

Conwy County Borough Council's Net Zero Plan



Mae'r ddogfen hon ar gael yn Gymraeg hefyd.

Large print, Braille and alternative language versions of this document are available on request.

Contents

Background	3
Introduction.....	4
What does net carbon zero mean?.....	4
What are greenhouse gas emissions?	4
Why is it important to become net carbon zero?	4
Related plans.....	4
Baseline Data	5
What are we going to do?	6
The Climate Challenge Programme	6
Net Zero Emissions Supply Chain	7
Net Zero Emissions Estate	7
Net Zero Emissions Staff Travel	8
Net Zero Emissions Fleet	8
Net Zero Emissions Street Lighting	8
Carbon Offsetting	9
Local Area Energy Plan (LAEP)	9
Public Electric Vehicle Charging.....	9
How will we measure our progress?	9

Background

In October 2018, the IPCC (Intergovernmental Panel on Climate Change) climate change predictions were that the impacts of global temperature rise are worse than expected. As a response to the predictions, local authorities across the UK began declaring 'Climate Emergencies'.

The Welsh Government declared a climate emergency on 29 April 2019 and on 1 May 2019 the climate emergency declaration motion was passed by the National Assembly.

On 9 May 2019, Conwy County Borough Council declared a climate emergency with the following stated in the resolution that was passed:

'The Council notes that the effects of climate change and extreme weather events have already had an impact on residents within the county, and that residents living on low ground and on the coast are living in an area of high flood risk.'

The Council also notes that sea level is expected to rise by 1.1 metre over the next century, and that every year floods cost around £200 million to the Welsh economy.'

The Council declares a climate emergency and commits to ensuring that the county continues to be a lively, viable and sustainable home for our children and future generations.'

The Council calls on the Welsh Government to commit to taking the positive steps needed to reduce carbon emissions and strive to create a carbon-neutral future. The Council calls on Welsh Government to provide the necessary support and resources to enable effective carbon reductions across Wales.'

The Council will task the Green Programme Board to develop, during the next 12 months, a clear plan for a route towards the Authority being a net zero carbon user. The plan will be designed with a goal to be fully implemented during the following 10 years.'



Introduction

What does net carbon zero mean?

Net carbon zero means reducing greenhouse gas emissions that we produce from our activities as much as we can and balancing any remaining emissions produced by removing them from the earth's atmosphere.

Net carbon zero will be achieved by Conwy County Borough Council when the amount of greenhouse gas emissions the council adds to the atmosphere from its activities is no more than the emissions removed from the atmosphere.

What are greenhouse gas emissions?

Greenhouse gases include Carbon Dioxide, Nitrous oxide and methane. These gases contribute to the warming of the earth through the greenhouse effect. This effect has been enhanced due to human activity releasing extra greenhouse gases into the atmosphere and causing global warming.

When we measure the greenhouse gas emissions we produce we use a Carbon Dioxide equivalent measure which takes into consideration all greenhouse gases released. So although we refer to emissions as carbon emissions we mean greenhouse gas emissions.

Why is it important to become net carbon zero?

We are already feeling the effects of climate change with rising sea levels and changing weather patterns including more severe storms, such as those in winter 2013/14 that saw the destruction of Deganwy promenade, Storm Ciara in 2020 that caused flooding in Llanrwst and surrounding areas and Storm Arwen that affected 250 trees across the county in 2021. This will only get worse if global warming increases.

What we do in the next decade to limit emissions will be critical to the future of Conwy County and our planet.

Related plans

Wellbeing of Future Generations Act 2015

The Act places a duty on public bodies to deliver services in a sustainable way, working to improve the economic, social, environmental and cultural well-being of Wales by setting and publishing well-being objectives and taking reasonable steps to meet those objectives.

Conwy & Denbighshire Public Service Board Local Well-being Plan 2023-2028

This 5 year plan sets out the local objectives the Public Service Board will take to improve the economic, social, cultural and environmental well-being for the local area.

Corporate Plan 2022-2027

This 5 year plan sets out the Council's key priorities to support the needs of the citizens who live in, work in and visit the County Borough of Conwy, contributing to delivering the wellbeing of Future Generations Act 2015.

