

**PLYMOUTH
CLIMATE
EMERGENCY
ACTION PLAN
2021**

**Laying the Foundations
for Carbon Neutrality
by 2030**

**Plan 2 of 11
25 January 2021**

On 18 March 2019, City of Plymouth councillors voted unanimously to declare a Climate Emergency. In doing so we committed to meeting the most significant challenge facing our city and our planet. This second Climate Emergency Action Plan continues to demonstrate that commitment with over 80 specific actions being delivered throughout 2021.

2020, more than any other year in recent history, has shown us that we can respond to emergencies and adapt to new circumstances. Crucially, the COVID-19 pandemic has proved that we can change our behaviours to avoid catastrophic results. If we are to achieve our climate ambitions, behaviour change must play a huge part - and unlike COVID-19, we cannot wholly rely on science for the solutions.

This plan has action at its heart. It is not a collection of strategies or visions, or idle words on a page. It is a collection of deliverable actions that we are committing to deliver by December 2021. These actions are the foundations and building blocks of a net zero Plymouth by 2030, and they are there to reflect the commitment of the City Council and the commitment of our partner organisations. They are there to be built on, in order to set the direction of travel and change needed on our journey to 2030. Above all, the actions are there to achieve carbon reductions, inspire action, and change mindsets.

We have made good progress on the first action plan that we approved in December 2019. This is the second action plan of the eleven that we are committed to preparing through to 2030; and this plan will complete the 'Emergency Response Phase' of our strategic approach to the climate emergency. We will see the continuation of projects and initiatives to reduce carbon emissions; we will inspire further local action by communities and partners; and using robust analysis, we will lobby government for the powers and resources we need to drive real change.

As we move forward during 2022-2023 into what we called the 'Transition Phase' we need to be ramping up the delivery of projects that will deliver significant carbon reductions. This will require embedding new ways of working, with everyone playing their part. It will undoubtedly require significant changes in people's choices and behaviours in how the move towards net zero is undertaken. This also has to be done in a just and fair way that does not leave existing disadvantaged communities behind.

There is still an enormous challenge ahead, but we should remain optimistic – the themed actions in this plan demonstrate that the route to net zero contains many factors: from major infrastructure works which will deliver new walking and cycling routes, to planting a thousand trees: there are multiple ways that the city can respond to the Climate Emergency.

I am hopeful that if we all share the responsibility and commit to change, we can shape the direction of travel over the next ten years to a net zero future - enabling us to secure the future survival of the planet, and the health and well-being of all people. As the democratic leaders of the city I am determined we continue to play a decisive leadership role on climate change. But we can't do it alone and need to bring the actions of key partners and communities into next year's plans. The actions we take will improve people's lives with cleaner air, healthier living, and actions that will support a sustainable greener city that will contribute to the overall protection of the planet. Ultimately all our actions are about people, place and planet and how those can work together in greater harmony for a more sustainable future for humanity.

Sue Dann
Cabinet Member for Environment and Street Scene, Plymouth City Council



INTRODUCTION

This is the second of 11 action plans in the City Council's annual Climate Emergency Action Plan series. It builds on the first action plan, providing an update on Plymouth's greenhouse gas emissions, the previous year's actions, and crucially lays down a new set of actions for 2021 which will help the city achieve net zero by 2030.

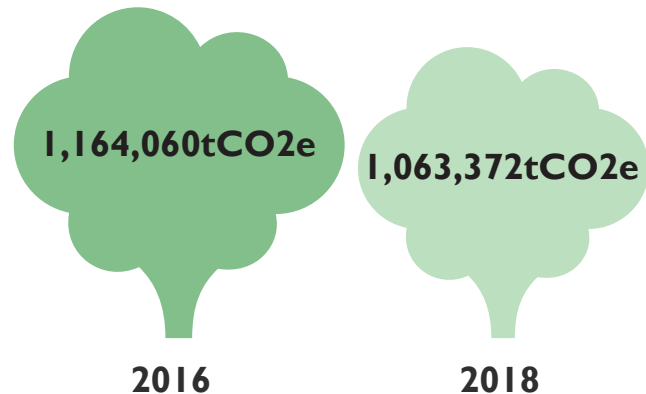
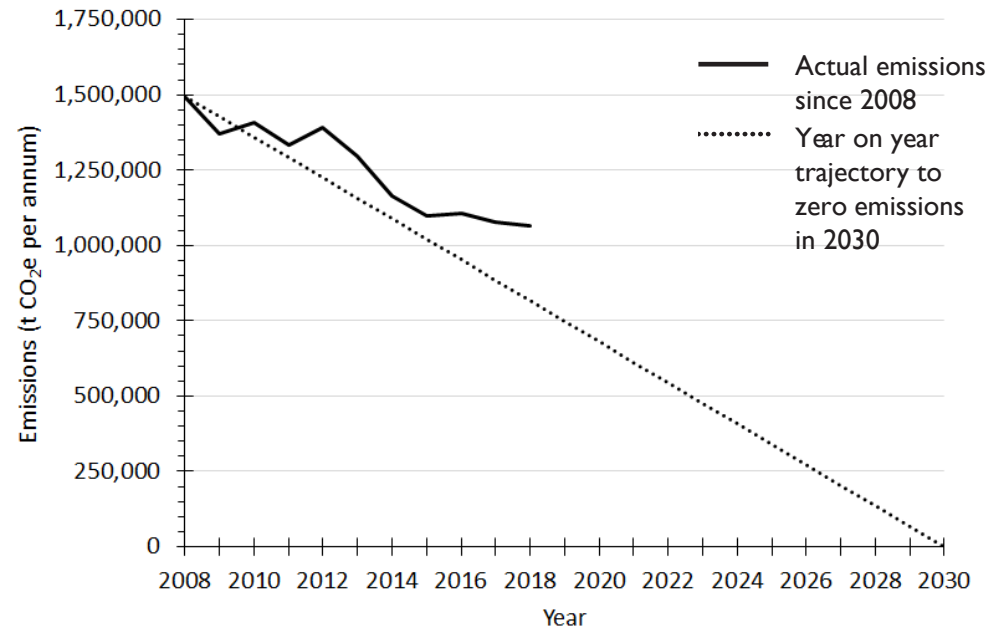
Plan 2 has been developed with clear and measurable actions at its heart, and as such the document focuses on the context and delivery surrounding these, rather than any detailed review of the science of climate change.



2020 UPDATE ON CITY EMISSIONS

The most recent data for city-wide emissions in Plymouth was obtained from a report produced by the University of Exeter’s Centre for Energy and Environment in October 2020. The most up-to-date data available from government is from 2018, and so the 2-year lag needs to be considered when analysing the progress made.

