



# Transport, Environment & Climate Change Select Committee Agenda

Date: Thursday 3 November 2022

Time: 10.00 am

Venue: The Oculus, Buckinghamshire Council, Gatehouse Road, Aylesbury HP19 8FF

## Membership:

B Chapple OBE (Chairman), R Carington (Vice-Chairman), P Brazier, M Caffrey, M Collins, C Cornell, E Culverhouse, E Gemmell, S Guy, A Poland-Goodyer, M Rand, L Sullivan, D Watson, W Whyte and A Wood

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Agenda Item	Time	Page No
1 Apologies for Absence		
2 Declarations of Interest		

- 3 Minutes of the Previous Meeting** **5 - 10**
- That the minutes of the meeting held on 8 September 2022 be confirmed as a correct record.
- 4 Public Questions**
- Public Questions is an opportunity for people who live, work or study in Buckinghamshire to put a question to a Select Committee. The Committee will hear from members of the public who have submitted questions in advance relating to items on the agenda. The Cabinet Member, relevant key partners and responsible officers will be invited to respond.
- Further information on how to register can be found here: <https://www.buckinghamshire.gov.uk/your-council/get-involved-with-council-decisions/select-committees/>
- 5 Climate Change & Air Quality Strategy: Annual Review** **10:15** **11 - 116**
- The Climate Change & Air Quality Strategy 2021-2022 Progress Report as presented to Cabinet at its meeting on Tuesday 11 October is attached for the Committee to consider. Also included is a summary of activity against the 60 actions in the Climate Change and Air Quality Strategy.
- Contributors:**  
 Councillor Gareth Williams, Cabinet Member for Climate Change & Environment  
 Councillor Jilly Jordan, Deputy Cabinet Member for Environment  
 Ian Thompson, Corporate Director for Planning, Growth & Sustainability  
 Steve Bambrick, Service Director for Planning & Environment  
 Ed Barlow, Head of Climate Change & Environment  
 Alexander Beckett, Energy & Climate Change Manager
- 6 Electric Vehicle Action Plan** **11:00** **117 - 168**
- The Committee will receive an update report on the Electric Vehicle Action Plan as well as the papers presented to Cabinet at its meeting on 7 June 2022.
- Contributors:**  
 Councillor Steve Broadbent, Cabinet Member for Transport  
 Councillor Gareth Williams, Cabinet Member for Climate Change & Environment  
 Richard Lumley, Service Director for Strategic Transport &

Infrastructure  
Hannah Joyce, Transport Strategy Lead Officer  
Rupert Zierler, Senior Strategy Transport Officer

- |           |  |              |                  |
|-----------|--|--------------|------------------|
| <b>7</b>  | <b>School Transport</b><br>The Committee will receive an update on home to school transport and the Client Transport Improvement Programme.<br><br><b>Contributors:</b><br>Councillor Steve Broadbent, Cabinet Member for Transport<br>Richard Barker, Corporate Director for Communities<br>Lindsey Vallis, Service Director for Transport Services<br>Cheryl Platts, Transport Policy & Improvement Manager                  | <b>11:30</b> | <b>169 - 176</b> |
| <b>8</b>  | <b>Inquiry Report: Pollution in Buckinghamshire's Rivers and Chalk Streams</b><br>Members agreed to undertake an inquiry into pollution in Buckinghamshire's rivers and chalk streams. The Committee will receive the final report of the review group ahead of it being presented to Cabinet on 15 November.<br><br><b>Contributors:</b><br>Councillor Robert Carington, Chairman of the Inquiry Group<br>All Inquiry Members | <b>12:00</b> | <b>177 - 194</b> |
| <b>9</b>  | <b>Work Programme</b><br>The Select Committee will consider the upcoming work programme.   | <b>12:15</b> | <b>195 - 196</b> |
| <b>10</b> | <b>Date of Next Meeting</b><br>2 February 2023.  |              |                  |

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Agenda Item 3  
**Buckinghamshire Council**  
**Transport, Environment &  
Climate Change Select Committee**

## Minutes

**MINUTES OF THE MEETING OF THE TRANSPORT, ENVIRONMENT & CLIMATE CHANGE SELECT COMMITTEE HELD ON THURSDAY 8 SEPTEMBER 2022 IN THE OCULUS, BUCKINGHAMSHIRE COUNCIL, GATEHOUSE ROAD, AYLESBURY HP19 8FF, COMMENCING AT 10.00 AM AND CONCLUDING AT 12.15 PM**

### MEMBERS PRESENT

B Chapple OBE, R Carington, P Brazier, M Caffrey, M Collins, C Cornell, E Culverhouse, E Gemmell, S Guy, A Poland-Goodyer, M Rand, D Watson, W Whyte and A Wood

### OTHERS IN ATTENDANCE

S Broadbent, J Jordan, G Williams, S Anthony, E Barlow, R Barker, M Dickman, K Fisher, R Garnett, V Grey, V Keeble, I Thompson and C Ward

### Agenda Item

#### 1 APOLOGIES FOR ABSENCE

Apologies were received from Councillors King and Sullivan.

#### 2 DECLARATIONS OF INTEREST

There were none.

#### 3 MINUTES OF THE PREVIOUS MEETING

A Member requested that their comment regarding the need to balance land usage between tree planting and food security be included in the minutes. Subject to the above inclusion, the minutes of the meeting held on 22 June 2022 were confirmed as an accurate record.

#### 4 PUBLIC QUESTIONS

One public question was considered at the meeting as attached to the agenda and a verbal response was provided by the Cabinet Member for Climate Change and Environment. The question and its response are appended to the minutes.

#### 5 VEOLIA WASTE CONTRACT & ROUND REORGANISATION

The Chairman welcomed Councillor G Williams, Cabinet Member for Climate Change & Environment, Councillor J Jordan, Deputy Cabinet Member for Environment, representatives from Veolia and council officers to the meeting. The Cabinet Member introduced the report to the Select Committee and highlighted the key points. In the north of Buckinghamshire, the

waste collection service is provided through an in-house service whereas in the south, the legacy Wycombe, Chiltern & South Bucks areas, the waste collection service was contracted to Veolia. In the contract, the target was for a maximum of 60 missed bins per 100,000. As part of the agreed contractual terms, Veolia had introduced a comprehensive reorganisation of the collection rounds with a view of improving service quality for residents and securing efficiencies. At the peak of the collection issues, around 600 out of 100,000 bins were reported as missed collections. This amounted to between 3,000 – 4,000 collections being missed per week. An external audit report would soon be published which would be presented to the Council's Risk Management Group, and the Cabinet Member advised that the Select Committee may also want to consider it.

The Chairman invited comments from the Veolia representatives. Andrew Reidy, General Manager, apologised to all residents and Members for the disruption caused and acknowledged the importance of rectification as soon as possible.

During the Select Committee discussion, the following points were noted:-

- Multiple Members reiterated how their residents had been negatively affected by the contract performance with examples given across different wards in the south of Buckinghamshire. Members also advised Veolia that a significant percentage of their current casework related to the ongoing waste collection issues including the Leader and the Cabinet Member. The Corporate Director asked Members to follow up with him after the meeting on cases where the service had not replied to reports of repeated missed collections.
- Despite some residents having lost confidence in the system, the Cabinet Member encouraged households to continue reporting missed collections online. Reports normally had to be submitted within 24 hours but had been extended to 48 hours; 15% of reports were currently within this extended 24 – 48-hour period.
- Data issues had been identified with examples including bins not registered at some households, collections being marked as completed when they were not and households missing from the new rounds.
- After a difficult start, Veolia had successfully delivered a round reorganisation in a local authority in the south of the country which was now one of the best performers. It was expected that the south's new round would eventually outperform the preceding one.
- The Council remained focused in working with Veolia to improve service delivery. The Cabinet Member advised that financial penalties were being explored and that the maximum the Council could claim was 5% of the contract value.
- The contract with Veolia was in place for ten years and had a five-year break clause. The contract contained definitions of a service breakdown, which were outlined in the report, and had not been reached during the peak of the poor performance. Veolia advised that although significant work had been put into the round reorganisation, a level of disruption for 8-12 weeks was always expected, and it was acknowledged that Veolia's anticipated scale of the disruption had not been correct.
- As well as the round reorganisation, other factors that contributed to the poor performance were:
  - A lack of experienced cover for staff due to sickness absence and annual leave during the summer.
  - Route learning being lost.
  - Some issues with the reporting system which, in some cases, led to duplicate reports.
  - Reports of missed collections being marked as complete when they were still outstanding which further frustrated residents.

- As part of the recovery plan, Veolia had increased crew resource, implemented additional 'catch up crews', and deployed weekend workers at their own cost. The extra resources were costing Veolia around £125,000 per month.
- Members sought assurance that Veolia were supporting their staff and crews during the round reorganisation. It was reported that crews had been engaged on their wellbeing and that catering vehicles had been arranged to show appreciation for their efforts. Veolia recognised the importance of drivers by offering recruitment and retention packages. Conversely, reported instances of poor behaviour from crews were investigated with Veolia following internal disciplinary processes.
- A Member suggested a system whereby residents could 'opt-out' of a collection that week if their recycling bin did not need emptying that week.
- One Member was mindful that the increased amount of customer contact due to missed collections in the south would impact all Buckinghamshire residents due to increased waiting times and lead times to resolve other service queries and issues.

The Chairman thanked everyone for their comments and civil discussion on an important service that impacted all residents in Buckinghamshire. The Chairman also thanked representatives from Veolia for attending to answer questions and would welcome their attendance at a future meeting.

## 6 FLOODING

The Chairman introduced the Deputy Cabinet Member for Environment, Councillor J Jordan, to introduce the report and outline the presentation that would be provided by officers. In the presentation, the following points were made:-

- In Buckinghamshire, 10.7% of land lies in Flood Zone 2 and 3 (equivalent to over 8,000 properties) and 8.4% of land lies in areas at high or medium risk of surface water flooding (equivalent to over 4,000 properties). The landscape was likely to change in response to climate change.
- Buckinghamshire Council acted as the Lead Local Flood Authority (LLFA) which required partnership working with the Environment Agency (EA) and water companies predominantly. The statutory role was outlined by officers.
- The roles and responsibilities for each authority were highlighted for flood risk management and flood incident management.
- The Strategic Flood Management team had a series of projects funded by central Government, regional committees, and the Council. Defra currently funded Project Groundwater 2021- 2027 which was focused on groundwater resilience in the Chilterns. The team was also responding to drainage aspects of planning applications of more than 10 units and linked with other council work such as Tree Planting and the Local Nature Recovery Strategy.
- Sustainable drainage systems (SuDS) were designed to manage stormwater locally and emulate natural drainage. They also enhanced the local amenity and biodiversity. Planning applications were required to provide a surface water drainage strategy; examples included the use of permeable paving and rain gardens.
- The council's approach to flood risk management was consistent with the EA's national strategy by creating climate resilience. The River Leck Natural Flood Management Scheme, which used leaky dams, was an example of this work. The Council also wanted to educate residents on flood risk and resilience.
- The Local Flood Risk Management Strategy would be revised in 2023.

The Cabinet Member for Transport introduced the gully clearance report which updated on the progress of maintenance. The Council had committed to clean every drain and gully last year,

costing £2m revenue, with another £2m capital investment of repairs. This exercise was being repeated for every gully this year. Last year's work had established a baseline of silt levels for each gully which was being checked against this year during the second year of cleaning. There were 7-8 gully teams carrying this out per day, and the super suckers were proving to be important.

In response to Member questions, the following points were noted:-

- It was acknowledged that the responsibilities for flooding were complex for all agencies which was confusing for Members and residents. The Council hosted a list of responsibilities on its website and signposted queries accordingly. The EA did have strategic oversight of flooding at a national scale which was then acted upon locally by partners which was stipulated in the Flood and Water Management Act.
- It could be challenging to encourage developers to deliver 'greener' SuDS that incorporated into the landscape. Recent changes to the Local Planning Policy guidance, which emphasised the need for SuDS to take into account water quantity, water quality, biodiversity and amenity, would help to hold developers to account.
- When speaking with residents regarding concerns of flooding and new developments, Members were advised developers had to manage their flows so that they are stored and slowly released at a controlled rate that is agreed with the LLFA and the planning authority.
- There was regular liaison between Strategic Flood Management and Transport for Bucks (TfB) regarding road flooding and gullies with each having its own responsibilities.
- The team followed Government climate change guidance and updated its work as the guidance changed. The latest guidance on climate change allowances could be found on the Gov.uk website: [Flood risk assessments: climate change allowances](#). This guidance applied to both flood management projects and planning applications. For example, a developer was required to demonstrate that surface water runoff from the impermeable areas on a development can be safely contained on site for storm events up to the 1% Annual Exceedance Probability (meaning a storm event that has a 1% chance of occurring in any given year). This would include a 40% uplift on peak rainfall to account for climate change.
- Project Groundwater sought to address groundwater flooding which was a lesser-known and hidden issue in flooding, and its impact could be devastating and long-lasting. The project was looking to create mapping information and a warning system using bore holes.
- Following the Section 19 Flood Report in Buckingham, an update on the recommendation regarding combined sewers work with the EA and Anglian Water would be requested. The response would be circulated separately once available.  
**Action: K Fisher / V Keeble**
- The purpose of the national and local policy was to steer development to the areas of lowest flood risk as set out by the Sequential Test and sequential approach. Statutory consultees, such as the LLFA and the EA, supported the planning authority in steering development to the lowest risk. There was a national record of planning applications approved contrary to the EA advice. The planning authority was not required to record the same information for decisions taken against the advice of the LLFA.

The Chairman thanked Members and officers for the discussion and requested that any further questions be referred to the Chairman and the Senior Scrutiny Officer outside the meeting.

## 7 TREE PROTECTION

The Chairman invited the Cabinet Member for Climate Change & Environment to introduce the



report, and the following points were highlighted during the officer presentation:-

- Tree Preservation Orders (TPOs) prohibited the felling, topping, lopping, uprooting or wilful damage or destruction of the tree unless permission is specifically given for such activities.
- TPOs covering an area were only a short-term measure until each tree was assessed, plotted, and protected individually or as a group.
- Public support or opposition for a TPO would be considered a material consideration but would not outweigh a professional, objective assessment of the health and quality of the tree using industry standard methodology.
- The process of making and confirming a TPO, including Member involvement, was outlined.
- Legacy planning policies made up Buckinghamshire Council's policy on trees which would be aligned in the Buckinghamshire Local Plan. The Wycombe, now West, legacy area had a canopy cover policy with a canopy cover supplementary planning document.
- Baseline work was currently underway on the Buckinghamshire Council Tree Strategy which would include a review of TPOs to ensure these were accurate records.
- From April 2020, there had been around 150 enforcement cases related to unauthorised tree-related works.
- Neighbourhood Plans can include policies on trees which could be shaped by Town and Parish Councils.

The Committee noted the following during its discussion:-

- One Member suggested that the Council publicised enforcement cases related to unauthorised TPO works as a deterrent.
- A Member advised that the Woodland Trust was working with other councils to use volunteers to protect trees when a tree was in imminent danger of being damaged or felled.
- The removal or retention of trees within a planning/development context depends on the balance of policy requirements in the individual case.

The Chairman thanked the Cabinet Member and the officers for the report.

## **8 WORK PROGRAMME**

The Senior Scrutiny Officer advised that the inquiry report would be considered at November's Select Committee meeting.

## **9 DATE OF NEXT MEETING**

Thursday 3 November at 10am.

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**Transport, Environment & Climate Change Select Committee – 3 November 2022**

**Agenda Item 4 – Public Questions**

1. Buckingham Town Council notes that there is no mention of provision of EV charging points for visitors to residential areas. Would it be possible include in the Action Plan the requirement that developers install (commercial) EV charging apparatus in at least two 'visitor' parking spaces on new developments, at the developer's expense (via condition or S106 depending on the size of the development)? All new cars will have to be electric in 7 years, and the Action Plan will be in force for 5 of these. It is unreasonable to expect a resident to pay for the charging of a guest's car or tradesman's vehicle on their domestic connection.

- Mark Cole

2. I welcome the update report and the Council's continued commitment to address climate change. My question relates specifically to the work carried out towards Action 42: "Improve infrastructure for active travel (such as walking and cycling) and electric vehicles". The progress reported is to be welcomed but, as far as active travel is concerned, it is exceptionally modest compared with the ambitions referred to in previous strategies. The Aylesbury Garden Town Masterplan, for example, contains the following ambitions:

'In 2033 people choose to walk, cycle, or use public transport for everyday journeys within Aylesbury, because it is easy to navigate and has an integrated and inclusive transport system. Residents benefit from active lifestyles and streets are people-friendly places. By 2050 at least 50% of trips originating in the Garden Town will be made by sustainable modes.

A web of green and blue infrastructure provides the 'garden' in Garden Town. As a result of the Garden Town project, Aylesbury's communities are better connected to the countryside and the Chiltern Hills. The town's waterways have been revealed and naturalised, streets are greener and outdoor spaces are more accessible, biodiverse and active.'

As someone who cycles nearly every day, both within Aylesbury and to nearby destinations such as Wendover and Haddenham, I have to say that, apart from the Haydon Hill extension, there is no evidence that provision for "active travel" is improving. On the contrary, paths are increasingly taken over by vegetation and the surfaces are breaking up, the signage for Aylesbury's Gemstones cycle routes is deteriorating badly, the 20mph scheme in Thame Road, Haddenham – introduced during the short-lived wave of enthusiasm for active travel during the pandemic – has been abandoned, and no progress has been made in creating the Haddenham station to Thame greenway despite years of promises and thousands of pounds wasted on studies by organisations such as Sustrans. Compared to the vast resources poured into projects such as the South-East Aylesbury Link Road, it is clear that active travel remains a very low priority within the Council. What resources does the Council make available to

ensuring that “active travel” really does become a strategic priority (in the jargon, bringing about a “step change”) and when can a detailed, comprehensive review of all “active travel” requirements, including maintenance, be made available to the Select Committee and to the general public?

- Colin Bloxham

3. It is great to see the introduction of new walking and cycling infrastructure around the county as part of your efforts to tackle climate change, but will this be backed up with a well-funded, consistent and high-profile campaign to promote the benefits of active travel, along with monitoring to assess the increase in uptake?

- Alan Thawley

4. Just this summer, a school in Wendover, which was the subject of a Feasibility Study into decarbonisation and electrification of heat, which was being done in partnership with Buckinghamshire Council, had its gas boilers replaced with gas boilers. How can Councillors and management in the Council help Property and Estates teams to change policy and practice more quickly so that this doesn't happen again as it is in direct contradiction to stated Council policy on climate change?

- Kirsty Shanahan



## Report to Cabinet

<b>Date:</b>	11 <sup>th</sup> October 2022
<b>Title:</b>	<b>Climate Change &amp; Air Quality Strategy 2021-2022 Progress Report</b>
<b>Cabinet Member(s):</b>	Councillor Gareth Williams, Deputy Leader and Cabinet Member for Climate Change and Environment
<b>Contact officer:</b>	Alexander Beckett
<b>Ward(s) affected:</b>	All
<b>Recommendations:</b>	<b>1. To note the progress made in 2021-2022 against the aims, objectives and actions in the Climate Change &amp; Air Quality Strategy</b>
<b>Reason for decision:</b>	Action 9 in the Climate Change & Air Quality Strategy commits the Council to ‘Report annually on progress made against actions and reducing emissions’.  Addressing climate change and poor air quality is relevant to all Council Corporate Plan 2020-2025 priorities.

