Appendix 1

Conwy County Borough Council
Net Zero Carbon Performance Report
2023/24

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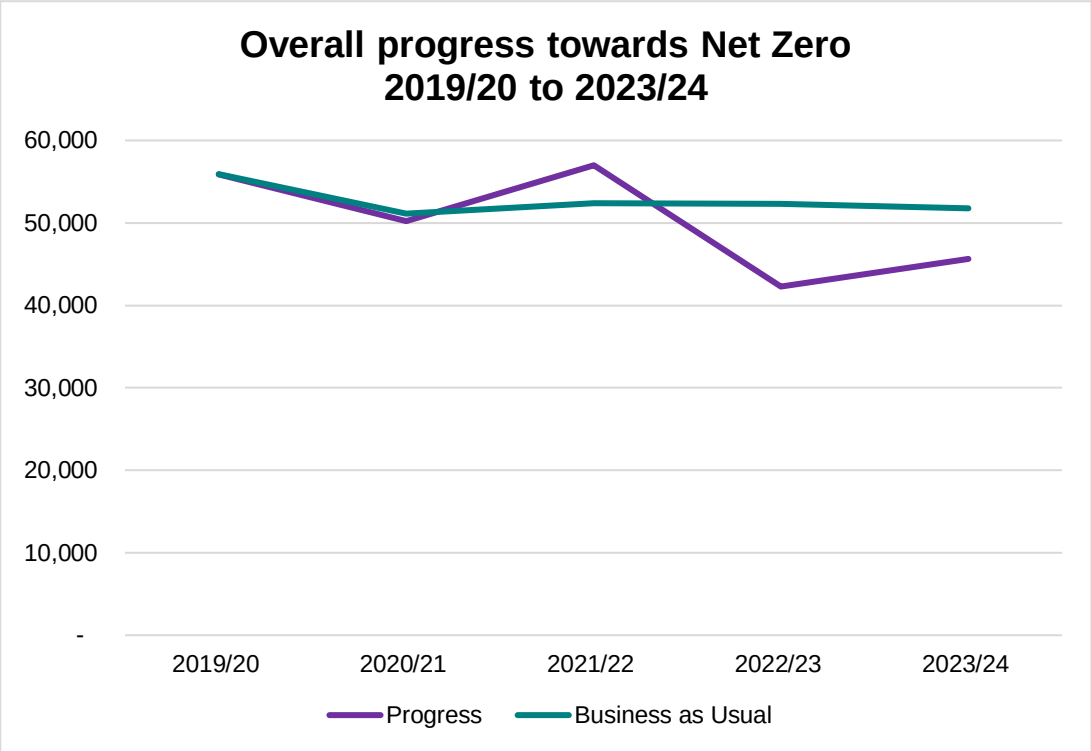
Mae'r ddogfen hon ar gael yn Gymraeg hefyd.

1.0 Carbon Equivalent Performance - Overall

The chart below details Conwy County Borough Council's emissions between 2019/20 and 2023/24. The activities emitting carbon include:

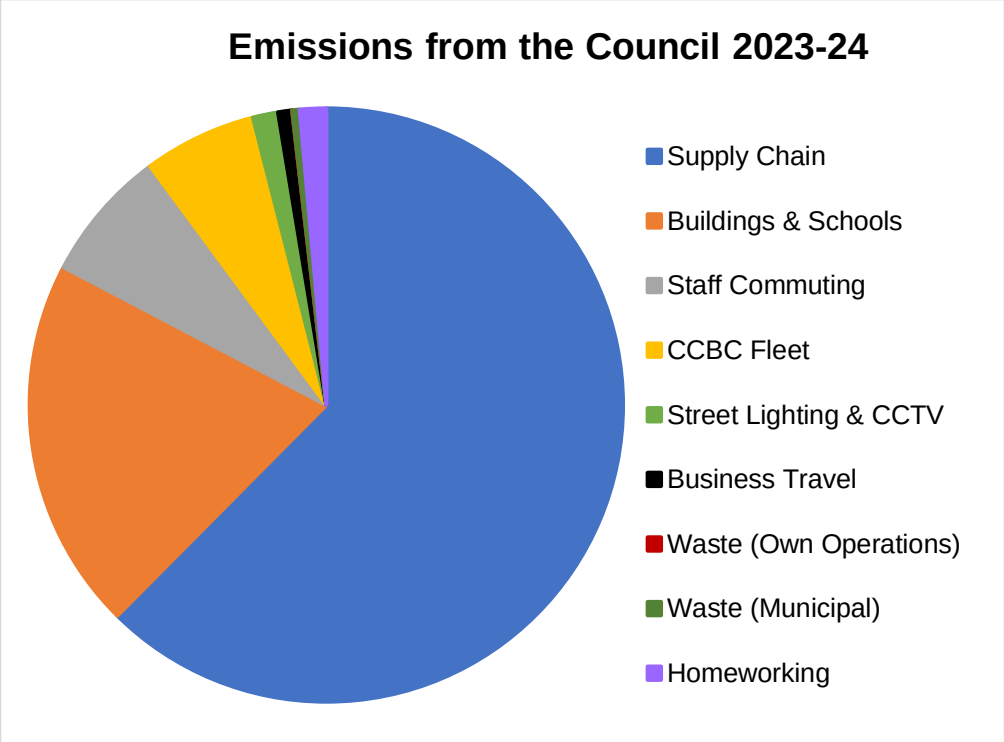
- Energy & water consumption from buildings we own and lease and use to deliver core Council services;
- Fuel consumption from the Council's fleet of vehicles;
- Fuel consumption from staff using their cars for business travel;
- Energy consumption from street lighting & CCTV;
- Fuel consumption from staff commuting to & from their place of work;
- Treatment of waste from our own operations;
- Spend in our supply chain.

