place in November and December 2021. All responses were reviewed, and the plan was amended accordingly.

2.4 Aims of the plan

The plan sets out the delivery themes, priorities, actions, and milestones that we need to take as a council over the next five years to:

- ***Reach net zero carbon as an organisation by 2030.***
- ***Review the services we provide to ensure they support the city's journey to net zero and adaptation to climate change.***

2.5 Key Delivery Themes

To deliver our plan six delivery themes were identified similar to the those in the Route Map for Decarbonisation.

The delivery themes are:

Theme 1				
Organisational Culture & Leadership				
Theme 2	**Theme 3**	**Theme 4**	**Theme 5**	**Theme 6**
Our Buildings	Our Land	Transport & Mobility	The Good & Services we Procure	Our Wider Role

The delivery themes are all interdependent and have interconnected and overlapping relationships, with Theme 1 as an overarching theme.

2.6 What does the Annual Report cover?

This is an introductory annual report and sets out some of the progress that was made prior to, and in the year before the adoption of the plan. The report covers:

- Projects that have taken place under each of the themes in 2021-22.
- The annual carbon emissions reporting process for us as a council.

3 PROJECTS AND CASE STUDIES

3.1 Theme 1: Organisational Culture & Leadership

3.1.1 2030 Vision

The climate and nature emergency will be at the heart of all our work. In our decisions we will take positive action to minimise climate and ecological impacts. We will lead by example and empower our partners, communities, and individuals to tackle the climate emergency and prioritise nature-based solutions

3.1.2 Priorities

To reach our vision we have set out four priorities:

1. **Behaviours & Role-Modelling:** Our elected members and workforce will be encouraged and supported to consider their individual contribution to becoming net zero carbon by 2030, and leaders will role model the council's expectations.
2. **Governance & Performance:** Our democratic and corporate functions will be committed to becoming net zero carbon by 2030, and our decision-making, governance framework and performance monitoring will reflect this commitment.
3. **Promotion & Engagement:** Regularly publicise progress and achievements to embed aspirations to be net zero carbon by 2030.
4. **Financial Commitment:** To plan for the financial impacts of climate change, and to ensure that our medium to long term financial planning contributes to the delivery of the council's commitment to reduce carbon emissions where possible

3.1.3 Case Studies

3.1.3.1 Declaring a Climate & Ecological Emergency

The council declared an ecological and climate emergency back in November 2021. In passing the motion, the council recognised that climate change is one of the defining issues of our generation, one that needs all of us working together to tackle it. As well as declaring an ecological and climate emergency, the motion committed the council to:

- continue the good work that we have started and reduce our carbon emissions to net zero by 2030.
- develop a clear climate change plan, in consultation with our citizens, for the next five years that will set out the actions we need to take to achieve this.
- develop a city-wide local area energy plan
- review the services we provide to ensure they support the city's journey to both net zero carbon and adapting to the impacts of climate change by 2050.
- work with One Newport partners and the public to develop a city-wide climate strategy to enable city-wide net zero carbon and adaptation to climate change by 2050
- support and influence action by partners through partnerships
- support and enable action by citizens to reduce their own carbon emissions.

Both the climate change plan and local area energy plan have already been developed and will guide our actions over the next five to ten years to meet the other objectives.

3.1.3.2 Carbon Literacy

Carbon literacy training provides an awareness of the carbon dioxide costs and impacts of everyday activities and the knowledge to enable the reduction of emissions as an individual, community and organisational basis.

In Spring 2021 all cabinet members, heads of service and 26 managers and staff attended carbon literacy training. To increase knowledge further across the council, in the coming months training will be recommended and provided for all elected members and senior managers. Three to four cohorts of staff training will also be offered in the coming year.

3.1.4 Next Steps

In 2022-23 a new Cabinet Member for Climate Change and Biodiversity will be appointed, and Climate Change action will be embedded into the new Corporate Plan further strengthening the leadership and governance of the plan. In addition, from October 2022, Carbon Literacy training will be rolled out to the remainder of elected members and senior managers and will also be available for staff.

3.2 Theme 2: Our Buildings

3.2.1 2030 Vision

To achieve net zero carbon energy and support the nature recovery across our buildings by 2030

3.2.2 Priorities

To reach our vision we have set five priorities:

1. **New Council Buildings:** All new building to be net zero carbon.
2. **Building Retrofitting:** Deep retrofit to ensure creating net zero carbon energy buildings.
3. **Renewable Heat:** Implementation of renewable heat in new buildings.
4. **Natural Gas:** A commitment to significantly reduce or remove natural gas heating across our buildings.
5. **Building Rationalisation:** Audit current assets to understand their long-term carbon impact with the aim of better strategic utilisation.

3.2.3 Case Studies

3.2.3.1 Basseleg High School

The carbon reduction team worked intensively with colleagues within education, Newport Norse and Welsh Government to improve an existing design of this yet-to-be-built scheme by significantly improving the building insulation, removing gas boilers and replacing with air source heat pumps and maximising the amount of solar PV installed on the building. These changes will deliver ~ 9,000

Tonnes of CO_2 savings over the buildings design life, this is equivalent to nearly one year of the council's total building-based emissions.

3.2.3.2 Kimberly Nursery Retrofit

The council were successful in obtaining funding from Welsh Government to support the transition of this refurbishment project from a gas heated building to a zero-gas site through the implementation of improved insulation and two air source heat pumps. The building will eventually become net zero carbon in operation.

3.2.3.3 Rogerstone Primary School and Three Other Schemes

Newport City Council is one of four local authorities who were awarded Low Carbon Heat Grant funding to retrofit air source heat pumps to existing sites reduce gas usage and therefore save carbon emissions. In total four council sites are receiving support across 2021 – 2023. Rogerstone Primary School has benefited from a £500k investment which now means that 100% of the schools heating and hot water usage will come from renewable or low carbon sources. This pilot project will be used as a model to inform an estate wide retrofit of low carbon heating.

3.2.3.4 No Gas

Since the publishing of the Climate Change Plan, the council has stuck to its commitment of no gas in new developments (or in retrofits where possible). No-gas projects include: Bassaleg school, Kimberley Nursery, 2 social services homes, the proposed Whiteheads Primary School, Llanwern Primary, St Andrews Primary replacement school and other new school projects in the pipeline. We also have an aspiration to develop Wales's first no fossil fuel leisure centre which would save 1,400 tonnes of CO_2e per year vs a typical gas only development.