### 1. Executive summary

- 1.1 The Climate Change & Air Quality Strategy 2021-2022 Progress Report provides an update on the significant progress made against the aims, objectives, and actions set out in our Climate Change and Air Quality Strategy within the year following its adoption on 19th October 2021. Details of 51 activities are provided, many of which address several actions in the Strategy. These have contributed to greenhouse gas emissions (GHG) decreasing by 10.61% from 2019 to 2020 and nitrogen dioxide concentrations staying within the annual mean value in the last two calendar years in Buckinghamshire; and, the Council’s GHG emissions being 70% lower in ‘21/’22 compared to its emissions from 1990.

- 1.2 The Council was responsible for 6,095 tonnes of greenhouse gas emissions (TCO<sub>2</sub>e) in '21/'22. We have kept comfortably within the Council's carbon budget for '21/'22 (7,407 TCO<sub>2</sub>e) and are on track to reduce the Council's carbon emissions by at least 75% by 2030.

## **2. Content of report**

- 2.1 Action 9 in the Climate Change & Air Quality Strategy commits the Council to 'Report annually on progress made against actions and reducing emissions' and addressing climate change and poor air quality is relevant to all Council Corporate Plan 2020-2025 priorities. The Climate Change & Air Quality Strategy 2021-2022 Progress Report (please see Appendix A) provides an update on the significant progress made against the aims, objectives, and actions set out in our Climate Change and Air Quality Strategy within the year following its adoption on 19th October 2021.
- 2.2 Following approval of the Climate Change & Air Quality Strategy 2021-2022 Progress Report at Cabinet the Report will be published online and promoted as part of the Bucks Climate Challenge communications campaign.

## **3. Other options considered**

- 3.1 The option to not produce Climate Change & Air Quality Strategy 2021-2022 Progress Report was considered as not being viable due to the commitment to 'Report annually on progress made against actions and reducing emissions' (action 9 in the Climate Change & Air Quality Strategy).

## **4. Legal and financial implications**

- 4.1 It's considered that there are no legal or financial implications associated with the Climate Change & Air Quality Strategy 2021-2022 Progress Report.

## **5. Corporate implications**

- 5.1 Due to their negative impacts on health, natural and built environments, and the economy addressing climate change and poor air quality is relevant to all corporate plan priorities:

- Increasing prosperity
- Strengthening our communities
- Improving our environment
- Protecting the vulnerable

## **6. Local councillors & community boards consultation & views**

- 6.1 Consultation with local councillors and community boards was deemed unnecessary regarding the production of the Climate Change & Air Quality Strategy 2021-2022 Progress Report.

## **7. Communication, engagement & further consultation**

- 7.1 Further consultation was deemed unnecessary regarding the production of the Climate Change & Air Quality Strategy 2021-2022 Progress Report.
- 7.2 All Council activity detailed in the Climate Change & Air Quality Strategy 2021-2022 Progress Report has been supported by the Bucks Climate Challenge communications campaign.

## **8. Next steps and review**

- 8.1 Following approval of the Climate Change & Air Quality Strategy 2021-2022 Progress Report at Cabinet the Report and the Action Plan will be published online and promoted as part of the Bucks Climate Challenge communications campaign.

## **9. Background papers**

- 9.1 [Buckinghamshire Electric Vehicle \(EV\) Action Plan 2022-27](#) (approved by Cabinet on 7<sup>th</sup> June 2022)
- 9.2 [Climate Change and Air Quality Strategy](#) (approved by Cabinet on 19<sup>th</sup> October 2021)
- 9.3 [Large Scale Tree Planting on Buckinghamshire Council Land Holding](#) (approved by Cabinet on 16<sup>th</sup> February 2021)
- 9.4 [Net Zero Carbon Emissions by 2050 Motion](#) (at Full Council on 15<sup>th</sup> July 2020)

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Buckinghamshire Council

# Climate Change & Air Quality Strategy

2021-2022 Progress Report

# Contents

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<a href="#"><u>Foreword</u></a>	3
<hr/>	
<a href="#"><u>Introduction</u></a>	4
<hr/>	
<a href="#"><u>Progress against targets</u></a>	5
<hr/>	
<a href="#"><u>Activity against actions</u></a>	17
• <a href="#"><u>Governance and Management</u></a>	
<hr/>	
<a href="#"><u>The Council's emissions</u></a>	23
• <a href="#"><u>Behaviour</u></a>	
• <a href="#"><u>The Council's Operational Estate</u></a>	
• <a href="#"><u>Transport</u></a>	
<hr/>	
<a href="#"><u>Suppliers and partners</u></a>	29
• <a href="#"><u>Partners</u></a>	
• <a href="#"><u>Suppliers</u></a>	
<hr/>	
<a href="#"><u>County-wide</u></a>	36
• <a href="#"><u>Transportation</u></a>	
• <a href="#"><u>Buildings and Developments</u></a>	
• <a href="#"><u>Economy</u></a>	
• <a href="#"><u>Environment, Land and Water</u></a>	
• <a href="#"><u>Health and Communications</u></a>	

# Foreword

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I am delighted to provide this update on the considerable activity undertaken to tackle climate change and poor air quality in Buckinghamshire. While giving some reassurance that all parts of our community are playing their part in tackling these significant environmental challenges, it also recognises the importance of continuing emission reduction and climate change adaptation work. Having only adopted the Climate Change and Air Quality Strategy last year, in October, it's good to see the innovation, enthusiasm and partnership initiatives already underway – from the creation of new larger woodland areas, to expanding the number of charging points to 1,000 by 2027, and delivering energy performance improvements to many more homes.

Our collective response to the COVID pandemic has proven that, together, we can introduce the necessary changes to address seemingly overwhelming challenges to our lives. Our efforts have contributed to decreasing levels of greenhouse gases and other air pollutants in Buckinghamshire and from the Council's operations. The health of those living and working in the area, and plants and animals, will have benefitted from NO<sub>2</sub> concentrations being lower than the 40µg/m<sup>3</sup> annual mean in 2020 and 2021. I'm also very conscious of the fact that initiatives that help communities transition to low or zero emissions can result in cost savings, especially with energy costs where they are. In the transport sector we have encouraged e-scooter and e-bike usage. In the home we have come up with ways

to help reduce energy consumption via the Green Homes Grant Local Authority Delivery and Buckinghamshire Solar Together schemes. Workplace energy usage has seen assistance from the Low Carbon Workspaces initiative.

Hopefully this report provides some inspiration to you all to explore new ways to reduce your environmental impact – there are some useful suggestions available on the AWorld App about some small lifestyle choices that everyone can make to save resources. It's great that 14 tonnes of CO<sub>2</sub> has already been saved by those using it.

We can all feel immensely satisfied with what has been achieved so far. The Council's '21/'22 carbon emissions (6,095 TCO<sub>2</sub>e) were far less than the carbon budget that was set (7,407 TCO<sub>2</sub>e). We have secured Government grants in excess of £10.3m to progress initiatives, introduced more electric vehicles into fleets and sizeable solar photovoltaic systems on buildings providing Council services, planted impressive number of trees with schools and community groups and we are now starting to buy renewable energy. I look forward to another year of successes, where we can share the benefits of securing a sustainable future.

**Councillor Gareth Williams**

*Cabinet Member for Climate Change and Environment*

# Introduction

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The UK experienced its hottest summer on record in 2022 - on [19 July 40.3°C was recorded at Coningsby](#) and temperatures recorded at 46 weather stations across the UK exceeded the previous record of 38.7°C. July 2022 has been the driest July in England since 1935 (and the driest on record for south-east England, according to provisional figures released by the [Met Office](#)) and every month up to September this year (apart from February) has seen below average rainfall.

These severe weather events have been a useful reminder of the urgent need to reduce global carbon emissions and implement measures to adapt to a changing climate. This document provides an update on the significant progress made against the aims, objectives, and actions set out in our Climate Change and Air Quality Strategy within the year following its adoption on [19 October 2021](#). Details of 51 activities are provided, many of which address several actions in the Strategy. These have contributed to greenhouse gas emissions (GHG) decreasing by 10.61% from 2019 to 2020 and nitrogen dioxide concentrations staying within the annual mean value in the last two calendar years in

Buckinghamshire; and, the Council's GHG emissions being 70% lower in '21/'22 compared to its emissions from 1990.

People and organisations' activities continued to be affected by the COVID pandemic in 2022, with [Plan B measures](#) being in place between [10 December 2021](#) and 26 January 2022 (inclusive). Emissions have been positively impacted by the changes – most notably the shift to home working has helped reduce transport emissions. The Council has continued to support this shift through its Work Smart programme, and the transition to low emission forms of transport. This includes: 111 employees using the Council's Cycle to Work scheme since May 2020, securing more than half a million pounds to upcycle and electrify a refuse collection vehicle, the introduction of battery electric vehicles into fleets operated by Family Times Services and a major supplier to the Council (Veolia), committing to more than 1,000 public charging spaces being available in the county by 2027, encouraging the use of low and ultra low emission taxis and private hire vehicles via a new licensing policy, implementing e-scooter and e-bike hire schemes, and extensions and improvements to active travel routes in Aylesbury, Wendover and Marlow.

The achievements outlined in this progress report wouldn't be possible without the cooperation and support of all stakeholders – from the Council's teams, suppliers and partners, to the third sector, businesses, and residents in Buckinghamshire. As result of collaborative working over £203k was secured to support tree planting projects by local organisations, water source heat pumps and solar panels have been installed at Chiltern Lifestyle Centre and Amersham Depot (which will save up to 228 tonnes of CO<sub>2</sub>e per annum), 200 business have been assisted by Low Carbon Workspaces to reduce their carbon footprints and energy costs, and 64 accredited school travel plans have been established.

Results from several schemes have, once again, confirmed widespread interest in delivering a zero carbon future for Buckinghamshire. Environmentally friendly actions taken and recorded on the AWorld App have resulted in 14 tonnes of CO<sub>2</sub> being saved, 91 domestic properties have been retrofitted with energy efficiency measures with funding from the Green Homes Grant Local Authority Delivery scheme, and there were 6,990 registrations to the Buckinghamshire Solar Together initiative.

Over the forthcoming year many initiatives will come to fruition, for instance: the provision of support for 30 large employers to increase the number of electric vehicles in their fleets, and improving the energy performance of eligible homes under the Sustainable Warmth scheme. Activity is already underway to build on the success of implementing climate change adaptation measures and reducing emissions from the Council's estate (e.g. planting 5,860 trees, procuring 25% of electricity from renewable sources, and transitioning to cloud based servers) which includes the installation of air source heat pump technology funded by the Public Sector Decarbonisation Scheme, and establishing new woodland areas.

# Progress against targets

The following section details the progress made against the aims and objectives of the Climate Change and Air Quality Strategy. It is of note that emissions over the reporting year have been influenced by changes to behaviours and the operations of organisations during the Covid-19 pandemic.

## Progress against Aim 1:

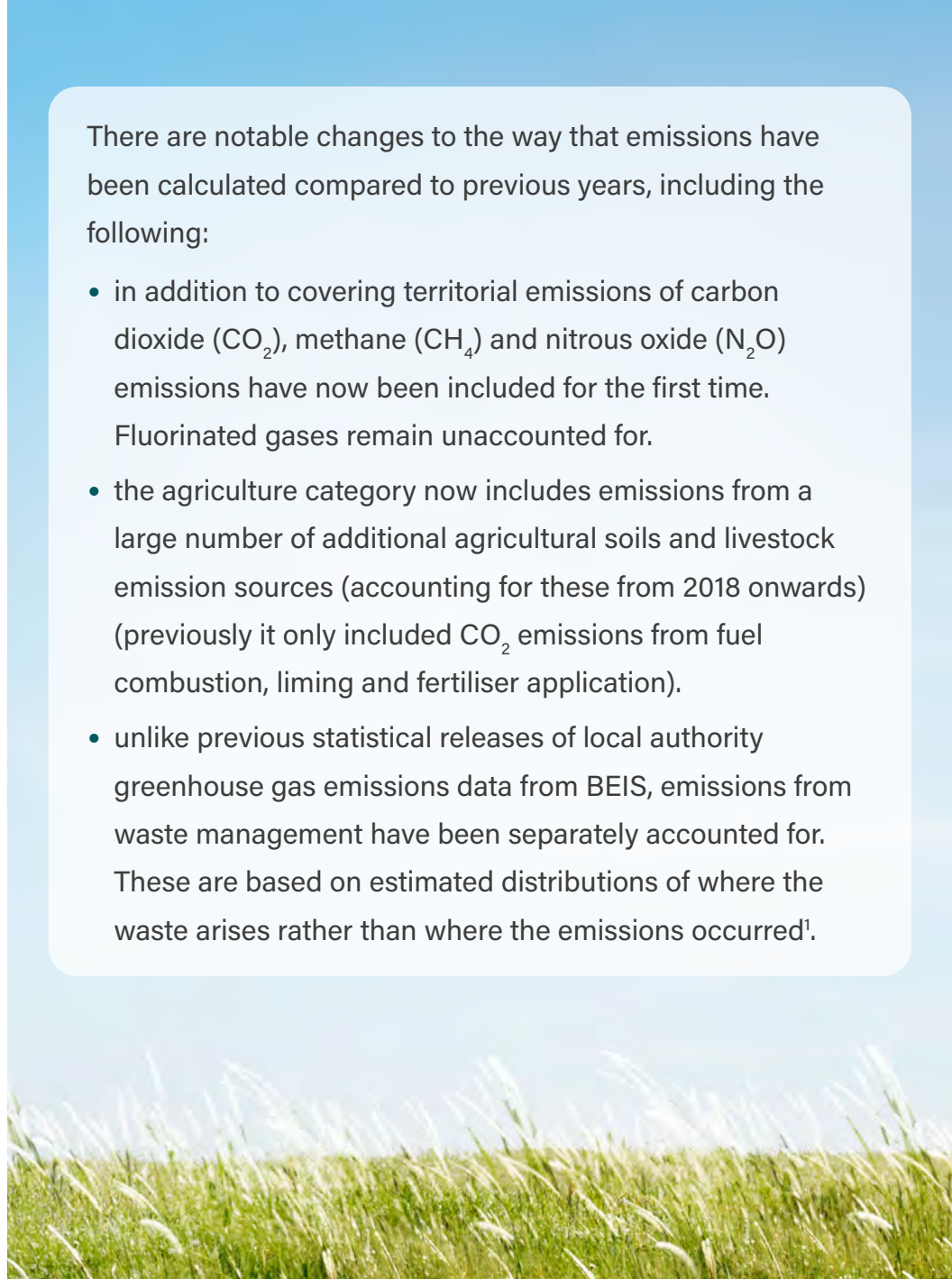
**Work alongside national Government with the objective to achieve net zero carbon emissions for Buckinghamshire as a whole by 2050.**

Area greenhouse gas (GHG) emissions are taken from the [UK local authority and regional greenhouse gas emissions national statistics: 2005-2020](#) and have been calculated using a generation based approach. These were published by the Department for Business, Energy & Industrial Strategy (BEIS) on 30 June 2022 and the data is presented in the graph 1 – confirming that emissions from the area the Council serves are decreasing at an average rate of 2.51% per annum. Emissions decreased by 10.61% from 2019 to 2020.

There are notable changes to the way that emissions have been calculated compared to previous years, including the following:

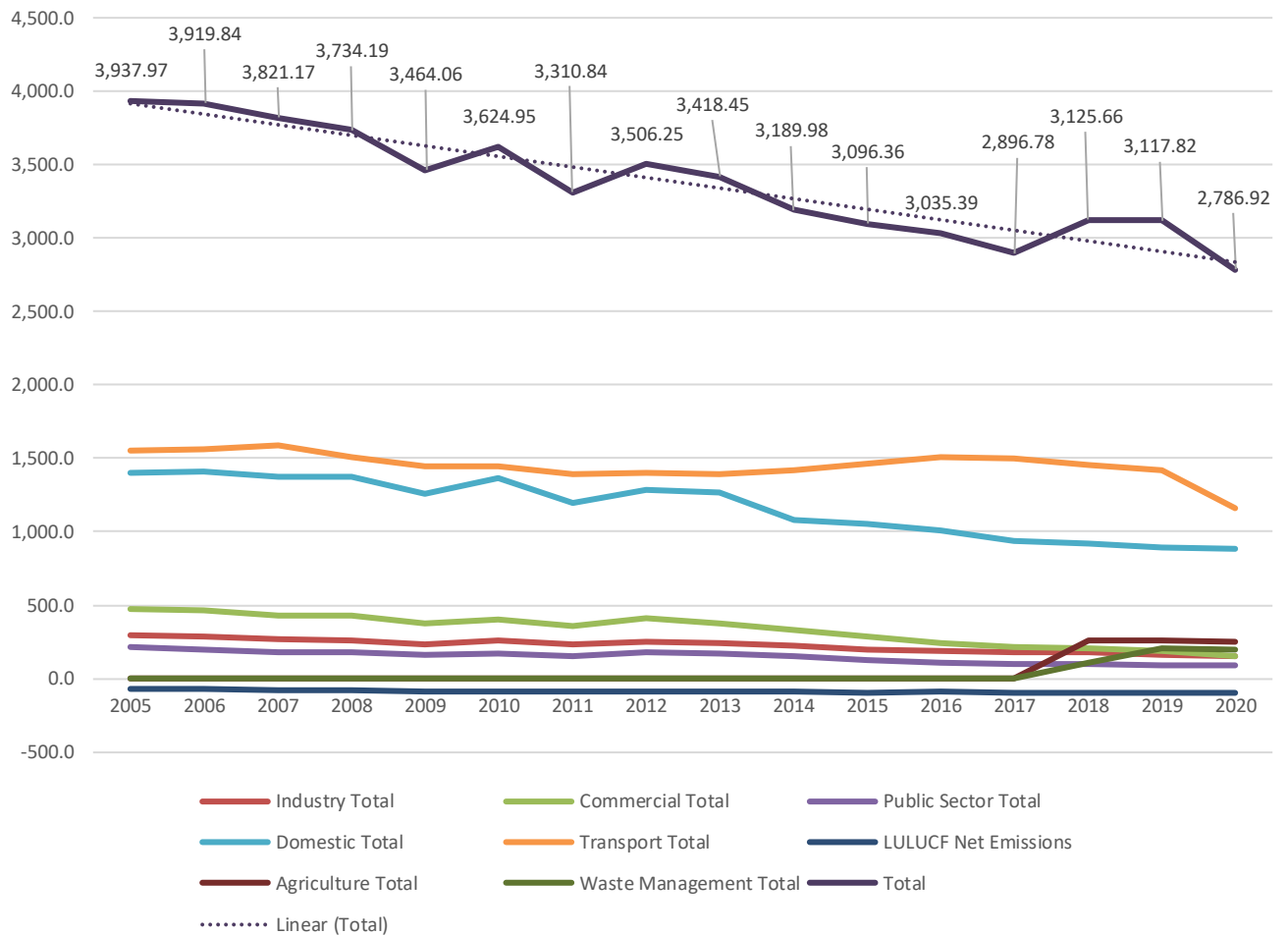
- in addition to covering territorial emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emissions have now been included for the first time. Fluorinated gases remain unaccounted for.
- the agriculture category now includes emissions from a large number of additional agricultural soils and livestock emission sources (accounting for these from 2018 onwards) (previously it only included CO<sub>2</sub> emissions from fuel combustion, liming and fertiliser application).
- unlike previous statistical releases of local authority greenhouse gas emissions data from BEIS, emissions from waste management have been separately accounted for. These are based on estimated distributions of where the waste arises rather than where the emissions occurred<sup>1</sup>.

