

Buckinghamshire Council Climate Change and Air Quality Strategy

2023 - 2024 Progress Report



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Foreword

The challenges faced both locally and globally over the 12 months covered in this report, the third year since adoption of our Climate Change & Air Quality Strategy, have been significant. The effects of climate change become ever more visible in our own experience and in what we hear and read on the news. This makes it even more important that we are able to present an update in our third annual progress report covering 12 months of activity from across the council. As you will read throughout this report we have continued to deliver; both by building upon the success of our first two years and by introducing new measures and initiatives to mitigate and adapt to climate change.

With regards to building on success, our Tree Planting Programme, the Bucks Tree Mission, continues to move forward with almost 193,000 trees planted in the first three years of our 10 year Mission. Further, thanks to the hard work of our Environmental Protection Officers, we are now in the process of formally revoking four of our nine AQMAs due to improvements in the air quality indicators.

Yet we are not resting on our laurels; rather we continue to plan for the future through strategic planning. Whether it is our new Local Plan for Bucks, our next – and first Bucks wide – Local Travel Plan, or our Local Walking Infrastructure Plan, climate change and future sustainability is a key consideration across them all.



Councillor Thomas BroomCabinet Member for Climate Change and Environment

Introduction

Our third progress report since the adoption of our Climate Change and Air Quality Strategy in 2021 contains updates on our two aims; working towards net zero across Buckinghamshire by 2050 and to improve air quality across the County. We are able to report good progress against these. Our Strategy also includes 60 separate actions which contribute to the overall delivery or our net zero future; this report includes updates on activity from across the Council.

Objective A is our stated target of reaching net zero for Council operations no later than 2050, with an interim target of a 75% reduction in emissions by 2030, compared to our 1990 baseline. Due to our decision to procure electricity on a 100% renewable basis for two years from October 2022, net emissions in line with our reporting methodology are down to 4,476 tCO₂e for the reporting period (April 2023 to March 2024). This represents a 78.2% reduction against our 1990 baseline. In the first four years of our seven year carbon budget, we have used 47.1% of the total. On a county wide basis, where emissions are reported by the Office for National Statistics one year in arrears, the data for 2022-23 showed a moderate increase over 2021/22. The effects of the recovery

from the COVID-19 pandemic and other global events such as the war in Ukraine and the cost of living crisis are still visible in the data. We continue to monitor local trends as emissions stabilise. The long-term trend since 2005 remains unchanged at a steady decrease in area based emissions.

Objective B from our Strategy relates to pursuing improved air quality across the County. Following a continued trend of reduced pollutant levels in some of our Air Quality Management Areas we have now formally begun the process of revoking the designation for four of our nine AQMAs. This is the result of consistent efforts by the Council and affected communities over many years.

Since adoption of the Climate Change & Air Quality Strategy, 7 interdepartmental groups work to oversee and co-ordinate efforts. This year's report includes a summary of each of their activities. For the first time, we are including emissions associated with water in our emissions reporting as we seek to capture relevant scope 3 emissions where practicable. The Council Land Tree Planting Programme is now in its fourth year, with over 192,000 trees planted and as many as five new woodlands to be established this planting season.

The council continues to roll out carbon literacy training and have delivered our first in-house training this year, with our total of accredited officers now above 50.

The de-carbonisation of the Council's estate is a fundamental part of our journey to net zero which brings many co-benefits; reduced energy consumption also delivers value for money by bringing bills down, while improved insulation also leads to greater comfort and wellbeing for users of our services. This year's project to install solar PV and battery storage across four of our sites has been a huge success with the panels installed in time for the summer. The electrification of our own fleet proceeds, with a new EV in operation at Black Park Country Park and our Highways Team taking delivery of 6 new electric vehicles. Communities have again been at the forefront of our tree planting, participating in our third successful application to the Local Authorities Treescapes Fund which saw over £264,000 awarded to community-based tree planting projects. Buckinghamshire Council has again come second in the Modeshift STARS league table, with 72 accredited schools across the County. Climate change is also a consideration in our procurement, with the recent award of a contract for leisure centre management including relevant

goals such as having environmental plans for all sites and including the role of Energy Champions to lead efforts to reduce energy consumption.

Looking to the future, the Council are working on a new Bucks-wide Local Travel Plan and a new Bucks Local Plan, both of which have clear commitments to sustainability and the mitigation of climate change. Indeed we have recently consulted on our draft proposals for a Local Walking & Infrastructure Plan. We have four separate initiatives to help residents with their energy bills; the Home Upgrade Grant 2, Energy Doctor scheme and the DEBEE grant all offer no cost upgrades and advice to reduce energy bills and their associated emissions. While the second round of Solar Together has seen almost 600 residents accept offers for solar PV on their rooftops to reduce their own energy bills.

We also work tirelessly to promote sustainable choices both among our staff, through internal emails and campaigns, for all residents through for example the BetterPoints Bucks App and through social media campaigns that we run regularly throughout the year.

Progress against targets

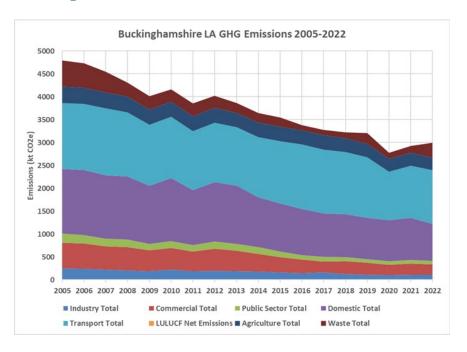
The following section details the progress made against the aims and objectives of the Climate Change and Air Quality Strategy.

Progress against Aim 1:

Work alongside national Government with the objective to achieve net zero carbon emissions for Buckinghamshire as a whole by 2050.

Area greenhouse gas (GHG) emissions are taken from the UK local authority and regional greenhouse gas emissions national statistics: 2005-2022 and have been calculated using a generation based approach. These were published by the Department for Energy Security & Net Zero on 27th June 2024 and the data is presented in the figure 1.

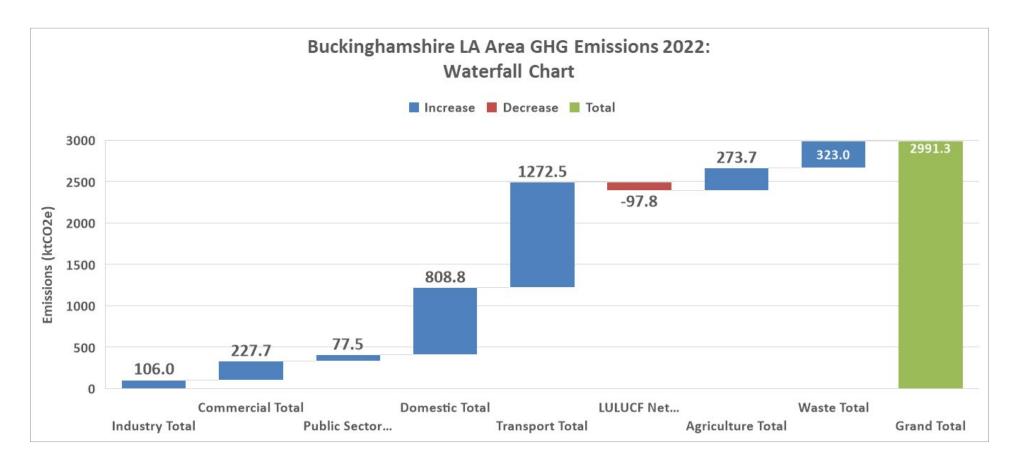
Figure 1 - Buckinghamshire Carbon Emissions (kt CO₂e) 2005-2022



The overall trend from the beginning of the data set, in 2005, is for a steady reduction from an initial level of 4,795 kt CO2e in 2005 to 2991 kt CO2e in 2022. This is a total reduction of 1,804 kt CO2e, or 37.6% over the 18 year period (an average rate of 2.63% per annum).

The impact of the COVID pandemic and subsequent recovery is visible within the latest trends - all emissions reduced significantly in the year 2020 largely due to restrictions on

Figure 2 - Buckinghamshire Carbon Emissions (kilotonnes CO₂e) 2005-2021



people and organisations' activities during pandemic (N.B. the first lockdown was announced by the Prime Minister on 23rd March 2020). As reported in the 2022/23 Progress Report, this was followed in 2021 by an increase in emissions of 6.5% (related largely to an easing of restrictions and colder temperatures increasing the use of heating in buildings).

Emissions increased again in 2022, however 2021 and 2022 area greenhouse gas emissions are lower (7.73% and 6.7% respectively) than those in 2019. To further understand recent trends, figure 2 shows the contribution made by sources of emissions to the Buckinghamshire local authority (LA) area greenhouse gas (GHG) emissions total in 2022.