Conwy County Borough Council's total carbon equivalent emissions in 2023/24 was 45,672 tCO_2e. When we take account of the carbon sequestered through land use, this figure is reduced to 45,212 tCO_2e.
The chart below details Conwy County Borough Council's progress towards net zero carbon emissions from 2019/20 to 2023/24 and what emissions would have been if we had carried on with business as usual.



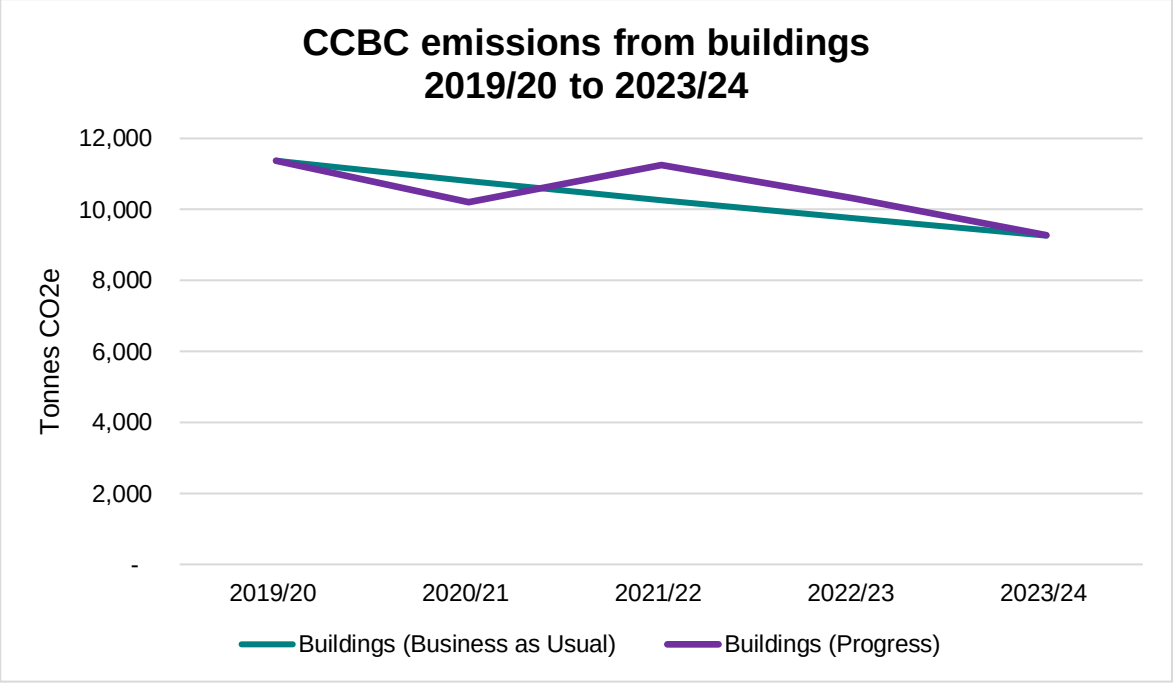
At the end of 2023/24, the Council's emissions had reduced by 19% (10,698 tonnes) when compared with the baseline year of 2019/20.

As shown in the chart below emissions from the supply chain accounted for the majority of the Council's emissions in 2023/24 at 62% (28,496 tonnes). This is followed by buildings at 20% (9,275 tonnes) and staff commuting at 7% (3,285 tonnes).