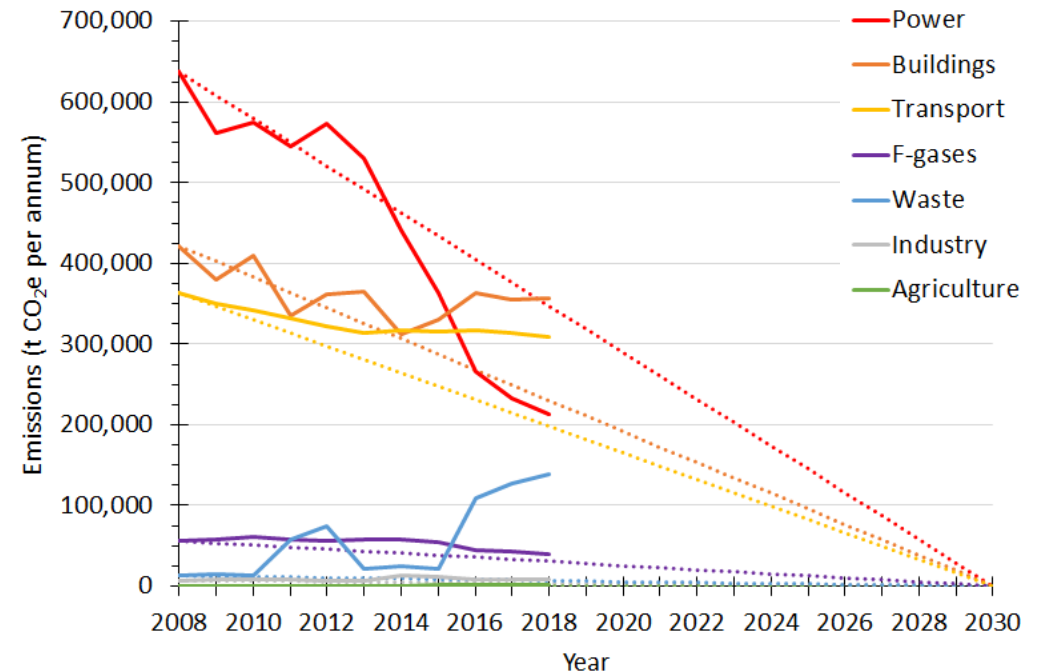
The chart to the right shows actual emissions since 2008 presented alongside an equal year on year trajectory to zero emissions in 2030. It is clear that whilst emissions are reducing from the 2008 baseline, they are not currently on course to meet the 2030 target.



2020 UPDATE ON CITY EMISSIONS

The chart to the right shows the breakdown of emissions across sectors in Plymouth. The results indicate that only the power, f-gas and land use change sectors are on track to achieve net zero greenhouse gas emissions by 2030. Emissions from the transport and building sectors have fallen, but not at the rate required. Emissions from the waste sector increased in 2016 due to the commissioning of the Devonport energy from waste plant. There are two main reasons for this:

1. Accurate data for years prior to 2016 is not available.
2. The figures include domestic waste brought into Plymouth from surrounding local authorities and commercial waste streams. Plymouth's domestic waste actually accounts for only 23% of the total emissions.



CITY WIDE STRATEGY

The three key objectives of the Climate Emergency response are:

1. Facilitate a citywide conversation.
2. Inspire Rapid Local Action.
3. Create bottom-up pressure on government.

This second action plan focuses on delivering elements of the emergency response phase, whilst at the same time moving into the transitional phase. The emergency stage, from 2019-2021, focuses on implementing actions that will rapidly and credibly reduce carbon emissions as well as driving changes needed to rapidly increase the rate at which we reduce our carbon emissions, and ultimately reach carbon neutrality. The transitional phase, from 2021-2023, sees delivery of projects increasing in intensity, ramping up the decarbonisation of key areas such as transport, housing, energy generation and waste.



CLIMATE EMERGENCY ACTION PLAN STRATEGIC APPROACH

Climate emergency purpose
 Facilitate city-wide conversation
 Inspire rapid local action
 Create bottom up pressure on government

Climate emergency values
 A city approach that supports national and global change
 Everyone plays their part
 No one gets left behind

Journey towards net zero carbon



Emergency response phase
 2019-21

Transitional phase
 2021-23

Acceleration phase
 2023-30

Emergency response phase focus

Continuation of work that is effective at reducing carbon emissions.

Inspire local action by focusing on projects that are quick to initiate and deliver proven carbon reduction outcomes.

Analyse and assess where information, resources and policy changes are needed to support the move towards zero carbon, and initiate lobbying to secure the powers and resources needed.

City collectively sets out vision for how Plymouth will function in a zero carbon world.

Transitional phase focus

Ramping up delivery of projects that deliver significant carbon reduction, including building retrofits, new low carbon energy generation and changes to mobility infrastructure.

Complete full scenario testing of options for achieving zero carbon.

Identifying and prioritising actions.

Embedding new ways of working.

Continuing to lobby government for powers and resources to enable us to meet our aim.

City collectively moves towards zero carbon living with everyone playing their part.

Acceleration phase focus

All actions required to enable us to reach our zero carbon target are identified and are being implemented.

All new projects and developments in Plymouth are being delivered in a manner that will ensure that they are zero carbon by 2030.

Zero carbon working practices are fully embedded as business as usual.

Plymouth is thriving, with a zero carbon focused approach to growth and quality of life.

FOCUS

The following sections provide an overview of actions that will be taken by the city throughout 2021 to tackle the Climate Emergency. The focus is very much on credible and deliverable activities within those sectors that are responsible for the majority of emissions.



BUILDINGS



MOBILITY



POWER
AND
HEAT



WASTE



ENGAGEMENT
AND
RESPONSIBILITY

BUILDINGS

The city's buildings continue to be the greatest producers of emissions - and though the trend for emissions is a reduction, there is a huge way to go to reach net zero. The importance of this is clear with the recent release of several funding streams by government aimed at retrofitting both domestic and public sector buildings.

Additional funding is vital as the scale of retrofits required in the city needs to significantly increase to meet the 2030 target.



CASE STUDY

Plymouth Energy Community

Working in partnership with the Council, Plymouth Energy Community has supported hundreds of householders this year in exceptionally challenging circumstances. The advice, guidance, and help is being provided to some of the city's most vulnerable residents in lowering their energy bills, providing affordable warmth, increasing household income, and of course lowering carbon emissions.

In the six months from April to September one such project - the Warm Homes Fund - has reached 200 households resulting in savings totalling £165,000.



BUILDINGS Actions

The buildings theme provides an opportunity for local action to make a real impact on carbon emissions.

The range of actions that can help achieve this is vast - this is demonstrated by the scope of actions in this year's plan.

From retrofitting cross tenure housing and public sector buildings, to enabling ultra low emission housing developments to commence - the following actions demonstrate the city's ability to respond robustly and innovatively to the challenge of reducing emissions from buildings.

2.1

Improve the energy efficiency of 300 homes by installing carbon efficiency measures.