Table 1 - Buckinghamshire 2021 Carbon Emissions by Source

| Calendar Year | Transport | Domestic | Waste | Agriculture | Commercial | Industry | Public Sector | LULUCF Net | Grand Total | Population ('000s) | Per Capita Emissions |
|------------------|-----------|----------|-------|-------------|------------|----------|------------------|---------------|----------------|--------------------|-------------------------|
| 2005 | 1527.5 | 1413.6 | 576.5 | 351.9 | 555.0 | 251.2 | 201.9 | -82.5 | 4795.0 | 485.5 | 9.9 |
| 2006 | 1532.3 | 1425.8 | 537.6 | 344.8 | 552.9 | 240.4 | 181.6 | -84.8 | 4730.7 | 489.3 | 9.7 |
| 2007 | 1557.7 | 1387.0 | 450.5 | 340.5 | 507.7 | 223.2 | 166.6 | -89.3 | 4543.8 | 493.5 | 9.2 |
| 2008 | 1491.3 | 1384.7 | 315.0 | 340.8 | 505.4 | 209.0 | 162.6 | -94.6 | 4314.2 | 496.4 | 8.7 |
| 2009 | 1433.3 | 1269.6 | 296.1 | 329.1 | 448.0 | 191.2 | 143.2 | -95.5 | 4014.9 | 498.8 | 8.0 |
| 2010 | 1434.9 | 1374.7 | 266.2 | 330.7 | 474.6 | 218.6 | 154.8 | -95.8 | 4158.8 | 502.8 | 8.3 |
| 2011 | 1390.6 | 1203.2 | 275.5 | 322.2 | 429.8 | 190.2 | 136.9 | -98.7 | 3849.8 | 506.6 | 7.6 |
| 2012 | 1391.1 | 1298.5 | 262.6 | 327.9 | 481.0 | 199.2 | 158.9 | -95.3 | 4023.8 | 510.6 | 7.9 |
| 2013 | 1380.1 | 1274.7 | 214.0 | 308.3 | 446.3 | 184.4 | 152.9 | -100.6 | 3860.0 | 515.3 | 7.5 |
| 2014 | 1417.1 | 1087.1 | 212.4 | 318.0 | 393.4 | 175.4 | 142.9 | -99.9 | 3646.3 | 520.4 | 7.0 |
| 2015 | 1461.9 | 1057.9 | 195.6 | 316.6 | 335.6 | 158.8 | 119.9 | -103.4 | 3543.0 | 527.1 | 6.7 |
| 2016 | 1505.0 | 1009.9 | 107.8 | 310.2 | 297.2 | 142.0 | 101.0 | -96.9 | 3376.1 | 534.7 | 6.3 |
| 2017 | 1497.0 | 948.7 | 118.7 | 311.8 | 241.7 | 158.4 | 100.6 | -100.1 | 3276.8 | 538.7 | 6.1 |
| 2018 | 1456.2 | 941.2 | 133.1 | 297.6 | 276.7 | 129.2 | 85.9 | -99.4 | 3220.6 | 543.4 | 5.9 |
| 2019 | 1426.0 | 906.4 | 235.0 | 290.9 | 256.7 | 112.0 | 79.0 | -101.2 | 3204.9 | 547.7 | 5.9 |
| 2020 | 1166.5 | 896.3 | 131.6 | 276.1 | 227.0 | 101.2 | 76.0 | -102.2 | 2772.5 | 551.3 | 5.0 |
| 2021 | 1243.3 | 916.3 | 142.1 | 281.7 | 245.2 | 108.5 | 82.2 | -98.8 | 2920.5 | 555.3 | 5.3 |
| 2022 | 1272.5 | 8.808 | 323.0 | 273.7 | 227.7 | 106.0 | 77.5 | -97.8 | 2991.3 | 560.4 | 5.3 |

The graph in Figure 3 presents annual total Buckinghamshire local authority area greenhouse gas emissions against population levels.

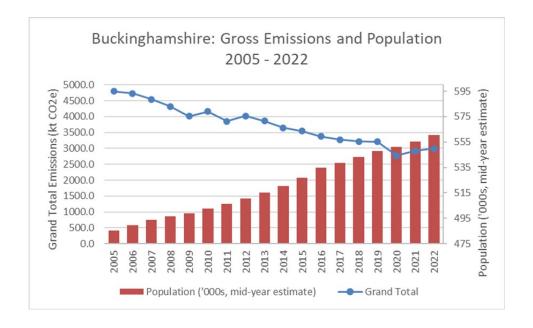


Figure 3: Buckinghamshire population growth and total emissions (top); selected emissions 2013-2022 (kt CO₂e)

Emissions per capita have fallen – despite population growth since 2005 of roughly 0.85% on average per annum emissions have decreased by over 1,500 kt $\rm CO_2e$. This is an average annual emissions reduction per capita of 3.44%, and ,despite emissions rising in 2022, emissions per capita remain the same in 2022 as in 2021 at 5.3 $\rm tCO_2e$.

From 2020 to 2022 some emissions categories have increased as society has returned to a "post-pandemic normal". These include emissions from waste to landfill, which has increased from 121.8 kt CO₂e in 2021 to 302.5 kt CO₂e in 2022 and emissions from transport, which has increased from 1243 ktCO₂e in 2021 to 1273 ktCO₂e in 2022. Emissions from all other source categories have decreased.

Progress against Objective A: Achieve net zero carbon emissions across council operations no later than 2050 and possibly before this, potentially by 2030, subject to resources.

Council Carbon Emissions 2023/24

As per previous Climate Change and Air Quality Strategy
Progress Reports, we have calculated our own emissions
respective of quantities produced in the Council's reporting/
financial year (April-March). In line with our reporting criteria,
we include our Scope 1 and Scope 2 emissions -those arising
from the Council's own operations such as the buildings and
vehicles we operate or those associated with the transmission
and distribution of electricity that the Council uses. Business
travel emissions relate to staff and councillors traveling
in their own vehicles where a mileage expense claim was
made. Emissions from the use of public transport, such as
train journeys, for work travel weren't captured as the data
was not available. We have excluded emissions from our
operations where our staff do not directly provide the service,

for example waste collection vehicles operated around Wycombe, Chiltern and South Buckinghamshire areas. These are referred to as Scope 3 emissions, please see Insight Box #1 for more background on Scope 1, 2 and 3.

For the first time, we also include emissions associated with water consumption as we implement Action 5 (Determine the most practicable means of assessing the Council's Scope 3 emissions) of our Strategy to determine and the most practical ways of reporting on our Scope 3 emissions.

The following Table 2 shows our gross emissions for 2023/24:

Table 2 - Buckinghamshire Council's Carbon Emissions (Gross)

| Activity | 2023/24 Gross Annual Carbon Emissions (tCO ₂ e) | % of Annual Emissions |
|--|--|-----------------------------|
| Buildings - Gas Consumption | 2252 | 28% |
| Buildings – Electricity Consumption | 1983 | 25% |
| Street Lighting - Electricity Consumption | 1503 | 19% |
| Council Fleet | 1148 | 14% |
| Business Travel | 735 | 9% |
| Transmission and Distribution | 302 | 4% |
| Electric Vehicles Travel | 3.2 | 0.04% |
| Water Consumption | 39.9 | 0.50% |
| Total | 7,965 | 100% |

Electricity supplied to the council (and other partners supplied under the council's electricity contract) from 1 October 2022 to 30 September 2024 has a 100% renewable tariff, fully backed by Renewable Electricity Guarantees of Origin (REGO) certificates. This has resulted in a substantial reduction in the emissions associated with electricity use. In line with guidance and our commitment to transparency, we are reporting our "Gross" (shown above) and "Net" (shown below) emissions separately. The following Table 3 shows our net emissions for 2023/24:

Our total gross emissions for the reporting period were 7,965 tCO₂e.

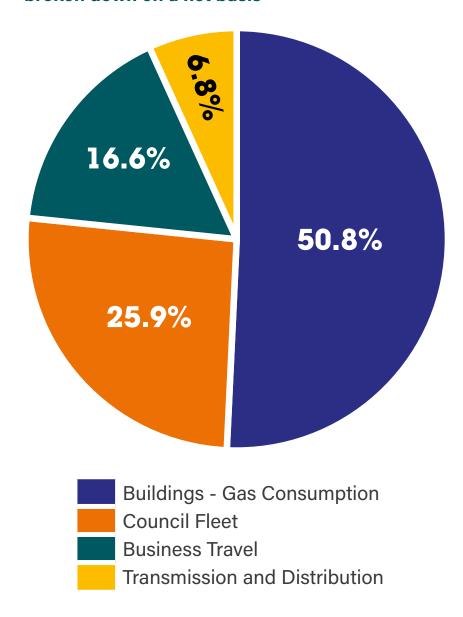
Table 3: Buckinghamshire Council's Carbon Emissions (Net)

| Activity | 2023/24 Net Annual Carbon Emissions (tCO ₂ e) | % of Annual Emissions |
|--|--|-----------------------------|
| Buildings - Gas Consumption | 2252 | 50.3% |
| Buildings - Electricity Consumption | 0 | 0.0% |
| Street Lighting - Electricity Consumption | 0 | 0.0% |
| Council Fleet | 1148 | 25.6% |
| Business Travel | 735 | 16.4% |
| Transmission and Distribution | 302 | 6.7% |
| Electric Vehicles Travel | 0 | 0.0% |
| Water Consumption | 39.9 | 0.9% |
| Total | 4,476 | 100% |

For 2023/24, we are reporting net emissions of 4,476 tCO2e. From this point on in the report, we will be referring only to "Net" emissions unless otherwise specified. As we have used 100% renewable electricity for the entirety of the '23/'24 reporting year there are zero greenhouse gas emissions associated with building, street lighting and EV fleet electricity consumption.

The pie chart in Figure 4 illustrates the source contributions to our 2023/24 net emissions.

Figure 4: Chart showing Council emissions broken down on a net basis



The most significant source of emissions on a net basis is building gas consumption representing over 50% of the total, while the second largest source of emissions is the Council's non-electrified fleet. Actions 17 and 18 from our Strategy deal with emissions reductions across our estate. By introducing energy efficiency measures to existing buildings we will be able to reduce emissions associated with gas (primarily heating) by both reducing demand and switching to low carbon heat sources in line with the asset lifecycles of our existing assets

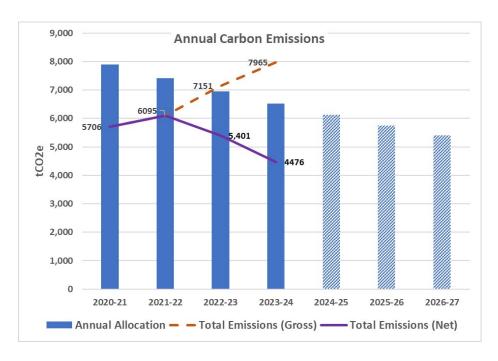
Carbon Budget

- On our journey to Net Zero Carbon by 2050 we have several way markers to ensure that we remain on track. Compared to our 1990 baseline of 20,550 tCO2eq we will:
- Reduce our annual carbon emissions by at least 75% by
 2030, to no more than 5,137.5 tCO2eq
- Reduce our annual carbon emissions by at least 90% by
 2040, to no more than 2,055 tCO2eq
- Reach net zero carbon emissions by 2050

For 2024 we are reporting a **reduction in emissions of 78.2%** compared to our 1990 emissions, this is **in line with our target of a 75% reduction by 2030**.