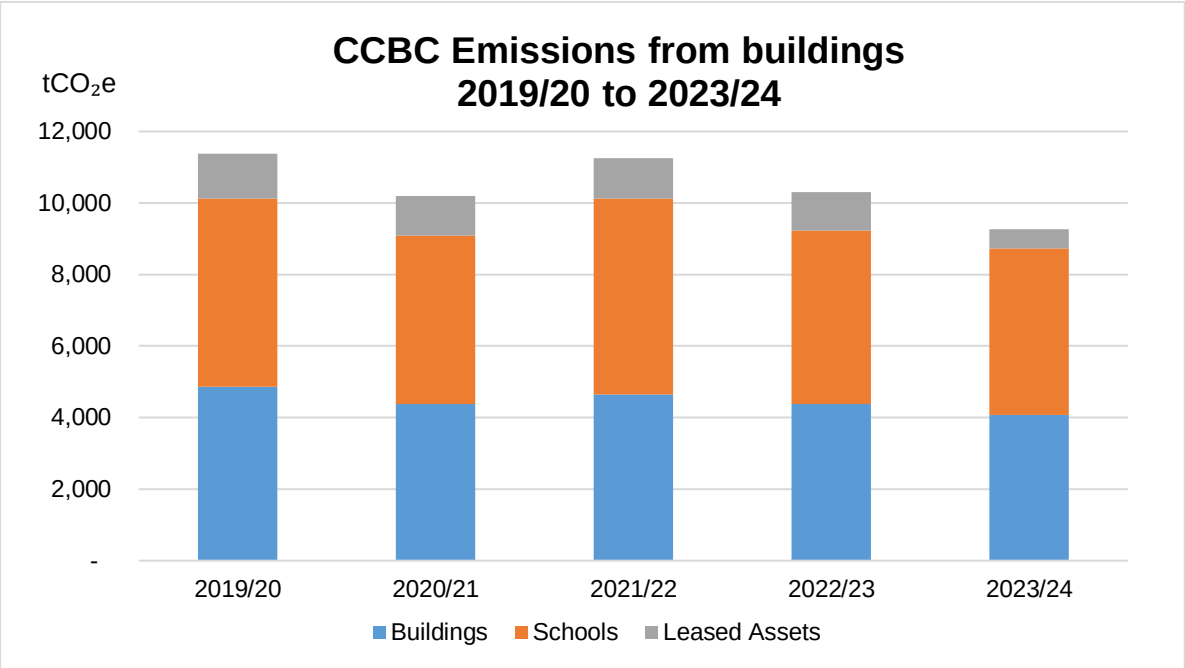
2.0 Carbon Equivalent Performance - Buildings

The chart below details Conwy County Borough Council's progress towards net zero carbon emission buildings from 2019/20 to 2023/24 and what emissions would have been if we had carried on with business as usual.



At the end of 2023/24, Conwy County Borough Council had reduced the carbon emissions from its buildings by 18% (2,098 tonnes) when compared with the baseline year of 2019/20. Factors contributing to the reduction from the baseline include:

- Upgrades to 18 school kitchens to install more efficient equipment;
- Installation of solar PV at the Bron y Nant respite centre and 6 schools;
- Phase 1 of the decarbonisation project at Ysgol Bro Aled;
- A reduction in the total number of buildings;
- Continued support for homeworking.



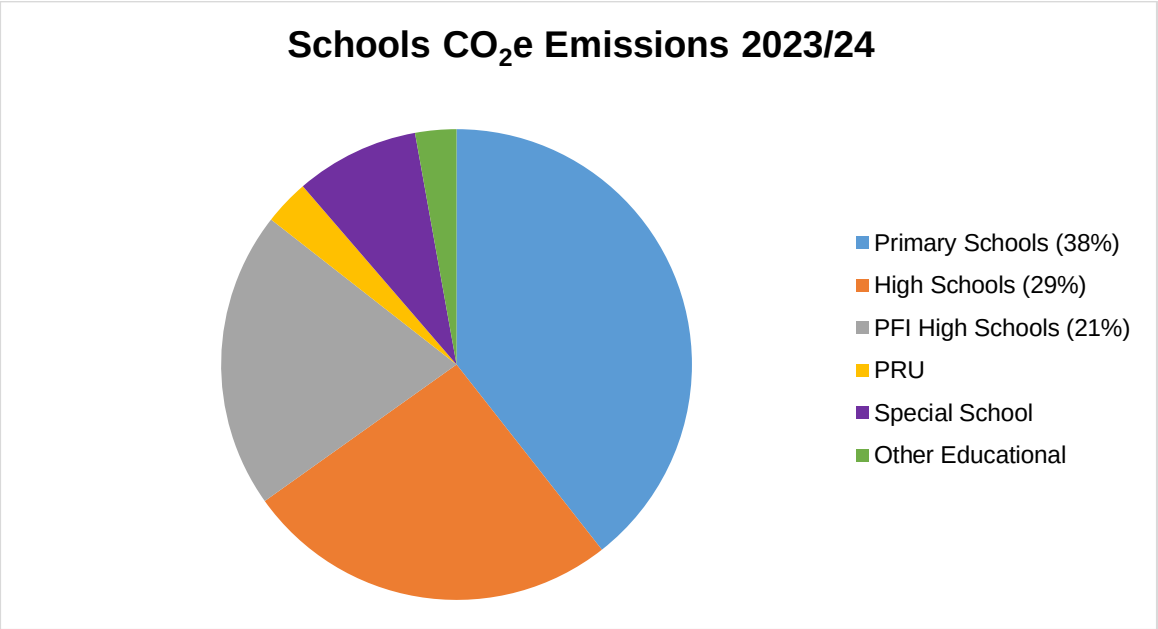
Under the Climate Challenge Programme the Net Zero Emission Estates project is tasked with reducing emissions from Conwy County Borough Council buildings.
The Net Zero Emission Estates project objectives are:

- Reduce the number of buildings owned and occupied by Conwy County Borough Council;
- Develop and implement a carbon reduction strategy specific to each building type;
- Integrate net carbon zero into the policies and procedures associated with building design, refurbishment, maintenance and asset management;
- Improve the energy and thermal efficiency of our estate by installing energy efficiency measures.
- Develop/support business cases for implementation of carbon zero measures.

3.0 Carbon Equivalent Performance - Schools

The primary and secondary schools in Conwy County are a major contributor to the Council's carbon emissions, accounting for approximately 50% of the Council's emissions from buildings occupied by the Council.
Carbon emission generations from schools in 2023/24 is detailed in the chart below, which is as follows:

- 51 primary schools which account for 38% of total emissions;
- 4 high schools which account for 29% of total emissions;
- 3 PFI schools which account for 21% of total emissions;
- 3 pupil referral units (PRU) which account for 3% of total emissions;
- 1 special school which accounts for approximately 8% of total emissions;
- 4 other educational centres which account for 3% of total emissions.

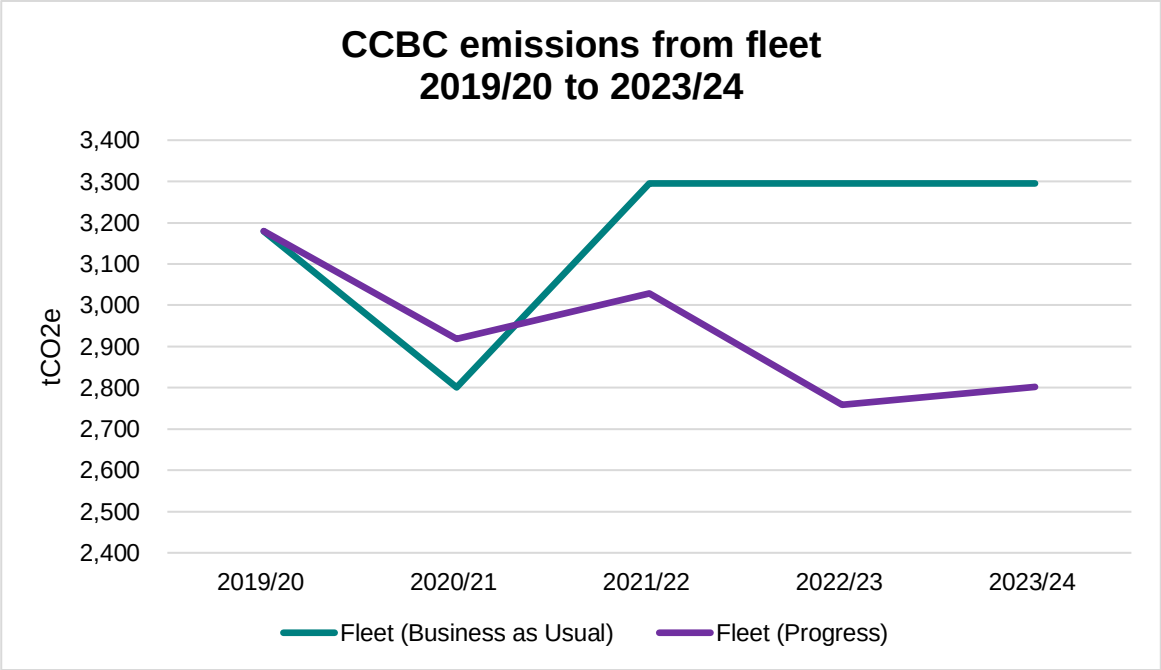


At the end of 2023/24, schools had decreased their carbon emissions by 12% (624 tonnes) when compared to the baseline year of 2019/20.
Interventions continue to take place with the aim of reducing the carbon emissions in the County's schools. In 2023/24 this included:

- Upgrades to 18 school kitchens to install more efficient equipment;
- Phase 1 of the decarbonisation project at Ysgol Bro Aled;
- Installation of solar PV on 6 schools: Ysgol Glanwydden; Ysgol Nant y Groes; Ysgol Ffordd Dyffryn; Ysgol Cynfran; Ysgol Porth y Felin and Ysgol St Joseph.