3.2.4 Next Steps

The last 12 months has seen another year of hard work and commitment in reducing our built estate carbon emissions. Moving forwards, changes to policy and engagement will support a commitment to make all new buildings net zero carbon. The Re:fit Programme will continue, as will further retrofitting of the existing estate, working with external contractors and Newport Norse, to identify and deliver projects. The implementation of renewable heat in new buildings, and a commitment to reduce or remove natural gas heating systems in existing buildings will further drive down our emissions. Additional renewable energy generation opportunities will continue to be explored across our estate. Understanding the current long-term carbon impact of existing sites is key, with asset rationalisation an important strand to this. Work is currently on-going between different areas of the council to provide the necessary information.

3.3 Theme 3: Our Land

3.3.1 2030 Vision

A city which sustainably manages and increases its natural resources, protecting, enhancing, improving and connecting the natural environment in a carbon neutral and climate and ecological responsible manner

3.3.2 Priorities

To reach our vision we have set four priorities:

1. **Ecosystem Resilience:** Sustainably restore, create and connect biodiversity and habitats by improving council owned land and public realm.
2. **Trees & Woodland:** Improve human health, environmental quality, carbon reduction and capture by sustainably managing and increasing Newport's trees and woodland.
3. **Urban Greenspace:** Increase green infrastructure in the urban/public realm to reduce environmental inequalities, for the multiple benefits of nature's recovery, human health and wellbeing, climate adaptation, cooling and flood alleviation, providing carbon reduction and clean air.
4. **Council Owned Leased Land:** Support the nature recovery whilst reducing carbon emissions from council owned farmland and any other leased land.

3.3.3 Case Studies

3.3.3.1 No Mow May

In May 2021, the council took part in the 'No Mow May' campaign which encourages individuals, councils and stakeholders to help bees, butterflies and other wildlife by letting wildflowers grow on lawns and green spaces throughout May instead of mowing them. The council became aware of this campaign during 20/21 and undertook a series of successful trials of different measures of grass management and wildflower seed mixes in our designated 'leave to grow' sites.

3.3.3.2 Bee Friendly

This initiative supports the council's accreditation as a Bee Friendly City and our duty to enhance nature and take actions that help counter the impact of climate change. Newport has over 25 acres managed as pollinator sites to attract bees, butterflies, beetles and other insects. Working with the Living Levels Project and Bumblebee Conservation Trust, areas of grassland at Pencoed reen and the Household Waste Recycling Centre are being managed for bumblebees.

3.3.3.3 City Centre Green Arc

New rainwater gardens, and enhanced planting for increased biodiversity, have been installed in June 2021 following some delays caused by Covid-19, along the river front and near the Queensway roundabout as part of the Greening City Centre Green Arc project. These include three areas:

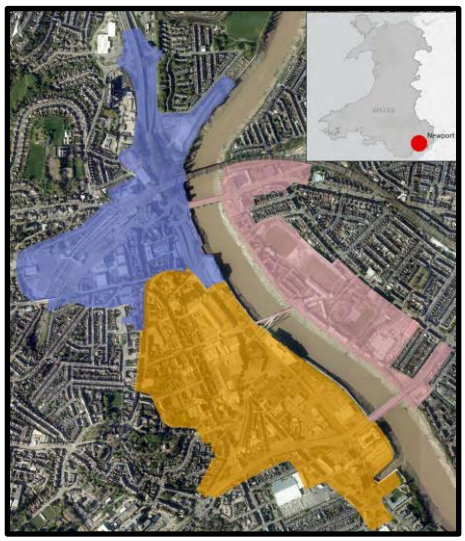
1. New rainwater garden and planting by Admiral building, Queensway
2. Two new rainwater gardens and planting by The Wave, Riverfront
3. New planting in Queensway roundabout

Working in partnership with Natural Resources Wales an application was submitted November 2019 to Welsh Government Targeted Regeneration Investment programme: Town Centre Green Infrastructure and Biodiversity Project 2020-21.

This pilot has been a successful test run of expanding Green Infrastructure in a highly urban area. It has helped kick start the delivery of nature-based solutions for sustainable drainage and enhanced biodiversity within the heart of the city. It has helped recognise the value of green and blue infrastructure and the health and wellbeing benefits it brings for City residents.

Greening and installing enhanced planting have multiple benefits, including benefits to a sustainable economy. Green Infrastructure increases biodiversity, provides benefits to people's health and wellbeing, helps cool the city alleviating heat island effect, and makes the city more visually appealing attracting more people to city centre businesses.

3.3.3.4 City Centre Feasibility Study



Following on from the work above the council have continued to work in partnership with Natural Resources Wales, individuals and other organisations to identify a number of green infrastructure interventions and nature-based solutions for the heart of the city.

The intention was to identify multi-functional, cost-effective, nature-based solutions that maximise environmental, social, cultural, and economic benefits. Green infrastructure is an important element of climate change adaptation and nature recovery and helps the city to meet the requirements of the Well-being and Future Generations (Wales) Act 2015, the Environment (Wales) Act 2016 and Schedule 3 of the Flood and Water Management Act 2010.

A long list of suggested schemes was presented to stakeholders in two meetings to give people more opportunities to participate. Participants included residents, councillors, council officers as well as representatives of businesses and Newport Now, the local Business Improvement District.

Following the receipt of feedback from stakeholders a consolidated list of projects was agreed on. Each potential project on the list includes a brief description, the rationale for the project, predicted

benefits and indicative costs. This list will be used to develop more detailed designs and plans when funding is available.

This study was funded by the Welsh Government's Transforming Towns Fund. The study area is the city centre as defined in the Newport City Centre Masterplan) which includes the Northern Gateway, City Core and Riverside.

3.3.4 Next Steps

A lot of good work has been undertaken in this area in the last year, and conflicting priorities mean that progress within the Land Use subgroup requires co-operation from colleagues throughout the council. In order to highlight where further climate change mitigation and resilience schemes can be implemented most effectively, green Infrastructure mapping of Newport is being undertaken. Policies will be updated to reflect the importance of land use in mitigating and adapting to climate change, and a continual review of land assets and land tenant contracts will be key to this group moving forwards.

3.4 Theme 4: Transport & Mobility

3.4.1 2030 Vision

A city with healthy and sustainable travel choices for the people

3.4.2 Priorities

To reach our vision we have set nine priorities:

Council Emissions

1. **Business (Grey) Mileage & Staff Commuting:** Reduce carbon emissions from employee commuting and grey mileage by implementing a policy of agile working, active travel and usage of public transport and ultra-low emissions vehicles (ULEVs).
2. **Fleet:** Reduce council carbon emissions by moving to a ULEV fleet.

Wider Role

3. **Transport Network:** Managing the transport network to enable people to travel in a more sustainable way.
4. **Land Use Planning & Placemaking:** Ensure sustainable transport options are available from the outset in all new developments, including walking, cycling, public transport and electric charging infrastructure.
5. **Active Travel:** Reduce carbon emission by prioritising active travel across the city.
6. **Public Transport:** Encourage the use of public transport instead of car usage.
7. Charging Point Infrastructure: Increase charging capacity across the city.
8. Schools: Reduce carbon emissions from home to school travel.
9. Taxis: Implement policies to support the move to a low emission taxi fleet.