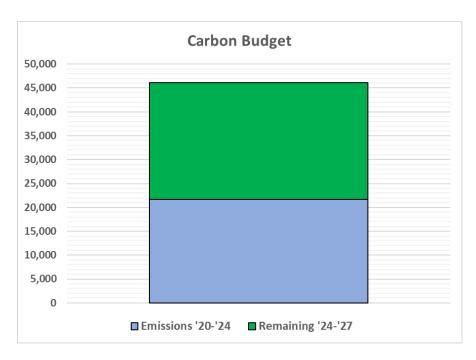
We also set out a Carbon Budget for the seven year period from 2020-21 to 2026-27, in Table 5 of our <u>Climate Change Strategy</u>, with indicative **annual allocations** and a **total budget of 46,069 tCO₂e**. The following figure shows our progress annually over the first four years of our first seven-year carbon budget. By procuring renewable energy from October 2022 to September 2024, we have achieved significant reductions in our net emissions allowing us to remain within our indicative annual allocations:

Figure 5: Annual carbon emissions and allocations



Our total emissions over the first four years amount to 21,678 tCO₂e, or 47.1% of our first carbon budget through to 26/27.

Figure 6: Remaining and used carbon budget



Progress against Objective B: Support communities to achieve net zero carbon emissions.

As a Council we work with a range of different stakeholders to enable communities to make progress towards a net zero future. Here are just a few highlights of our work in this area:

- Local Authority Treescapes Fund Round 3 award of £264k
 secured for community tree planting across Buckinghamshire
- Working with Buckinghamshire Community Energy to progress the Wendover Wharf Road Campus Decarbonisation project

- Promoting a second round of the solar PV system grouppurchasing (Solar Together) scheme for resident and small business owner occupiers
- Energy Doctors visiting eligible homes to provide advice on behavioural and control changes, and install low cost easy retrofit resource efficiency (LCERRE) measures, to reduce energy and water consumption, costs, and carbon emissions
- Working with the <u>Greater South East Net Zero Hub</u> to deliver the Home Upgrade Grant 2 scheme in Bucks
- Issuing a quarterly Climate Change Newsletter with over
 100 regular readers
- Providing a new Domestic Building Envelope Energy
 Efficiency (DBEEE) grant to help residents improve the energy performance of their homes



Further details are provided in the 'Activities against Actions' section, look out for the symbol indicating stakeholder-based work throughout the report.

Progress against Aim 2:

Improve air quality across Buckinghamshire pursuant to achieving national air quality objectives

The majority of Buckinghamshire already meets the Air Quality Objectives (AQOs) for nitrogen dioxide (NO₂). As shown in Figure 8 - Figure 10 there has also been a consistent reduction in recorded levels of NO₂ at most monitoring locations for the last five years (2019 -2023). In addition, monitoring data in four of the nine Air Quality Management Areas (AQMAs) has been comfortably below the annual mean objective for NO₂ for five years or more. It is also noted that the concentrations have not returned to those levels seen before the COVID-19 pandemic.

In 2023, there was a general decrease in concentrations recorded at most monitoring locations, with a few exceptions, which is in line with the national trend. In addition, air quality monitoring undertaken in 2023 showed that there were no exceedances of the annual mean nitrogen dioxide objective of $40 \, \mu g/m3$.

N.B. Results from new monitoring locations set up in January 2023 have not been included in the graphs.

Figure 7: Annual Mean Nitrogen Dioxide Concentrations Recorded in Chesham AQMA

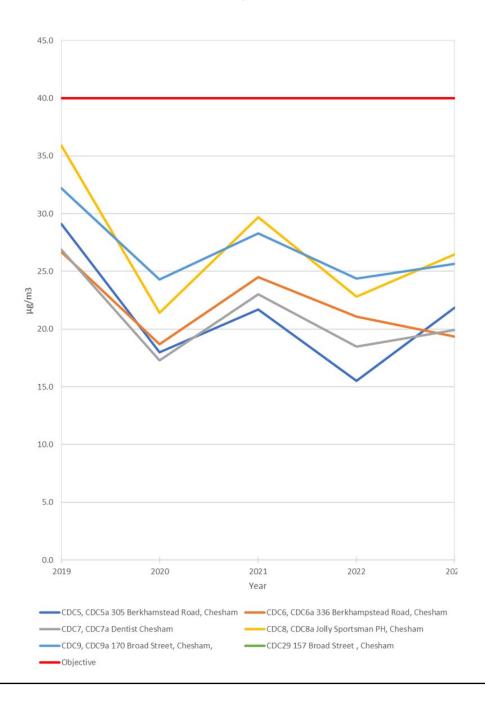


Figure 8: Annual Mean Nitrogen Dioxide Concentrations Recorded in Friarage Road, Tring Road and Stoke Road AQMAs in Aylesbury

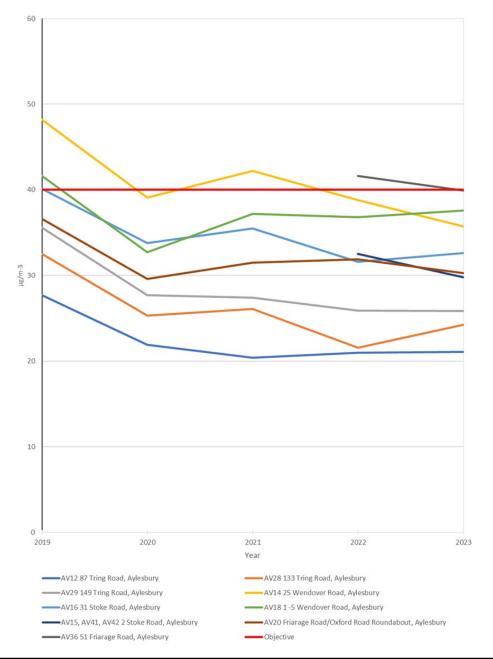


Figure 9: Annual Mean Nitrogen Dioxide Concentrations Recorded in High Wycombe & Marlow AQMAs

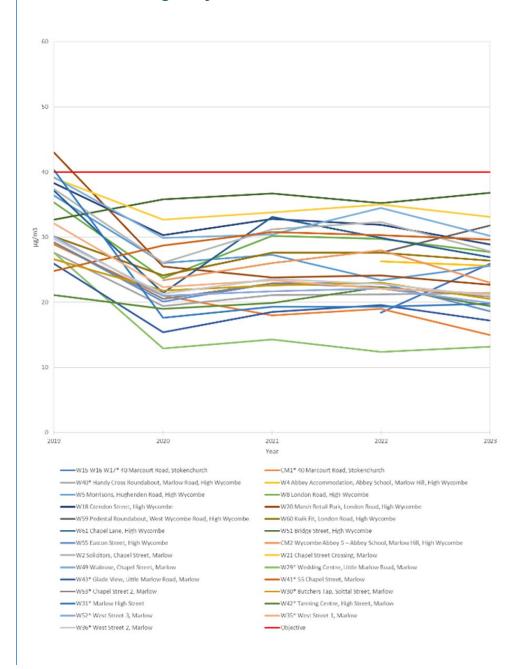
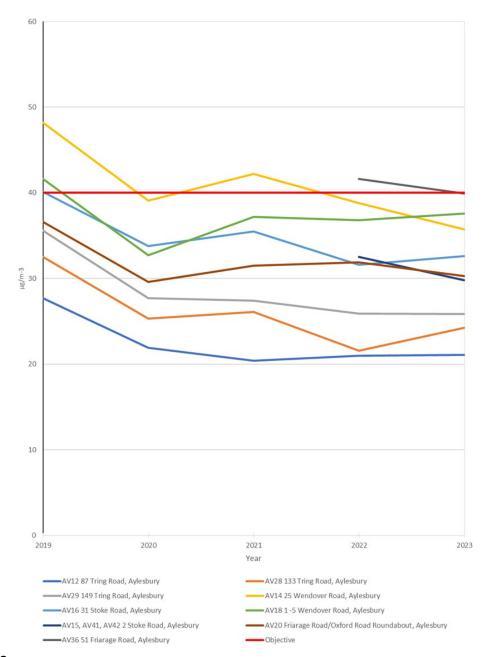


Figure 10: Annual Mean Nitrogen Dioxide Concentrations Recorded in South Buckinghamshire AQMAs



Data missing for diffusion tube W4 Abbey Accommodation, Abbey School, Marlow Hill, High Wycombe as site was not accessible during the COVID-19 pandemic. Monitoring has resumed in 2022.

Progress against Objective C: Reduce emissions to air from all council operations.

Compared to our baseline emissions from 1990 we have seen a reduction of 78.2% on a net basis. Similar reductions have been achieved regarding emissions of nitrogen oxides, particulate matter, and other air pollutants.

Progress against Objective D: Reduce human exposure to harmful levels of air pollution

There has been a consistent reduction in recorded levels of nitrogen dioxide (NO₂) at most monitoring locations for the last five years (2019 - 2023) (please see Figure 8 to Figure 10) and annual mean NO₂ concentrations are all below the National Air Quality Objective, generally resulting in a benefit to human health.