2.2

Improve the energy efficiency of housing in the city through the rigorous use of housing enforcement powers including the Minimum Energy Efficiency Standards policy.

2.3

Implement the Plymouth Flood Defence Strategy.



BUILDINGS Actions

- 2.4** Secure planning permission for the Plan for Homes Flagship Energiesprong low carbon housing development on land at Kings Tamerton and make a start on site infrastructure.
- 2.5** Promote the Green Homes Grant to empty home owners and continue to align with the Plan for Homes Empty Homes Programme.
- 2.6** Promote the Green Homes Grant to landlords, agents and partners in the private rented sector including landlords and agents of licensed Houses in Multiple Occupation.
- 2.7** Campaign with the Local Government Association (LGA), Key Cities and other professional bodies to bring forward the date of the Futures Homes Standards from 2025.
- 2.8** Ringfence funding support for low carbon housing within Plan for Homes 3.
- 2.9** Identify and support the most appropriate campaign related to VAT reduction on refurbishment, repair and maintenance to be cut to match the typical rate for new-build.



BUILDINGS Actions

2.10

Submit a funding bid for Phase 2 of the Green Homes Grant to include social housing retrofit.

2.11

Create Climate Emergency categories within the Abercrombie Awards to showcase carbon efficient building schemes.

2.12

Explore mortgages for sustainable energy with South West Mutual.

2.13

Engage with the construction sector on developing skills for the Green Economy through up-skilling their existing workforce, promoting green jobs and career opportunities to young people and adults looking to retrain and up-skill, and influence local training providers to align their curriculum by including new green apprenticeships.



MOBILITY

The transport sector is accountable for 30% of the city's total emissions and is an area which requires a major change in behaviour if we are to achieve our 2030 target. There is a requirement to rapidly increase the rate at which emissions are reduced based on current trends.

The COVID-19 pandemic has had a huge impact on mobility trends across the UK, with emissions from all transport falling drastically in the spring - only to increase again to near normal levels towards the end of the summer. The legacy of COVID-19 could have a detrimental effect on people's use of public transport, with private car journeys becoming the preferred means of travel.



CASE STUDY

Transforming Cities Fund

Plymouth City Council awarded grants from the Transforming Cities Fund to enable local businesses such as Plymouth University and the NHS to move towards more sustainable and environmentally friendly forms of transport by installing 46 electric vehicle (EV) chargepoints.

All businesses who were awarded Plymouth City Council's grant funding took advantage of the Office for Low Emission Vehicle's (OLEV) 'Work Place Charging Scheme' which provided a further £500 towards each chargepoint installed.

This funding has enabled businesses to take on a low carbon approach by replacing their diesel powered fleet with cleaner electric vehicles reducing their carbon footprint for years to come.



MOBILITY Actions

The need to accelerate the rate of reductions from transport emissions is well reflected by the scale and scope of actions included in this year's plan.

Increasing the sustainable travel options available for the city is a thread which links all the following mobility actions. Supported by the Transforming Cities Fund, 2021 will see both design work and installation work commence on several key sites in the city.

These improvements will be made alongside expanding the charging infrastructure for electric vehicles in the city, and incentivising businesses to adopt sustainable travel planning.

2.14

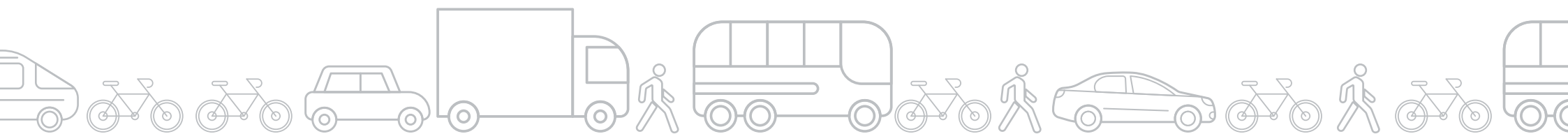
Support transport providers to lobby the Department of Transport to adopt a leasing model for zero emission buses to accelerate the replacement of older diesel powered buses.

2.15

Expand the Local Cycling and Walking Implementation Plan to include five more cycling routes identified as having the greatest potential to increase cycling.

2.16

Implement a non-motorised road user audit to all changes to the highway.



MOBILITY Actions

2.17

Conduct an assessment of transport improvement schemes to capture the benefits of active travel.

2.18

Adopt the Healthy Street Check as a key performance indicator across infrastructure projects to create streets where people are encouraged to walk or cycle for short trips.

2.19

Implement the 2050 Climate Mobility City INTERREG project to explore and quantify the impact of low carbon transport strategies.

2.20

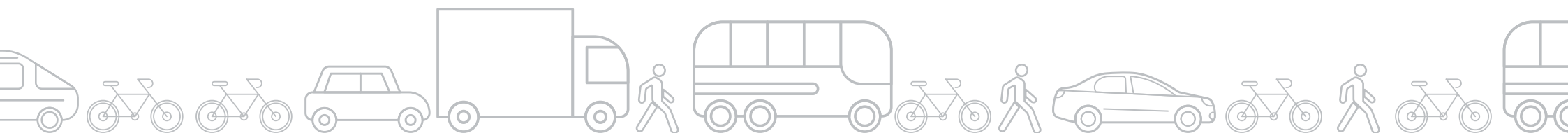
Complete the Southway to Plymbridge walking and cycling scheme.

2.21

Deliver a continuation of the off-road Eastern Corridor walking and cycling route to Colesdown Hill.

2.22

Commence construction of new cycle paths in Somerset Place, Broxton Drive, Newnham Road and Derriford Community Park.



MOBILITY Actions

2.23

Improve walking and cycling routes through Central Park.

2.24

Complete delivery of Saltash Walk and Cycle programme.

2.25

Commence design work on the Dockyard to City and St Budeaux to Docks cycle schemes.

2.26

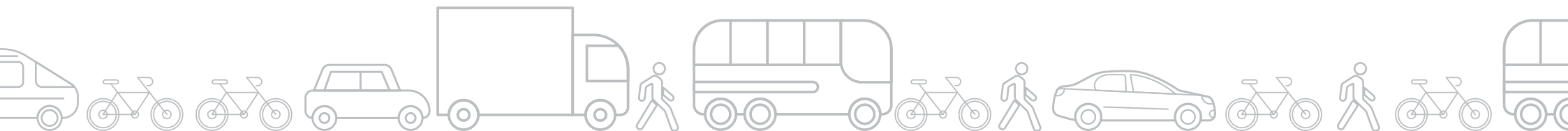
Complete new pedestrian crossings at Woodford Avenue and Larkham Lane as part of the Eastern Corridor Junction Improvements scheme for Plymouth Road.

2.27

Complete delivery of two new bus shelters and 54 Real Time Passenger Information Boards along the Plymouth East Western Corridor.