<sup>1</sup> Emissions associated with electricity used in the waste industry comes under Industrial and Commercial Electricity. This is also true for emissions from energy from waste plants for which the emissions are associated with the end user of the electricity



Emissions generated from all source categories have decreased between 2005 and 2020 apart from waste management 'other' emissions which is influenced by population growth in the area (489k people in 2005 and 547k people in 2020). Emissions from settlements, public sector, commercial and domestic gas and domestic 'other' increased between 2019 and 2020 reflecting the impact that lockdowns and home working arrangements associated with the COVID pandemic had. Table 1 provides details of the carbon emissions produced by various sources in Buckinghamshire in 2020.

**Graph 1**  
**Buckinghamshire Carbon Emissions (kilotonnes CO<sub>2</sub>e) 2005-2020**



**Table 1 - Buckinghamshire 2020 carbon emissions by source**

Source	Annual Carbon Emissions (kilotonnes CO <sub>2</sub> )	% of Carbon Emissions
Industry Electricity	4.89	1.76%
Industry Gas	20.4	0.73%
Large Industrial Installations	0.6	0.02%
Industry 'Other'	83.4	2.99%
<b>Industry Total</b>	<b>153.3</b>	<b>5.5%</b>
Commercial Electricity	87.5	3.14%
Commercial Gas	67.5	2.42%
Commercial 'Other'	1.4	0.05%
<b>Commercial Total</b>	<b>156.4</b>	<b>5.61%</b>
Public Sector Electricity	29.0	1.04%
Public Sector Gas	56.1	2.01%
Public Sector 'Other'	1.0	0.03%
<b>Public Sector Total</b>	<b>86.0</b>	<b>3.09%</b>
Domestic Electricity	203.7	7.31%
Domestic Gas	575.2	20.64%
Domestic 'Other'	105.2	3.77%
<b>Domestic Total</b>	<b>884.1</b>	<b>31.72%</b>
Road Transport (A roads)	313.3	11.24%
Road Transport (Motorways)	461.4	16.55%
Road Transport (Minor roads)	321.1	11.52%
Diesel Railways	44.8	1.61%
Transport 'Other'	16.5	0.59%
<b>Transport Total</b>	<b>1,157.1</b>	<b>41.52%</b>



**Table 1 - Buckinghamshire 2020 carbon emissions by source** *continued*

Source	Annual Carbon Emissions (kilotonnes CO <sub>2</sub> )	% of Carbon Emissions
Net Emissions: Forest Land	-117.5	-4.22
Net Emissions: Cropland	47.3	1.70%
Net Emissions: Grassland	-47.7	-1.71%
Net Emissions: Wetland	0.0	0.00%
Net Emissions: Settlements	23.4	0.84%
Net Emissions: Harvested Wood Products	0.0	0.00%
Net Emissions: Indirect N <sub>2</sub> O	0.9	0.03%
<b>Land use, land-use change and forestry Total</b>	<b>-93.7</b>	<b>-3.36%</b>
Agriculture Electricity	7.4	0.26%
Agriculture Gas	14.8	0.53%
Agriculture 'Other'	19.9	0.72%
Agriculture Livestock	155.7	5.59%
Agriculture Soils	52.6	1.89%
<b>Agriculture Total</b>	<b>250.4</b>	<b>8.98%</b>
Landfill	174.2	6.25%
Waste Management 'Other'	19.2	0.69%
<b>Waste Management Total</b>	<b>193.3</b>	<b>6.94%</b>
<b>Grand Total</b>	<b>2,786.9</b>	

**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**

The emissions shown in table 2 are those from the Council's operations, such as the buildings and vehicles we operate, and those associated with the transmission and distribution of electricity that the Council uses. Business travel emissions relate to emissions from staff and Councillors 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 is 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.

There have been significant emission savings across all aspects of our operations in '21/'22 compared to our emissions from '18/'19, including 52% and 50% reductions

of CO<sub>2</sub>e emissions from the Council's fleet and building electricity consumption respectively, and bringing emissions from business travel down by 40%.

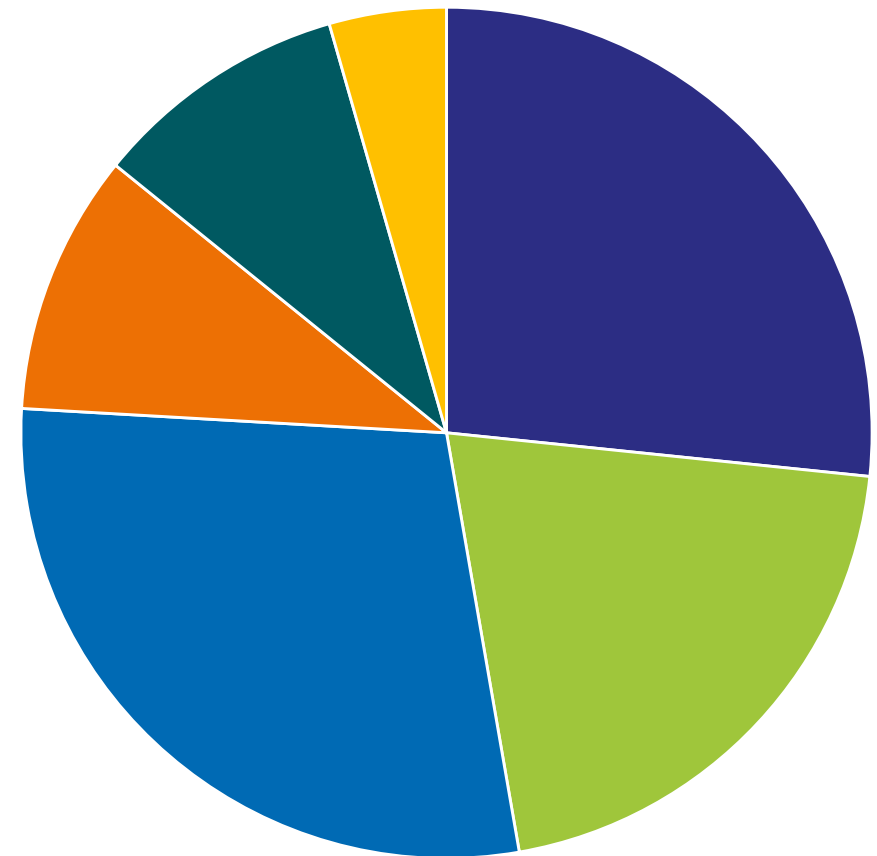
**This has led to a 32% reduction of greenhouse gas (GHG) emissions compared to our emissions from '18/'19 and a 70% reduction of GHG emissions compared to those from 1990. We have kept comfortably within our carbon budget for '21/'22 (7,407 TCO<sub>2</sub>e) and are on track to reduce our carbon emissions by at least 75% by 2030.**



**Table 2 - Buckinghamshire Council's Carbon Emissions**

Activity	2021/22 Annual Carbon Emissions (TCO <sub>2</sub> e)	% of Annual Emissions
Buildings - Gas Consumption	1,624	27%
Buildings - Electricity Consumption	1,257	21%
Street Lighting - Electricity Consumption	1,746	29%
Council Fleet	604	10%
Business Travel	593	10%
Electricity Transmission and Distribution	271	4%
<b>Total</b>	<b>6,095</b>	

**Buckinghamshire Council '21/'22 Carbon Emissions**



- Buildings - Gas Consumption
- Buildings - Electricity Consumption
- Street Lighting - Electricity Consumption
- Council Fleet
- Business Travel
- Transmission and Distribution

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

There are numerous examples of where the Council has supported various communities to date to achieve net zero carbon emissions, including the following:

- Financial support for community tree planting (as a result of a successful bid to the Local Authority Treescaping Fund)
- Provision of Travel Plans and ad-hoc support for Schools
- Supporting Buckinghamshire Community Energy regarding the Wendover Wharf Road Campus Decarbonisation project
- Providing new and innovative electric vehicle charging infrastructure for use by the public
- Introducing more and better quality active travel routes (e.g. the Haydon Hill extension to the Waddesdon Greenway and Wendover Cycleway improvements)
- Establishing e-scooter and e-bike rental schemes
- Promoting a solar PV system group-purchasing (Solar Together) scheme for resident and small business owner occupiers
- Funding the installation of energy efficiency measures in eligible homes via the Green Homes Grant Local Authority Delivery Scheme
- Launching a Zero Waste Map that shows all the shops, recycling points and businesses in Buckinghamshire that can help people reduce their waste
- Providing information and advice to businesses and community groups regarding funding opportunities (e.g. Low Carbon Workspaces) and means to reduce emissions from fleet vehicles (e.g. the Electric Vehicles for Businesses Project)
- Encouraging individuals to adopt more environmentally friendly behaviours via the AWorld app
- Instigating large-scale communication activities (e.g. the Green Wheels in Motion event, and Bucks' Climate Challenge) to make information about tackling climate change more prevalent and accessible

Further details are provided in the ['Activity against Actions'](#) section.

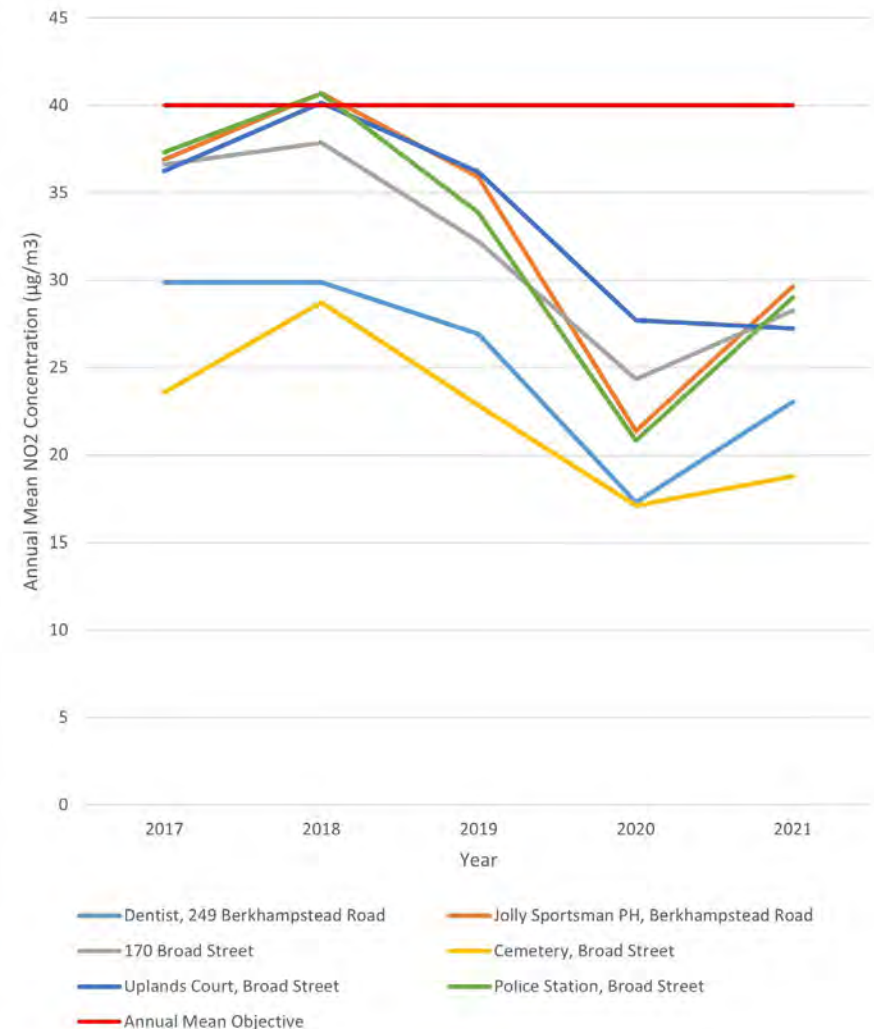
## Progress against Aim 2:

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

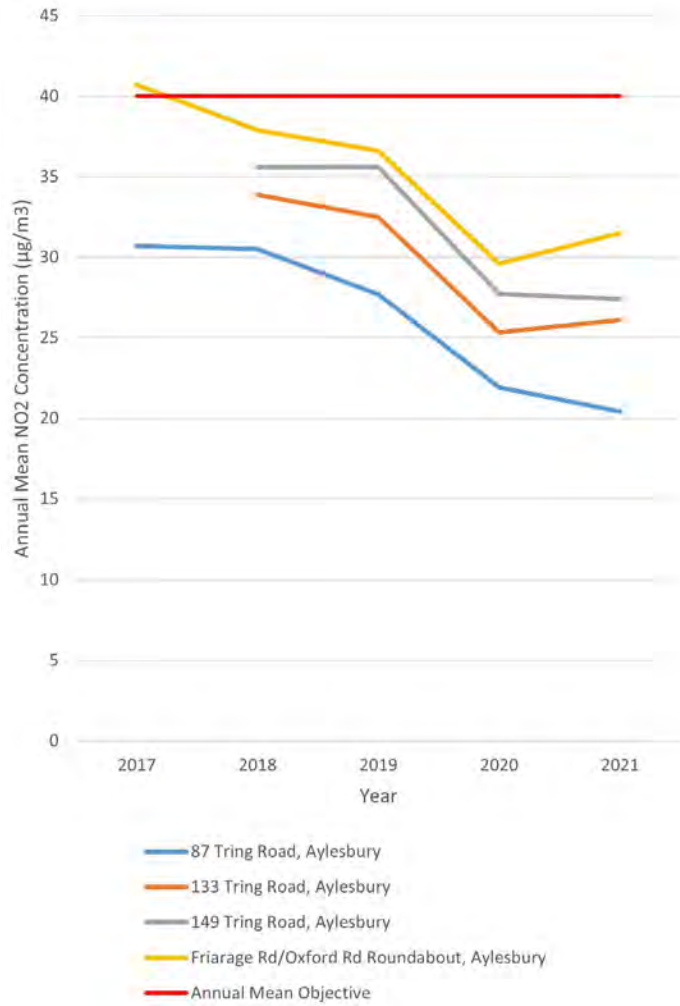
There has been a consistent reduction in recorded levels of nitrogen dioxide (NO<sub>2</sub>) at most monitoring locations for the last five years (2017 - 2021) (please see graphs 2-7) and in 2020 there was a significant reduction in recorded NO<sub>2</sub>. In 2021, air quality monitoring showed there was only one exceedance of the annual mean [National Air Quality Objective](#) for NO<sub>2</sub> within Buckinghamshire. This was located within the Stoke Road Air Quality Management Area (AQMA) in Aylesbury. However, once the data was bias adjusted and the distance was corrected an exceedance was no longer recorded.

It's of note that recorded concentrations of NO<sub>2</sub> have not returned to pre-Covid pandemic levels. This may be a result of a shift of people's/organisations behaviour following the pandemic to work from home more or to use alternative forms of transport.

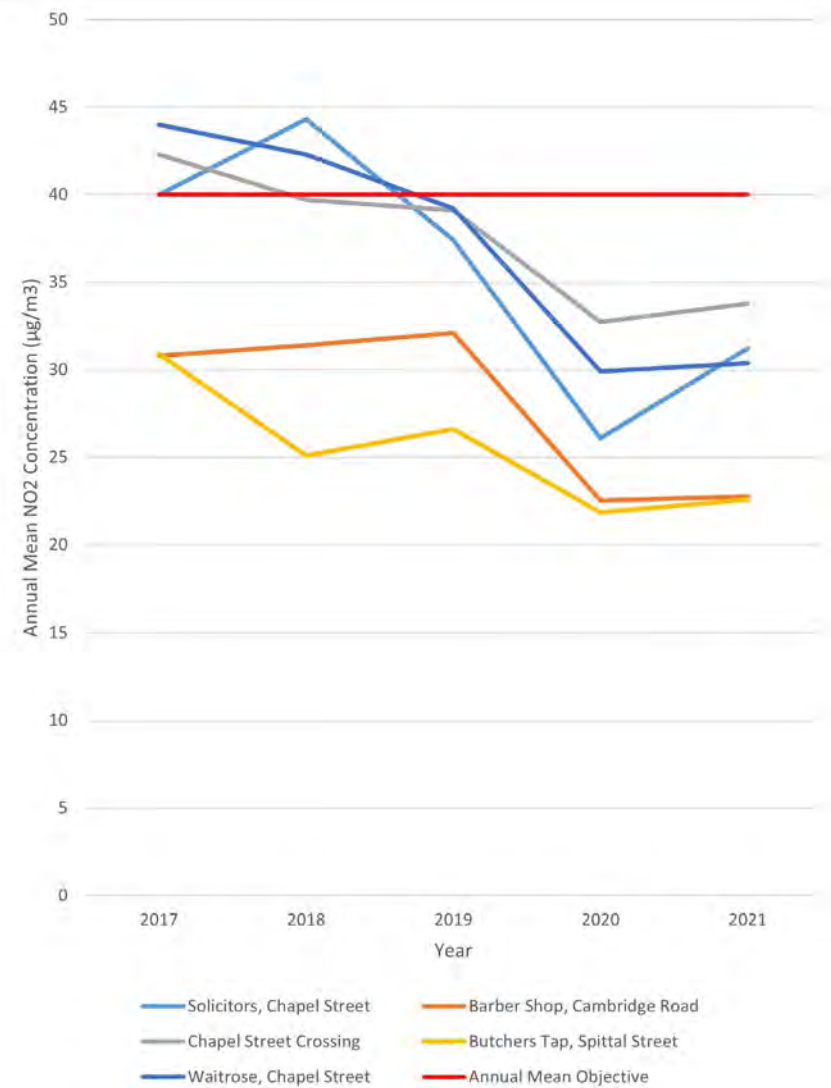
**Graph 2**  
**Annual Mean NO<sub>2</sub> Concentrations Recorded in Chesham AQMA**



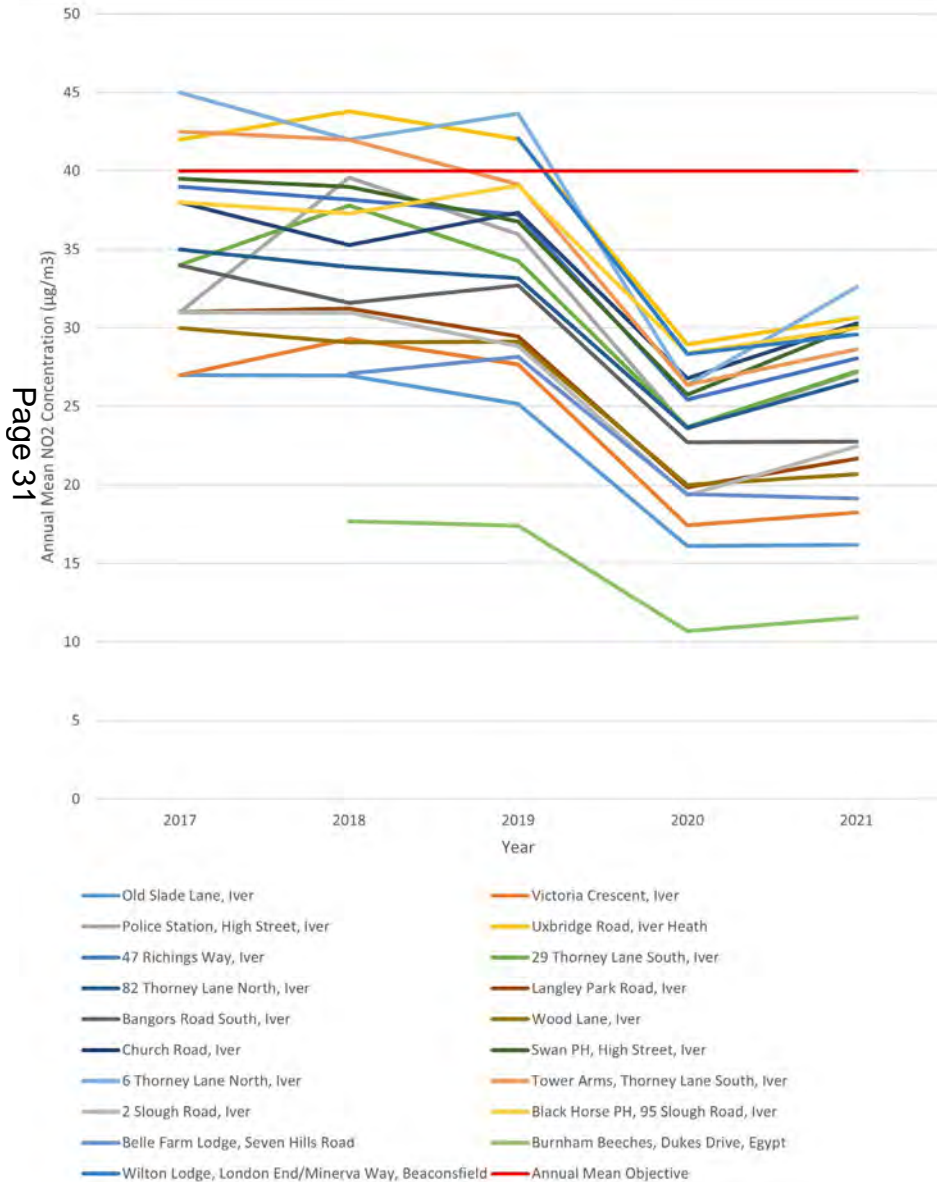
**Graph 3**  
**Annual Mean NO<sub>2</sub> Concentrations Recorded in Friarage Road and Tring Road AQMAs (Aylesbury)**