Air quality monitoring data in four of the nine Air Quality Management Areas (AQMAs) in Buckinghamshire has been comfortably below the annual mean objective of $40\mu g/m3$ for NO_2 for five years or more. Furthermore, predictions of future trends in NO_2 show that the probability of the objectives being exceeded again is highly unlikely.

Technical guidance published by the Department of Environment, Food and Rural Affairs (Defra) clearly states: "There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five-year period." Therefore, following the process outlined in LAQM Policy Guidance: 22 the Strategic Environmental Protection Team are in the process of formally revoking these AQMAs namely; Tring Road AQMA, Chesham AQMA, South Bucks AQMA and AQMA No. 1 (M40). Revocation orders will be published on the Council's website and submitted to Defra by December 2024.

All nine of the AQMAs were declared prior to the creation of Buckinghamshire Council on 1 April 2020. Therefore, there was a need to review and consolidate the Air Quality Action Plans (AQAP) developed by the legacy areas for their respective air quality management areas into a single AQAP for Buckinghamshire. The revised and consolidated AQAP was subjected to <u>public consultation</u> in the Summer of 2024. The final version will be published on the Council website in January 2025.

Activity against actions

Details of activities against the actions from the Climate Change and Air Quality Strategy are provided in the following sections. As last year, five key themes will be referenced throughout, to provide a broader context to the work undertaken by the Council and our partners. These are:

Table 4: The Five Themes

The Energy Transition



De-carbonisation of Transport



The Built Environment



Stakeholder Based Solutions



Nature Based Solutions



Governance and Management

Interdepartmental Working Groups (re Action 3)

A total of eight interdepartmental working groups have been created or identified as working toward the implementation of the Climate Change & Air Quality Strategy.

Climate Change & Air Quality Strategy Programme Board











This year has seen the initiation of our Climate Change & Air Quality Strategy Programme Board. It contains representatives from all six corporate services and is sponsored by Steve Bambrick, Corporate Director of Planning, Growth & Sustainability. The Group will meet quarterly to oversee delivery of activity against actions and to enable effective dissemination of information and offerings related to climate change across the Council.

Council Land Tree Planting Programme Board



The Council Land Tree Planting Programme Board oversees the programme of works to plant 543,000 trees on Council Land by the end of the 2031 planting season. To date, over 192,000 trees have been planted.

Domestic Retrofit Programme Board





This Board has met 6 times in the reporting period and aims to improve collaboration and knowledge sharing across energy efficiency schemes. Outcomes have included improved arrangements for Energy Doctors to work with BHBH. It includes representatives from Climate Change, Domestic Resource Efficiency Service, Housing Strategy, Environmental Health and Helping Hands.

Electric Vehicle Charging Infrastructure Working Group





Within our Climate Change and Air Quality Strategy we have committed to achieve net zero carbon emissions for Buckinghamshire by 2050. Transportation is a significant contributor to emissions within our LA area. EVs provide a good alternative to combustion engine vehicles as they generate zero 'tailpipe' emissions and have a lower whole-life carbon footprint.

The internal co-ordination of the EVCI working group will help to achieve the objectives outlined in the <u>Buckinghamshire Electric</u> <u>Vehicle Action Plan</u> (2022-2027):

- Support the uptake of EVs within Buckinghamshire through the provision of a comprehensive network of EV charging infrastructure;
- Contribute to reducing carbon and air pollutant emissions from transport by supporting the UK-wide transition to EVs;
- Ensure that the EV infrastructure network is future-proofed, to allow for new technologies and trial innovative solutions;

- Provide a range of publicly funded charging infrastructure to support different charging requirements, including for those without off-street charging at their home;
- Support Buckinghamshire Council staff to transition to EVs through salary sacrifice and vehicle leasing schemes
- Increase the council's EV fleet capacity and provide any necessary charging infrastructure;
- Work with developers, local businesses, parish and town councils to encourage provision of privately funded charge points;
- Work with local public transport and taxi- and private hire companies to facilitate charging infrastructure and support the transition to zero emission vehicles

Council Estate & Climate Change Board





The Council Estate and Climate Change Board oversees initiatives to reduce emissions from and enhance the resilience of (regarding climate change) the Council's estate (and includes representatives from Property & Assets, Climate Response, and Energy Management Teams).

Public Health & Transport Strategy Collaboration



The meeting is an opportunity to discuss, collaborate and promote various projects/work being undertaken by teams from across the council which will either directly or indirectly have a co-benefit to each other's specific area of work. The group meets quarterly and had met 4 times from Oct 2023 to Sept 2024.

The group contains representatives from Public Health, Transport Strategy, LEAP and Strategic Environmental Protection. Key examples of work have been Demand Responsive Transport (see action 44) and a Travel Planning project for local businesses being run by Strategic Environmental Protection and Transport Strategy.

Fleet De-carbonisation Co-ordination Group



This Group has met three times in the reporting period and includes representatives from 14 different teams including Public Transport, Climate Response, Fleet Management, Parking Services and Highways. Two core aspects of the work programme for this year include promoting and coordinating use of the Climate Change Fund to facilitate the transition to low-carbon fleet vehicles. Its work delivers against actions 24 and 25.

Health Protection Assurance Committee (HPAC)



This group is convened by the Director of Public Health under their statutory responsibilities. It meets quarterly and includes representatives from Public Health, Environmental Health, Communications, the Integrated Care Board, the UK Health Security Agency, Bucks Health Trust and NHS England. The work of this group contributes to our aim of minimising the health impacts of air pollution for residents of Buckinghamshire.

Scope 3 emissions from Water Use (re Action 5)

Scope 3 emissions are important because they typically make up 70-80% of a local authority's total emissions². While Scope 3 emissions are not directly in the council's control, we may still be able to influence them through our policies (e.g. home working and procurement) and our choice of suppliers. Our residents may also want to better understand the full impact of council operations and see how we plan to reduce these. This year, we have included our Scope 3 emissions from the supply and treatment of water used in council buildings for the first time. We will continue to assess and capture our Scope 3 emissions where practicable as we implement our Climate Change & Air Quality Strategy.

If you aren't sure what the differences between Scopes 1, 2 and 3 are, please read our insight box.

Insight Box 1: Emissions scopes 1, 2 & 3

The Greenhouse Gas Protocol defines three scopes of emissions:

Scope 1 emissions are released as a direct result of an activity.

For Buckinghamshire Council, this includes our gas consumption for use in buildings, and fuel combusted in our own fleet vehicles. From Table 2 – the categories "Buildings – Gas Consumption" and a proportion of "Council fleet" make up our Scope 1 emissions.

Scope 2 emissions are indirect emissions related to electricity consumption.

For Buckinghamshire Council, this includes electricity used in our buildings and our streetlights, and electricity used by electric vehicles in our fleet. From Table 2 the categories "Buildings – Electricity Consumption", "Steet Lighting – Electricity Consumption" and the proportion of "Council fleet" associated with the electric vehicles in our fleet make up our Scope 2 emissions.

Scope 3 emission are indirect emissions other than from electricity.

For Buckinghamshire Council, this includes emissions arising from staff travel as part of council business, emissions associated with transmission and distribution losses from electricity consumption, and emissions associated with the supply and treatment of water used in council buildings. From Table 2 the categories "Business travel", "Transmission and distribution" and "Water" are Scope 3 emissions.

While we calculate our full Scope 1 and 2 emissions in our analysis, our Scope 3 emissions analysis does not yet cover all Scope 3 emissions. Some Scope 3 emission categories can be hard to quantify, often due to the challenges around collecting the appropriate data. Examples of other Scope 3 emissions categories that we do not yet evaluate include:

 Staff commuting – these are the emissions associated with staff travelling to and from work. Calculating these emissions would require a comprehensive staff survey to evaluate the modes of transport and distances travelled by staff to and from work.

- Working from home these are the emissions associated with council staff working from home. Calculating these emissions would require analysis of hours spent working from home and the emissions associated with heating and running office equipment.
- Material use these are emissions associated with the production of materials and products used by the council, either in construction projects (e.g. aggregates, bricks etc.) or in office-based activities (e.g. food, paper etc.).
- Waste generated from own operations these are the emissions associated with processing waste generated by the council's operations and will be influenced by the type of waste and method of disposal.
- Outsourced Scope 3 emissions these are the Scope 1 to 3 emissions of organisations proving services on Buckinghamshire Council's behalf, for example, leisure centres or social care.

Monitoring and Reporting

Council Emissions

Reporting quarterly on emissions savings across Council operations (re Action 6)

Since October 2023, we have published two updates of our action tracker, with actions completed since the previous update highlighted in a different colour. You can access them via the following weblinks:

- Update #1 to December 2023
- Update #2 to March 2024

We have also issued a quarterly newsletter containing updates on actions to minimise Council emissions.

Automatic Meter Reading Rollout - Update (re Action 7)

We have continued to rollout Automatic Meter Reading (AMR) meters to our sites. These meters automatically capture and transmit meter readings to our energy supplier on a monthly basis, in some cases transmitting data every half hour. This provides us with greater granularity in our data which in turn allows more sophisticated analysis, to be better inform future investment decisions to reduce energy consumption. They also eliminate the need for manual readings, saving staff time.

The number and nature of the meters can change as properties are purchased or disposed of. We have no control over the type of meters we inherit under when these changes occur.

Of the 388 non-half hourly (not automatic) electricity meters which are AMR compatible, 310 have been upgraded to AMR (80% of the total). For our 264 gas meters, 181 have been upgraded to AMR (68% of the total).