3.4.3 Case Studies

3.4.3.1 Plant & Fleet Vehicles



In 2020/21, the council added 29 ultra-low emission vehicles (ULEVs) to our fleet which included 5 additional electric refuse vehicles. We also added 37 chargers for fleet use which will meet our needs into the future.

Around 130,000 zero emission miles were driven by the council's electric cars and light vans in the year to April 2022.

3.4.3.2 Active Travel

Through the Welsh Government's Active Travel Fund a number of new active travel projects have been delivered to increase the availability of good quality cycling and walking routes across the city area.

Many of these projects have been delivered in areas that provide off road alternatives through open space areas such as in Tredegar Park, Gear Fort, Coed Melyn and Monkey Island in Lliswerry.

Project delivery has been focussed on areas where demand for intervention is demonstrated through public consultation. This often emphasises the lack to good quality provision for walking and cycling away from busy roads and junction crossings. This demand supported by the results of previous active travel network consultations shows the potential to address the issues through the provision of routes through parks and open spaces. This approach improves the sense of safety, creates a more pleasant environment for the user and can also provide more direct routes when compared with on-road alternatives.

Many of these active travel project sites cross areas of ecological sensitivity and so it is important to minimise the negative impacts of the project. This includes carrying out appropriate surveys that inform both design and delivery of the project. Practises that protect the biodiversity in the area include restricting the timings of work, protection of tree root areas and nearby vegetation and monitoring the area during the works.

It is also important to consider the longer-term negative impact of ecology and biodiversity once the project had been delivered. This presented a challenge when considering the installation of lighting along new routes. As fears over personal safety is a major barrier to walking and cycling the lighting of routes is an important consideration to ensure routes provide an attractive environment which

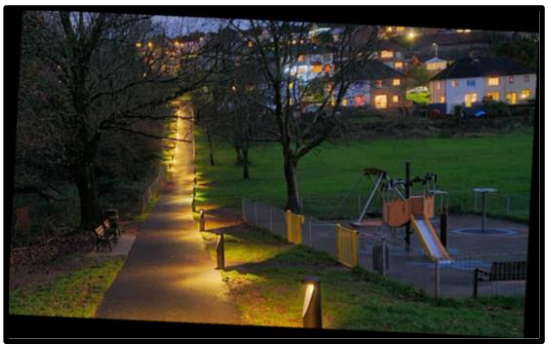
provides reassurance for users. This ensures that use of new routes is maximised at all times of the year.

The use of traditional high-level highways lighting presents and ecological issue when installed in open space areas as it results in a wide spread of artificial light which negatively impacts the nocturnal wildlife that uses the area. To reduce this impact whilst still providing this important feature, low level bollard lighting has been used on all active travel routes that travel through green open spaces. As can be seen in the below picture, this type of lighting focusses light across the path area and so minimises the spread of light throughout the wider area.

The delivery of walking and cycling routes through open spaces also increases the availability of routes for recreation purposes. This has numerous health and wellbeing benefits and increases the likelihood of an individual's opting to utilise walking and cycling for their everyday journeys. Improvements that have been made across the city include:

The new **Devon Place bridge** provides much improved connectivity for both pedestrians and cyclist moving between the north and south of the city centre. The connecting route between the two destinations was previously served by an underpass which is unfit for purpose. This bridge will connect the Gold Tops and Queens Hill area to the city centre without the need to use the underpass.

Providing a link through **Tredegar Park** into the **Tredegar Park old golf course** leading out onto the A48 near to the Junction 28 roundabout. This exciting project will further enhance this popular destination and provide cyclists and pedestrians with alternative means of transport. The path complies with both the Active Travel (Wales) Act 2013 and the Equalities Act 2010, making it suitable for users of all abilities. This route is lit with low level bat friendly lighting that has been very popular at the Coed Melyn active travel route.



Monkey Island active travel route has now been opened after the completion of works to ensure the path is fully accessible. The new route provides a safe crossing link under the Southern Distributor Road for pedestrians and cyclists. A new accessible ramp connects the pedestrian and cycle path on the northern side of the SDR bridge with a new path under the bridge. This path leads off into the Lysaght Village housing estate, and from there to other commercial and residential links in Lliswerry. The new route means that cyclists and pedestrians no longer need to use multiple road crossings to get from one side of the SDR to the other.

A new link from **Tredegar Park** to the front of **St. David's School**, providing parents and children a safer route to and from the school.

Surface improvement taking place at **Malpas & Bettws Canal** to bring this route up to active travel standard along the section of the canal between Gwastad Gate and the boundary with Torfaen.

After several rounds of public consultation, the Active Travel Network maps review has been completed and the updated map of active travel routes (both existing and proposed routes) and final report have been approved by Welsh Government. The map routes within in it will be used to plan future active travel developments over the next five years.

3.4.3.3 Charging Points

The council has been instrumental in the installation of 85 charge sockets across the city. Seventeen were delivered in 2021/22. There are currently 18 in construction, and a further twenty are planned for delivery in 2022/23. More sites are being identified for future years. In 20/21 our public chargers delivered over 80,000 zero emission miles.

3.4.4 Next Steps

Some of the work we will be looking at over the next 12 months includes:

- Reducing commuting by single use car by implementing a new operating model for staff including hybrid home working and use of local public sector hubs
- Developing a five-year plan for fleet renewal and charging capacity
- Increasing our charging capacity and looking to link it to renewable sources of energy as much as possible.
- Developing more active travel routes, and promote walking and cycling for shorter journeys
- Improving travel information at bus stops to encourage the use of public transport

Changes to working practices, including increased homeworking, will have a big impact on future transport emissions. We also expect to see emissions in this theme decrease gradually over the next five years as we implement our fleet renewal, charging capacity and active travel plans.

3.5 Theme 5: The Goods & Services we Procure

3.5.1 2030 Vision

Sustainable procurement will be at the heart of ensuring that our external contracting minimises the climate and nature impact and also the carbon footprint of goods, works and services procured

3.5.2 Priorities

To reach our vision we have set four priorities:

1. **Measurement:** Gain a good understanding of our estimated tCO_2e per annum from procured goods and services, and its emissions profile and supplier base.
2. **Guidance, Tools and Training:** Develop guidance, tools and training for the organisation to support staff to reduction of carbon throughout the procurement lifecycle.
3. **Partnership:** Lead by example and work with our procurement strategic partners both public and private to align climate change, carbon reduction and circular economy aspirations.
4. **Engagement:** Incentivise suppliers through proportionate evaluation criteria to proactively seek opportunities to reduce carbon and climate impacts.