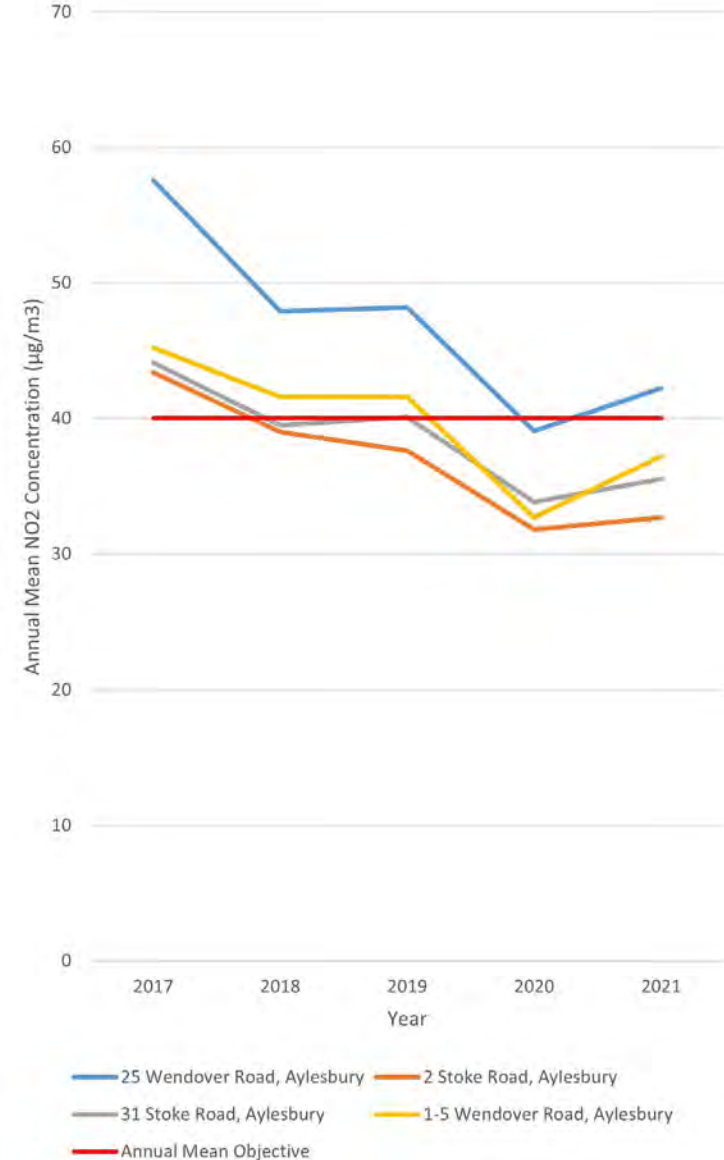
**Graph 4**  
**Annual Mean NO<sub>2</sub> Concentrations Recorded in Marlow AQMA**



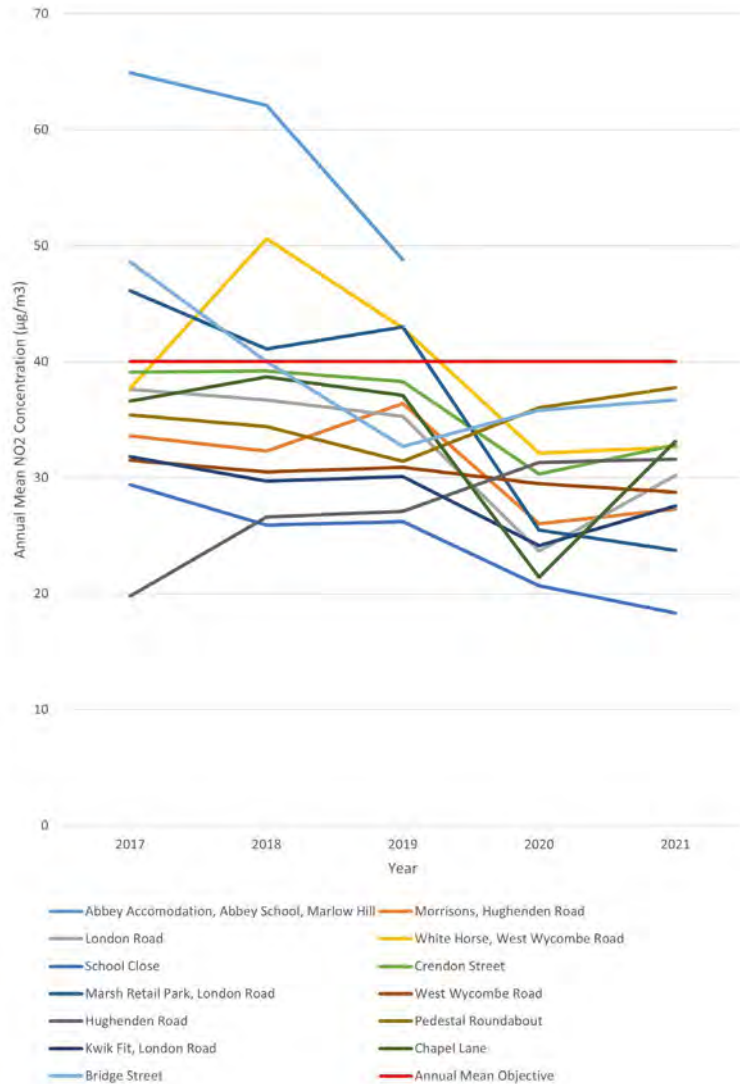
**Graph 5**  
**Annual Mean NO<sub>2</sub> Concentrations Recorded in South Buckinghamshire AQMAs**



**Graph 6**  
**Annual Mean NO<sub>2</sub> Concentrations Recorded in Stoke Road AQMA (Aylesbury)**



**Graph 7**  
**Annual Mean NO<sub>2</sub> Concentrations Recorded in High Wycombe AQMA**



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

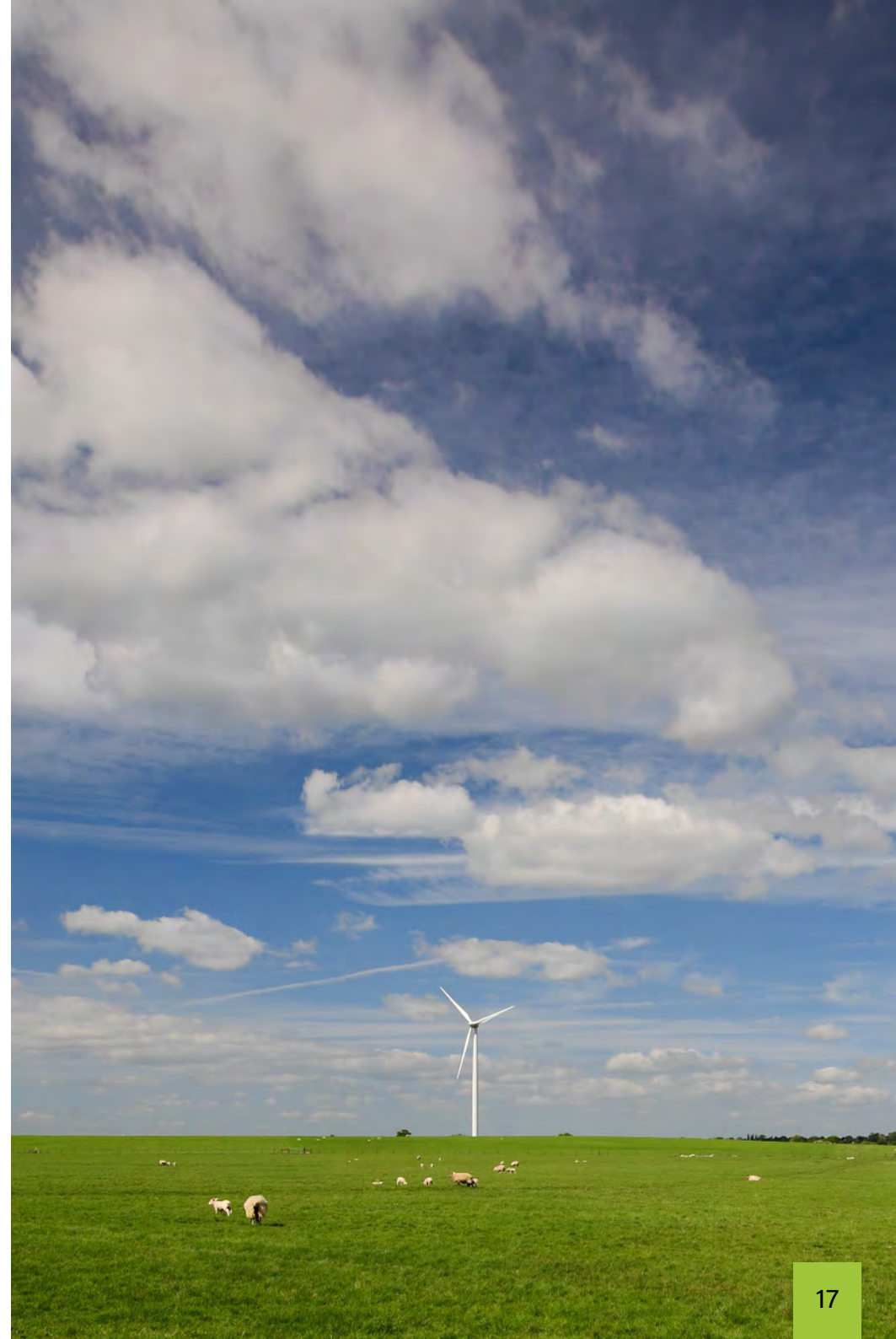
As mentioned in the progress made against objective C there has been a 32% reduction of the Council’s greenhouse gas (GHG) emissions compared to our emissions from ‘18/’19 and a 70% reduction of GHG emissions compared to those from 1990. Similar reductions have been achieved regarding emissions of nitrogen oxides, particulate matter, and other air pollutants.



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

As there has been a consistent reduction in recorded levels of nitrogen dioxide (NO<sub>2</sub>) at most monitoring locations for the last five years (2017 - 2021) (please see graphs 2-7) and annual mean NO<sub>2</sub> concentrations at all recorded locations are below the [National Air Quality Objective](#) (including the Stoke Road Air Quality Management Area where, once the data was bias adjusted and the distance was corrected, an exceedance was no longer recorded) human health will generally benefit.

The Council's Strategic Environmental Protection Team continues to provide comments on planning applications regarding the air quality impacts of proposed developments with the aim of mitigating human exposure to harmful levels of air pollution.



# Activity against actions

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**Details of activities against the actions Climate Change and Air Quality Strategy are provided in the following sections.**

## Governance and Management

### Response to Minimum Energy Efficiency Legislation consultation (re Action 1)

In December 2020 the Council issued a response to a consultation by the Department for Business, Energy and Industrial Strategy (BEIS) - "Improving the energy performance of privately rented homes". The consultation asked for views on a range of options for improving the Minimum Energy Efficiency Standards legislation which currently requires landlords in the private rental sector to ensure properties have a minimum EPC (Energy Performance Certificate) rating of "E". The most likely option would see this raised to "C" between 2025 and 2028, alongside an increase in the financial penalties for non-compliance.

The council was broadly supportive of the proposals, while also raising concerns about the risk of a decrease in the available PRS stock should landlords seek to exit the sector following the changes.

### Response to Defra's consultation on the Designation of the National Highways as a Relevant Public Authority (re Action 1)

Defra carried out a [national consultation](#) from 28 March to 6 June 2022 on their proposal to designate National Highways as a relevant public authority thereby bringing National Highways into the statutory Local Air Quality Management Framework. The consultation also outlined proposed statutory guidance setting out how local authorities and National Highways should work together. The Council's Strategic Environmental Protection Team, working with other key departments provided a technical response.

## **Response to Defra's consultation on the review of the Local Air Quality Management Policy Guidance (re Action 1)**

Defra carried out a second national consultation from 28th March 2022 until 6 June 2022 to seek views on the planned revision to the statutory Local Air Quality Management (LAQM) Policy Guidance.

The LAQM statutory guidance sets out what local authorities should do and the legal duties with which they must comply under Part IV of the Environment Act 1995, to improve local air quality. The guidance is being revised to reflect the legislative changes introduced through the Environment Act 2021 and clarify roles and responsibilities within local government. The Council's Strategic Environmental Protection Team provided a detailed response to the consultation.



### Interdepartmental Working Groups (re Action 3)

In addition to the establishment Council Land Tree Planting Programme Board (which oversees matters in relation to the planting of 543,000 trees on Council Land) 3 interdepartmental groups have been created so far to oversee and progress initiatives relevant to the Climate Change and Air Quality Strategy:

- The Domestic Retrofit Programme Board is concerned with emissions mitigation and climate change adaptation initiatives at domestic properties (and includes representatives from the Climate Response and Housing Teams)
- The Electric Vehicle Charging Infrastructure (EVCI) Working Group deals with matters related to public, and Council fleet and staff electric vehicle charging (and includes representatives from the Parking Services, Transport Strategy, Air Quality, Energy Management, Waste Management, Highways, Property & Assets, and Climate Response Teams).
- 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).



# Monitoring and Reporting

## Council Emissions

### Automatic Meter Reading Meter Rollout Update (re Action 7)

Automated Meter Reading (AMR) meters send accurate meter readings to energy suppliers on a monthly basis (or more frequently). The Council has been managing a roll out of AMR meters on its gas and electricity supplies to: reduce the burden of taking manual meter readings and managing matters in relation to estimated energy consumption (e.g. financial reconciliation regarding energy bills), and improve the management of energy and data accuracy for carbon emissions reporting. To date AMR meters have been installed on 75% and 80% of the Council's gas and electricity supplies respectively.

## County-wide Emissions

### Air Pollutant Sensor Trial (re Action 8)

The Council's Strategic Environmental Protection Team, in conjunction with Spelthorne Borough Council, Ricardo E&E and Heathrow Airport, [was awarded a grant of £124,399 from Defra's Air Quality Grant in 2020/21](#) to test new real time air quality monitoring sensors including electrochemical and particulate sensors, and electronic diffusion tubes (EDT) to monitor air pollution around Heathrow Airport. Several factors including a delay in receiving the funding, EDTs no longer being available to test and complications in purchasing multi-pollutant sensors, in addition to the arrival of the Covid-19 pandemic, resulted in a review and amendment to the original grant proposal. (N.B. a full copy of the report is available on the Council's website [Air Quality Review and Assessment - Buckinghamshire Council - South Bucks Area](#)).

Following the review, several different types of sensors were deployed and tested to establish how reliable the results of the monitoring obtained were. It was concluded that the sensors tested were not yet a 'fit and forget system' as the air quality data obtained required ongoing quality control. Therefore, caution is required when utilising raw data from such sensors. In addition, issues with operational requirements, reliability, drift and the expense in purchasing and completing the required quality control meant there were several major limitations to running such sensors/systems. As the sensors are such a new technology manufacturers also produce updated models quite frequently resulting in older models being out of date quickly and no longer being supported by the manufacturer so they can have a short lifespan.

The Council along with Ricardo E&E are however eager to work with the manufacturers of multi-pollutant sensor to enable them to be a more viable option in the future.

Photo showing a Vaisala monitoring sensor



Photo showing a Praxis Cube monitoring sensor



## **NO<sub>2</sub> Diffusion Tube Monitoring Locations Review (re Action 8)**

In December 2021 the NO<sub>2</sub> 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.

The diffusion tube monitoring data collected is also reviewed. 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. Maps showing the NO<sub>2</sub> diffusion tube monitoring locations can be found in the latest [Annual Status Report](#).

## **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 2022. The report will be made available on our website shortly. However the report from 2021 is [currently available to view](#).

# The Council's emissions

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## **Modular Solar PV, Battery Storage and Electric Vehicle Charging Infrastructure (EVCI) Solution (re Actions 10 and 20)**

The Council has been exploring the potential to site standard solar PV canopies and battery storage technologies alongside EVCI solutions. Standard solar canopy products offered by the market: require high capital investment or complex lease and power purchase agreements to be established; can cause significant disruption to car park operations while being constructed; and may not be suitable for some car park sites [due to shading, size, or matters affecting the ability to attain planning permission for their installation (such as heritage impacts)]. One company has developed a prototype modularised solution that can help overcome these barriers, and has recently started trialling it in a private car park.

On 17 June 2022, the Council submitted a bid for £320,076.24 of LEVI pilot funding trial the modularised hybrid EVCI solution for eight years at Wendover Library Car Park.

It predominantly uses solar photovoltaic canopies (16.56kWp total installed capacity), battery storage (240kWh battery capacity) and energy management technologies to provide power to 12 charge points (CPs). The solution would be connected to the Library's supply and any excess renewable energy could be either used by the Library or exported, thereby reducing the Council's emissions.

## **Solar Car Ports (re Action 12 and 20)**

The Council has engaged with two suppliers regarding the potential for solar car ports on Council-owned car parks. Initial feasibility work, conducted at the same time the carbon audit, indicated that 13 systems could be installed on public car parks with a total installed capacity of 2,675kWp (subject to supplier surveys). An additional desktop assessment has identified the potential to site a 428kWp system on a car park next to one of the Council's operational buildings.



## Council Land Tree Planting Programme (re Actions 13 and 14)

Five thousand eight hundred and sixty trees were planted on Council Land in the 2021-2022 planting season. This includes trees planted: at [Billet Field](#) (on the Council's agricultural estate) (3450 trees); next to Spade Oak Nature Reserve and the public highway [with funding from the [Local Authority Treescapes Fund](#) (LATF)] (586 trees); as part of [Queens Green Canopy](#) (QGC) work in Buckinghamshire (168 trees); and, by Chiltern Rangers (1656 trees).

The Council's Climate Response Team secured an [England Woodland Creation Offer](#) grant of £28,380.00 for the Billet Field Wood project and has registered it with the UK Land Carbon Registry. It's calculated that the project will remove ~411 TCO<sub>2</sub>e by 2122.