4.0 Carbon Equivalent Performance – Fleet

The chart below details Conwy County Borough Council's progress towards a net zero carbon emission fleet from 2019/20 to 2023/24 and what emissions would have been if we had carried on with business as usual.



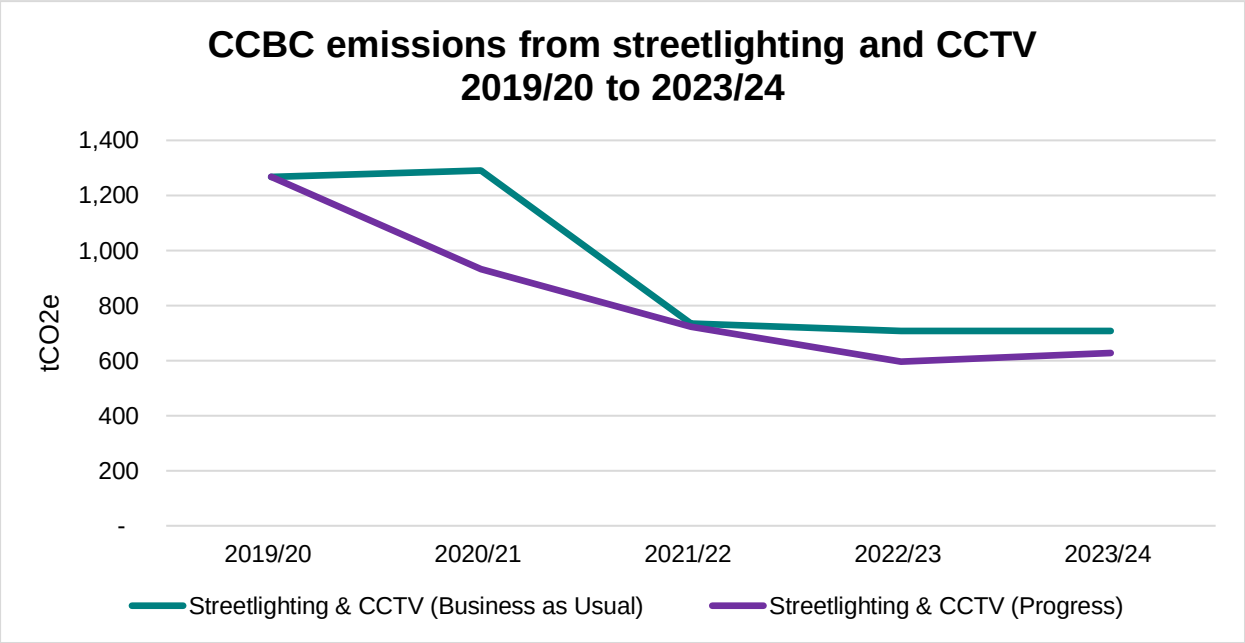
At the end of 2023/24, the Council had reduced carbon emissions from its fleet by 12% (378 tonnes), when compared with the baseline year of 2019/20.

The reduction in carbon emissions from the Council's fleet from the baseline year is a result of transitioning to low carbon alternatives, specifically electric vehicles.
There are currently 17 electric vehicles operational in the fleet, this includes 5 pool cars, 3 small vans, 2 road sweepers and 7 recycling collection vehicles and a further 9 are on order.
Charging infrastructure is in place at 5 sites to support operation of a zero emission fleet.
Under the Climate Challenge Programme the Net Zero Emission Fleet project is tasked with reducing emissions from CCBC fleet.
The Net Zero Emission Fleet project objectives are:

- Profile CCBC fleet to understand how it is used currently and to forecast future demand;
- Develop a programme to replace all fleet with ultra-low emission vehicles (ULEV) by 2030;
- Develop the physical infrastructure to support the operation of a low carbon fleet of vehicles and large plant;
- Explore all alternative low carbon fleet options, e.g. hydrogen, biomethane, hybrid.