3.5.3 Case Studies

3.5.3.1 The National TOMs Wales Social Value Calculator

In Wales, the term social value is in effect defined through the Well-being of Future Generations Act (Wales) 2015 which requires public bodies to think about the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change.

The Social Value Calculator for the National TOMs Wales has been designed to allow organisation and their suppliers to measure, procure and report on social value.

The council has adopted the tool and has reviewed and selected measures within the tool that relate to decarbonisation, sustainability and waste. These measures will now be used in our procurement processes.

3.5.4 Next Steps

Work on the Goods & Services we Procure is already under way with Gateway and Tender documents being updated to reflect our commitment to the actions outlined in the Climate Change Plan. Long-standing contracts will continue to be reviewed, to ensure suppliers' actions and behaviours align with our own, and new contracts will be assessed in-line with new Council guidance. As we begin to implement the new requirements, cooperation with suppliers, and knowledge sharing both internally and externally will be required.

3.6 Theme 6: Our Wider Role

3.6.1 2030 Vision

Leading by example and proactively supporting our communities and partners towards society wide action for nature and climate recovery

3.6.2 Priorities

1. **Placemaking & Building Control:** Reduce carbon emissions and support nature recovery by focusing on sustainable, low carbon development, influencing low carbon energy and building resilient communities.

2. **Energy:** Identify and implement the changes needed to the local energy system to decarbonise heat, electricity and local transport and realises local renewable energy production.
3. **Flooding:** Build climate resilience and alleviate flooding across the city using a range of measures including natural flood defences.
4. **Waste:** Reduce carbon emissions from managing waste to become a zero-waste city and nation by 2050.
5. **Digital:** Utilise digital solutions effectively to reduce and monitor carbon emissions.
6. **Partnerships & Communities:** Work collaboratively with partners and communities to promote the climate and nature recovery across the city.

3.6.3 Case Studies

3.6.3.1 Newport's Local Area Energy Plan

In 2021, private and public sector partners and stakeholders worked together to develop Newport's Local Area Energy Plan (LAEP). Following Ofgem methodology, the LAEP process combines robust technical analysis with comprehensive stakeholder engagement to create a pathway for delivering decarbonisation as effectively as possible, identifying actions required by groups including local and national government, energy providers, regulators, industry, and residents.

The Newport LAEP sets out a vision for reaching a net zero energy system for Newport by 2050 and provides a city-wide route map to decarbonise the heat, electricity and local transport that we use on a daily basis and realise local renewable energy production for the future. It provides us with an understanding of the nature, scale, rate, and timings of changes that need to be made for Newport's transition to a net zero energy system.

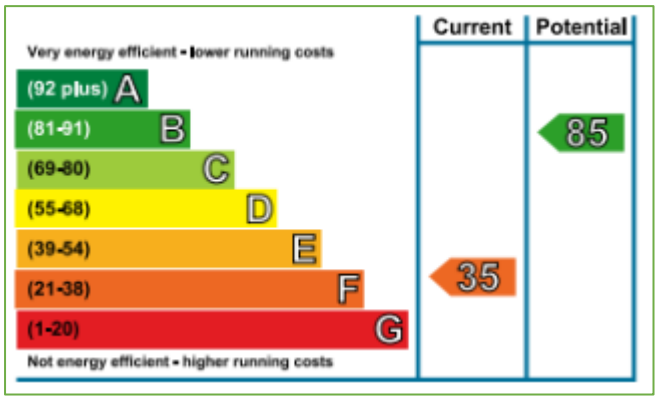
Based on evidence the plan identifies seven priority intervention areas which represent the areas where physical change to the energy system needs to be made:

1. Whole building retrofit (insulation, efficiency measures and behind the meter generation)
2. Development of public EV charging infrastructure
3. Electricity distribution network upgrades
4. Onshore renewables
5. Industrial innovation program
6. Heat pump and heat network deployment
7. Transport energy demand reduction

The plan was approved by the council's Cabinet in June 2022 and initial plans are now underway to implement the seven priority areas.

Development of the plan has facilitated increased local stakeholder awareness in Newport, resulting in more widespread and meaningful consent for the changes required and credible commitments to deliver the plan and will provide a framework for partners to work together in the future.

3.6.3.2 Domestic Rental Energy Performance



Where property owners market properties for rent (or sale) there is a need to comply with Energy Performance Rules. These rules state that properties must have an Energy Performance Certificate and the properties efficiency should be rated at or between levels A to E, whilst ratings of F and G are banned.

Trading Standards have undertaken an extensive intelligence gathering exercise looking at domestic rental properties across the city, 113 landlords suspected of renting illegal and inefficient properties (F or G rating) were contacted, 23 demonstrated they were compliant and 29 brought themselves into compliance due to the service interaction. 27 compliance notices were sent to those not returning contact.

362 landlords suspected of having no EPC. It was discovered that 117 were compliant and 11 of these were only made compliant following the action of the service. 241 of the landlords require further consideration; 12 of whom are in discussion with the service and from 229 there has been no response. This work will continue to bring these properties in to compliance.

The impact of this work so far shows a reduction annually of 198.5 tonnes of carbon emission, a reduction in annual energy of 178,329 kWh and a reduction in fuel bills (April 2022 prices) of £58, 217.

3.6.3.3 Waste

The council is continuing its work to meet Welsh Government zero waste targets by 2050. In 2021-22 the council once again surpassed its target for municipal waste reused, recycled and composted achieving 67.1%.

3.6.3.4 The Road to Nature

Our new 'Road to Nature' formally known as LG Access Road, is located off the A48 Coedkernew and runs off Church Lane Coedkernew. Built many years ago, this road had never been fully developed into an operational highway, however it is still classified as an adopted highway. Over the years the lane had become a target for large scale commercial fly-tipping and has since been used by travellers to set temporary illegal encampments, especially in 2004 and 2015.

Last year, the council carried out a very successful covert surveillance operation was carried out by the council during 2021, leading to a number of fixed penalty notices being issued, five prosecutions and seizure of two vehicles. Since the installation of CCTV in the access and main sections of the road, no further fly tipping has occurred in the area.

In October 2021, the council also carried out large scale works to remove all fly tipped waste. Works lasted ten days, with 650 tonnes of waste removed from the site including over 1,800 tyres. All recyclable waste was sorted into different elements to maximise recovery, achieving a recycling rate of 85%. The council is now working with the Friands of the Road to Nature, a local community group who have adopted the site, to improve biodiversity in the area and promote it as a nature destination.