# Behaviour

## Guidance on the management of supplier contracts for environmental betterment draft (re Action 15)

Following the adoption of the Climate Change and Air Quality Strategy, services across the Council have acknowledged and responded to it. One notable example is Neighbourhood Services – representatives from this service engaged the Council’s Climate Response Team regarding options to reduce the environmental impacts of a contract to replace cremators at Chilterns Crematorium. This prompted the Climate Response Team’s production and dissemination of draft guidance on the management of supplier contracts for environmental betterment.

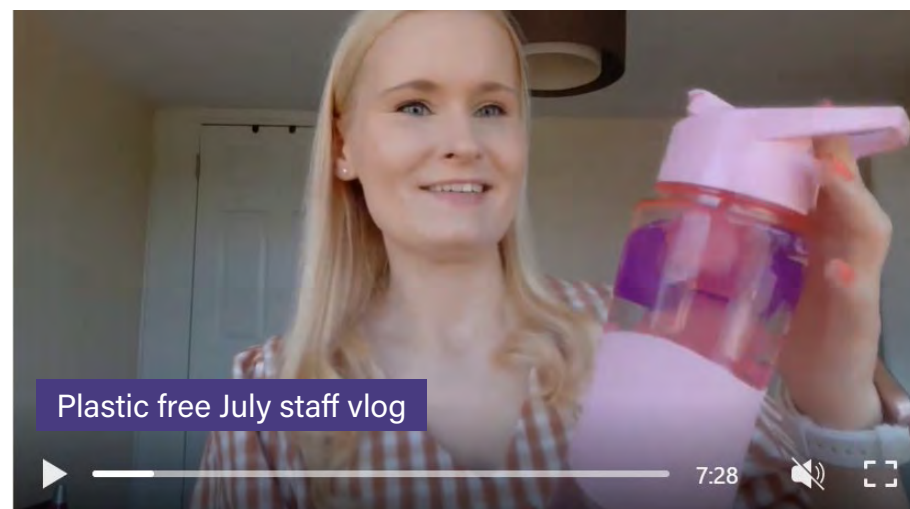
## Climate Change Awareness and Carbon Literacy Training (re Action 16)

On 28 April two~1 hour internal climate change awareness training sessions were held for members, which included details of how the carbon mitigation hierarchy is applied to decision-making to help reduce emissions from individuals’ activities. The sessions were attended by 52 members.

An external training provider was engaged to deliver a day’s worth of training in June to help 13 individuals become certified as Carbon Literate against the requirements of the [Carbon Literacy Project](#). It’s hoped that the Council can become a [Bronze tier Carbon Literate Organisation](#) as a result of the training.

## Internal Communications and Behaviour Change (re Action 16)

Weekly ‘Together’ internal emails to all staff have included messaging to encourage staff to ‘waste less and save more’ (on Earth Day); adopt emissions reducing behaviour (on Clean Air Day); use active travel modes (for National Walking Month); use the [AWorld App](#); and go plastic free in July.



# The Council's Operational Estate

## Operational Buildings

### Heat Decarbonisation Work (re Action 17)

Our work to decarbonise heating systems across our operational estate since the adoption of the Strategy includes the following:

- the production of heat decarbonisation plans for 13 sites (using a third party)
- taking forward two air source heat pump projects with grants of £127,690 and £86,580 from the Public Sector Decarbonisation Scheme
- submitting an application to the Public Sector Low Carbon Skills Fund for heat decarbonisation plans/detailed design plans for 7 sites

### Transition to Cloud Based Servers (re Action 17)

Over the past 18 months, we have replaced over 260 of our traditional on-site computer servers with the Microsoft 'Azure' Cloud service. Moving these out of sites in Aylesbury, Amersham and Wycombe to more energy efficient servers based in the cloud is estimated to save over 156 tonnes of carbon a year.



# Transport

## Internal Communications and Staff Travel (re Action 22)

Weekly 'Together' internal emails to all staff have included items on:

- the Cycle to Work scheme
- one staff member's experience of driving an electric car for 12 months
- the benefits of securing an electric car via the car benefit scheme from CPC Drive/Tusker

111 employees have used the Cycle to Work scheme since May 2020 and in 2021 20.6% of all bikes purchased under the scheme were e bikes; and 56% of all orders placed with CPC Drive/Tusker since October 2018 have been for either electric or hybrid vehicles.



## Travel for Work Purposes

### Upcycling and Electrifying a Refuse Collection Vehicle (re Action 24)

Following submission of a bid in 2021 to [Defra's Air Quality Grant](#), the Council was awarded £578,000 to [upcycle and electrify a refuse collection vehicle \(RCV\)](#). Once the retrofit work has been completed it's anticipated that the zero tailpipe emissions RCV will travel 412 miles a week on collection routes in the north of Aylesbury, including roads in three air quality management areas. As a result it's estimated over 10 tonnes of greenhouse gases (CO<sub>2</sub>e), 69 kg of oxides of nitrogen (NO<sub>x</sub>), and half a kilo of particulate matter emissions will be saved per year.

## Family Time Services' New Electric Vehicles (EV) and EV Charging Infrastructure (re Action 24)

Two new fleet electric vehicle charging points were installed at Family Time Services' operational sites in High Wycombe and Aylesbury (in March and June) to support the replacement of two diesel multi-purpose vehicles (MPVs) with battery electric vehicle alternatives. Just one of these replacements will result in the following emission savings over the next 5 years: 6.97 tonnes of CO<sub>2</sub>e, 62.36 kgs of carbon monoxide, 9.97 kgs of oxides of nitrogen (NOx), and 0.56 kgs of particulate matter.

## Commuting and Working from Home

### Work Smart (re Actions 26 and 46)

Office based Council employees worked from home during COVID-19 pandemic lockdown periods as a result of the swift introduction of IT systems and hardware that enabled remote working. Exceptions to this were those who did not have a suitable working environment at home, or access to equipment only available in the office, or had wellbeing reasons. Work Smart was introduced in October 21 – reducing the time 'any desk' employees must be in the office to 40% of their working week, working from home for the remainder of the week. 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.

The graphic features four portraits of diverse individuals against colored backgrounds (yellow, blue, green, red). A central 'Work Smart' logo is overlaid. Each portrait is associated with a workstyle icon and label: 'Mobile' (man in green sweater), 'Any desk' (woman in orange shirt), 'Fixed' (woman in blue patterned shirt), and 'On-the-go' (man in blue shirt). A purple banner at the bottom of the portraits reads 'Work Smart programme workstyles'.

# Suppliers and partners

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## Partners

### Local Authority Treescapes Fund (LATF) 2021 Bid (re Action 27)

In 2021, the Council's Climate Response Team secured over £203k from a [LATF](#) bid to support tree projects led by several organisations including: Transition Town Marlow, Sue Ryder Prayer Fellowship, Chiltern Rangers C.I.C., Haddenham Parish Council, Buckland Parish Council, and Transport for Buckinghamshire. 817 trees were planted in the '21/'22 planting season as a result.

Deputy Cabinet Member for Environment Jilly Jordan



## Wendover Wharf Road Campus Decarbonisation project (re Action 27)

The Council has supported [Buckinghamshire Community Energy](#) regarding the Wendover Wharf Road Campus Decarbonisation project – which assessed the feasibility of establishing a district heat network (powered by a groundsource heat pump) for seven buildings: John Colet School, John Hampden School, Wendover Junior School, Wendover Swimming Pool, Wendover Youth Centre, Wendover Memorial Hall and Little Acorns Kindergarten. It also identified the potential for installing insulation and other energy efficiency measures (to reduce energy demand) and a solar PV system. The feasibility study was conducted by ReEnergise and funded by the Rural Community Energy Fund.

In July 2022 the results of the assessment were published. It concluded that the best option would be for air source heat pumps to be installed when the (relatively new) existing boilers reach the end of their lives. Cavity wall, loft or roof insulation, and point of use (PoU) water heaters could reduce heat and hot water demand on the Campus by nearly 20%. The installation of solar PV panels on the roofs could provide as much as 450MWh of electricity, which equates to about 63% of actual demand.



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## 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](#).

The team also deliver initiatives such as the Footsteps training scheme, bikeability training and Walk Once a Week (WOW) incentive scheme. In April 2022 [Buckinghamshire Council came 2nd place in the Modeshift STARS league table](#) for the country, with a total of 64 accredited school travel plans across the county. Three schools have also achieved platinum status.

### Ad-hoc Support for Schools (re Action 29)

While a specific service for schools hasn't been formalised, ad hoc support for schools from the Council's Energy and Climate Change Team continues. This included helping Stony Dean School explore the potential to transition its vehicles over to electric alternatives in Sept/Oct 2021. Information was provided regarding the emission and financial savings that could be achieved.





## The Council's Investment Estate

### Planned New Ambulance Resource Facility in High Wycombe (re Action 30)

[The Council approved a proposal in July 2021 regarding a state-of-the-art new ambulance resource facility in High Wycombe](#) (subject to a successful planning application).

Under the existing agreement the Council will build a sustainable and environmentally focused new facility (including high levels of insulation, a heat pump and electric vehicle charging points) to South Central Ambulance Services' design and specification. South Central Ambulance Services would then lease the facility through a long-term rental arrangement.



## Suppliers

### Solar PV at Amersham Depot, Highways Term Maintenance Services Contract, Electric Vehicle Charging Point Investigation at Leisure Centres (re Action 32)

In March 2021 it was announced that Veolia (which delivers the South Buckinghamshire Waste Collection and Street Cleaning Contract) had completed work on a [large solar PV system at the Amersham Depot](#). The system includes 136 solar PV panels and saves 12.25 tonnes of CO<sub>2</sub>e per annum.

Work with other suppliers has included: building in emission reduction considerations in the [highways term maintenance contract that has been awarded to Balfour Beatty \(and commences on 1 April 2023\)](#), and asking Everyone Active (in May 2022) to explore the potential to install electric vehicle charge points at leisure centre sites in Buckinghamshire.

## Water Source Heat Pumps and Solar PV at the Chilterns Lifestyle Centre (re Action 32)

[Funding of £345,386 was awarded to Buckinghamshire Council by BEIS via the Public Sector Decarbonisation Scheme.](#) The funding was used to install water source heat pumps and 450 roof-mounted solar photovoltaic panels at the new [Chiltern's Lifestyle Centre](#) in Amersham (operated by [Everyone Active](#)). The water source heat pumps are the main source of heat for the two new swimming pools, providing heating to both the pool water and pool hall environment. The system is highly efficient and will save up to 180 tonnes of CO<sub>2</sub>e per annum, compared to a traditional gas boiler system. The photovoltaic solar panel system is estimated to save 36.74 tonnes of CO<sub>2</sub>e per year.

Solar PV at the Chilterns Lifestyle Centre



## Gas and Electricity Supplies

### 25% of Purchased Electricity from Renewable Sources (re Action 33)

As of 1 October 2022, 25% of the electricity we use will be purchased from renewable sources.

This decision helps support the renewable generation sector, reduces emissions of greenhouse gases and other air pollutants, and our dependence on fossil fuels. The extraction, processing, and transportation of fossil fuels has various negative environmental impacts so this purchasing decision helps improve the Council's environmental performance overall.

This change is forecast to save nearly 1,000 tonnes of carbon emissions per year.



(left to right) Councillor Gareth Williams, Cabinet Member for Climate Change and Environment and Councillor Steven Broadbent, Cabinet Member for Transport, at one of Buckinghamshire's EV charging points

## South Buckinghamshire Waste Collection and Street Cleaning Contract

### South Buckinghamshire Waste Collection and Street Cleaning Contract Vehicle Emission Reductions Activities (re Actions 34, 35, and 36)

Several emissions reduction projects have been implemented by Veolia since the company took on the contract to deliver [household waste collections and street cleansing services in the Chiltern, Wycombe and South Bucks areas from 7 September 2020](#). All of their vacuum sweepers in operation in Buckinghamshire have dust suppression systems, [electric vehicle charging points have been installed at their waste depots](#), electric vans were introduced to their fleet in 2020, and they started to use hybrid street sweepers in 2021. In addition all their new vehicles are automatically fitted with telematics systems.

The new in-cab technology



## **Buckinghamshire Council Electric Vehicle Action Plan 2022-2027 (re Action 38)**

On 7 June 2022 the Council adopted a [5-year Action Plan](#) to support the transition of the county to electric vehicles (EVs). The Action Plan covers a range of measures, including doubling the number of EV charging parking spaces across Buckinghamshire by 2023/4 and an ambition to have more than 1,000 publicly-available charging spaces across the county by 2027. This addresses the government's [electric vehicle infrastructure](#) strategy, which aims to have 300,000 publicly-available charge points across the UK by 2030.

## **Response to Defra's consultation on Environmental Targets (re Actions 1 and 39)**

The Environment Act 2021 requires the government to set at least one long-term target in each of the following areas: air quality, water, biodiversity, and resource efficiency and waste reduction. [The Clean Air Strategy](#) 2019 also gives a commitment to set a legally binding target for PM2.5. Defra

therefore carried out a [national consultation](#) from 16 March 2022 until 27 June 2022 on these new proposed targets.

For air quality the consultation proposed to introduce the following target for PM2.5:

- Annual Mean Concentration Target ('concentration target') – a target of 10 micrograms per cubic metre ( $\mu\text{g m}^{-3}$ ) to be met across England by 2040.
- Population Exposure Reduction Target ('exposure reduction target') – a 35% reduction in population exposure by 2040 (compared to a base year of 2018).

The Council's Strategic Environmental Protection Team, working with other key departments provided a technical response.

# Transportation

## 2021 Hackney Carriage and Private Hire Licensing Policy (re Action 40)

A new [Hackney Carriage and Private Hire Licensing Policy](#) came into force in September 2021 with the aim of improving the environment and air quality by encouraging the use of low and ultra-low emission [such as electric, hybrid or liquefied petroleum gas (LPG)] taxi and private hire vehicles (PHVs). From the date of the implementation of the policy zero and ultra-low emission vehicles will be licensed for up to 15 years, and all other vehicles will be licensed for up to 10 years (except for wheelchair accessible and prestigious vehicles which can also be licensed for 15 year).

As a result of the Council's vehicle age policy, over 90% of taxis and PHVs now meet Euro 5 emission standards as a minimum and a third now meet the higher Euro 6 emission standards. The Council aims to only issue licences to ultra-low or zero emission vehicles by 2030.



## New and Innovative Electric Vehicle Charging Infrastructure (re Action 42)

The Council secured £105k in 2021 from the [On Street Residential Chargepoint Scheme](#) to install 32 new electric vehicle chargepoints (EVCPs) in car parks in Buckinghamshire. In addition, the On-Street Residential Induction Charger demonstrator project resulted in cutting edge induction charging bays and specialised electric hire vehicles being introduced in [Liston Road Car Park \(Marlow\) in September 2021](#) and in [Summer's Road Car Park in Burnham in October 2021](#).

On 17th June 2022 the Council submitted an application for £2.47m to the LEVI Fund for in-pavement cable channels, lamp post/bollard style chargepoints (20 EVCPs), an EV car club with induction charging, and a solar canopy car port with battery storage and 12 EVCPs. The Council has also submitted another bid to the [On Street Residential Chargepoint Scheme](#) (on the 20th July 2022) which should fund an additional 64 chargepoints in 16 public car park locations.



EV charging points being installed in Aylesbury



EV charging points in Chesham

## Haydon Hill Extension to the Waddesdon Greenway (re Action 42)

A [650m extension to the 'Waddesdon Greenway'](#) was opened in [August 2021](#) for people using active travel modes (e.g. walking and cycling). It runs from Gogh Road, Haydon Hill to Aylesbury Vale Parkway railway station, providing an important connection from the [Emerald Way cycle route through to the Waddesdon Greenway](#).

It includes a new 15 metre long bridge over the River Thame, four new bench seats, additional flood mitigation measures and special solar eye lights to illuminate sections of the pathway at night; and was funded with a £400k grant from the Department for Transport.

Opening of Haydon Hill Greenway extension



Steve Broadbent, leads the way along the new extension







### **Wendover Cycleway Improvements (re Action 42)**

Improvements have been made to the existing Amber Way in Wendover (connecting Wendover to Aylesbury town centre) in order to provide a better route for both pedestrians and cyclists (including priority side road crossing). A new link to Wendover Rail Station has been included to help improve connectivity to rail services. The scheme was delivered using £500k from HS2 Ltd.

### **Emergency Active Travel Fund Schemes Made Permanent (re Action 42)**

Following £514k investment from the Department for Transport into [Emergency Active Travel Fund Schemes](#) (trial schemes to reallocate road space and encourage active travel during the pandemic), two of the schemes were made permanent in April 2022.

In Southcourt (Aylesbury) the 'Jet Way' cycle route was diverted (following previous severance due to the closure of the railway crossing at Old Stoke Road) providing a new walking/cycling link from Stoke Mandeville to Aylesbury town centre. The scheme includes a segregated cycle lane on Churchill Avenue and a 'point closure' on Old Stoke Road to remove through traffic (to provide a safer environment for pedestrians and cyclists).

The second initiative was a 'quietway' created on Trinity Road in Marlow by closing the road off to traffic and only allowing access for pedestrians and cyclists.

## Electric Scooters (re Action 44)

Buckinghamshire Council has implemented an [Electric Scooter rental trial](#) to help support a 'green' alternative to local travel in Aylesbury, High Wycombe, and Princes Risborough.

It is due to operate until the end of November 2022 and since it began in November 2020 there have been over 190,000 rental e-scooter journeys covering over 210,000 miles (with average journey distance of 2 miles).

As approximately 20%-30% of rides are replacing motorised vehicle trips it's estimated that the scheme has saved 21.7 tonnes of carbon emissions.

E-scooter rental scheme, operated by Zipp Mobility





## Electric Bikes (re Action 44)

Page 59

The Council [successfully implemented the first e-bike rental scheme in the county](#) in March 2021. The bikes charge up at docking stations located at Aylesbury Vale Parkway railway station and Waddesdon Manor and are available 365 days a year. The scheme is operated by Smoove, and the bikes receive repair and maintenance work from Cyclefleet (an organisation based in Great Missenden).

The trial is being conducted for an initial period of 12 months and was funded through a grant provided by the Department for Transport. From August 2020 until December 2021 a total of 20 bikes were in operation. During this period the bikes were hired 3,552 times and covered a total distance of 33,995 kilometres.

## Upgrading of traffic signals at Stoke Road Gyratory, Aylesbury (re Action 47)

In 2021, the Council secured a £500k traffic signals maintenance grant from the Department of Transport for refurbishing the signals at the Walton Street Gyratory in Aylesbury. SCOOT (split cycle offset optimisation technique) sensors enable groups of traffic lights to pick up traffic data which is then used to synchronise the lights to reduce delays. MOVA signals are used at standalone junctions, altering the length of time a light stays red according to traffic volume. The SCOOT and MOVA (microprocessor optimised vehicle actuation) systems will be installed as part of the work to make the lights work more efficiently to reduce traffic jams.

New Puffin crossings will also be installed with sensors which adapt the length of time the lights stay red according to how fast a pedestrian crosses the road.

The Gyratory junction forms the Stoke Road Air Quality Management Area (AQMA) and it's anticipated that the upgrade will also benefit air quality in the local area.

# Buildings and Developments

## Housing

### Green Homes Grant Local Authority Delivery Schemes and Sustainable Warmth (re Actions 52 and 53)

£7.4m has been secured to deliver energy saving measures in local domestic properties with [Energy Performance Certificate](#) ratings of D, E, F, and G and where the household income is ≤£30k (from 2020 to March 2023). The funding is split across three consecutive schemes – the Green Homes Grant Local Authority Delivery Scheme (GHGLAD) 1b, GHGLAD2, and Sustainable Warmth. [GHGLAD1b funding was awarded following submission of a consortium bid with Watford Borough Council](#) and the scheme was delivered by the National Energy Foundation (as the Managing Agent) – it has resulted in 91 properties in the area being retrofitted with energy efficiency measures.