2.28

Complete delivery of three bus shelters and 16 Real Time Passenger Information boards along the Plymouth North Corridor.



MOBILITY Actions

2.29

Complete the installation of electric vehicle charge points at the Elphinstone, Plymstock Broadway, Crownhill, Guildhall, Plympton Mudge Way and North Hill public car parks.

2.30

Complete the installation of an electric vehicle charge point at the Barbican Landing Stage to support the passenger ferries becoming electric powered.

2.31

Complete the installation of nine new public electric vehicle charging hubs.

2.32

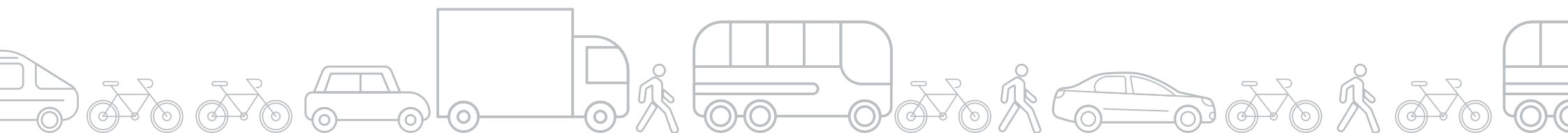
Commence design of St Budeaux Station's Sustainable Transport Interchange.

2.33

Complete design and consult on the preferred Woolwell to the George Transport Improvement Scheme, which will deliver an extension to segregated walking and cycling facilities along Plymouth's Northern Corridor.

2.34

Commence design of transport improvements along Royal Parade to enhance sustainable transport in the city centre.



MOBILITY Actions

2.35

Commence design of transport improvements on Mayflower Street that will create more space for waiting passengers and arriving buses using both Royal Parade and Mayflower Street.

2.36

Commence design work on the St Budeaux to Crownhill sustainable transport corridor.

2.37

Commence design work on Better Places Plymouth: a programme of transformation of key city centre streets and spaces creating a network of high quality walking and cycling routes north-south and east-west through the city centre to drive a higher proportion of journeys through the area by sustainable modes.

2.38

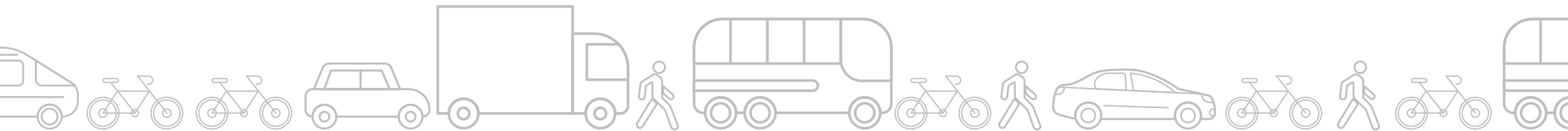
Commence design work on the Mobility Hubs, which will offer a low carbon multi-modal network for travel throughout Plymouth and the surrounding area.

2.39

Commence design work on the Plymouth Station Access, which will promote low-carbon forms of transport and facilitate pedestrian access between the station, the university and the city centre.

2.40

Commence construction of the new passenger concourse at Plymouth Train Station.



MOBILITY Actions

2.41

Provide additional signage and passenger information at Plymouth's suburban rail stations to promote linked trips by train.

2.42

Expand smart and multi-operator ticketing to include ferries and local rail services as well as buses.

2.43

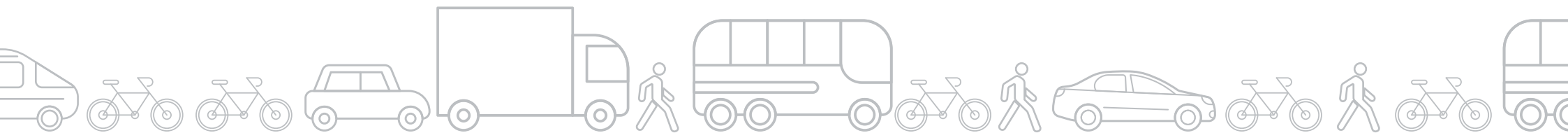
Provide a tendered bus network from January 2021 to provide access to essential services by bus rather than private car.

2.44

Develop new and existing local passenger ferry services by working with stakeholders including operators, the business community and Cornwall Council.

2.45

Provide school and business Sustainable Travel Grants.



POWER AND HEAT

Power and heat includes emissions resulting from using electricity and providing heat to buildings. Nationally, emissions from power generation have continued to fall as the percentage of renewable energy contributing to the national grid increases. Last year renewable energy provided 26.5% of the power the UK consumed.

The decarbonisation of heat continues to be a crucial factor in reducing emissions. Our reliance on gas boilers and inefficient electric heating to provide warmth to buildings needs to significantly shift if we are to reach net zero and represents one of the key challenges for the 'transition phase' of the Climate Emergency response from 2021, raising significant long-term resourcing issues.



CASE STUDY

District energy

Work is well underway in Millbay Boulevard, which has included the installation of district energy pipework by South West Highways, over 250m of its length, to provide low carbon renewable heating and cooling to a range of existing and new buildings.

A heat pump is also proposed for Ballard House, which can be connected to this network in the future. The network can utilise groundwater and/or seawater as the source for heating or cooling buildings.



POWER AND HEAT Actions

Local solutions to decarbonise heat are crucial if we are to meet our 2030 target. The following heat and power actions are a reflection of this, highlighting areas that are already at an advanced stage, as well as more innovative solutions that require further development.

Successful funding applications will enable a low carbon heat network to commence, whilst our partnership work with Western Power Distribution will ensure grid capacity to keep our buildings warm.

2.46

Develop the city's biggest community owned solar farm in partnership with Plymouth Energy Community.

2.47

Submit funding applications, including to SALIX, to support the development and delivery of Plymouth's Low Carbon Heat Network.

2.48

Work in partnership with the University Hospital Plymouth NHS Trust, Plymouth Marjon University, the Plymouth Housing Development Partnership and Plymouth Combined Courts to develop business cases to secure funding for district energy networks at Derriford, Barne Barton and the City Centre.



POWER AND HEAT Actions

2.49

Secure funding from Western Power to identify how the transition to low carbon heating will impact the capacity of the city's electricity grid.

2.50

Complete a feasibility study on the potential for low carbon heat networks, heat pumps and hybrid boilers, including identifying current potential funding models and barriers to uptake.

2.51

Submit consultation responses and lobby government to expand the support available through the Green Heat Networks Fund and other support for Heat Pump roll out.

2.52

Explore the potential for utilisation of seawater in the City Centre and Millbay for heating or cooling solutions.

2.53

Hold a Hydrogen Technology Summit with interested stakeholders to explore the opportunities and challenges of delivering land and maritime applications for hydrogen generation, supply and use for motorised transport in Plymouth with a view to producing a feasibility report by December 2021.