County-wide Emissions



Clean Up Our Air' initiative (re Actions 8, 16 & 59)

The Council's Strategic Environmental Protection Team, in conjunction with Spelthorne Borough Council and Ricardo, was awarded a grant of £91,273 from Defra's Air Quality Grant in 2021/22 to create air quality toolkits which were offered to each community board area within Buckinghamshire. To coincide with Clean Air Day on 15 June 2023, Buckinghamshire launched a new initiative called 'Clean Up Our Air'.

The grant funding is now coming to an end with over half of the council's Community Boards taking up the offer of the toolkit. The toolkits provided the Community Boards with materials to enable them, local schools, and organisations to carry out campaigns and to raise awareness of local air quality issues. Also included was access to the use of one air quality sensor for one year, campaign materials, advice, and toolkits on how to run campaigns.

To learn more about the Clean Up Our Air Initiative and what you can do to help improve Air Quality in Buckinghamshire please visit the <u>Clean Up Our Air pages</u> on the council's website.

NO₂ Diffusion Tube Monitoring Locations Review (re Action 8)

In December 2023 the NO₂ diffusion tube monitoring locations present throughout the county were reviewed. This is completed annually to establish if any additional monitoring points are required where there is the potential for breaches of the national air quality objectives to occur. This may be following significant developments such as new housing or new road schemes within the county or from an increase in observed levels of traffic.

Where significant data exists to show there are low levels of pollution present and that there will be no breaches in the national air quality objectives, that monitoring may be closed, and the diffusion tube moved to a new monitoring location. The 2023 review resulted in 8 sites being added to the monitoring network and 4 sites being removed.

A map showing the NO₂ diffusion tube monitoring locations can be found on the air quality pages of our website².

Air quality management reviews and annual reports |

Buckinghamshire Council.

Air Quality Annual Status Report (re Action 9)

The submission of an Annual Status Report (ASR) is a statutory requirement under the Local Air Quality Management Framework as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents. The report provides an annual review of air quality, the results of all air quality monitoring undertaken, and outlines the actions the council has taken in the previous calendar year to improve air quality within the county.

The latest Annual Status Report (ASR) for Buckinghamshire was submitted to the Department for Environment, Food & Rural Affairs (Defra) for appraisal on 30th June 2024. Defra stated in the appraisal report, that it supports the revocation of the Tring Road AQMA, Chesham AQMA, South Bucks AQMA and AQMA No.1 (M40) and recommends that the council progresses with this work. It also states that the report is detailed and thorough, provides a good overview of the work the council is undertaking to improve air quality within their area, and satisfies the criteria of the relevant reporting standard. The council should continue their good work.

A copy of the 2024 ASR is available to view on the <u>air quality</u> pages of our website.

Air Quality Annual Status Report (re Action 9)

The submission of an Annual Status Report (ASR) is a statutory requirement under the Local Air Quality Management Framework as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents. The report provides an annual review of air quality, the results of all air quality monitoring undertaken and outlines the actions the council has taken in the previous calendar year to improve air quality within the county.

The latest Annual Status Report (ASR) for Buckinghamshire was submitted to Defra on 30 June 2023. The report is available to view on the air quality pages of our website.

Annual Climate Change & Air Quality Strategy Progress Reports (re Action 9)

Each year since adoption of the Strategy we have published a Progress Report:

- 2021/22 Annual Progress Report
- 2022/23 Annual Progress Report
- 2023/24 Annual Progress Report (this document)

² "Air quality reviews & annual reports", available at:

[<u>Air quality management reviews and annual reports | Buckinghamshire Council</u>]

Buckinghamshire Council, accessed 11 July 2023

The Council's Emissions

The Bucks Tree Mission & Council Land Tree Planting Programme (re Action 13)

Over the first three years of our <u>Bucks Tree Mission to plant</u> 543,000 trees within a decade we have planted 192,994, meeting our annual and cumulative tree planting targets for the first three planting seasons. To date four new woodlands have been established across the County:

- Billet Field 3,450 trees in Iver (in '21/'22)
- Bury Farm 14,300 trees in Amersham (in '22/'23)
- Grange Farm 14,700 trees Hazlemere (in '22/'23)
- Wing Wood 132,000 trees in Wing (in '22/'23 and '23/'24)

During the last 12 months, a total of <u>23,000 trees were</u> planted in Wing Wood, including over 600 planted by willing <u>volunteers</u> from the local community. As shown in Figure 11 right:



In addition, following a successful bid to the Forestry Commission's Local Authority Treescapes Fund resulting in the council securing over £264,000, a further five "Tiny Forests" were planted on Council owned land (adding 3,000 trees to our total). These were planted at sites in:

- Hamilton Academy, Wycombe
- Booker Park Rec. Ground, Wycombe
- Totteridge Park, Wycombe
- Cannock Rd., Aylesbury
- Walton Ct., Aylesbury

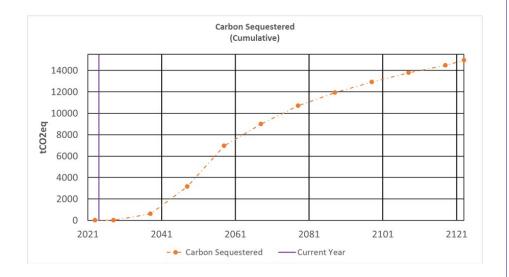
In June 2024, Cllr Broom, Cabinet Member for Climate Change & Environment and Cllr Jordan, Deputy Cabinet Member for Climate Change presented an update on our Tree Planting Programme to the Transport, Environment & Climate Change Select Committee. You can view the session or read the presentations on our website, please see agenda item 6. Cllr Bill Chapple OBE, Chair of the Committee said "The planting progress is good news. The initial target was ambitious and achievable, and it is being delivered."

As our new woodlands are planted, we register them with the UK Land Carbon Registry, ensuring they are compliant with the Woodland Carbon Code on the official registration list.

After initial establishment and within 3 years, the woodland is then required to be validated in order to progress on through further regular verifications and ultimately official carbon credits made available. As the 3 year deadline is approaching on our first woodland, at Billet Field Wood, we have submitted this for validation with SA Cert Ltd (part of the Soil Association organisation and one of 2 official bodies who can provide this validation service). Billet Field Wood has now been validated and a report is being prepared.

All of our sites planted on our own and either by contractors or in partnership with Forestry England are registered with the Woodland Carbon Code and will generate Woodland Carbon Units which can be used to offset emissions on our journey to net zero by 2050. The following Figure 12 shows the forecast carbon sequestration for our four woodlands (Billet Field, Bury Farm, Grange Farm, Wing Wood) through to 2124.

Figure 12: Forecast carbon sequestration from Billet Field, Bury Farm, Grange Farm & Wing Wood



We are currently forecasting a total of **15,234 tCO₂e** to be sequestered through these sites over the next century. That would be enough to offset the Council's net emissions from 23/24 3.4 times.

Over the first three years of the Council Land Tree Planting Programme we have planted 192,994 trees, or 35.5% of our 543,000 tree target to be planted by 2031.

Figure 13: Tree Planting Programme progress against targets



Pond restoration at Grange Farm (re Action 14)

The Woodland Creation Design Plan for Grange Farm includes work to restore a pond on site. In June 2024, a site visit was carried out with our woodland maintenance contractors to assess what would be required for restoration and agree a programme of works. This was reviewed alongside advice provided by the Buckinghamshire Council ecology team to maintain the health of the pond.

In the late summer/early Autumn, the surrounding scrub will be thinned and/or grubbed out to allow c.4hrs of light per day to fall on the pond, while still ensuring dappled shade over most of the pond. This maintenance is to be carried out selectively/irregularly, as per the ecologist's direction, with individual bushes manipulated to sustain approximately the right light levels in the event of foliar regrowth. Brash will be used to fill in some gaps at ground level in the vegetation buffering the pond to deter dogs as well as provide habitat, and dense bushy plants retained to maintain a buffer at ground level. This is necessary because should dogs access the pond, toxins harmful to some of the organisms could damage the pond's ecology. The picture in Figure 14 was taken on our recent site visit.

Figure 14: Site visit at Grange Farm Wood, June 2024

Although our surveys have shown no indications of the presence of Great Crested Newts, the area is a possible habitat for them. The pond will form a valuable piece of restored blue infrastructure - an active pond supports a huge number of animal, insect, bird and reptile species.



Behaviour

Climate Change Awareness and Carbon Literacy Training (re Action 16)

In February 2024 we delivered our first in-house Carbon
Literacy Training using material and trainers suitably
accredited by the <u>Carbon Literacy Project</u>. 16 officers
subsequently received their Carbon Literate accreditation.
This built upon two external training sessions delivered in
November 2023 to 18 officers. This brings the total number of
officers certified as Carbon Literate to 59, alongside a number
of members who were also trained in 2022. Buckinghamshire
Council have been a <u>Bronze tier Carbon Literate Organisation</u>
since June 2023.

In July we ran an online survey for those who had completed Carbon Literacy training, to get their feedback. All respondents indicated that they would recommend Carbon Literacy training to colleagues. Respondents reported a range of ways that they had been able to use their Carbon Literacy training, from improving their own knowledge on the topic to influencing their behaviour, for example, in recycling and reuse, or their driving choices.