3.6.4 Next Steps

Work is underway to realise the six “Our Wider Role” priorities in the plan which includes:

- Implementation of the Local Area Energy Plan (LAEP). A funding plan is under development and a programme manager will shortly be recruited to lead and co-ordinate the actions specified in the LAEP.
- The Domestic Rental Energy Performance Project. Funding for this project came to an end in March, however the good work of the project has continued and we are now looking to source further funding to enable the project to continue on an ongoing basis.

4 ANNUAL CARBON REPORTING

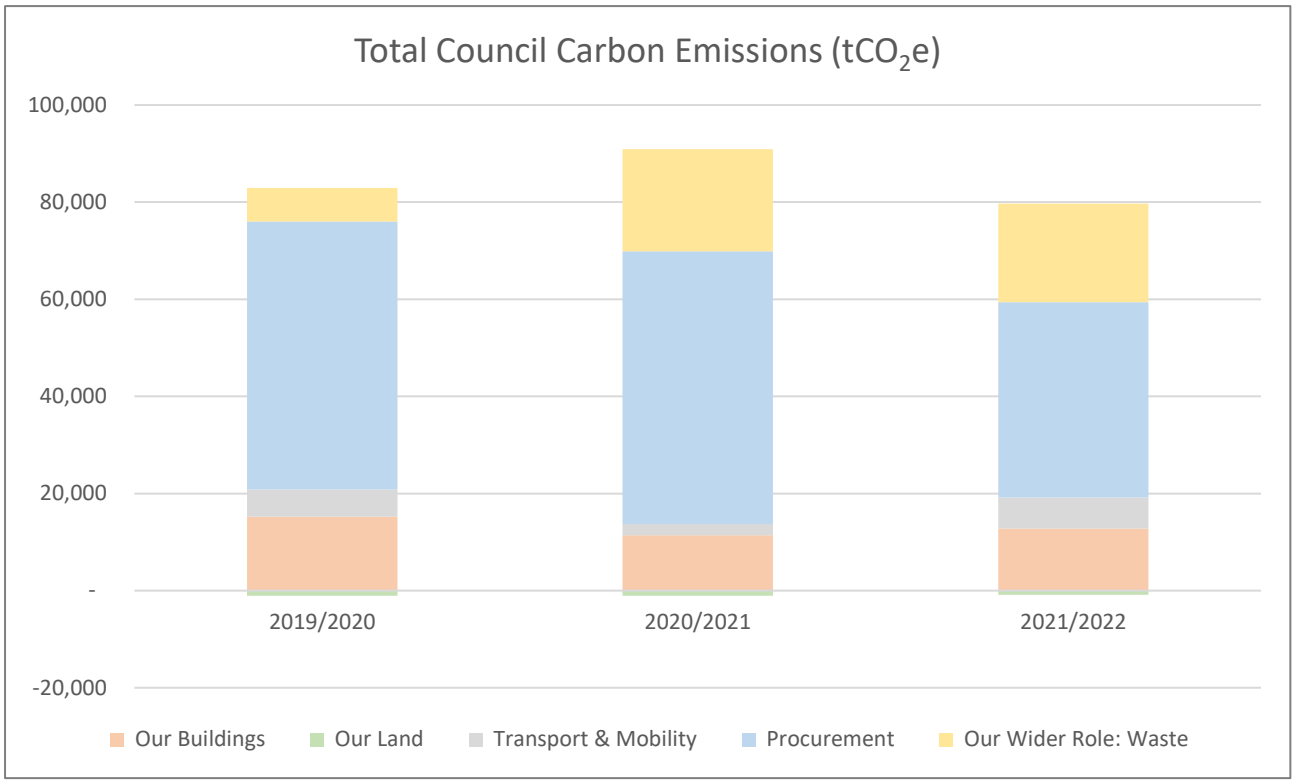
4.1 Baselining our carbon emissions

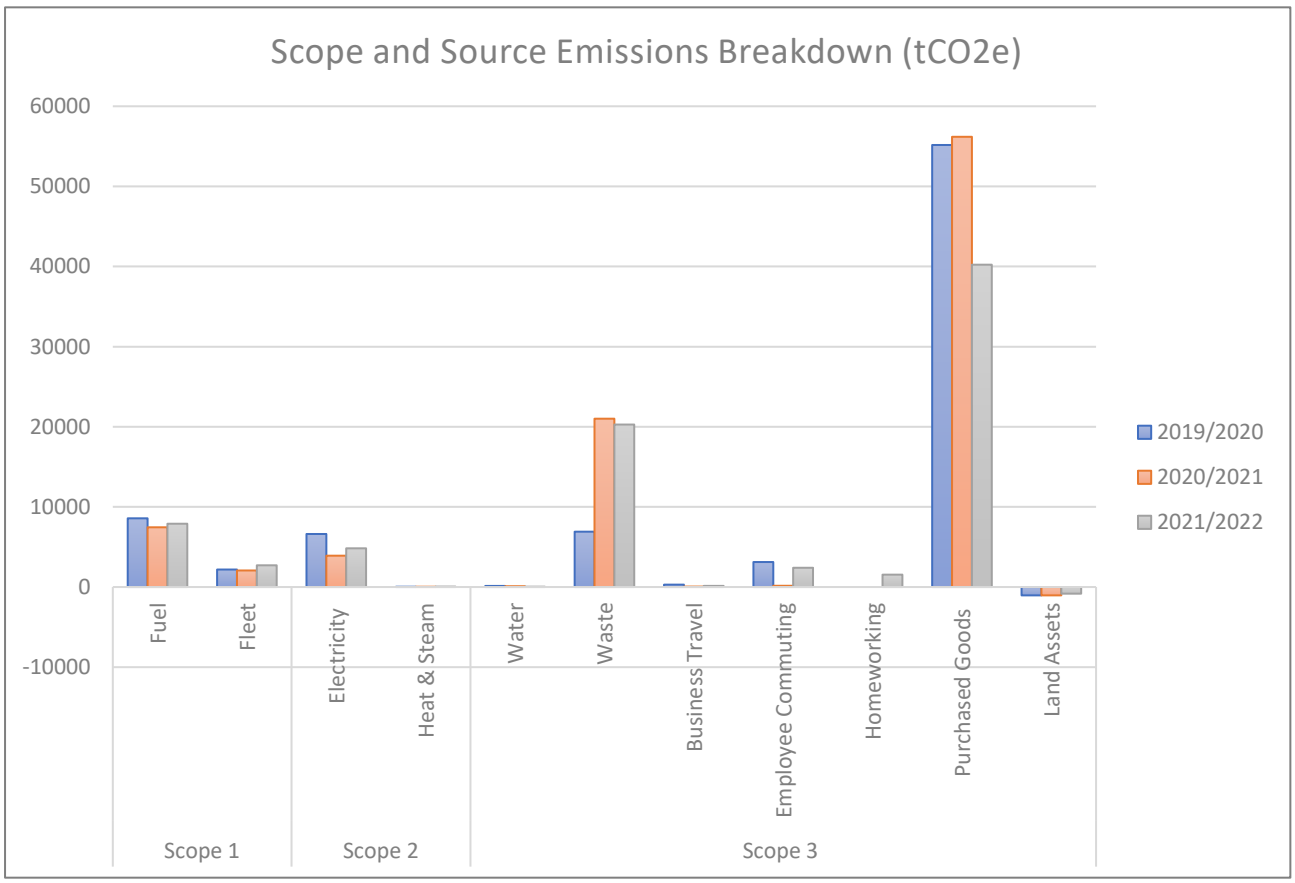
Welsh Government published guidance (May 2021) to public sector organisations to enable a consistent approach across Wales for reporting on their organisational carbon emissions. The reporting methodology considers all emissions associated with activities performed by local authorities including fuel, energy, water consumption, waste disposal, employee commuting, business travel and land use.