WASTE

In terms of carbon emissions the city's waste is an area where data collection methods need to be further refined. The absence of historical data makes it difficult to forecast the trend and rate of reductions from decarbonisation actions and initiatives.

Waste was not immune to the impacts of COVID-19 with the city's domestic waste collection increasing by 11% whilst the majority of residents remained at home.



CASE STUDY

New recycling bins

100 new recycling bins were installed in 88 of the city's most popular locations during 2020 in order to encourage recycling whilst people are out and about.

The way that we manage waste can have a huge impact on climate change. Recycling helps reduce greenhouse gas emissions by reducing energy consumption. Using recycled materials to make new products reduces the need for virgin materials along with reducing emissions from transporting materials through extended supply chains. This avoids greenhouse gas emissions that would result from extracting or mining virgin materials.



WASTE Actions

Carbon emissions resulting from waste are some of the most difficult to calculate, and subsequently some of the most difficult to mitigate through action.

The basic principle of Reduce, Re-use, Recycle within the waste hierarchy has been consistently adopted across the city and this year's resulting actions follow that theme.

Alongside increasing recycling rates, actions also look to address the emissions once waste has been disposed of - from old landfill sites to where recyclate is processed.

2.54

Launch a campaign to reduce waste generation (especially food waste) by 25% by 2025.

2.55

Utilise community feedback, data evidence and behavioural change opportunities to commence new innovative approaches to reuse and recycling which will increase Plymouth's household and municipal recycling rates from 40% to 65% by 2025.

2.56

Collect and utilise waste data intelligence to optimise service delivery by reducing frequency of collections and improving route planning and scheduling.



WASTE Actions

2.57

Identify processing gaps within the South West region waste recycling and treatment facilities and make appropriate provision where gaps have been identified including working with partners to ensure that where practical and economical, recyclable material is processed and recycled in the UK.

2.58

Lobby government to ensure its new Resource and Waste Strategy fully supports the need to address the Climate Emergency and provides local authorities with the powers and resources needed to increase recycling targets, food and garden waste management including additional measures to reduce the environmental impact of resource use and the creation of waste.

2.59

Assess opportunities from closure of landfill to generate further methane capture and/or solar power generation, whilst maintaining the highest environmental standards until closure is achieved.



ENGAGEMENT AND RESPONSIBILITY

The City Council recognises that it needs to play a leadership role working with partners and the local community across the city to raise awareness and understanding around climate change.

Importantly we need to ensure everyone understands what part they can play in addressing the Climate Emergency from an individual level through to community groups, businesses and public sector organisations.

We will work with the Youth Parliament and children and young people across the city to ensure that their voice is heard in designing the actions needed to address climate change.



CASE STUDY

Plymouth Net Zero Partnership

Recognising the need for citywide collaboration and conversations, several key organisations from across the city came together to form the Plymouth Net Zero Partnership.

Consisting of the organisations listed opposite, the partnership aims to bring together a citywide leadership group to drive the necessary actions, informed by the available science and latest research, needed to achieve carbon neutrality within Plymouth by 2030.

The partnership consists of both an executive and an officer group and meets regularly to support members to collaborate effectively, share knowledge, share good practice, provide cross-organisational positive challenge, and pool resources.

PLYMOUTH NET ZERO PARTNERSHIP



Devon & Cornwall Police



CASE STUDY



University of Plymouth

Pulsiv Solar Limited, a University of Plymouth spinout company, has raised £500,000 to step up development of its novel power conversion technology. Pulsiv is based at Plymouth Science Park and was incorporated to commercialise the work of Dr Zaki Ahmed, Associate Professor in Information Technology at the University.

Pulsiv has achieved a number of notable successes in recent months, having started design work funded by a major multinational to incorporate its technology into a new product line. It has also engaged in discussions with a number of other large multinational companies about a wide range of further industrial applications.

The step change in industrial engagement follows the company successfully developing a series of demonstration products which show the technology not only improves energy efficiency but also has the potential to reduce costs.

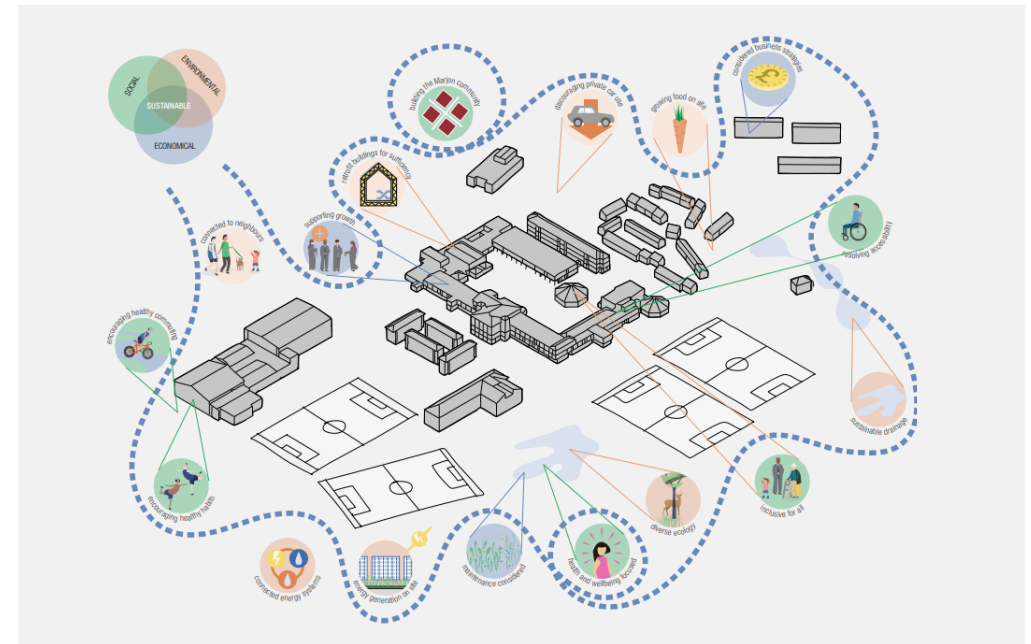


CASE STUDY

Plymouth Marjon University

Plymouth Marjon University joined many organisations and Plymouth City Council in recognising the environmental challenges facing society today. We declared a Planetary Emergency in November last year, committing to reducing our impact on the world we live in. We are aiming to achieve net zero carbon in our direct emissions by 2035 and to achieve this we have been creating our campus development plan.