Internal Communications and Behaviour Change (re Action 16)

The council has encouraged staff to adopt more sustainable behaviours through a variety of means including:

- Promoting the "BetterPoints Bucks Workplace Challenge" over 8 weeks in October and November 2023
- Highlighting key points from the Annual Climate Change & Air Quality Strategy Progress Report in November 2023
- The December issues of "Spotlight on Planning, Growth & Sustainability" included tips on energy saving at home
- The Council ran a re-usable cup competition for three months from January to March 2024
- The Council's Energy Management Team ran an internal campaign including an information stand in Walton Street during "Big Energy Saving Week" in January 2024
- Officers from the Climate Response and Waste Prevention teams ran a pop stand in the Walton St. Offices focusing on reducing plastic use on 28th February 2024

- The Strategic Environmental Protection Team produced an article our Together weekly update from 19th June 2024 about Clean Air Day
- Millie, who has featured in every Progress Report since 2021/22, wrote a staff blog for Plastic Free July about her experience of reducing plastic consumption. Millie is a passionate campaigner in this area and has written about her plastic free journey during Plastic Free July in 2022, 2023 and 2024!
- Promotion of two new e-bike schemes launched in Bucks via the Council wide weekly update newsletter (July 2023)





Staff Vlog - Millie's journey in her third year reducing single-use plastic

BetterPoints Bucks (re Actions 16, 59 and 60)

Launched in January 2023, BetterPoints Bucks is a behaviour change programme, underpinned by academic research, that incentivises and rewards people for making positive changes to their lives. Delivered through an app and online platform it enables Local Authorities to incentivise, track, reward, and measure activities such as walking, cycling, wheeling and public transport and engaging directly with local audiences.

Within Buckinghamshire, the vision is to use a systems-based approach which works across active travel and health, recognising shared aims of encouraging people to be more active to tackle obesity, reduce smoking prevalence, whilst also reducing solo car use to improve air quality and reduce congestion. The latest version of Better Points calculates ${\rm CO_2}$ and ${\rm NO_2}$ avoided, in real time on all journeys not made by car and highlights this on the app.

The app has proven to be very successful and at the end of its first year after being launched there were 3,066 registered users. It is estimated that in that year 159,036 car journeys have been replaced by other forms of sustainable transport and 35,020kg of CO₂ and 301,476g of NO₂ has been mitigated.

More information on BetterPoints Bucks can be found on their website at <u>bucks.betterpoints.uk</u>.



The Council's Operational Esstate

Operational Buildings

Installation of Solar PV and Battery Storage Systems at Council Buildings (re Action 17)

Following a feasibility study that had identified the potential for the installation of solar PV and battery storage systems at several Council owned sites, approval was given on 13 October 2022 to release capital from the Climate Change Fund to install the technologies Lot 1 of ESPO's Renewable Energy Solutions Framework (Reference 2838 23) was used for the procurement exercise to secure a suitable supplier. Bright Spark Energy was awarded the contract, which was ratified on 3 April 2024, and has completed the workat four sites across our operational estate. Case studies about the projects, prepared by our supplier, are available via the links below:

- Aylesbury Family Time Centre
- Castlefield Family Time Centre
- Chesham Library
- Hazlemere Library





The systems add an additional 80kWp of solar PV installed capacity and 89kWh of battery storage capacity. 66% of the renewable energy generated will be used by the sites, reducing the council's annual electricity consumption, costs and carbon emissions by 41MWh, £18k, and 9 tCO₂e. The electrification of the council's fleet and heating systems in due course will result in more of being consumed onsite.





Figure 17: Aylesbury Family Figure 17: Solar PV & battery storage at Hazlemere Library Time Centre





Figure 18: Model & picture of the installation at Chesham Library

Chesham Library Renovation (re Action 17)

In addition to the installation of solar PV and battery storage technologies at the site, Chesham Library has also benefited from the following being integrated into its renovation:

- Air source heat pump
- LED lighting
- Solar film
- Additional loft insulation

The air source heat pump and LED lighting are much more efficient than the technologies that were present in the building. Additional loft insulation will reduce the amount of heat being lost, thereby reducing the demand on the heating system; and solar film will reduce solar gain, thereby reducing the demand on the cooling system.







New Builds and Expansions

School Feasibility Studies (re Action 18)

Two new schools are currently in the feasibility stage; a second primary school for Kingsbrook and a new Primary School for the Hampden Fields development in Aylesbury. The objective for both of these schools is to be net zero in operation.

Street Lighting

Street Light LED Retrofit Progress (re Action 19)

Between October 2023 and September 2024 a further 2,750 streetlights have been retrofitted with LEDs. This brings the proportion of our street lights which have been upgraded to 98.03%, with a further 599 to be retrofitted. We remain on track to meet our target of completing this retrofit Programme, subject to funding, by 2025.

Transport

Promotion of the Cycle to Work Scheme (re Action 22)

During November 2024 the Council's provider of our Cycle to Work scheme ran a prize draw competition to win a bike of up to £4,999 to encourage take up of the scheme. There is also a dedicated page on our staff intranet which explains how the scheme works and the benefits of participating (please see Figure 20).

Tusker salary sacrifice car leasing scheme (re Action 22)

The Council offers a salary sacrifice car leasing scheme provided by Tuskers. The scheme offers benefits for low emissions vehicles, including a reduced "Benefit in Kind" payment (BiK) rate of 2% on electric vehicles (until 2025) versus up to 37% being levied on the most polluting cars. These rates are set by the government.

There are currently 94 live contracts with a further one on order, of these 51 are for an EV and 17 for a ULEV. Tusker also offset all tailpipe emissions and any from EV charging, since the launch of the scheme 735.2 tonnes of CO2 have been offset.

Get a bike by joining our salary sacrifice scheme

The scheme aims to make getting a bike simpler and more cost effective.

Benefits of the scheme

All council employees can sacrifice some of their salary to rent a bike by applying to our cycle to work scheme.

You'll benefit from:

- savings on tax
- bike and equipment up to the value of £3,000

This benefit is provided by Cyclescheme.

The cycle scheme was so easy to use, It makes so much sense to save money and split the cost of buying a high end bike you may have been put off due to the cost before. The choice is fantastic and the fact you are not constricted to just getting the bike you can get all the bits you need to go with it using the scheme. I would recommend it to anyone, you don't even notice the deduction in your wages.

Figure 20: Screenshot from staff intranet promoting the cycle to work scheme



Travel for Work Purposes

Update on Fleet Electric Vehicle Charging Infrastructure (EVCI) (re Action 24)

Since the adoption of our Climate Change & Air Quality Strategy in 2021 we have:

- Installed a new fleet charging point at Black Park Country Park for a new EV that is now in use by our Country Parks Team
- Installed fleet EVCI at our Family Time Services sites in High Wycombe and Aylesbury
- Our Highways Team have taken delivery of 6 new EVs
- One new EV each for the Crematoria & Cemeteries Service and the South Waste & Street Scene Service.
- In total we have installed 8 electric vehicle charge points across our estate for charging our EV fleet

The Country Parks Team welcomed a new electric van to the team in January 2024. Visitor Services Ranger, Ben Bateman, said "By switching to an electric vehicle to open and close our Country Parks, our diesel vehicle usage has been reduced by over 2,000 miles. Importantly, this mileage reduction is during peak traffic times when our diesel vehicles would produce higher emissions."



Figure 21: The Country Parks Ranger Team with their new electric Peugeot Partner van in Black Park Country Park (Taken April 2024)

Commuting and Working from Home

Work Smart (re Actions 26 and 46)

The "Work Smart" practices, reported upon in last year's Progress Report, continue - allowing Council operatives to work from home, where operationally feasible, approximately 60% of the time. This has been enabled by IT systems and hardware that allow for effective remote working, such as Microsoft Teams °. Managers decide on how best to balance the home/office working patterns of teams to ensure that required performance standards can be met while social and environmental benefits can still be realised.

Suppliers and Partners

Partners

Local Authority Treescapes Fund (LATF) Round 3 (re Action 27)

Buckinghamshire Council secured £264,729 funding from the 2023/24 <u>Local Authority Treescapes Fund (LATF)</u> Round 3. The bid this year included partners from across Buckinghamshire including:

- Earthwatch LLP
- Gerrards Cross Town Council
- Releaf Marlow
- Earthwatch LLP & Hamilton Academy
- Buckingham Town Council
- Stoke Hammond Parish Council



Booker Recreation Ground (Wycombe)

These organisations planted over 3,000 trees across the County, including additional four more "Tiny Forests" established in line with the "Miyawaki" Method - packing 600 trees into an area no bigger than a tennis court. The dense planting helps accelerate tree growth (and therefore achieves greater biodiversity and carbon sequestration rate improvements sooner), while their small size allows for these forests to be planted in urban areas – allowing for much needed exposure to nature in our towns and cities. A further Tiny Forest will be planted in Wycombe this Autumn – delayed from this season's planting due to poor weather and flooding.



We partnered for the third year running with Releaf Marlow, who planted 166 trees across a range of sites although the majority were at Harleyford Golf Club. Stoke Hammond Parish Council planted 200 trees on public land around the Newton Leys estate. Gerrards Cross Town Council planted 40 trees at West Common, adjacent to Oxford Road; and Buckingham Town Council planted 229 trees at Bourton Park, Chandos Park and Lace Hill Sports & Community Centre.

at Cannock Road Tiny Forest (Aylesbury)



Wharf Road Decarbonisation Project, Wendover (re Action 27)

We have been working with Buckinghamshire Community
Energy (BCE) who are <u>developing a project in to decarbonise</u>
the Wharf Road Campus in Wendover, which includes seven
buildings: John Colet School, John Hampden School, Wendover Junior School, Wendover Swimming Pool, Wendover Youth
Centre, Wendover Memorial Hall and Little Acorns Kindergarten. The first stage of the project involved a feasibility study in
2021 which identified opportunities for substantial savings in

substantial savings in energy and hot water consumption which could be realised through energy efficiency and renewable energy measures.

Over the last 12 months, the Council have worked with BCE to produce a set of template documents which could be used to allow the project to progress. These include template lease documents, guidance on how to conduct a site survey and on submission of a grid connection application. In time, the objective is to make these templates available to other community energy groups for use on their projects.

BCE funded a study by Renew EV who conducted the analysis necessary for sizing the measures proposed for the campus and calculated the financial aspects necessary for an initial community share offering, should the project progress further.