5.0 Carbon Equivalent Performance – Street Lighting & CCTV

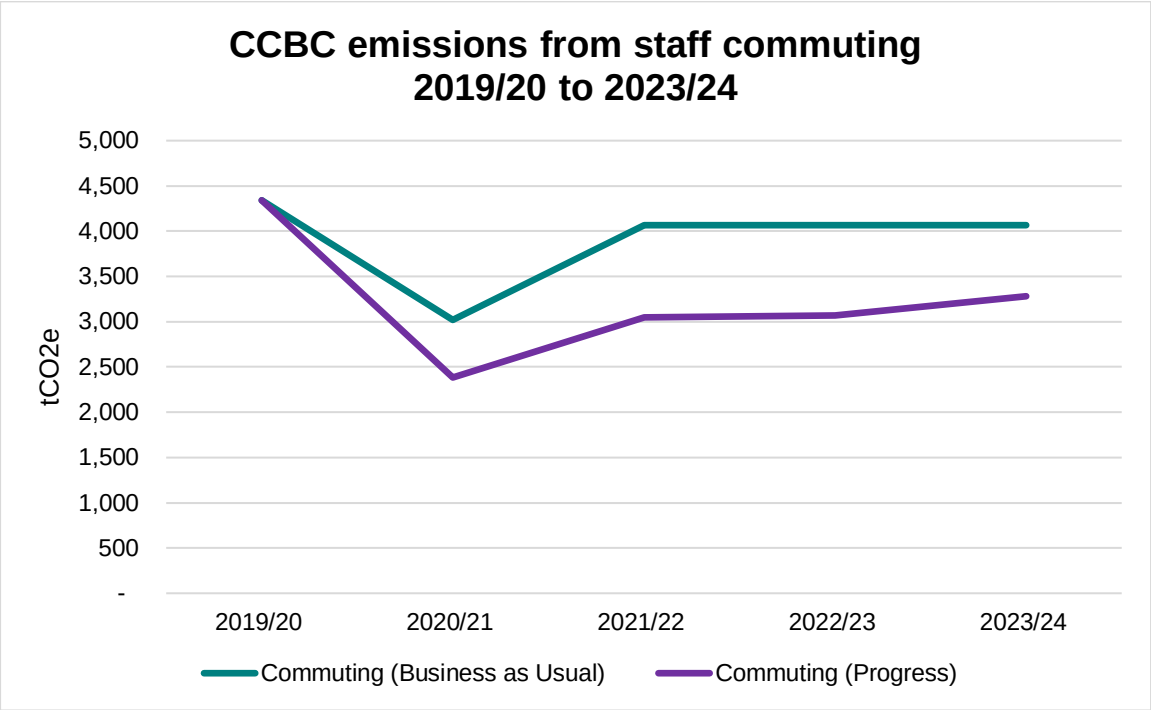
The chart below details Conwy County Borough Council's progress towards net zero carbon emission street lighting and CCTV from 2019/20 to 2023/24 and what emissions would have been if we had carried on with business as usual.



At the end of 2023/24, carbon emissions from street lighting and CCTV had reduced by 51% (640 tonnes) when compared with the baseline year of 2019/20.
The reduction in carbon emissions can be attributed to the lantern replacement programme that has replaced approximately 96% of CCBC's lanterns with more efficient LED.

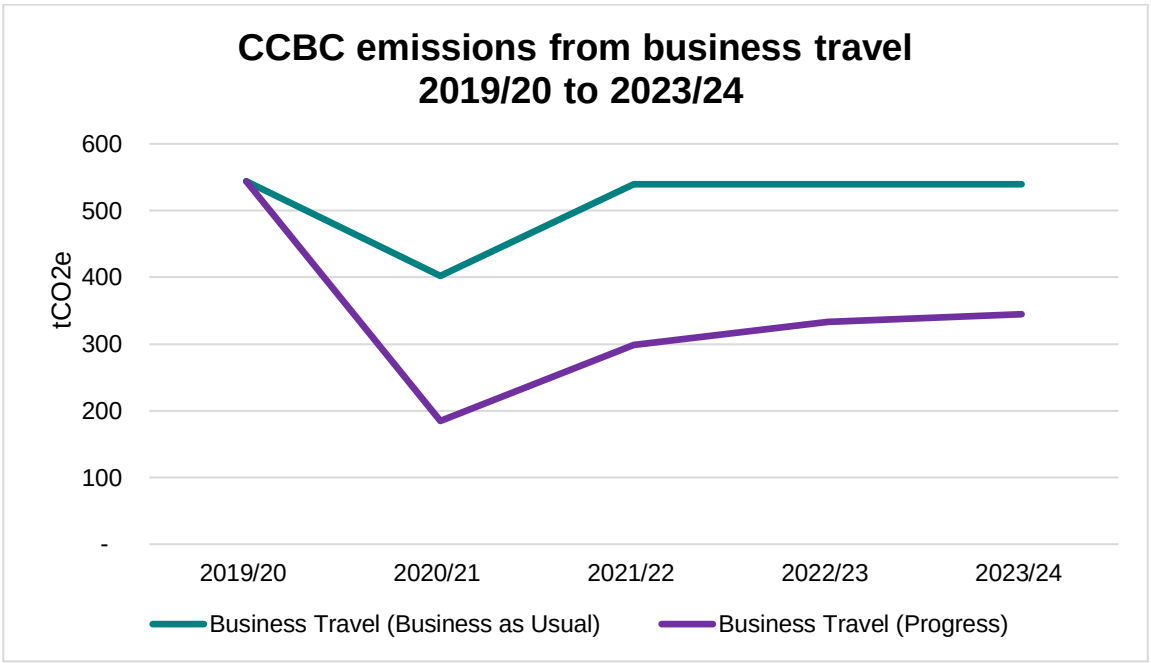
6.0 Carbon Equivalent Performance – Staff Travel