Annual Service Plans

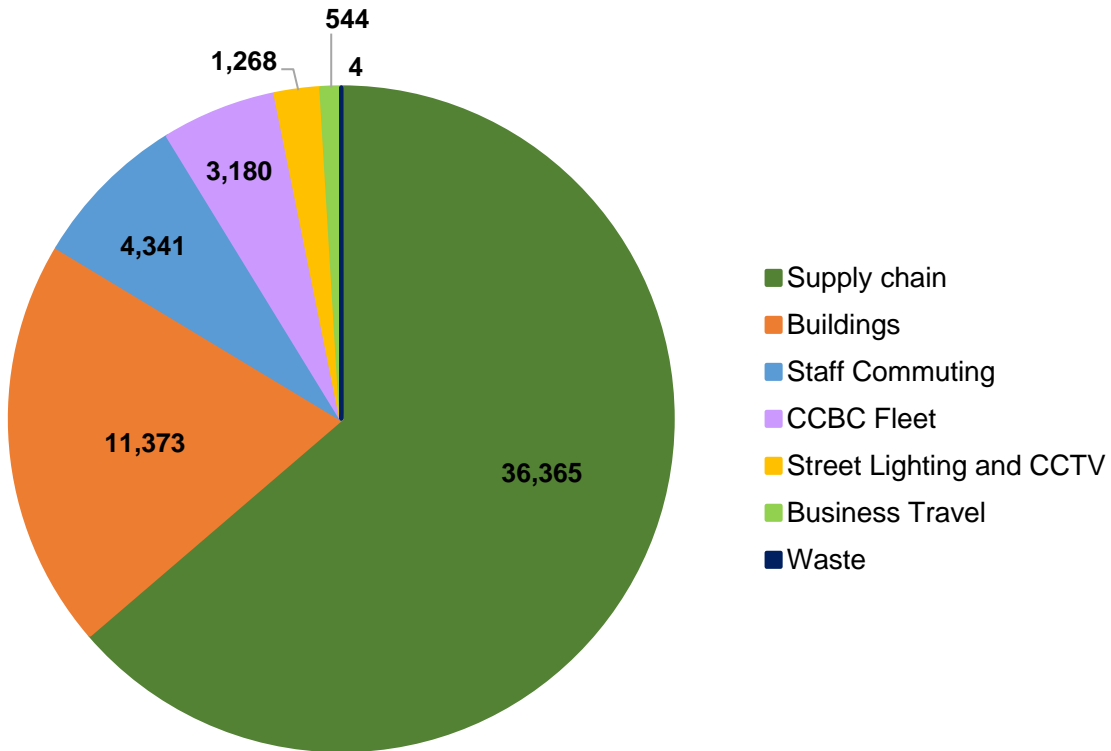
Each Council Service has a plan to detail the specific actions they will undertake during the year to develop the service and to achieve the Corporate Plan priorities.

Baseline Data

The baseline emissions for Conwy County Borough Council are from 2019-20 and are shown in the graph below.

Conwy CBC emissions - 2019/2020

(tCO₂e)



The total carbon dioxide equivalent (CO₂e) emissions released by the activities of Conwy County Borough Council was 56,618 tonnes in 2019-20, the 456 tCO₂e that the Council removed from the atmosphere through different types of land use has been taken away from this total.

As the graph shows the majority of emissions, 64% come from Conwy County Borough Council's supply chain, followed by emissions associated with building use with 20% of emissions.

This baseline data will be used to measure progress towards the goal to become net carbon zero by 2030.

What are we going to do?

Following making the climate emergency declaration Conwy County Borough Council worked with Aether an external consultant to develop 3 different options for the Council using our baseline data from 2019/20:

1. Business as usual – we don't take any action to reduce our greenhouse gas emissions.
2. Committed Action – we commit to take actions to reduce our greenhouse gas emissions.
3. Further Action – we make a significant commitment to undertake ambitious actions to reduce our greenhouse gas emissions.

Under the Business as usual option, it was estimated that the Council's emissions would reduce by 8%, due mainly to the work of energy companies in making energy greener, for example more electricity being made from wind rather than coal.

Under the committed action option, it was estimated that emissions for the Council would be reduced by 27%.

Under the further action option it was estimated that the Council's emissions would reduce by 79% but would be the most challenging and would cost the most.

Conwy County Borough Council adopted the further action option and a decarbonisation plan was developed to explain how the Council can become a net zero carbon by 2030. Any emissions remaining would need to be off-set.

The Climate Challenge Programme

Following the development of the decarbonisation plan Conwy County Borough Council set up the Climate Challenge Programme in 2020 to deliver the vision:

'To lead our communities in delivering a net carbon zero county.'

The programme objectives are to:

- Reduce greenhouse gas emissions from the Council's estate, fleet, staff commuting, business travel, supply chain and street lighting to achieve net zero emissions.
- Offset the remaining emissions by 2030.
- Develop and implement a local area energy plan for Conwy County by 2030.

8 projects have been set up to deliver these objectives:

1. **Net Zero Emissions Supply Chain**
2. **Net Zero Emissions Estate**
3. **Net Zero Emissions Staff Travel**
4. **Net Zero Emissions Fleet**
5. **Net Zero Emissions Street Lighting**
6. **Carbon Offsetting**
7. **Local Area Energy Plan (LAEP)**
8. **Public Electric Vehicle Charging**

The Climate Challenge Programme Board oversees the programme and is chaired by the Cabinet Member for Neighbourhood and the Environment and is attended by the Chief Executive, senior management, the Leader of the Council, elected Members, and the Climate Challenge Programme Manager.

Net Zero Emissions Supply Chain

A supply chain is the things that we buy, where they have been bought from, and how they are delivered.

Examples of the things that make up Conwy County Borough Council's supply chain are, reams of paper used in our offices and schools, large heavy goods vehicles used to collect residents recycling, and agencies who deliver domiciliary care in our communities.