Schools and Academies

School Travel Plan Success (re Action 28)

The Council's Travel to School team provides advice to schools on travelling sustainably. While their primary focus is to encourage active travel and reduce the number of car journeys to school altogether, they also provide information on anti-idling. Information is provided in newsletters and to schools in the course of working with them on their school travel plans.



Insight Box 2: Community Energy

According to <u>Community Energy England</u>, community energy refers to the delivery of renewable generation, energy efficiency or energy supply projects which are owned or funded in some form by a community group. This can mean fully funding projects, for example through a community share offer such as those administered by <u>South East London Community Energy</u>, or it can involve part ownership in partnership with the private or public sector.

The team also deliver initiatives such as the Footsteps training scheme, bikeability and balanceability training, and Walk Once a Week (WOW) incentive scheme. In June 2024, Buckinghamshire Council came 2nd in the Modeshift STARS (Sustainable Travel Accreditation and Recognition for Schools) scheme league table for large local authorities (with 100 schools or more) following the most recent round of applications in Autumn/Winter 2023/24.

There are now a total of 72 accredited school travel plans across the County.

Suppliers

Leisure Centre Management - Sustainability Commitments (re Action 32)

In December 2023, the Council awarded a contract for leisure centre management at the following sites:

- Aqua Vale Swimming and Fitness Centre (Aylesbury)
- Swan Pool and Leisure Centre (Buckingham)
- Little Marlow Athletics Track
- Evreham Sports Centre (Iver)
- The Beacon Centre (Beaconsfield)

The procurement included securing commitments for the following under our Corporate Priority "Improving the Environment":

- Centre-specific environmental plans
- Energy champions
- Supporting cycle to work schemes for staff
- Reducing single use plastics
- Supporting the council with any Public Sector
 Decarbonisation Scheme (PSDS) / Salix funded proposals and implementation.

Gas & Electricity Supplies

Purchased Electricity from Renewable Sources (re Action 33)

By procuring 100% renewable "REGO backed" electricity for the reporting period, carbon savings of 3,489 tCO2e have been achieved. The Council have also decided to procure electricity with a minimum 25% renewable energy content when we enter into a new contract for three years from October 2024.

County-wide

Local Transport Plan 5 (LTP5) (re Actions 38 & 42)

The Council are currently preparing our fifth "Local Transport Plan" (LTP5). This will be the fifth LTP for Buckinghamshire and will cover transport policies across the county to 2040. Within the objectives of the LTP5 development there are commitments to our Climate Change & Air Quality Strategy and the promotion of sustainable and active travel.

Buckinghamshire Local Plan (re Action 38)

The Unitary Council are working on preparation of a <u>new</u>
<u>Local Plan for Buckinghamshire</u>. In summer 2024 we set out a <u>draft vision and objectives</u> for consultation, which included the following in relation to climate change:

- Mitigating/adapting to climate change listed among the eight objectives for the plan
- Working towards achieving a carbon-neutral plan
- Designing new developments to be resilient to climate and flooding risks
- Increasing the supply of renewable energy

Requiring the highest standards of insulation and energy efficiency

The consultation responses are currently being evaluated and will inform the next stage of the Local Plan.

New Buckinghamshire Housing Strategy (2024 to 2029) (re Action 38)

In April 2024 the Council adopted a comprehensive <u>Housing</u>

<u>Strategy covering the period 2024 to 2029</u>. The <u>Strategy sets</u>

<u>out three priorities</u>, including priority two "Better Homes:
good quality, sustainable and matched to need". This includes the following commitments relevant to climate change:

- Supporting the Buckinghamshire Council Energy Doctor Scheme
- Supporting schemes such as Sustainable Warmth and Solar Together

Transportation

Electric Vehicle charging trial in Wendover (re Action 42)

Buckinghamshire Council received just over £70,000 in funding from the Office for Zero Emission Vehicles (OZEV) to support the installation of new on-street electric vehicle (EV) charging points in Wendover. The money will be used as match-funding for the council's existing £110,000 investment in the Wendover EV pilot scheme, which aims to promote the use of EVs in the area.

The EV pilot scheme will include the installation of 10 onstreet lamppost charging points in locations where there is a lack of off-street parking in Wendover and in-pavement cable channels. Both options will offer slow charging suitable for overnight charging of EVs.



The in-pavement cable channels are being installed to enable those residents who do not have a driveway to use their own EV chargers outside their house to charge their cars overnight (whilst parked on the street) in an easily accessible way. This is because the in-pavement cable channel ensures pedestrian safety by preventing trip hazards from trailing cables across pavements. It also means that residents can use their own electricity rather than relying on potentially more expensive public charge points. To date 3 in- pavement channels have been installed and the council has received positive feedback from residents using them. The usage of the channels will be monitored by the council until November 2025 and a decision will be made on whether to offer the in-pavement channels to more residents of Buckinghamshire.

Superfast EV Charging Hubs (re Action 42)

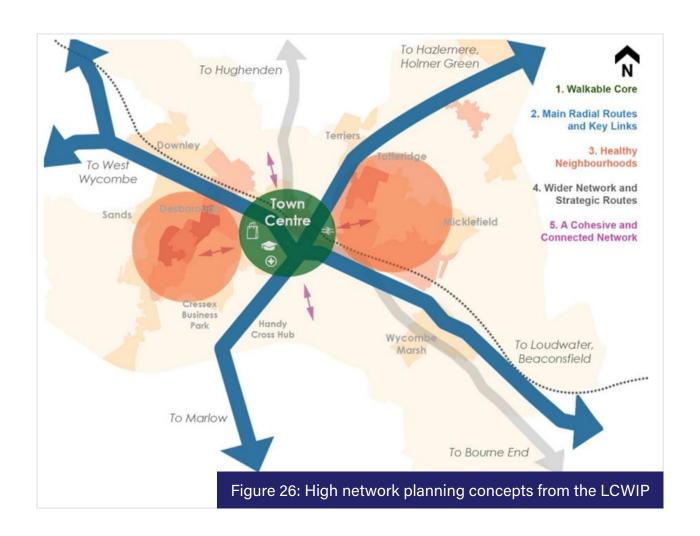
The council is in the process of identifying sites that might be suitable locations for EV hubs. Delivery of Ultra-Rapid EV charging hubs would support the commitments made by the Council in the EV Action Plan and Climate Change & Air Quality Strategy, as well as the corporate priorities: increasing prosperity, strengthening communities, and improving our environment.

High Wycombe's Handy Cross park and ride is a 'pilot site' for developing the Council's approach to the delivery of Ultra Rapid charging hubs. The car park off Handy Cross roundabout currently has 383 standard parking spaces but is considered to be underutilised. We are therefore proposing turning part of the site, which is in Council ownership, into an electric vehicle (EV) 'charging plaza'. This would include between 30 and 40 'ultrafast' EV charging points and a drive through food and beverage kiosk with toilet facilities. Other sites are currently being considered.

New Transport Strategy and Local Cycling Walking Infrastructure Plan for High Wycombe (re Action 42)

The High Wycombe Transport Strategy envisions that by 2050, High Wycombe will be among the best connected and most innovative towns in the Thames Valley. All the journeys from start to finish aim to be considered low emission, seamless, and safe for everyone, setting an ambitious goal for the town's transport system.

To achieve this, the high-level Transport Strategy sets out the key transport schemes required in the next 5, 10, 15 years and beyond. The supporting Local Cycling and Walking Infrastructure Plan (LCWIP) includes more detail on opportunities for new and improved cycling, walking and wheeling infrastructure.



Buckinghamshire Wide Local Cycling & Walking Infrastructure Plan (re Action 42)

Following a decision taken in January 2024 we have developed a council-wide Local Cycling and Walking Infrastructure Plan (LCWIP) that will outline a high-level walking, cycling and wheeling network across Buckinghamshire.

The LCWIP will focus on opportunities for strategic connections between settlements and to key destinations, including:

- Employment
- Education
- public transport hubs and networks
- town and village facilities
- countryside and visitor attractions
- neighbouring authority areas

<u>Public consultation on the LCWIP took place from September-October 2024</u>. The LCWIP will provide an evidence base for the forthcoming Local Transport Plan 5 and Local Plan for Buckinghamshire, and ultimately result in greater opportunities for people to choose to travel actively in Buckinghamshire.

Figure 27: Buckinghamshire LCWIP development process

Annex A - Summary of Buckinghamshire LCWIP Process

Stage 1: Determining the Scope

Stage 2: Gathering Information Stages 3 & 4: Network Planning for Walking and Cycling Stage 5: Prioritising Improvements Stage 6: Integration and Application

Geographical scope defined as well as the methodology, strategy, and the LCWIP project team. Evidence from digital mapping analysis was used to understand the existing and potential active travel journeys based on origins and destinations (trips to education, employment, shopping, leisure, tourism, community and health facilities, and public transport hubs).

Feedback was collected from members and Community Boards on their aspirations for active travel improvements and routes. Two main strands of analysis were used to identify a shortlist of corridors: likely scale of active travel trips which could be enabled between each origin and destination if high-quality infrastructure were in place; and Feedback on aspirations for active travel improvements.

Delivery Plan developed for priority corridors, considering feasibility, contribution to the overall network and approximate cost. The delivery plan is a live document and will be updated when required.

LCWIP document produced.

The priority corridors will be taken forward as funding becomes available and will be subject to further design work and engagement.

Engagement with Members, Community Boards and Stakeholders was carried out as part of the LCWIP development. Buckinghamshire Council will continue to work with partners during further development of priority corridors.

First draft of South East Aylesbury Link Road Carbon Management Plan (re Action 43)

The South East Aylesbury Link Road (SEALR) forms a crucial part of the Council's Transport Strategy for Aylesbury. The project specification includes a carbon management plan, which assesses the overall carbon impact of the road over a 60 year period including the emissions avoided by delivery of this infrastructure. Estimates suggest that over 109,000 tCO₂e will be saved over its lifetime as compared to a "do minimum" scenario.