Staff Commuting:
The chart below details Conwy County Borough Council's progress towards net zero carbon emission staff commuting from 2019/20 to 2023/24 and what emissions would have been if we had carried on with business as usual.



At the end of 2023/24, emissions from staff commuting had decreased by 24% (1,056 tonnes) when compared with the baseline year of 2019/20.
Carbon emissions from staff commuting have steadily increased since the reduction in 2020/21 during the Covid-19 pandemic. The increase is attributed to the return to more office based working however carbon emissions remain below the pre-Covid levels as staff now work in a hybrid way.

Business travel:
The chart below details Conwy County Borough Council's progress towards net zero carbon emission business travel from 2019/20 to 2023/24 and what emissions would have been if we had carried on with business as usual.



At the end of 2023/24, Conwy County Borough Council had reduced carbon emissions from business travel by 37% (199 tonnes) when compared with the baseline year of 2019/20.
Emissions from business travel have steadily increased each year since a return to more office based working and in-person meetings following the Covid-19 pandemic.

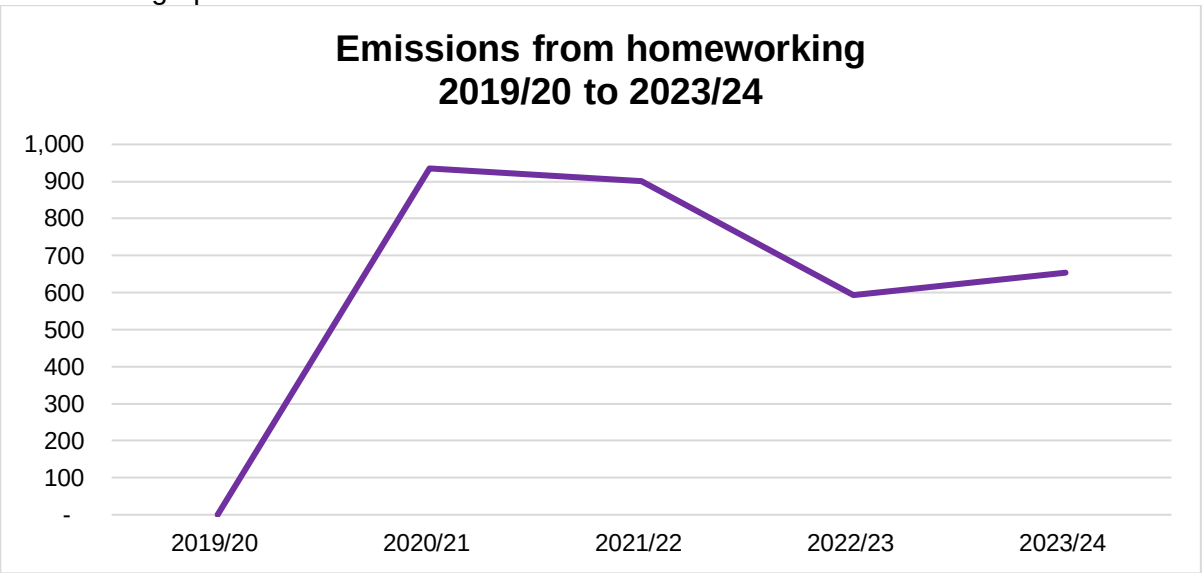
However carbon emissions remain below the pre-Covid levels as staff now work in a hybrid way and a total of 606,373 fewer miles were claimed for business travel in 2023/24 compared to the baseline year.

Under the Climate Challenge Programme the Net Zero Emission Staff Travel project is tasked with reducing emissions from Conwy County Borough Council business travel and staff commuting.
The Net Zero Staff Travel project objectives are:

- Develop a Staff Travel Policy;
- Develop a method of capturing staff commuting data at regular intervals;
- Develop the physical infrastructure to facilitate reduced staff travel, low carbon and active travel methods;
- Develop procedures to facilitate reduced business travel and commuting;
- Ensure staff are well informed about the policies and procedures associated with reduced travel, low carbon and active travel methods;
- Develop a CCBC Workplace Travel Plan.