4.2 Annual Carbon Reporting 2021-22

For 2021-22 there are changes to the structure of the reporting template; emission factors are now incorporated, and emissions are calculated automatically. The table and graphs overleaf give a comparison of emissions since the council has moved to using the Welsh Government guidance for calculating annual carbon reporting.

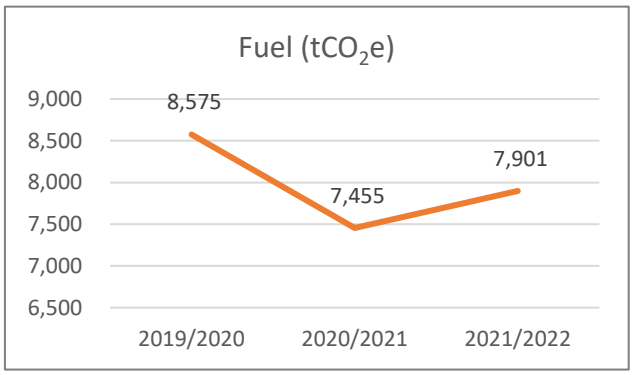
	2019/20		2020/21		2021/22	
Theme and Descriptions	**tCO_2e**	**%**	**tCO_2e**	**%**	**tCO_2e**	**%**
2: Our Buildings						
Fuel	8,575	10.5%	7,455	8.3%	7,901	10.0%
Electricity	6,619	8.1%	3,911	4.3%	4,832	6.1%
Heat & Steam	37	0.0%	37	0.0%	55	0.1%
Water	136	0.2%	101	0.1%	44	0.1%
Total	**15,367**	**18.7%**	**11,504**	**12.8%**	**12,831**	**16.3%**
3: Our Land						
Land Assets	-1,041	-1.3%	-1,041	-1.2%	-829	-1.1%
Total	**-1,041**	**-1.3%**	**-1,041**	**-1.2%**	**-829**	**-1.1%**
4: Transport & Mobility						
Fleet	2,184	2.7%	2,066	2.3%	2,298	2.9%
Business Travel	299	0.4%	58	0.1%	143	0.2%
Employee Commuting	3,120	3.8%	156	0.2%	2,403	3.0%
Employee Homeworking	-	-	-	-	1,545	2.0%
Total	**5,603**	**6.8%**	**2,280**	**2.5%**	**6,388**	**8.1%**
5: The Goods & Services we Procure						
Procurement	55,168	67.3%	56,190	62.5%	40,231	51.0%
Total	**55,168**	**67.3%**	**56,190**	**62.5%**	**40,231**	**51.0%**
6: Our Wider Role						
Waste	6,908	8.4%	21,009	23.4%	20,279	25.6%
Total	**6,908**	**8.4%**	**21,009**	**23.4%**	**20,279**	**25.6%**
Total Council Emissions	**82,005**	**100%**	**89,942**	**100%**	**78,900**	**100%**
tCO_2e - Tonnes of CO_2 equivalent						

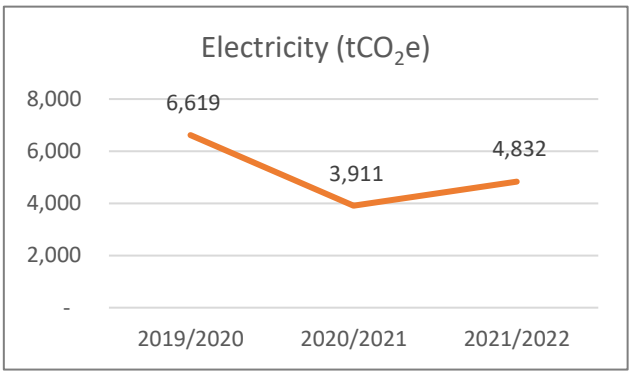

Total Council Carbon Emissions (tCO_2e)
100,000
80,000
60,000
40,000
20,000
-
-20,000
2019/2020
2020/2021
2021/2022
Our Buildings
Our Land
Transport & Mobility
Procurement
Our Wider Role: Waste

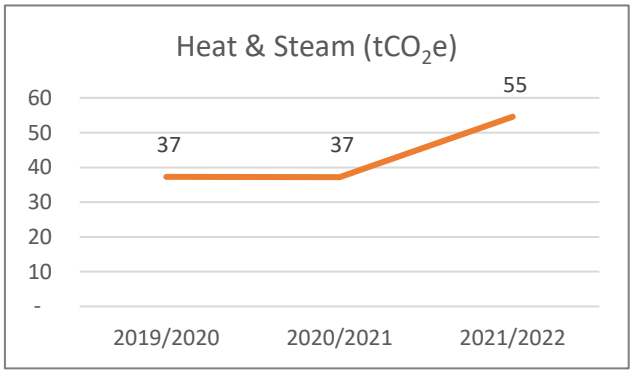

Scope and Source Emissions Breakdown (tCO2e)
60000
50000
40000
30000
20000
10000
0
-10000
Fuel
Fleet
Electricity
Heat & Steam
Water
Waste
Business Travel
Employee Commuting
Homeworking
Purchased Goods
Land Assets
Scope 1
Scope 2
Scope 3
2019/2020
2020/2021
2021/2022

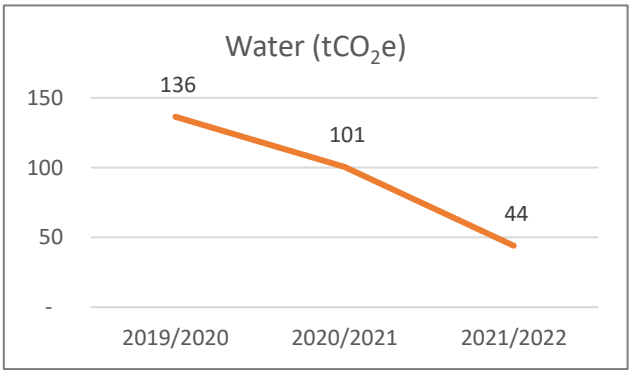
4.2.1 Our Buildings

Most fuel sources have seen an increase in emissions vs 2020/2021 due to buildings resuming activity after the COVID pandemic, however our long-term downward trend is continuing.