Electric Scooters (re Action 44)

Buckinghamshire Council, as part of the Department for Transport (DfT) trials, have implemented an Electric Scooter rental trial to help support a 'green' alternative to local travel that is convenient, clean, and affordable. E-scooters can also reduce reliance on car trips, reduce congestion and improve air quality.

The trial has been extended by the Department for Transport until May 2026 to continue their assessment of impacts and allow legislation to be put in place to legalise e-scooters. The continuation of the e-scooter trial also supports the council's Climate Change and Air Quality Strategy by promoting sustainable low-carbon transport alternatives for shorter trips.

In 2023, more than 100,000 rides covering approximately 107,000 miles were made on the trial e-scooters.

'Pick Me Up' Demand Responsive Transport (DRT) Service (re Action 44)

The 'demand responsive transport' (DRT) service launched in September 2022 which operates around High Wycombe has been expanded to include Flackwell Heath. The service operated by Carousel Buses has proven to be popular with local residents with close to 100 people per day travelling by the end of the first week of service. By June 2024, this had increased to 300 passengers per day and the service continues to attract new passengers. It now provides over 1500 rides per week.

The service was introduced to reach residents living in parts of the town not serviced by regular bus routes and demonstrates the role that demand-responsive transport plays in improving air quality and traffic congestion in the town.

Buildings and Developments

Housing

Responding to planning applications as Lead Local Flood Authority (re Action 50)

The Sustainable Drainage team performs the role of the Lead Local Flood Authority in the planning process and is a statutory consultee on major planning applications in relation to surface water drainage. This means that the team advises the Local Planning Authority on whether surface water drainage schemes are fit for purpose to manage surface water runoff generated from sites up to a 1 in 100 year plus climate change allowance storm event. The team ensures that sustainable drainage systems are prioritised, meaning that rainfall is managed as close to source as possible, such as through rain gardens which dispose of roof runoff in vegetated areas. Some of these are shown in Figure 28.





Figure 28: Examples of Sustainable Urban Drainage

Guidance on the Embodied Carbon within Buildings (re Action 51)

The Climate Response Team provided guidance to the Heritage & Archaeology Team regarding considerations of embodied carbon within buildings and how this might impact decisions on renovation or demolition and new build. If you would like to read more about embodied carbon, this can be found in our 22/23 Progress Report.

Home Upgrade Grant 2 (re Action 53)

Buckinghamshire Council secured £540k through the Government funded Home Upgrade Grant 2. The scheme is supporting energy performance improvements in off-gas grid homes up until March 2025 to reduce carbon emissions and lower household bills. Eligible households may receive measures such as insulation and ventilation upgrades, a low carbon heating system such as an air source heat pump, a solar PV system or heating controls. The scheme is largely being managed by the Greater South East Net Zero Hub, in partnership with the managing agent, Agility Eco.



Energy Doctor scheme (re Action 53)

An 'Energy Doctor' scheme (Domestic Resource Efficiency Service) was approved by <u>Cabinet on 5 January 2023</u>. Just under £2 million has been allocated to support the initiative until the end of March 2025 from the Government's <u>UK</u> Shared Prosperity Fund (UKSPF).

Energy Doctors (Domestic Resource Efficiency Officers) have been visiting <u>eligible homes</u> (since 5 April '23) to:

- Identify whether households are paying too much for their energy and/or water (benchmarked against average prices and taking into account legislation relating to energy and water supplies);
- Provide advice on support available (including funding and grants) to assist with the implementation of resource efficiency measures;
- Suggest appropriate behavioural and control changes that can help reduce resource consumption; and
- Implement suitable low cost easy retrofit resource efficiency (LCERRE) measures such as water saving measures (aerated shower heads, shower timers and toilet cistern water displacement devises), draught proofing (for windows, doors, letterboxes, and chimneys), heated throws, hot water cylinder insulation jackets, reflective radiator panels, secondary glazing film, portable solar generators, electricity consumption monitors, smart plugs, thermometer cards, and LED lights.

As of 5 September 2024, over 800 visits have been made by the Energy Doctors and it's estimated that by March '25 the scheme will reduce carbon emissions in the area by 300 tonnes per year. It's estimated that the visits made so far are helping people save over £120 on their energy bills per year on average.

Domestic Building Envelope Energy Efficiency Grants (re Action 53)

The <u>Domestic Building Envelope Energy Efficiency grant</u>
<u>scheme</u> was launched on 1 May 2024 and is also funded by
UK Shared Prosperity Fund allocation to the 'Energy Doctor'
scheme. The grant may be used by eligible owner occupiers
to fund the installation of roof insulation, cavity wall insulation,
external wall insulation, loft insulation, window replacement,
secondary glazing and door replacement.

As of 16 August 2024, 55 application forms have been returned. Of the returned applications 46 have been approved (27 of which are within an Opportunity Bucks ward), with a total value of £670,227 (net) and works have been completed at 4 properties. It's estimated that these works will reduce carbon emissions in the area by 16 tonnes per year. Claims for the funded works need to be submitted by 31 December 2024.

The <u>Domestic Building Envelope Energy Efficiency grant</u>
scheme is also supporting the development of the green
economy both within Buckinghamshire and nationally. 48% of
the approved applications involve works being completed by
at least one Buckinghamshire based company.





Buckinghamshire Solar Together Scheme (re Action 53)

After the success of the first round of Buckinghamshire Solar Together (please see the 2022/23 Progress Report), a second round was launched in Spring 2024. A total of 2,579 residents registered by the scheme deadline of July 5th, receiving their offers shortly after. Of those who received an offer following the reverse auction, 623 accepted their quotes for Solar PV and 598 of these added battery storage. A further 43 accepted an offer for the installation of battery storage to an existing solar PV array.

Installations began in August and will proceed over the winter, with the final results in terms of installed capacity and emissions saved to be published next year.

Economy

Travel Planning Support for Local Businesses (re Action 56)

In 2022/23 Buckinghamshire Council were awarded £120,000 to provide travel planning support for local businesses. The main aim of this project is to enable greater collaboration with local businesses and encourage low emission vehicle practices and improvements to the fleet travelling in and around Buckinghamshire. Thereby reducing emissions from

traffic and encouraging safer driving. A Travel plan consultant has been appointed and Bucks Business First has started recruiting businesses. A promotional event also took place on 14th June 2024 to raise awareness of the project to more local businesses.

Environment, Landand Water

Environment Agency Supported Flood Risk Management Projects (re Action 57)

Flood risk management projects ongoing with Environment Agency support and funding include those in Marlow (Newt Ditch), and Property Flood Resilience (PFR) packages for property owners], and Willows estate in Aylesbury. Feasibility studies are underway to determine if there are viable options for a business case in Sands (High Wycombe), Hughenden (High Wycombe), West Marlow, Gawcott and Tingewick. Natural Flood Management projects are ongoing in and around Buckingham and Winslow areas.

Health and Communications

Social Media Posts for Clean Air Night (re Action 59)

Buckinghamshire Council published posts through social media platforms to support the first Clean Air Night campaign organised by the charity Global Action Plan which took place on 24 January 2024. The aim of the campaign was to spark a local and national conversation about the harms of wood burning and to uncover some of the myths around it.

Overnight statistics showed that there were 6,600 impression and 109 engagements with the article posted on X and 1,456 impressions and 75 engagements with the article posted on Facebook. This indicates that social media can reach a wide audience in short space of time and is a good way of raising public awareness to campaigns.

More information about Clean Air Night, including the latest research on wood burning, can be found on the <u>campaign</u> website.



Figure 31: Social Media Post on Facebook



Clean Air Night is here! Did you know, the number of wood burning stoves used in Buckinghamshire nearly doubled from 2021 to 2022-23? We know some households are reliant on wood burning as their main source of heating, but there are also many others installing stoves as a way of creating a cosy atmosphere, or thinking that they are greener or a cheaper source of heat. Burning solid fuels, like wood, produces 27% of the UK's annual PM2.5 air pollution — more than road transport! Why does this matter? These particles are damaging to our lungs and heart

Find out more by visiting the Clean Air Hub: learn the uncomfortable truth about wood burning https://orlo.uk/oEZ4r

Share this information with your community, family, and friends. Let's shine a light on the truth about wood burning and protect people and the planet.

Join us in creating a cleaner, greener future! 💸 #CleanAirNight

This #CleanAirNight learn the uncomfortable truth about wood burning





Visit cleanairhub.org.uk to learn more

#NetZeroWeek Social Media Campaign (re Action 60)

To mark NetZeroWeek the Council posted a series of social media stories covering active travel, tree planting and the installation of solar PV and battery storage across four Council owned sites. These garnered a total of over 18,800 impressions.



Buckinghamshire Council

8 July · 😢

As part of #NetZeroWeek, we are delighted to announce that we've installed solar photovoltaic panels (with a total installed capacity of 80kW) and battery storage (with a total energy storage capacity of 89kWh) at Aylesbury Family Time Centre, Castlefield Family Centre, Chesham Library and Hazlemere Library. These will reduce our carbon emissions and save money on our energy bills as we progress towards our #netzero targets.

Read more about the actions we are taking to tackle climate change: https://orlo.uk/fQRoU



Quarterly Climate Change Newsletter (re Action 60)

We issue a quarterly climate change newsletter highlighting activity from across the Council, from communities or events and developments on a national level relating for example to policy. The readership is usually above 100. If you wish to sign up then please contact: climatechange@buckinghamshire.gov.uk.



Buckinghamshire Council

Climate Change and Air Quality Strategy

2023 - 2024 Progress Report