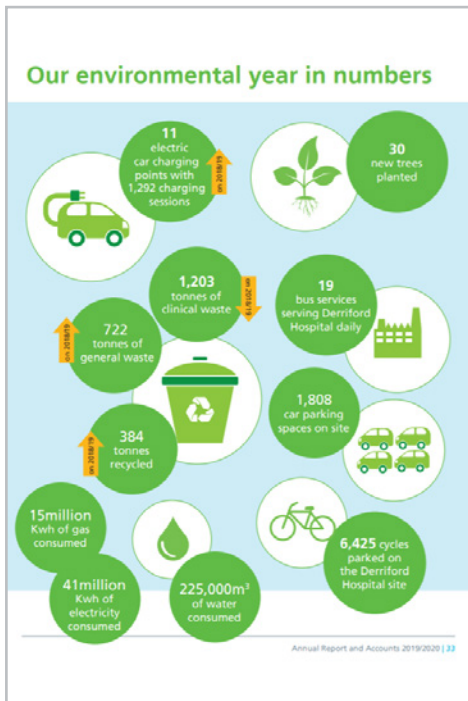
With this, we will be transforming our University over the next 15 years, from retrofitting energy efficient buildings to adapting for sustainable transport methods and producing renewable energy alongside low carbon heat on campus. We have already started to implement strategies to improve our sustainability and reduce our carbon emissions. We already have a solar power installation on one of our rooftops, and currently all the electricity we purchase comes from low-carbon generation such as renewable technology.



We will be campaigning and working to reduce waste of all kinds, including energy, and are investing in green travel, for example with cycle infrastructure, electric vehicle charging points and incentives.



CASE STUDY



Derriford Hospital

Over the last 12 months, the staff at University Hospitals Plymouth have been working flat out to cope with the unprecedented health emergency that the COVID-19 pandemic has created and is now at the forefront of the South West’s vaccination programme.

Despite this, on 25 September, the Trust Board agreed unanimously to declare a ‘climate health emergency’ and launched its Green Plan, thus turning the Trust’s commitments to reduce carbon emissions and the principles of sustainable development into action.

As part of this plan, the Trust has extended its electric vehicle infrastructure to eleven electric vehicle charging points, introduced an electric patient mobility vehicle and planted thirty trees to help reduce local air pollution.

CASE STUDY

Devonport Royal Dockyard

Historically, Devonport Royal Dockyard Limited (DRDL) has used diesel vans, but owing to the low speed limit permitted on site which results in their particulate filters becoming blocked regularly, coupled with the environmental impact of using diesel vehicles, the decision was taken to move to electric vehicles (EVs).

The first EVs were introduced in 2020, with charge stations throughout the dockyard made available and a second phase is planned for 2021. The EVs will make a 14.24 tCO₂e saving per year.

DRDL is fully committed to introducing a range of sustainable and environmentally friendly solutions.



babcockTM

CASE STUDY



Plymouth Science Park

Plymouth Science Park (PSP) has continued to invest in energy efficiency/reduction measures during the year.

In the first quarter of 2020, the Park installed 10 electric car charging points offering 7.2kW charging to all tenants at a reasonable cost. The trust will offer tenants without home charging facilities the ability to top-up while at work to help ease the transition away from internal combustion engine vehicles.

The scheme was funded in part by a grant from Plymouth City Council and makes use of the 150kWp solar array installed on the phase I building at the Park.

CASE STUDY

Citybus

Low Carbon Buses for Plymouth

In 2016 Plymouth Citybus welcomed the first alternative fuel buses to the region in the form of 13 single deck buses, powered by Compressed Natural Gas.

The buses, along with infrastructure to fuel at the Plymouth Deport are 96% cleaner than the Euro 4 buses they replaced.

In 2017 Plymouth Citybus invested £4.5 Million in 16 state-of-the-art Euro 6 Low Carbon Certified, British built, double decker buses. Another 11 followed in 2019, with a further £3.5 Million investment in the fleet.



CASE STUDY



2020 saw a further 10 brand-new Euro 6 buses enter service on cross-boundary routes between Plymouth City Centre and South East Cornwall, meaning that a total of 50 low carbon certified buses now operate within the city.

Advances in bus engine technology means that a clean new bus has allowed for older, more polluting buses to be removed from service.

Plymouth Citybus is part of the Go Ahead Group. Across the company there are a number of alternative fuel bus projects under way. These include Electric, Geo Located Electric/Euro 6 Hybrid and Hydrogen fuelled buses.

The bus industry is at the forefront of clean travel. Not only does a double deck bus at full capacity take 75 cars off the road, reducing congestion, but it can do it in a clean way.

CASE STUDY

Plymouth's marine environment is a key part of what makes our city unique and special. Over the next three years, the Preventing Plastic Pollution and LIFE Recreation ReMEDIES projects both aim to engage residents, schools, visitors and marine experts in ways to improve the health, condition and species diversity within Plymouth Sound and Tamar Estuaries.

Preventing Plastic Pollution

Working alongside Britain's Ocean City's Plastic Taskforce, Preventing Plastic Pollution will implement a programme of engagement activities to:

- Remove plastic pollution from source to sea, reducing the impact on our marine environment.
- Trial new plastic recycling bins in the water and on the land.
- Work with businesses, leisure and recreation sectors, schools and communities to raise awareness about single use plastics, and to find joined up ways to reduce our plastic footprint.



CASE STUDY



PREVENTING PLASTIC POLLUTION PARTNERS

England

- Queen Mary University of London
- The Rivers Trust
- Westcountry Rivers Trust
- South East Rivers Trust
- DEFRA
- Environment Agency
- Plymouth University
- Plymouth City Council

France

- LABOCEA Conseil, Expertise et Analyses
- Syndicat mixte établissement public de gestion et d'aménagement de la baie de Douarnenez
- Agence Française de la Biodiversité
- Brest métropole
- Centre national de la recherche scientifique
- Conseil départemental de la Manche
- Institut français de recherche pour l'exploitation de mer
- Syndicat de bassin de l'Elorn
- ACTIMAR
- Brest'aim

CASE STUDY



Image © Keith Hiscock

LIFE Recreation **ReMEDIES**

ReMEDIES

ReMEDIES (Reducing and Mitigating Erosion and Disturbance Impacts affecting the Seabed) will:

- Identify areas for large scale restoration of seagrass beds which store significant amounts of carbon from the atmosphere, helping mitigate climate change impacts.
- Develop and install new environmentally friendly ways to moor and anchor boats, which will reduce the impact on the seabed.
- Raise awareness about the importance of seagrass and Plymouth Sound and Tamar Estuaries through community events, boating surveys and an education programme.

PARTNERS

- Natural England
- RYA
- Ocean Conservation Trust
- Marine Conservation Society
- Tamar Estuaries Consultative Forum
- Plymouth City Council

CASE STUDY

Green Minds

Green Minds is a three year programme from 2020-2023 which aims to rewild people and places across Plymouth. Funded from the social innovation strand of the European Regional Development Fund, Green Minds will demonstrate how nature can provide solutions to the challenges that climate change brings, improve health and wellbeing and create thriving environmental enterprises.