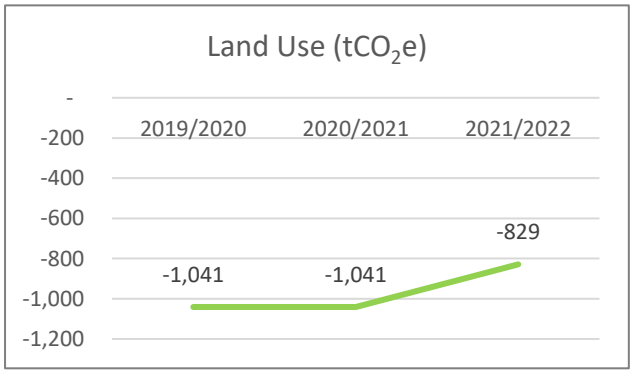






Due to the continued expansion of the population in Newport, the council is adding additional infrastructure, such as streetlights and new schools to our estate, whilst this does add to our baseline figures and therefore the scale of decarbonisation ahead of us, we are currently just absorbing this into our totals. Additionally, as the carbon reporting guidance evolves and we refine our data collection we sometimes need to report on emissions which we previously didn't which affects our totals. One example of this is in 2021/22 is the inclusion of the southern distributer road lighting (78,167 kg CO2equivalent).

4.2.2 Our Land

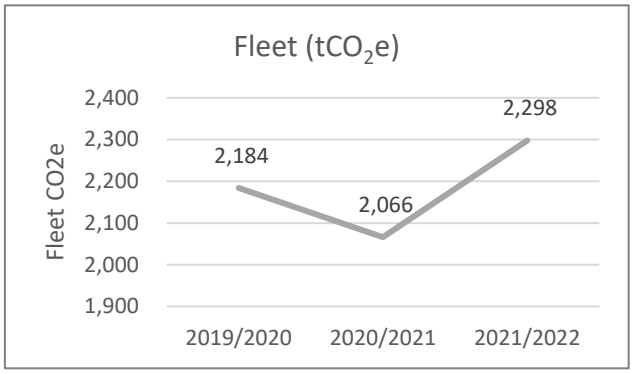


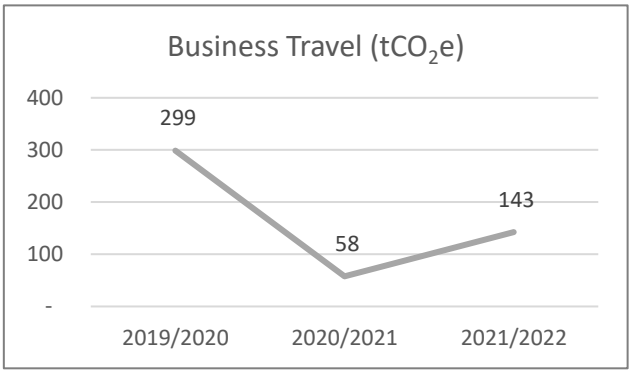
The type of land we own and the way in which we use it can have a positive or negative impact on our overall emissions. Importantly having the right type of land that can absorb carbon (though sequestration) allows us to offset those carbon emissions that we cannot remove from other sources. Over the past year the offsetting that our land provides has reduced due to the acquisition of new settlement areas; and the acquisition and construction of footpaths, parking spaces, cycleways etc., and the removal of a small number of grass

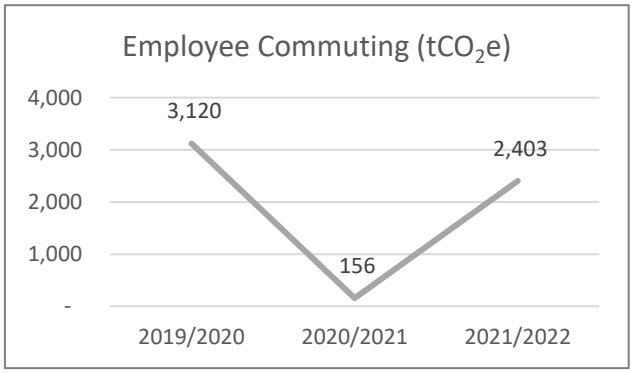
spaces. As we move forward to 2030, carbon offsetting though land that we own will increase in importance.

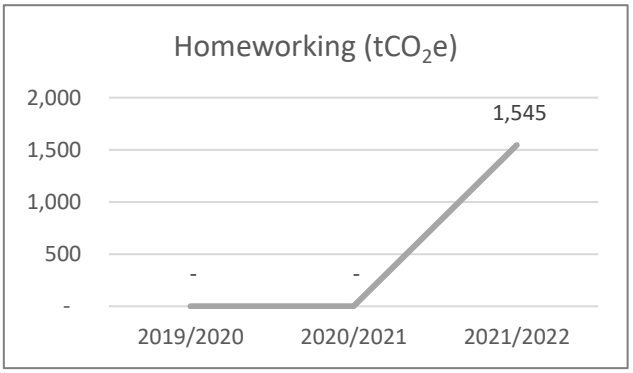
4.2.3 Transport & Mobility

In this reporting year, the council has worked hard to make our fleet more sustainable and has increased the number of electric vehicles we use from 39 to 67. Unfortunately, due to COVID-19 working practices additional diesel vehicles had to be used as crews couldn't travel together, this pushed up the amount of fuel we otherwise would have used.