The Council has worked with four major Residential Social Landlords (RSLs) to maximise the opportunity under GHGLAD2 to improve the energy performance of their eligible housing stock.

The scheme requires a landlord to match fund a third of the cost of the measure(s) installed and the outcomes of GHGLAD2 will be known after the scheme closes in September 2022.

[Sustainable Warmth](#) will follow GHGLAD2 and support energy performance improvements in both eligible on and off-gas grid homes with more funding being available for measures in off-gas grid homes with lower EPC ratings. GHGLAD2 has largely been managed by the [Greater South East Net Zero Hub](#) and this will continue to be the case for Sustainable Warmth.



## Buckinghamshire Solar Together Scheme (re Action 53)

A Buckinghamshire Solar Together scheme was launched on 9 May 2022. The aim of the initiative is to help resident and small business owner-occupiers interested in installing solar PV and battery storage (with an option for an electric vehicle charging point) receive offers for installing these measures that are up to 30% less than those typically provided by the market. Following a postal mailout to 151,340 addresses (identified as potentially being eligible for the scheme), there were 6,990 registrations to the scheme. Installers, approved by IChoosr, competed (via a reverse auction process in summer 2022) to have their offer presented to registrants, and registrants received their offers by 28 July 2022. As of 15th August 2022 over 950 offers have been accepted and it's projected that the scheme will result in 675 tonnes of carbon emissions being saved per year.



Zero Waste Map - [recycleforbuckinghamshire.co.uk/zerowastemap](https://recycleforbuckinghamshire.co.uk/zerowastemap)

## Economy

### Zero Waste Map (re Actions 54 and 55)

[The Council marked Zero Waste Week in 2020 \(7 – 9 September\) by launching its own local zero waste map.](#) The [map](#) shows all the shops, recycling points and businesses in Buckinghamshire that can help people reduce their waste (e.g. a nappy library, zero waste refill shop, furniture repairs or just somewhere to recycle a carrier bag).

## Low Carbon Workspaces (re Action 56)

[Low Carbon Workspaces](#) helps businesses reach their net zero goals, through grant funding for projects at commercial premises that reduce carbon emissions. Projects which lower on-site carbon emissions, reduce energy usage, or divert waste from landfill are supported by the scheme. These include the installation of LED lighting, solar PV systems, heating upgrades, insulation/glazing, and many more. The team also provide free energy saving advice to those who engage with the scheme, and are able to suggest further actions that can be taken to decrease carbon emissions and save energy costs. Since 2017 200 businesses in Buckinghamshire have been assisted by the scheme (with £589,546 in grant funding) leading to 662 tonnes CO<sub>2</sub>e and £394,337 energy cost savings per year.

## Electric Vehicles for Businesses Project (re Action 56)

The Council's Strategic Environmental Protection Team [were awarded £97,900 from Defra's Air Quality Grant 2021/22](#) in Spring 2021 to work with Global Action Plan (GAP) and local business engagement groups, to lead a campaign to accelerate the mode shift to electric vehicles and e-bikes in Buckinghamshire. Under the scheme 30 large employers will receive tailored, high quality, and independent support to implement actions to increase EV and e-bikes in their own operations and to encourage and enable 10,000 of their staff to buy or lease EVs and e-bikes taking advantage of attractive incentives on offer.

The initial stages of the project including research into the provision of EVs were concluded in 2021. Global Action Plan working with Bucks Business First and Globe BID (Business Improvement and Delivery) are now in the process of engaging with the companies who have joined the scheme.

More information including FAQ's on the project can be found on our [website](#).

## 2022 Clean Air Day Event (re Action 56)

Buckinghamshire Council in conjunction with Bucks Business First, Global Action Plan and the University of Buckingham held an event on Clean Air Day (16 June 2022) for local businesses.

The day included a 'Focus on Marketing Your Green Credentials' workshop and a Networking Lunch, where attendees joined representatives from Buckinghamshire Council, Buckinghamshire Business First and Global Action Plan for an update on the support available for businesses adopting electric vehicles and creating low-carbon workspaces. One-to-one advice was also available from Low Carbon Advisers and Global Action Plan to help businesses reduce their energy and associated cost, measure their carbon footprint, and find out what resources are available to start the transition to adopting electric vehicles for individual businesses.



Clean Air Day Event - 16 June 2022

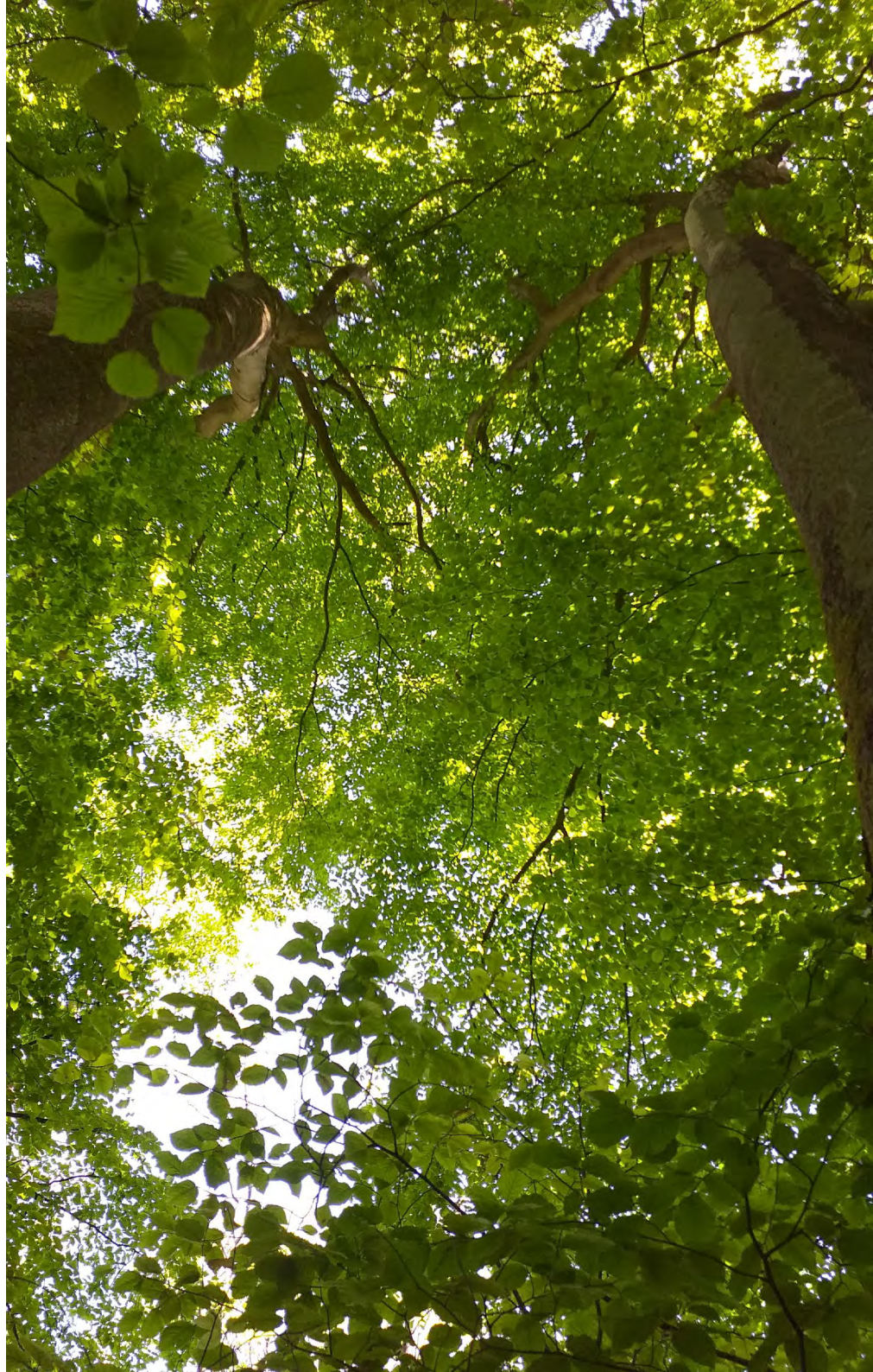


Clean Air Day Event - Keith Cotton from Global Action Plan

## Communication of Opportunities to Community Boards and Businesses (re Action 56)

Community Board Coordinators have passed on information provided by the Council's Climate Response Team to [Community Boards](#) regarding funding and other opportunities that can help organisations address climate change, including details of the following: [Rural Community Development Fund](#), [The Greening Campaign](#), [HS2 Community and Environment Fund](#), [The Tree Council Branching Out Fund](#), [Urban Tree Challenge Fund](#), [Veolia Environmental Trust Grants](#), [Gawcott Solar C.I.C.'s Bee Green Grant Fund](#), and [Heart of Bucks](#) funding.

The Buckinghamshire Solar Together scheme was advertised on the [Low Carbon Workspaces website](#) and promoted in an e-shot to businesses from Low Carbon Workspaces. Furthermore the [£250 vouchers offer to businesses by Visit Buckinghamshire to reduce their carbon footprint](#) was promoted in an e-shot, and the [Clean Air Day Networking Lunch was mentioned in a Council press release](#).





# Environment, Land and 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 \(Newt Ditch\)](#), at [Pednormead End in Chesham](#) [which includes culvert replacement construction work (now planned for summer 2023), 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.



Pednormead End, Chesham

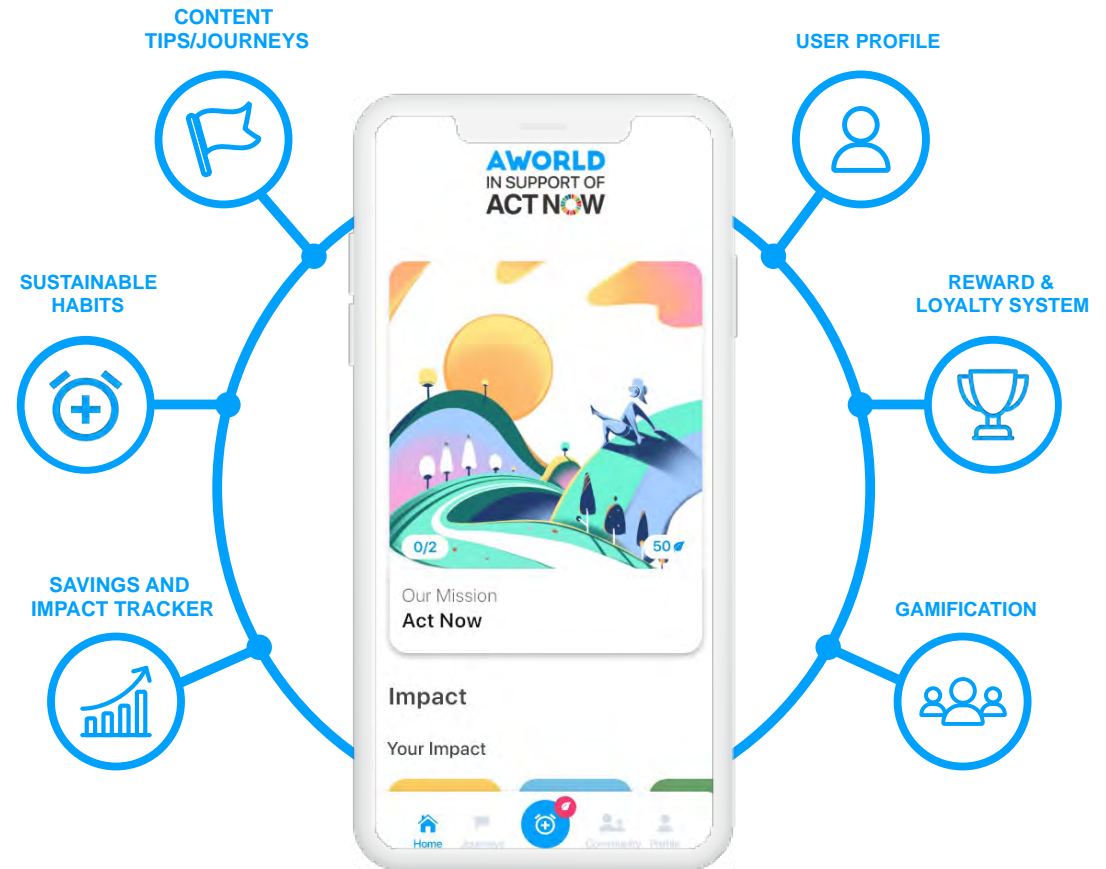


Excavations showing issues with rainfall and rising water

## AWorld App (re Actions 58 and 60)

[On 22nd April 2022 \(Earth Day\) Buckinghamshire Council became the first local authority in the UK to support the AWorld app.](#) AWorld is the official platform in support of ActNow, the United Nations campaign for individual action on climate change and sustainability. The app guides users towards living sustainably. It does this by showing people how much energy or water they can save by making small changes to their daily lives and creating new habits – such as putting the washing machine in eco wash mode or unplugging a charger as soon as a mobile phone is fully charged.

It's estimated that 14,466 kgs of CO<sub>2</sub>, 1.11m litres of water and 5346 kWhs of electricity have been saved so far as a result of environmentally friendly actions taken and recorded on the app.



# Health and Communications

## Community Board Air Quality Campaign Toolkits (re Action 59)

The Council's Strategic Environmental Protection Team in conjunction with Spelthorne Borough Council and Ricardo E&E, were [awarded a grant of £91,273 from Defra's Air Quality Grant](#) in 2021/22 to create air quality campaign toolkits for use by Community Boards. The toolkits will contain materials, advice, and information packs on running campaigns, which will enable the Boards, and other organisations/groups within their areas, to raise awareness of local air quality issues. An air quality sensor will also be included in each pack which will record air pollution levels.

The packs will help educate residents, businesses, and visitors (to the area) regarding how they can reduce emissions, and provide a basic understanding on air pollutant dispersion and how to reduce exposure to air pollution, and what the Council is doing to reduce air pollution in their area and how they can help. The packs are due to be rolled out in September 2022.



## 'Green Wheels in Motion' Event (re Action 59)

A [UN Climate Change Conference \(COP 26\)](#) related transport decarbonisation event was held on Wednesday 10 November 2021 at the [Lunaz Group's](#) headquarters. It featured presentations from [Buckinghamshire Council](#), [England's Economic Heartland](#), [Buckinghamshire Business First \(BBF\)](#), the Lunaz Group, [Buckinghamshire Local Enterprise Partnership](#), and [Buckinghamshire Community Energy](#), and videos from [Robert Bosch Ltd](#). These organisations had formed a partnership, led by Buckinghamshire Council, for the purpose of submitting a bid for funding for the event from the [Greater South East Energy Hub](#). The Council was notified on 10 September that the bid submitted for £28,500 on 27 August had been successful.

Local businesses were contracted by the Council to stage the event, including [Cube Video](#) (event production) and [Brickhill Bistro](#) (catering). [Char.gy](#), [Zipp Mobility](#), and CycleFleet, suppliers of sustainable transport solutions in Buckinghamshire, provided electric vehicle charging, e-scooter and e-bike displays and interactive demonstrations. [Cue](#) facilitated a [livestream](#) of the proceedings (which was connected to the Council's [YouTube](#) and [Facebook](#) pages) and a school pupil from [Stony Dean School](#), who submitted the winning design for the 'Design a Green Bus' competition for schools, enjoyed a tour of Lunaz's vehicle upcycling and electrification facility.



## Bucks' Climate Challenge (re Actions 59 and 60)

In September 2021, Buckinghamshire Council launched a new public awareness campaign to help tackle climate change, called the [Bucks' Climate Challenge](#). The campaign aims to generate more environmentally sustainable behaviour and activity in Buckinghamshire to contribute to the net zero carbon emissions goal and improve air quality.

A new campaign page on our website was launched, to gather all the information in one easily accessible place, including grants and schemes to improve the energy performance of homes and links to calculators or tips to work out individual carbon footprints. We have also updated our refuse vehicles with campaign artwork, used social media ads and organic posts to carry messaging that will help people respond and/or adapt to climate change, and ran a radio ad urging people to take action.



Buckinghamshire Council

# Climate Change & Air Quality Strategy

2021-2022 Progress Report

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# Climate Change and Air Quality Strategy – Action Plan

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Last updated: 08/22

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A summary of the activity against the 60 actions in the Climate Change and Air Quality Strategy ('main document') is presented in Table 1.

**Table 1 Climate Change and Air Quality Strategy Actions.**

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
Governance and Management			1. Continued engagement with central government on air quality and greenhouse gas emissions issues.	Short	Inform & Influence	Response to Minimum Energy Efficiency Legislation consultation	Dec 2020			
						Defra consultation on environmental targets which includes targets for PM <sub>2.5</sub> <sup>1</sup>	16/03/22	Submitted response to Defra	27/06/22	
						Response to Defra's consultation on the Designation	06/06/22			

<sup>1</sup> For more information, please visit: <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets/>



Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						of the National Highways as a Relevant Public Authority				
						Response to Defra's consultation on the review of the Local Air Quality Management Policy Guidance	06/06/22			
Governance and Management			2. Explore carbon offsetting fund and low carbon energy generation investment options.	Medium	Financial / Regulatory Role					
Governance and Management			3. Establish and maintain interdepartmental working groups	Short	Direct Control	Domestic Retrofit Programme Board established	16/07/21			

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			accountable for the delivery of actions.			EVCI <sup>2</sup> and Solar Car Port Programme Board / Working Group established	11/08/21			
						Council Estate and Climate Change Board established	04/01/22			
Governance and Management	Review and Update		4. Review and update the strategy and action plan so that they are fit for purpose for each carbon budget.	Short	Direct Control					
Governance and Management	Review and Update		5. Determine the most practicable means of assessing the Council's Scope 3 emissions.	Short	Direct Control					

<sup>2</sup> Electric Vehicle Charging Infrastructure

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
Governance and Management	Monitoring and Reporting	Council's Emissions	6. Monitor and report quarterly on emissions savings across Council operations	Short	Direct Control					
Governance and Management	Monitoring and Reporting	Council's Emissions	7. Improve data management and quality to better inform options for reducing emissions and performance monitoring.	Short	Direct Control	Automatic Meter Reading meter rollout	Ongoing	Installed on 75% and 80% of the Council's gas and electricity supplies respectively.	Aug 2022	
Governance and Management	Monitoring and Reporting	County-wide Emissions	8. Maintain and enhance effectiveness of outdoor air pollution monitoring.	Short	Direct Control	Defra Air Quality Grant bid to test new real time air quality monitoring sensors	Sept/Oct 2018	Successful bid outcome - £124,399 awarded <sup>3</sup>	02/04/19	

<sup>3</sup> For more information, please visit: <https://www.gov.uk/government/news/3-million-boost-for-innovative-local-air-quality-improvements--4>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
								Real time air quality monitoring sensor study completed <sup>4</sup>	Dec 2021	
						NO <sub>2</sub> monitoring locations review	Annually every December	Review completed <sup>5</sup>	Dec 2021	
Governance and Management	Monitoring and Reporting	County-wide Emissions	9: Report annually on progress made against actions and reducing emissions.	Short	Direct Control	Submission of an Annual Status Report <sup>6</sup> (ASR) to Defra detailing the actions the Council has taken in 2021 to improve air quality	30/06/22			
The Council's Emissions to Air			10. Monitor the development of innovative solutions which could help	Short	Direct Control	Application for £320,076.24 submitted to the Local	17/06/22			