As part of the project, in November 2020, Plymouth made history to become the first (and only) city in the UK for 400 years to have a resident beaver at Derriford Community Park. This keystone species is an ecosystem engineer – creating wetland habitats that help to ‘slow the flow’ of water, bringing many benefits such as increasing biodiversity, improving water quality, as well as acting as a carbon store. Not only that, they bring social benefits too in terms of health and wellbeing, education and will support the local economy through wildlife tourism.



Image © Chris Parkes

More projects to come include a sustainable urban drainage solution to transform rainwater into a resource in Central Park; greening the grey through trees and wildflower planting in the north west of the city; creating new nature corridors and community orchards at Saltram; and supporting nature-based social enterprises in Devonport and Stonehouse.

CASE STUDY



Engaging and empowering residents, schools, landowners and businesses to take action for nature is an important part of the programme. Over 600 people attended our virtual launch in October and we will be running a range of events, training, awareness raising and educational activities as we go along, creating networks, resources and tools to share best practice and connect people and wildlife. This will include a fully immersive nature film in the Market Hall at the end of the project.

More info at www.greenmindsplymouth.com

PARTNERS

University of Plymouth
 Plymouth College of Art
 Real Ideas Organisation
 Devon Wildlife Trust
 The Data Place
 National Trust
 Plymouth City Council

CASE STUDY

Plymouth Tree Challenge campaign

Following on from the successful creation and adoption of Plymouth's Plan for Trees in March 2019, a steering group comprising the City Council, Plymouth Tree Partnership, National Trust, Plymouth Community Homes, Woodland Trust, the Plymouth Open Space Network and others have been working to kick start our delivery programme.

The Plymouth Tree Challenge campaign aims to increase awareness of Plymouth's trees by covering multiple case studies to promote the value of trees to the city and to communities, with a range of videos and infographics which tell the story of the projects as they progress. The campaign will encourage all the Plan for Trees principles to care, enhance, promote and protect the trees of Plymouth, as well as educate on the wider context of their importance in terms of climate change, biodiversity loss, and tree disease management.



CASE STUDY



Plymouth's trees and woodlands, including trees in urban areas, make our city a great place to live, work, do business and create an environment to invest in. Trees do a really important job but they are too often overlooked. It is time to recognise what a highly valuable asset they are for Plymouth.

The Plan for Trees aims to help trees in urban areas become fit for purpose, resilient to the challenges of climate change and disease, and adaptable to whatever new challenges the future may hold. It covers all trees in Plymouth and we will be working with partners to achieve these goals.

This plan recognises that realising all of the benefits of urban trees will require significant effort and investment over a prolonged period of time from all partners and stakeholders. It is accompanied with a detailed phased and costed delivery programme developed to support Plymouth's Plan for Trees, setting out how each of the principles will be taken forward and achieved.

More info at www.plymouth.gov.uk/planningandbuildingcontrol/treesandhedges/plantrees

CASE STUDY

Plymouth Climate Challenge

In Spring 2020 a full review of the City Change Fund was undertaken. This included raising the capped contribution from £20,000 to £30,000 and also introducing a new Climate Emergency Bonus (up to an additional £15,000) for projects helping to address climate change.

To launch the bonus, raise awareness of the City Change Fund, and to support and generate funding for Climate Emergency initiatives in real-time, the Plymouth Climate Challenge Live competition took place in Autumn 2020 with the final broadcast live via YouTube on Thursday 3 December 2020.

Seven shortlisted projects were given a £250 start-up pledge and crowdfunded for a month. The top three projects who raised the most money were awarded an additional £2,500 and took part in the live final. The winner was awarded a prize of £5,000 live during the final event.



The review of the City Change Fund and the Plymouth Climate Challenge competition has been just one of the great examples of how the city is responding to the Climate Emergency, ensuring grass-roots contribution to this national and international challenge. Projects which were shortlisted included: collecting and recycling 1,000 abandoned tyres in Plymouth Sound, a mass art installation to be displayed at COP26, a nappy library and a project to equip every school child in the city with re-wilding seeds.

More info at www.plymouth.gov.uk/planningandbuildingcontrol/neighbourhoodplanning/citychange fund

ENGAGEMENT AND RESPONSIBILITY Actions

The role of engagement in meeting our Climate Emergency ambitions is huge and should not be underestimated. The only way we can achieve our target is by working collaboratively and sharing responsibility.

This sentiment is clearly reflected in the diversity and range of actions that are set for 2021, from tree planting to creating offsetting funds.

2.60

Implement a Climate Emergency communications campaign to support a step change in behaviours, in partnership with the Plymouth Net Zero Partnership.

2.61

Develop a programme for establishing Climate Change Ambassadors across the whole of Plymouth.

2.62

Engage with the Youth Parliament to ensure that the voice of children and young people is heard in relation to the Climate Emergency.



ENGAGEMENT AND RESPONSIBILITY Actions

2.63

Organise an annual Climate Emergency Summit for Young People.

2.64

Organise a themed day at Plymouth Libraries on the topic of climate change.

2.65

Reconnect residents, schools and local enterprises with Plymouth's natural environments to support climate change initiatives through the Green Minds Programme.

2.66

Bring forward nature-based solutions through initiating a programme of investment in sustainable urban drainage and rewilding projects supported by the Green Minds Programme.

2.67

Remove plastic pollution from source to sea, raise awareness of the impact of single use plastics and develop joined up ways to reduce our plastic footprint on the marine environment through the Preventing Plastic Pollution Programme.

2.68

Identify areas for large scale restoration of seagrass beds which store significant amounts of carbon from the atmosphere, helping mitigate climate change impacts and raising awareness through the ReMEDIES project.



ENGAGEMENT AND RESPONSIBILITY Actions

2.69

Continue to support community-based initiatives through the Climate Change Challenge Fund to encourage local decarbonisation projects and initiatives.

2.70

During 2021 plant over 1,000 trees and complete the Tree Planting Programme for 2022 as part of the Plymouth Tree Challenge.

2.71

Further develop plans for the Plymouth Community Forest to create around 1,000 hectares of new woodland planting by consulting key stakeholders and beginning preparation of a Sustainable Investment and Funding Business Plan.

2.72

Promote a car-free day across Plymouth.

2.73

Deliver an anti-idling campaign (including enforcement) outside schools.

2.74

Through Plymotion, provide personalised travel planning support to Plymouth residents to identify the best walking and cycling routes.



ENGAGEMENT AND RESPONSIBILITY Actions

2.75

Encourage and enable pedestrians, new and returning cyclists (adults and children) by implementing the Council's Active Travel Fund programme and delivering the Council's Plymotion behavioural change programme.

2.76

Actively support community transport providers to expand the range of services they offer and explore more commercial opportunities.

2.77

Work in collaboration with Peninsula Transport, South Hams and West Devon to embed consideration of the Climate Emergency into the development of sustainable transport projects.