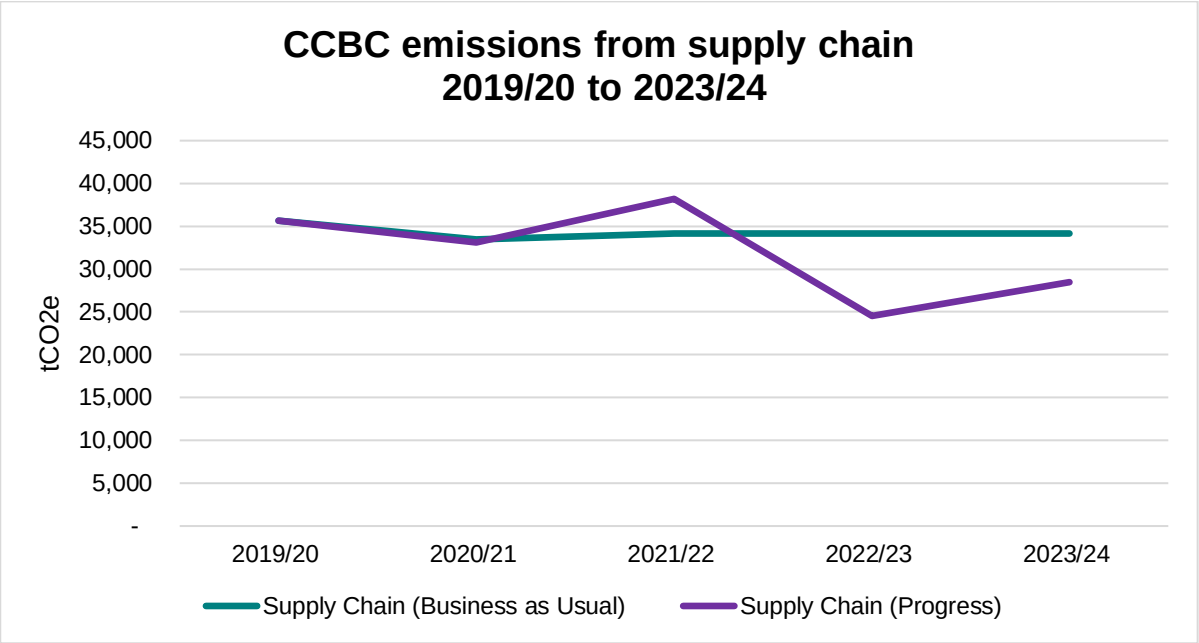
7.0 Homeworking

Emissions from homeworking were minimal in the baseline year, prior to the pandemic, and were not measured.
During 2023/24 emissions from homeworking had reduced by 30% (653 tonnes) when compared with the baseline year of 2019/20 as staff returned to more office based working. As shown in the graph below:



8.0 Carbon Equivalent Performance – Supply Chain

The chart below details Conwy County Borough Council's progress towards a net zero carbon emission supply chain from 2019/20 to 2023/24 and what emissions would have been if we had carried on with business as usual.



Supply Chain accounts for approximately 62% of Conwy County Borough Council's total emissions.
At the end of 2023/24, emissions from supply chain spend had reduced by 20% (7,161 tonnes) when compared with the baseline year of 2019/20.
The reduction in emissions from the baseline year is a result of revised emissions factors implemented nationally in 2022.
Under the Climate Challenge Programme the Net Zero Emission Supply Chain project is tasked with reducing emissions from the Council's supply chain.
The Net Zero Supply Chain project objectives are:

- Improve the supply chain emission data methodology working with Welsh Public Sector as a whole;
- Integrate net carbon zero in to the Council's procurement policies and procedures;
- Review procurement templates across the Council to integrate decarbonisation as a factor in procurement processes;
- Develop and implement a communication and engagement plan to incentivise carbon reduction amongst suppliers;

9.0 Land Use

The forestland and grassland owned by Conwy County Borough Council act as a carbon sink. It is estimated that the forestland & grassland is responsible for the annual sequestration of 460 tonnes of CO_2 equivalent, approximately 1% of Conwy County Borough Council's total emissions.
At the end of 2023/24, emissions sequestration from land have increased by 1% (3 tonnes) when compared with the baseline year of 2019/20. This is due to the acquisition of additional grassland in Llanrhos.
Under the Climate Challenge Programme the Carbon Offsetting project is tasked with sequestering Conwy County Borough Council emissions, partly through land use.
The Carbon Offsetting project objectives are:

- Establish the impact of urban trees on Conwy County Borough Council carbon emissions;
- Carry out tree planting across 110 hectares of current Conwy County Borough Council estate;
- Expand tree planting across an additional 225 hectares of Conwy County Borough Council estate;

- Explore opportunities for renewable installations across Conwy County Borough Council estate, such as solar farms;
- Increase hedgerow coverage in Conwy County Borough Council estate.