<sup>4</sup> For more information, please visit: <https://www.southbucks.gov.uk/Review-and-Assessment>

<sup>5</sup> Maps showing the NO<sub>2</sub> diffusion tube monitoring locations can be found in the 2021 [Annual Status Report](#)

<sup>6</sup> The 2021 Annual Status Report is accessible via the following link: <https://www.buckinghamshire.gov.uk/environment/air-and-water-quality/air-quality-status-report-2021/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			reduce our emissions.			Electric Vehicle Infrastructure (LEVI) Fund for a modular system that incorporates solar PV, battery storage and EVCI technologies				
The Council's Emissions to Air			11. Review carbon offsetting options and develop a policy on their use.	Short	Direct Control					
The Council's Emissions to Air			12. Explore the potential for renewable energy generation projects on the council's land (e.g. a solar farm).	Medium	Direct Control	Engagement with two suppliers regarding the potential for solar car ports on Council car parks	17/06/21 07/07/21 11/08/21	(13 systems could be installed on public car parks with a TIC of 2,675kWp). 428kWp system could potentially be installed at a Council operational site		

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
The Council's Emissions to Air			13. Implement a large scale tree planting programme across the estate.	Medium	Direct Control	WCDPs <sup>7</sup> produced for Phase 1	12/08/21			
						Invitation to Quote for Woodland Creation and Maintenance at Billet Field published	18/10/21	Contractor selected <sup>8</sup> . Woodland creation at Billet Field completed (3450 trees)	March 2022	~411 tCO <sub>2</sub> e by 2122
						LATF funded community tree planting in Spade Oak Meadow <sup>9</sup> and next to the public highway	08/01/22	586 trees planted	March 2022	
						Trees offered to schools and care homes as		168 trees planted on Council owned sites	March 2022	

<sup>7</sup> Woodland Creation Design Plans

<sup>8</sup> For more information, please visit: <https://www.contractsfinder.service.gov.uk/notice/3e503a8a-0b7e-4800-91eb-1379aca2a01b?origin=SearchResults&p=1>

<sup>9</sup> Opportunity publicised by Releaf Marlow: <https://www.facebook.com/events/994278691152668/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						part of the Queen's Green Canopy  Tree planting by Chiltern Rangers on Council sites		1656 trees planted	March 2022	
The Council's Emissions to Air			14. Explore the potential for blue and green infrastructure improvement projects (e.g. green roofs) across our estate.	Medium	Direct Control	LATF <sup>10</sup> bid includes provision for tree planting at highways verge locations	29/06/21	LATF funding secured (~£203k) to support tree planting and maintenance on highways verges and in community spaces	13/09/21	
The Council's Emissions to Air	Behaviour		15. Embed climate change and air quality considerations in policy and decision making.	Medium	Direct Control	Climate Change and Air Quality Strategy formally adopted <sup>11</sup> .	19/10/21			

<sup>10</sup> Local Authority Treescaping Fund

<sup>11</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/together-for-buckinghamshire-together-for-our-planet/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Neighbourhood Services consider the environmental impacts of a contract to replace of cremators at Chilterns Crematorium	27/10/21	Guidance on the management of supplier contracts for environmental betterment draft provided	12/11/21	
The Council's Emissions to Air	Behaviour		16. Engage and inform staff and councillors how they can reduce emissions through simple changes to behaviour.	Short	Direct Control	Two Member Climate Change Awareness Training delivered (52 attendees)  Staff encouraged to 'waste less and save more' on Earth Day (22/04/22) (Together Now email)	28/04/22  20/04/22			



Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Staff encouraged to adopt emission reducing behaviour on Clean Air Day (Together Now email)	15/06/22			
						Staff encouraged to use active travel modes for National Walking Month (Together Now email)	18/06/22			
						Staff encouraged to use the AWorld app (Together Now email)	11/05/22			
						Staff encouraged to go plastic free	29/06/22			

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						in July (Together Now email)				
						Carbon Literacy Training <sup>12</sup> delivered to 13 individuals	29 <sup>th</sup> – 30 <sup>th</sup> June 2022			(Individuals' carbon footprint reduced by 5-15%)
The Council's Emissions to Air	The Council's Operational Estate	Buildings	17. Identify and implement renewable energy and energy efficiency measures across the operational estate, in line with the accommodation strategy and repair and renewal cycles.	Short	Direct Control	Commissioning of consultants to undertake a review of Council buildings to inform the production of a heat decarbonisation plans (HDPs)	Sept / Oct 2021			

<sup>12</sup> For more information on the Carbon Literacy Project, please visit: <https://carbonliteracy.com/organisation/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Taking forward an air source heat pump (ASHP) project with a £127,690 grant from the PSDS <sup>13</sup>	04/02/22 <sup>14</sup>			
						Taking forward an air source heat pump (ASHP) project at Aylesbury Lending Library with a £86,580 grant from the PSDS <sup>15</sup>	27/01/22 <sup>16</sup>			
						Application to the Public Sector Low	15/06/22	Application not successful due to the	15/08/22	

<sup>13</sup> Public Sector Decarbonisation Scheme (for more information, please visit: <https://www.gov.uk/government/collections/public-sector-decarbonisation-scheme>)

<sup>14</sup> Grant offer date

<sup>15</sup> Public Sector Decarbonisation Scheme (for more information, please visit: <https://www.gov.uk/government/collections/public-sector-decarbonisation-scheme>)

<sup>16</sup> Grant offer date

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Carbon Skills Fund (LCSF) for HDPs/detailed design plans for 7 sites		LCSF not being able to accommodate all bids		
						Transition to cloud-based servers project	2021 – 2022	260 on-site computer services replaced with the Microsoft 'Azure' Cloud service	Aug 2022	156 tCO <sub>2</sub> e per annum
The Council's Emissions to Air	The Council's Operational Estate	New Builds	18. Ensure Council new builds are as low carbon as practicable taking into account available budgets.	Short	Direct Control					
The Council's Emissions to Air	The Council's Operational Estate	Street Lighting	19. Retrofit LEDs to remaining street lights by 2025 (subject to funding).	Short	Direct Control					
The Council's Emissions to Air	The Council's Operational Estate	Land	20. Conduct feasibility studies for the installation of	Medium	Direct Control	Engagement with two suppliers	17/06/21 07/07/21 11/08/21	(13 systems could be installed on public car parks with a TIC of		

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			solar car ports at appropriate parking sites.			regarding the potential for solar car ports on Council car parks		2,675kWp). 428kWp system could potentially be installed at a Council operational site		
						Application for £320,076.24 submitted to the Local Electric Vehicle Infrastructure (LEVI) Fund for a modular system	17/06/22			
The Council's Emissions to Air	The Council's Operational Estate	Land	21. Enhance and support sustainable tree management practices.	Short	Direct Control					
The Council's Emissions to Air	Transport		22. Promote schemes which enable staff to purchase bikes and ULEVs.	Short	Direct Control	Together (internal email to all staff) includes an item on The	02/03/22	111 employees have used the scheme since May 2020 (N.B. in 2021 20.6% of all bikes purchased under the scheme were e bikes)	27/07/22	

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Cycle to Work Scheme <sup>17</sup>				
						Together includes an item on 12 months of driving electric	13/04/22			
						Together includes an item highlighting the benefits of securing an electric car via the car benefit scheme from CPC Drive/Tusker	06/07/22	56% of all orders placed since Oct 18 have been for either electric or hybrid vehicles.	27/07/22	
The Council's Emissions to Air	Transport		23. Introduce annual staff and councillor travel surveys.	Short	Direct Control					

<sup>17</sup> 'The Cycle to Work Scheme opens this month! Save 25-39% on a new bike for work'. Webinar hosted by Cyclescheme (the Council's Cycle to Work partners) on Thursday 3 March at 11am.

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
The Council's Emissions to Air	Transport	Work Transport	24. Review the council's fleet and develop proposals to reduce emissions from its operation.	Short	Direct Control	Defra Air Quality Grant Bid for upcycling and electrifying a Council refuse collection vehicle	08/10/21	Successful bid outcome - £578,000 awarded <sup>18</sup> .	09/03/22	
						Installation of a new EVCP and replacement of a Peugeot Expert Combi 1.6 HDI MPV with a new Vauxhall Vivaro-e Life at Family Time Services High Wycombe	21/03/22		21/03/27	Over 5 years: 6.97 tonnes of CO <sub>2</sub> e 62.36 kgs of CO <sup>19</sup> , 9.97 kgs of oxides of nitrogen (NO <sub>x</sub> ) 0.56 kgs of particulate matter

<sup>18</sup> For more information, please visit: <https://www.gov.uk/government/news/116m-boost-for-local-authorities-to-tackle-air-pollution>; and <https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-to-convert-first-refuse-vehicle-to-electric-thanks-to-government-grant/>

<sup>19</sup> Carbon monoxide

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Installation of a new EVCP at Family Time Services Aylesbury	07/06/22			
The Council's Emissions to Air	Transport	Work Transport	25. Explore the introduction or enhancement of logistics/fleet management equipment, additives and lubricants, eco-driving techniques, and alternative fuels to reduce fleet emissions and implement where practicable.	Short	Direct Control					
The Council's Emissions to Air	Transport	Commuting and Working from Home	26. Support staff and councillors to work from home (flexible working) where practical.	Short	Direct Control	Work Smart programme introduced – reducing the time 'any desk' employees must be in the	01/11/21			



Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						office to 40% of their working week				
Suppliers and Partners	Partners		27. Help communities identify, develop, and secure funding for projects addressing climate change and/or air quality.	Short	Enabling Change	LATF <sup>20</sup> bid includes projects led by Buckingham Canal Society, Transition Town Marlow, Haddenham Town Council, Hazelmere Parish Council, Buckland Parish Council, Sue Ryder Prayer Fellowship, and Chiltern Rangers C.I.C.	29/06/21	LATF funding secured (~£203k)	13/09/21	

<sup>20</sup> Local Authority Treescapes Fund

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
								817 trees planted	March 2022	
						Provided rural Community Energy Fund application support to Buckinghamshire Community Energy		Funding secured and Wendover Wharf Road Campus decarbonisation feasibility study completed. Recommended that ASHPs to be installed when boilers need to be replaced. Heat and hot water demand could be reduced by installing cavity wall, loft or roof insulation, and point of use (PoU) water heaters. Solar PV could provide as much as 450MWh of electricity	July 2022	
Suppliers and Partners	Partners	Schools and Academies	28. Support measures that reduce emissions to air in the Getting to School Strategy and	Short	Enabling Change	Helping schools develop School Travel Plans <sup>21</sup>	Ongoing	2nd place in the Modeshift STARS league table for the country, with a total of 64 accredited travel plans	July 2022	

<sup>21</sup> For more information, please visit: [School Travel Planning – Buckinghamshire Council](#)

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			forthcoming Home to School Strategy			Helping children to learn to cycle (Bikeability training)	Ongoing (with funding from DfT)	across the county. Three schools have also achieved platinum status.		
Suppliers and Partners	Partners	Schools and Academies	29. Develop a service that supports schools to address climate change and air quality issues.	Medium	Financial / Regulatory Role	Helped Stony Dean School explore the potential for electric vehicles	Sept / Oct 2021			
Suppliers and Partners	Partners	The Council's Investment Estate	30. Endeavour to improve the energy performance of investment properties.	Long	Financial / Regulatory Role	New High Wycombe ambulance hub will include proposals for high levels of insulation, a heat pump and electric vehicle	20/07/21			

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						charging points <sup>22</sup> .				
Suppliers and Partners	Suppliers		31. Produce and provide training on green procurement tools for purchasing decision-makers.	Medium	Direct Control					
Suppliers and Partners	Suppliers		32. Work with key suppliers to identify opportunities to reduce emissions from their products/services.	Short	Enabling Change	Considerations built into establishing a new highways maintenance contract that commences on 01/04/23	2021/2022	Balfour Beatty awarded the contract <sup>23</sup>	03/08/22	

<sup>22</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/green-light-for-new-high-wycombe-ambulance-hub-proposal/>

<sup>23</sup> For more information please visit: <https://www.buckinghamshire.gov.uk/news/council-announces-new-partner-to-continue-programme-of-highways-improvements/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Solar PV system installation at London Road East Depot in Amersham by Veolia		136 solar PV panels installed	17/03/21	12.25 tonnes of CO2e per annum
						Engagement with Everyone Active re. introducing EV to their sites	25/05/22	Everyone Active is investigating the potential to install EV charge points within their car parks		
						£345,386 PSDS scheme funding secured <sup>24</sup> to install water source heat		Renewable energy technologies installed and Chilterns Lifestyle Centre opens <sup>25</sup>	06/12/21	~180 tonnes of CO2e per annum saved from ASHP technology.

<sup>24</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/new-grant-to-boost-chilterns-lifestyle-centres-green-credentials/>

<sup>25</sup> For more information, please visit: <https://chilternslifestylecentre.com/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						pumps and 450 roof-mounted solar photovoltaic panels at the new <a href="#">Chiltern's Lifestyle Centre</a>				~36.74 tonnes of CO2e per year saved from the solar PV installation
Suppliers and Partners	Suppliers	Gas and Electricity Supplies	33. Determine the additional carbon benefits which may be achieved by purchasing renewable energy.	Short	Direct Control	Review of Council supply contract underway with a view to purchasing 'green energy' in 2022	Feb / March 2022	Commitment to procure 25% of the electricity we use at corporate sites from renewable sources for supplies commencing on 01/10/22 <sup>26</sup>	21/07/22	~1000 tonnes CO2e
Suppliers and Partners	Suppliers	South Buckinghamshire Waste Collection and Street Cleaning Contract	34. Use dust suppressant systems on vacuum sweepers to reduce airborne emissions of particulate matter from street cleaning.	Short	Financial / Regulatory Role	All 7 Vacuum sweepers in the Southern Waste Contract have dust suppression systems				

<sup>26</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-to-hit-25-renewable-electricity-target/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings	
Chapter	Section	Sub-section									
Suppliers and Partners	Suppliers	South Buckinghamshire Waste Collection and Street Cleaning Contract	35. Install electric vehicle charging infrastructure at waste collection depots by 2021 and commence use of hybrid plug-in electric vans and electric street sweepers by 2022.	Short	Financial / Regulatory Role	6 EV charging points have been installed at Amersham Depot					
						2 electric cage tippers introduced	Nov 2020				
						1 electric cage tipper introduced	Autumn 2022				
						9 electric vans introduced	Spring 2021				
						2 electric vans introduced	Autumn 2022				
						13 hybrid vehicles introduced	Autumn 2020				
						Hybrid street sweepers introduced	2021				

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
Suppliers and Partners	Suppliers	South Buckinghamshire Waste Collection and Street Cleaning Contract	36. Implement telematics system to optimise driving behaviour to improve fuel efficiency and reduce emissions to air by 2022.	Short	Financial / Regulatory Role	New vehicles are automatically fitted with telematics systems				
Suppliers and Partners	Suppliers	South Buckinghamshire Waste Collection and Street Cleaning Contract	37. Trial an electric waste collection vehicle by 2023.	Short	Financial / Regulatory Role					
County-Wide			38. Consider emissions in future strategy development and grant funding decisions.	Short	Direct Control	(Tree Strategy currently under development)  (Electric Vehicle Charging Strategy		Buckinghamshire Electric Vehicle Action Plan adopted <sup>27</sup>	07/06/22	

<sup>27</sup> For more information, please visit: <https://buckinghamshire.moderngov.co.uk/ieListDocuments.aspx?CId=337&MeetingId=17440>; and <https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-launches-ambitious-electric-vehicle-action-plan/#:~:text=The%20Action%20Plan%20covers%20a,across%20the%20county%20by%202027.>



Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						currently under development)				
County-Wide			39. Develop targets for the reduction of reactive airborne forms of nitrogen and particulate matter.	Short	Direct Control	Defra consultation on environmental targets which includes targets for PM <sub>2.5</sub> <sup>28</sup>	16/03/22	Submitted response to Defra	27/06/22	
County-Wide	Transportation		40. Reduce emissions from taxis and private hire vehicles.	Medium	Enabling Change	New Taxi Licencing Policy will come into effect on 6 <sup>th</sup> September.		Renewal licences only issued where vehicles comply with Euro 5 emissions standard <sup>29</sup> . All newly licensed vehicles must meet Euro 6 emissions standards. Licences only issued to ultra-low or zero emission vehicles by 2030. Taxis that produce	06/09/21  2030	

<sup>28</sup> For more information, please visit: <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets/>

<sup>29</sup> Unless they meet grandfather rights criteria. For more information about the new policy, please visit: <https://www.buckinghamshire.gov.uk/business/licences-and-permits/taxi-licensing/new-taxi-and-private-hire-licensing-policy/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
								ultra-low or zero emissions will also be licensed for a longer period until they are fifteen years old		
County-Wide	Transportation		41. Implement initiatives to reduce emissions from freight pursuant to achieving the objectives of the Freight Strategy.	Short	Inform & Influence					
County-Wide	Transportation		42. Improve infrastructure for active travel (such as walking and cycling) and electric vehicles.	Short	Direct Control	2020 ORCS <sup>30</sup> bid application	2020	£105k awarded for 32 additional electric vehicle charge points <sup>31</sup> which will be installed by Autumn 2021.		
								New cycle route section linking Waddesdon and	24/08/21	

<sup>30</sup> On-Street Residential Chargepoint Scheme. For more information, please visit: <https://www.gov.uk/government/publications/grants-for-local-authorities-to-provide-residential-on-street-chargepoints>.