The baseline emissions for the Supply Chain project are 36,365 tCO₂e, and the project aims to reduce the emissions associated with the Council's supply chain by 75% by 2030/31.

Net Zero Emissions Estate

Conwy County Borough Council's estate is all of the buildings that the Council manage and where council activities take place including, schools, our offices, libraries, leisure centres, operational depots, community centres and theatres.

Carbon emissions from our estate come from the energy used to heat, light and power our buildings. The Net Zero Emissions Estate projects aims to reduce these emissions by 84% from the baseline of 11,373 tCO₂e by 2030/31.



Net Zero Emissions Staff Travel

Staff travel includes how Conwy County Borough Council's staff travel to and from their usual place of work and travel that is made during the working day, to meet customers and to attend meetings and training.

The Net Zero Emissions Staff Travel project aims to reduce the number of miles travelled by our staff and encourage different ways to travel, for example, walking and cycling to reduce the carbon emissions associated with staff travel by 77% from the baseline of 4,885 tCO₂e by 2030/31.

Net Zero Emissions Fleet

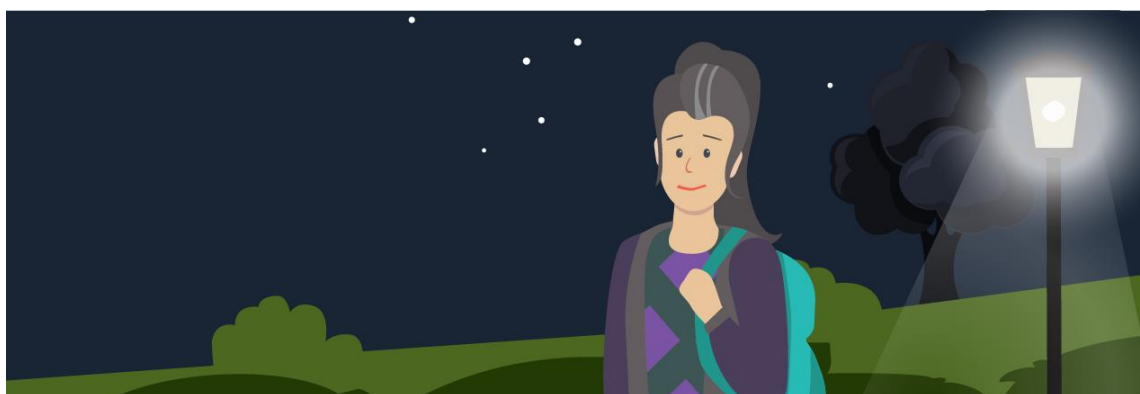
The fleet is every vehicle owned by Conwy County Borough Council and used to deliver council services. There are lots of different types of vehicles used by the Council for example recycling lorries, street sweepers, mini busses, small vans and cars.

Our fleet also includes large plant, this is pieces of equipment that are used by us to carry out our activities and include, tractors, ride on mowers, gritters and small street sweepers.

The Net Zero Emissions Fleet project aims to reduce the emissions of our Fleet by 61% from the baseline of 3,180 tCO₂e by 2030/31. The project will look at buying electric vehicles and developing our sites to allow for electric vehicle chargers to be fitted, it will also look at adopting other zero and low emissions technologies as they become reliable alternatives to petrol and diesel vehicles.

Net Zero Emissions Street Lighting

Street lights are used to light up our roads, paths and street signs across the county. The baseline emissions for our Street Lighting are 1,268 tCO₂e and the project aims to reduce these by 60% by replacing street lights with more efficient LED lights to reduce the amount of energy that they use.



Carbon Offsetting

Offsetting is a term that describes finding ways of removing carbon emissions from the atmosphere to balance the carbon emissions being released.

The carbon offsetting project will look at the different ways land can be used to increase the amount of carbon it absorbs. This can include planting trees, leaving areas of land to become wild and looking at ways to produce renewable energy.

Local Area Energy Plan (LAEP)

A Local Area Energy Plan describes the actions an area needs to take to meet its energy goals, what actions the Council will take and what is needed from other places such as national government, energy providers and local organisations.

A Local Area Energy Plan for Conwy County has been made and with the help of local stakeholders, we have identified areas that we will focus on including: offshore wind power, electric vehicle charging, improving the energy efficiency of buildings, onshore renewable energy, putting heat-pumps in properties who do not have mains gas and a tidal lagoon. We have looked at the actions we can take as a local authority and identified where we will need input from other partners.

Public Electric Vehicle Charging

Following from the Local Area Energy Plan an area of focus is to have more electric chargers available to the public.

The Public Electric Vehicle charging project will look at opportunities to provide electric vehicle chargers for public use across Conwy County and making sure fitting and using the chargers is the same wherever they are.



How will we measure our progress?

Each year our carbon emissions are calculated and compared with the baseline year 2019/20. This means we can tell what progress has been made since the implementation of the Climate Challenge Programme.

The data is broken down into each of our activities and looked at in more detail, a report is produced which is taken through Conwy County Borough Council's democratic process it is then published on our public website: [Green Dragon Environmental Standard](#)