2.78

Work with the Inclusive Growth Group of the Plymouth Growth Board to publish the Resurgam Charter, and deliver on its commitment to encourage and support businesses to respond proactively to the Climate Emergency.

2.79

Encourage Plymouth businesses to seek 'Green tourism' accreditation by promoting good practice and supporting funding bids where possible.

2.80

Encourage partner organisations to adopt and align social value procurement policies and ensure carbon reduction is duly considered and acted upon in their procurement initiatives.



ENGAGEMENT AND RESPONSIBILITY Actions

2.81

Publish and launch our Action Plan for Green Skills.

2.82

Develop Plymouth's first carbon offsetting pilot.

2.83

Continue to raise Plymouth's priorities for government action on climate change through the Local Government Association (LGA) Environment, Economy, Housing and Transport Board.

2.84

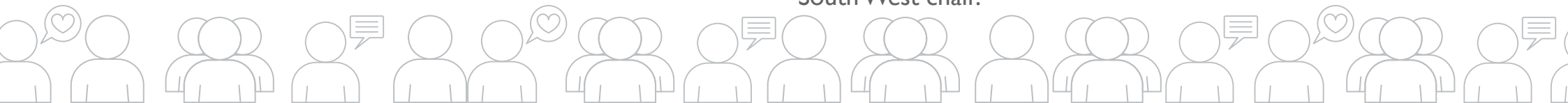
Continue to raise our priorities for government action on climate change where relevant through the quarterly meetings of the South West Association of Directors of the Environment, Economy, Planning and Transport (ADEPT) and feed into the ADEPT leadership team at a national level via the South West chair.

2.85

Support the University of Plymouth's Reconstructed Soils from Waste project.

2.86

Continue the programme of 'climate conversations' to bring together the stakeholders from across Plymouth to review strategic options for delivering net zero by 2030.



ENGAGEMENT AND RESPONSIBILITY Actions

2.87

Continue to raise awareness of climate change issues by supporting the Future Plymouth 2030 conference programme in partnership with the Royal Institute of British Architects.

2.88

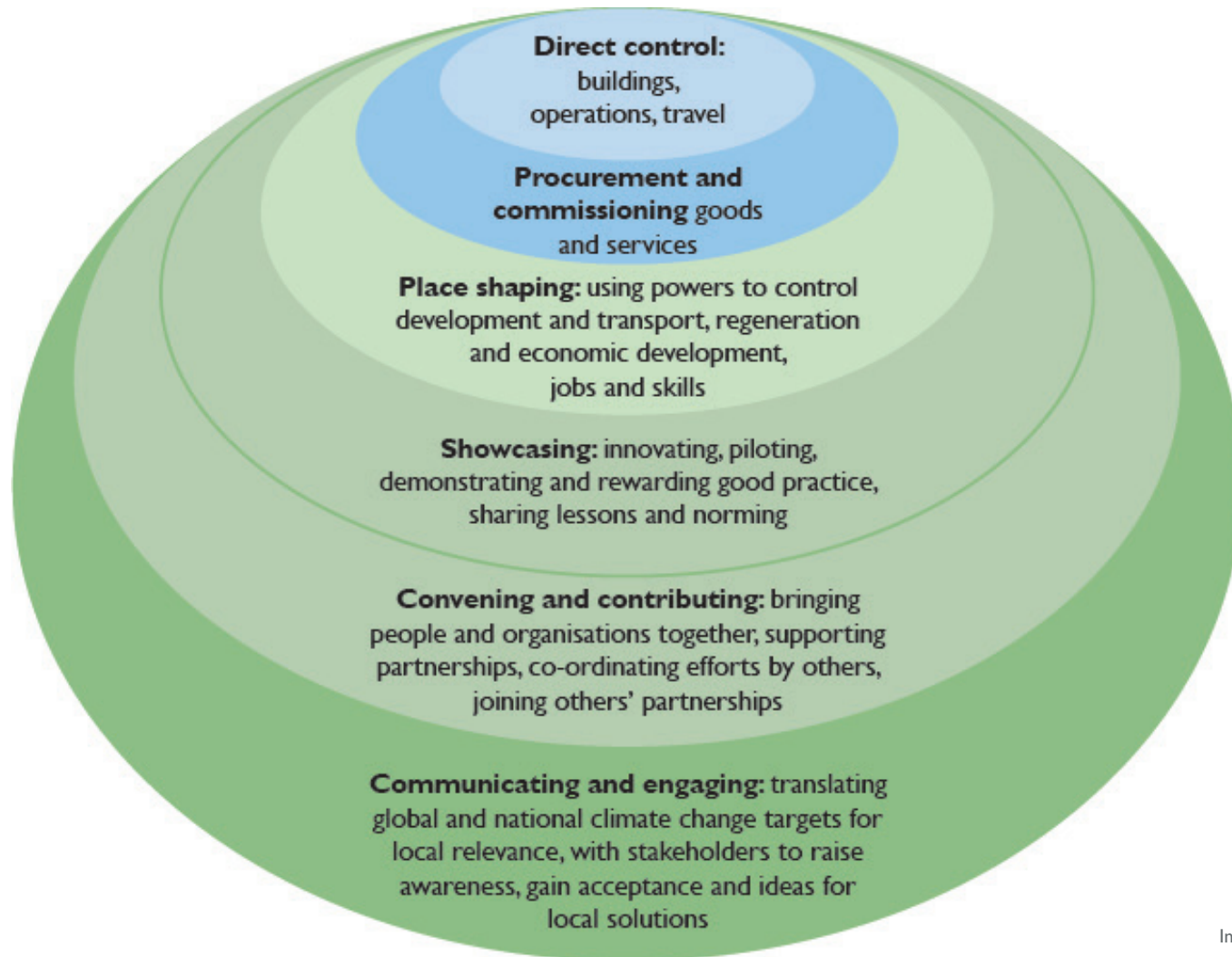
Continue to work with other councils with similar ambitions on climate change, sharing good practice.

2.89

Continue to lobby government to change laws, taxation and investment in infrastructure to make low carbon living easier.



LOCAL AUTHORITY INFLUENCE AND ROLE IN DELIVERING NET ZERO



Climate change is still the biggest challenge facing our city's future and without rapid action the consequences will be severe on society, the environment and the economy. Plymouth cannot resolve global climate change alone, but we can play our part by participating fully in a Climate Emergency response.

This second action plan is a significant step in directing action that will reduce carbon emissions across Plymouth and advance us on a path to meet our net zero carbon ambition by 2030.

The Climate Emergency Action Plan is reviewed publicly every six months by a City Council scrutiny committee. Recordings of the meeting, agenda and minutes are available on our website.

If you think there is more you can do to help please contact us at ClimateEmergency@plymouth.gov.uk.