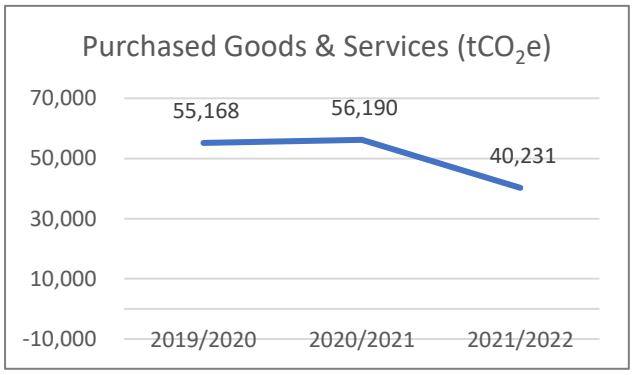






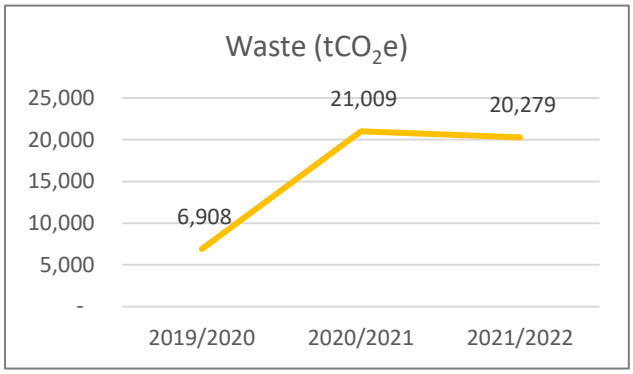
Homeworking is a new addition to annual carbon reporting. Organisations need to account for how many staff are working from home and the average percentage of time they do so.

4.2.4 Goods & Services We Procure



There is a significant change in this year's procurement figures. This is partially due to improvements in the Welsh Government reporting guidelines but also due to the changes in the goods and services we buy from year to year which have different amounts of carbon associated with them. The council is updating its procurement processes to embed positive climate and carbon action in our supply chains.

4.2.5 Our Wider Role



Whilst our climate change plan covers a broad range of actions that are part of our wider work, the carbon reporting methodology only covers emissions from waste. Emissions for the last year were broadly in line with 2021/2022.

5 TIMESCALES UPDATE

Aug-Oct 2021	Consultation Draft of the plan developed	Complete
29 Oct 2021	Reviewed by Scrutiny Committee	Complete
31 Dec 2021	Consultation closing date	Complete
Jan/Feb 2022	Consultation responses reviewed and Climate Change Plan updated	Complete
9 Mar 2022	Presented to Agreed and endorsed by Cabinet	Complete
Mar 2022	Plan published	Complete
Mar/Apr 2022	Development of a delivery, governance and performance framework	Complete
Apr 2022	Start implementation of the plan	Underway
Annually	Progress report to be published	Underway for 2021-22
Annually	Review of the plan	Planned for Jan 2023
Apr 2026	Start to develop new plan for next period 2027-32	

6 GLOSSARY OF TERMS

Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and microorganisms like bacteria that make up our natural world. Each of these species and organisms work together to maintain balance and support life.

Building Retrofit is changes to a building after construction to improve energy efficiency or decrease energy demand.

Carbon Literacy is an awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis.

Carbon Neutral is a state of net zero carbon emissions.

Carbon Sequestration is the process of capturing and storing atmospheric carbon dioxide. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change. Forests and other forms of plant life absorb carbon dioxide from the air as they grow and bind it into biomass.

A *Circular Economy* is achieved by designing products smartly with their whole life cycle in mind, re-using and repairing to extend their useful life, and then when their life is deemed over, remanufacturing to create new products from old.

Climate Change includes global warming and the "side effects" of warming, e.g. melting glaciers, heavier rainstorms, more frequent drought.

Climate Change Mitigation means avoiding and reducing greenhouse gas emissions and increasing greenhouse gas capture and storage.

Climate Change Adaptation is altering our behaviour and way of life to protect our families, our economies, and the environment in which we live from the impacts of climate change.

The *Climate Emergency* is a situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it.

Deep Retrofitting is a major or whole building retrofit to achieve a near net-zero energy building

Ecology is the relationship between living things and their environment.

Ecosystems are all the living things in an area and the way they affect each other and the environment.

Ecosystem Resilience is the capacity of an ecosystem to respond to a disturbance by resisting damage and recovering quickly.

Global Warming is the Earth's rising surface temperature and is one symptom of the much larger problem of human-caused climate change.

The *Greenhouse Effect* is a warming of Earth's surface caused by greenhouse gases.

Greenhouse gases (GHG) are the thin layer of gases surrounding the Earth. These gases include both naturally occurring and human-derived greenhouse gas such as carbon dioxide, methane, water vapour and nitrous oxide.

Green Infrastructure is a network of multi-functional green space and green features, which can deliver quality of life and environmental benefits for communities. It includes parks, open spaces, playing fields,

woodlands, street trees, allotments, private gardens, green roofs and walls, SuDS and soils.

Natural Resources are natural assets or raw materials occurring in nature. Earth's natural resources include light, air, water, plants, animals, soil, stone, minerals, and fossil fuels.

Nature-Based Solutions are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

Net Zero is achieving a balance between the amount of greenhouse gas emissions produced and the amount removed.

Procurement is the act of purchasing goods or services.

Scope 1 Direct Emissions arise from sources that are owned or controlled by the council including emissions from our plant and vehicle fleet and fuel.

Scope 2 Indirect Emissions arise from the generation of purchased electricity and heating. The energy is generated elsewhere, however as a user the council is responsible for these emissions.

Scope 3 Indirect Emissions arise from sources that are not owned and not directly controlled by the council; however, they are related to our activities. This includes emissions from the supply chain, such as goods we have purchased and services that we have outsourced. It also includes emissions from the water we consume, our waste services, employee commuting and business travel.

Solar PV (Solar Photovoltaics) is the generation of electricity using energy from the sun. Modern solar panels produce electricity from daylight and do not require direct sunlight, although more electricity is produced on bright sunny days.

Sustainable Drainage Systems (SuDS) are designed to manage stormwater locally, to mimic natural drainage and encourage its infiltration and passive treatment. SuDS are designed to both manage the flood and pollution risks resulting from urban runoff and to contribute wherever possible to environmental enhancement and place-making.

Sustainable Procurement is a process whereby organisations meet their needs for goods, services and works in a way that achieves value for money on a whole life basis and generates benefits not only to the organisation, but also to society, the economy and the environment. It considers the social, economic and environmental consequences of what is procured through all stages of its life cycle. This includes considering design, resource extraction and sourcing, manufacturing and production, transportation, service delivery, operation and maintenance, reuse, recycling and disposal. It is also about questioning whether the purchase requires to be made at all. It also considers the capacity of suppliers to address these consequences throughout the entire supply chain.

Sustainable Transport Options are walking, cycling, public transport and electric vehicles. Not all options are equally sustainable.

Tonnes of Carbon Dioxide Equivalent (tCO_2e) is a measure used to compare the emissions from various greenhouse gases based upon their global warming potential. For example, the global warming potential for methane over 100 years is 21. This means that one million metric tons of methane emissions is equivalent to 21 million metric tons of carbon dioxide.

Ultra-Low Emission Vehicles (ULEVs) are vehicles that emit less than 75g of CO_2 per km from the exhaust.