<sup>31</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/funding-boost-electric-vehicle-ownership/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
								Aylesbury is officially opened <sup>32</sup>		
								OSRIC <sup>33</sup> demonstrator project – induction pad and EV hire car made available in Liston Road Car Park, Marlow <sup>34</sup>	27/09/21	
								OSRIC demonstrator project – induction charging pad made available in Summers Road Car Park in Burnham <sup>35</sup>	28/10/21	
								Wendover cycleway improvements <sup>36</sup>	Summer 2022	

<sup>32</sup> For more information, please visit: <https://www.itv.com/news/meridian/2021-08-24/new-cycle-route-section-linking-waddesdon-and-aylesbury-is-officially-opened>

<sup>33</sup> On-Street Residential Induction Charger

<sup>34</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/innovative-wireless-electric-vehicle-charging-comes-to-bucks/>

<sup>35</sup> For more information, please visit: <https://www.osric.co.uk/ecar-club-summers-road/>

<sup>36</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/parking-roads-and-transport/cycling-and-walking/walking-and-cycling-routes/walking-and-cycling-routes-in-development/wendover-cycleway-improvements/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Application for £2.47m submitted to the LEVI Fund for in-pavement, lamppost, and induction EVCI and a modularised solar car port with EVCI	17/06/22	Active travel schemes in Aylesbury and Marlow made permanent <sup>37</sup>	Apr 2022	
						ORCS bid submitted for funding for an additional 64 chargepoints in 16 public car park locations	20/07/22			

<sup>37</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/two-active-travel-schemes-in-aylesbury-and-marlow-to-be-made-permanent/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
County-Wide	Transportation		43. Assess the carbon emissions from proposed road schemes.	Short	Direct Control					
County-Wide	Transportation		44. Trial low emission forms of transport, such as electric buses, bikes and electric scooters.	Short	Direct Control	Expansion of the Electric Scooter Trial	17/05/21	Electric Scooters made available in Princes Risborough <sup>38</sup>	17/05/21	
						Possible extension of the Electric Scooter Trial until 31 <sup>st</sup> March 2022	Nov. 2021			
						Extension of the electric scooter trial until Nov 2022 <sup>39</sup>	March 2022	~21.7 tCO <sub>2</sub> e saved	Summer 2022	~21.7 tCO <sub>2</sub> e saved
						Completed the introduction of	March 2021	Bikes were hired 3,552 times and covered a total	Dec 2021	

<sup>38</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/parking-roads-and-transport/buckinghamshire-electric-scooter-trial/>

<sup>39</sup> For more information, please visit: [https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-extends-its-e-scooter-trial/?dm\\_i=5438,IS5B,4CAIDB,26K9I,1](https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-extends-its-e-scooter-trial/?dm_i=5438,IS5B,4CAIDB,26K9I,1)

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						County's first e-bike rental scheme along the Waddesdon Greenway <sup>40</sup>		distance of 33,995 kilometres		
County-Wide	Transportation		45. Investigate the feasibility of introducing Low Emission Zones.	Short	Direct Control	Marlow Low Emission Zone Study - Air Quality Assessment produced	July 2021	A range of measures were considered but it was concluded that the introduction of a LEZ would most likely be too costly and not publicly acceptable to take forward for further investigation	Jan 2022	
County-Wide	Transportation		46. Reduce unnecessary travel by encouraging regular home working patterns and supporting initiatives that facilitate remote working.	Short	Enabling Change	Work Smart Programme Introduced. Option to work in the office 40% of the time or at manager's discretion.	01/11/21			

<sup>40</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/new-electric-bike-scheme-waddesdon-greenway/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
County-Wide	Transportation		47. Improve traffic management technology on the highway network where practicable to reduce congestion and support more efficient driving.	Long	Enabling Change	Bid to Department for Transport (DfT) to upgrade traffic signals at Stoke Road Gyratory to reduce congestion	07/05/21	Successful bid outcome - £500,000 awarded <sup>41</sup> (N.B. scheme to be completed by March 2023)	13/08/21	
County-Wide	Buildings and Developments		48. Work with neighbouring local authorities and England's Economic Heartland to reduce air pollution impacts from cross-border and major transport hub developments.	Short	Inform & Influence					
County-Wide	Buildings and Developments		49. Produce a Technical Advice Note (TAN) on addressing climate	Short	Direct Control	Sustainable Development TAN exploration	19/05/21			

<sup>41</sup> For more information, please visit: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1009151/traffic-signals-maintenance-scheme-award-winners.csv/preview](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1009151/traffic-signals-maintenance-scheme-award-winners.csv/preview)

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			change in new developments.							
County-Wide	Buildings and Developments		50. Use opportunities coming out of revisions to national planning policy to enhance environmentally sustainable aspects of developments.	Short	Direct Control					
County-Wide	Buildings and Developments	Historic Environment	51. Explore means to protect heritage assets from, and use them to address, climate change and poor air quality.	Long	Enabling Change					
County-Wide	Buildings and Developments	Housing	52. Support registered social housing providers' implementation of	Long	Enabling Change	GHGLAD <sup>42</sup> Phase 2 bid	22/03/21	£1,360,070 awarded for energy performance retrofits to approx. 130 eligible properties <sup>43</sup>		

<sup>42</sup> Green Homes Grant Local Authority Delivery Scheme. For more information, please visit: <https://www.gov.uk/government/publications/green-homes-grant-local-authority-delivery-scheme-phase-2-funding-allocated-to-local-energy-hubs>

<sup>43</sup> Press release issued on 6<sup>th</sup> December 2021: <https://www.buckinghamshire.gov.uk/news/new-initiative-launched-to-help-householders-be-warmer-greener-and-save-on-fuel-bills-this-winter/>



Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			sustainable energy and climate change adaptation initiatives in their stock.			GHGLAD Phase 2 implementation deadline extension request submitted	16/08/21	Deadline extended to the end of March 2022	20/08/21	
						Sustainable Warmth Competition <sup>44</sup> EOI submitted (≤10% applicable to social housing)	30/07/21			
County-Wide	Buildings and Developments	Housing	53. Promote opportunities for residents to improve their homes to help them mitigate and/or adapt to climate	Short	Enabling Change	GHGLAD 1b <sup>45</sup> Consortium bid submitted (led by Watford Borough Council)	2020	£1m awarded for energy performance retrofits to approx.. 100 properties (primarily park homes)		

<sup>44</sup> For more information, please visit: <https://www.gov.uk/government/publications/apply-for-the-sustainable-warmth-competition>.

<sup>45</sup> For more information, please visit: <https://www.gov.uk/government/publications/green-homes-grant-local-authority-delivery-scheme-entering-a-bid>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			change and poor air quality.			GHGLAD 1b Implementation extension request submitted	August 2021	Deadline extended to the end of March 2022	20/08/21	
								91 properties retrofitted with energy efficiency measures under GHGLAD1b	Aug 2022	
						Green Homes Grant promoted via a press release <sup>46</sup>	07/10/22	Bucks Herald news item <sup>47</sup>	07/10/22	
						Bucks Solar Together launched and promoted <sup>48</sup>	09/05/22			

<sup>46</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/green-homes-grant-can-help-households-save-up-to-600-a-year-on-their-energy-bills/>

<sup>47</sup> For more information, please visit: <https://www.bucksherald.co.uk/business/green-homes-grant-can-help-aylesbury-households-save-ps600-year-their-energy-bills-2995496>

<sup>48</sup> For more information, please visit:

[https://solaraltogether.co.uk/buckinghamshire/home?utm\\_source=google&utm\\_medium=cpc&utm\\_campaign=search&utm\\_content=brand&utm\\_term=rsa&gclid=CjwKCAjwve2TBhByEiwAaktM1MxceWFvQeklp3gOPI9CxL-n7WOKLNCtWI7AGTCoHk8Uf2nATgeW3hoC-cMQAvD\\_BwE](https://solaraltogether.co.uk/buckinghamshire/home?utm_source=google&utm_medium=cpc&utm_campaign=search&utm_content=brand&utm_term=rsa&gclid=CjwKCAjwve2TBhByEiwAaktM1MxceWFvQeklp3gOPI9CxL-n7WOKLNCtWI7AGTCoHk8Uf2nATgeW3hoC-cMQAvD_BwE); <https://www.buckinghamshire.gov.uk/news/residents-invited-to-register-for-affordable-renewable-energy-offer/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Bucks Solar Together scheme promoted to staff via Together Now internal email	11/05/22			
						Letters sent to 151.340 addresses regarding the Solar Together opportunity	23/05/22	6,990 registrations to the scheme	11/07/22	
								950 offers accepted under the Buckinghamshire Solar Together scheme	15/08/22	(~675 tCO <sub>2</sub> e saved per annum projected)
County-Wide	Economy and Skills		54. Encourage the use of recycled, biodegradable, and/or recyclable	Short	Inform & Influence	Bucks Zero Waste Map published <sup>49</sup> that shows all the shops,	09/09/20			

<sup>49</sup> For more information, please visit: <https://www.recycleforbuckinghamshire.co.uk/zerowastemap/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			materials in products.			recycling points and businesses in Buckinghamshire that can help people reduce their waste <sup>50</sup> .				
County-Wide	Economy and Skills		55. Support the development of the green economy in Buckinghamshire.	Short	Enabling Change	Bucks Zero Waste Map published <sup>51</sup> that shows all the shops, recycling points and businesses in Buckinghamshire that can help people reduce their waste <sup>52</sup> .	09/09/20			

<sup>50</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/interactive-map-launched-mark-zero-waste-week/>

<sup>51</sup> For more information, please visit: <https://www.recycleforbuckinghamshire.co.uk/zerowastemap/>

<sup>52</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/interactive-map-launched-mark-zero-waste-week/>



Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						The Greening Campaign <sup>55</sup>	04/12/20			
						HS2 Community and Environment Fund <sup>56</sup>	05/03/21			
						The Tree Council Branching Out Fund <sup>57</sup>	08/10/2020			
						Funding for Woodland Creation	22/03/21			
						Urban Tree Challenge Fund <sup>58</sup>	30/06/21			

<sup>55</sup> For more information, please visit: <http://www.greening-campaign.org/#>

<sup>56</sup> For more information, please visit: <https://hs2funds.org.uk/home/community-environment-fund/>

<sup>57</sup> For more information, please visit: <https://treecouncil.org.uk/apply-for-one-of-our-tree-planting-grants/>

<sup>58</sup> For more information, please visit: <https://www.gov.uk/guidance/urban-tree-challenge-fund>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						Veolia Environmental Trust Grants <sup>59</sup>	16/08/21			
						Gawcott Solar C.I.C.'s Bee Green Grant Fund <sup>60</sup>	16/08/21			
						Funding from Heart of Bucks <sup>61</sup>	16/08/21			
						Bucks Solar Together advertised on the Low Carbon Workspaces website <sup>62</sup> and promoted in an e-shot to	26/05/22			

<sup>59</sup> For more information, please visit: <https://www.veoliatrust.org/>

<sup>60</sup> For more information, please visit: [https://gawcottsolar.co.uk/#get\\_involved](https://gawcottsolar.co.uk/#get_involved)

<sup>61</sup> For more information, please visit: <https://heartofbucks.org/green-schools-fund/>; and <https://heartofbucks.org/green-community-fund/>.

<sup>62</sup> Please visit: [https://www.lowcarbonworkspaces.co.uk/news/registration-for-the-solar-together-scheme-is-now-open.html#msdyntrid=dV\\_ii34vYTjzGy9BxpnaHjIKdfRe7g4Hi34Zlxb6fhg](https://www.lowcarbonworkspaces.co.uk/news/registration-for-the-solar-together-scheme-is-now-open.html#msdyntrid=dV_ii34vYTjzGy9BxpnaHjIKdfRe7g4Hi34Zlxb6fhg)

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						businesses from Low Carbon Workspaces				
						£250 vouchers offer to businesses by Visit Buckinghamshire <sup>63</sup> to reduce their carbon footprint promoted in an e-shot	09/06/22			
						Promotion of Clean Air Day Networking Lunch <sup>64</sup>	10/06/22			
						Clean Air Day Event held in conjunction	16/06/22	Over 35 local business attended the event and were provided with an	16/06/22	

<sup>63</sup> Please visit: <https://bbf.uk.com/news/get-a-ps250-voucher-to-help-pay-for-climate-friendly-activity>

<sup>64</sup> Please visit: <https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-launches-ambitious-electric-vehicle-action-plan/>



Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						with Bucks Business First, Global Action Plan and the University of Buckingham for local businesses		update on the support available for businesses adopting electric vehicles and creating low-carbon workspaces		
								Since 2017 200 businesses in Buckinghamshire have been assisted by Low Carbon Workspaces scheme (with £589,546 in grant funding) leading to £394,337 energy cost savings per year.	Aug 2022	662 tCO2e saved per annum
County-Wide	Environment, Land and Water		57. Work with the Environment Agency and other partners to minimise the risk of flooding and improve	Short	Direct Control	Projects ongoing with Environment Agency support and funding in Marlow (Newt	Through 22/23 and forward until 2026			

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
			community resilience.	flood		Ditch) <sup>65</sup> , Pednormead End <sup>66</sup> (Chesham) and Willows estate in Aylesbury. Feasibility studies to determine if there are viable options for a business case in Sands (High Wycombe), Hughenden, (High Wycombe), West Marlow, Gawcott and Tingewick. Ongoing Natural Flood Management				

<sup>65</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flood-management-projects/the-newt-ditch-marlow-flood-alleviation-scheme/>

<sup>66</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flood-management-projects/the-pednormead-end-project/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						projects are ongoing in and around Buckingham, and Winslow areas.				
County-Wide	Environment, Land and Water		58. Support the provision of advice and resources to encourage water saving.	Short	Inform & Influence	AWorld app promoted by the Council <sup>67</sup>	22/04/22	1.11m litres of water and 5346 kWhs of electricity have been saved so far as a result of environmentally friendly actions taken and recorded on the app.	Aug 2022	14,466 kgs of CO2 saved to date
County-Wide	Health and Communications		59. Raise public awareness of climate change, and indoor and outdoor air quality.	Short	Inform & Influence	EOI Bid to the Greater South East Energy Hub to hold a COP26 transport decarbonisation event	27/08/21	Bid successful - £28,500 secured to run an event at Lunaz's facility in Silverstone on 10/11/2021 which will be live-streamed	10/09/21	

<sup>67</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-becomes-the-first-local-authority-in-the-uk-to-support-aworld/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
								'Green Wheels in Motion' event <sup>68</sup>	10/11/21	
						Defra Air Quality Grant bid includes a project to provide Community Boards and schools with materials (toolkits) to enable them to carry out campaigns and to raise awareness of local air quality issues.	08/10/21	Successful bid outcome - £91,273 awarded <sup>69</sup> .	09/03/22	
						Council Energy and Climate Change	28/02/22			

<sup>68</sup> YouTube link: <https://www.youtube.com/watch?v=0Eq5NhlqcvY>. COP26 Regional Roadshows link: [https://cop26regionalroadshows-gseeh.org.uk/green\\_wheels\\_in\\_motion\\_event.html](https://cop26regionalroadshows-gseeh.org.uk/green_wheels_in_motion_event.html).

<sup>69</sup> For more information, please visit: <https://www.gov.uk/government/news/116m-boost-for-local-authorities-to-tackle-air-pollution>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						webpages updated <sup>70</sup>				
						Bucks' Climate Challenge webpage goes live <sup>71</sup>	11/03/22			
						Clean Air Day promoted in Together Now internal email	15/06/22			
County-Wide	Health and Communications		60. Encourage environmentally sustainable living via communications campaigns.	Short	Inform & Influence	Tree seed collection and germination at home encouraged via Council social media campaigns	Oct 2021			
						New information on	22/12/21			

<sup>70</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/environment/energy-and-climate-change/>

<sup>71</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/campaign/bucks-climate-challenge/>

Main Document Reference			Action	Time-frame	Sphere of Influence	Activity	Activity Date	Outcome	Outcome Date	Emission Savings
Chapter	Section	Sub-section								
						EV Charging published on the Council's website <sup>72</sup>				
						Bucks' Climate Challenge webpage goes live <sup>73</sup>	11/03/22			
						AWorld app promoted by the Council <sup>74</sup>	22/04/22	1.11m litres of water and 5346 kWhs of electricity have been saved so far as a result of environmentally friendly actions taken and recorded on the app.	Aug 2022	14,466 kgs of CO2 saved to date

<sup>72</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/parking-roads-and-transport/parking/electric-vehicle-charging/>

<sup>73</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/campaign/bucks-climate-challenge/>

<sup>74</sup> For more information, please visit: <https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-becomes-the-first-local-authority-in-the-uk-to-support-aworld/>



## Report to TECC Select Committee

**Date:** 3<sup>rd</sup> November 2022

**Title:** Update on Installation of Electric Vehicle Infrastructure

**Author:** Steven Smith and Rupert Zierler

### 1. Executive Summary

1.1 Buckinghamshire Council published the Electric Vehicle Action Plan (EVAP) in January 2022, outlining our strategy to improve access to electric vehicle charge point infrastructure across the county. This included recommendations and actions for the Council to progress in the short, medium and long term to deliver 1000 publicly available charging spaces by the 2027, the end of the 5-year plan. The intention of this report is to give details on the progress of the Council towards achieving this goal in providing a reliable and comprehensive charge point network.

### 2. Background

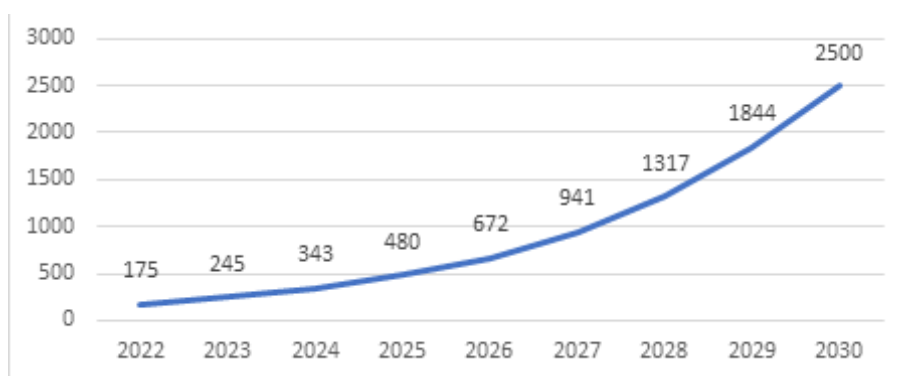
2.1 The aim of the EVAP is to help to reduce carbon emissions and improve air quality in Buckinghamshire as set out in Buckinghamshire Council's Climate Change and Air Quality Strategy. The EVAP also supports our commitment to achieve net zero carbon emissions for Buckinghamshire by 2050.

2.2 Transportation currently contributes 51% of carbon emissions in Buckinghamshire, with 65% of these generated by cars. Although the number of privately-owned chargepoints for EVs is increasing, these are difficult to install for homes without access to off-street parking. Therefore, an important part of our strategy to reduce carbon emissions is to encourage residents of Buckinghamshire to move away from petrol and diesel vehicles towards Battery Electric Vehicles (BEVs), through increased access to charging infrastructure.

2.3 One key aim of our EVAP is to double the number of public EV charging spaces across Buckinghamshire by 2023/24, compared to a February 2022 baseline. This equates to 175 new charging spaces and our focus has been on increasing coverage in areas currently lacking access to publicly-accessible chargepoints.

2.4 The EVAP also sets out our ambition to have more than 1,000 publicly-accessible charging spaces across the county by 2027. The rationale behind this ambition is set out in Appendix 1 and is based on population size relative to the rest of the UK. This addresses the government’s national requirements for charge points established in the UK Electric Vehicle Infrastructure Strategy ‘Taking Charge’<sup>1</sup>, which would see a minimum of 300,000 publicly-available charge points installed across the UK by 2030. Working backwards from this, we estimate that there needs to be around 2,500 publicly-accessible chargepoints in 2030 (see Figure 1)

**Figure 1: Number of EV charge points required in Buckinghamshire to meet minimum government target of 300k points by 2030<sup>2</sup>**



2.5 To enable this to happen, the Council has allocated £200k capital funding per year for the next 4 years (£800k in total) to support the roll out of charging facilities across the county. This ‘match funding’ allows us to access and apply for Government grants and also work with charge point suppliers to fund new charging points across the county.

2.6 To date the delivery of charge points has been dependent on funding from the Office for Zero Emission Vehicles (OZEV), via their On-Street Residential Chargepoint Scheme (ORCS)<sup>3</sup>. This is likely to be replaced in future years by a similar OZEV £400M funding source which will be known as the Local Electric Vehicle Infrastructure fund (LEVI)<sup>4</sup>.

2.7 Appendix 1 shows that the projected growth curve for registered EVs in Buckinghamshire would result in approximately 30,000 vehicles by 2030 (based on data provided by our consultants in preparation for the EVAP).

<sup>1</sup> UK electric vehicle infrastructure strategy: <https://www.gov.uk/government/publications/uk-electric-vehicle-infrastructure-strategy>

<sup>2</sup> Population of UK – 67m, population of Bucks – 543k (0.81%)

<sup>3</sup> OZEV ORCS scheme details: <https://www.gov.uk/government/publications/grants-for-local-authorities-to-provide-residential-on-street-chargepoints/grants-to-provide-residential-on-street-chargepoints-for-plug-in-electric-vehicles-guidance-for-local-authorities>

<sup>4</sup> OZEV LEVI fund details: <https://www.gov.uk/guidance/apply-for-local-electric-vehicle-infrastructure-levi-pilot-funding>



2.8 We are also keenly aware of the need for chargepoints to be accessible to all potential users. We will work with our suppliers to ensure that public chargepoints meet the needs of EV drivers, in addition to the requirements required by the majority of our funding sources (i.e. ORCS and LEVI).

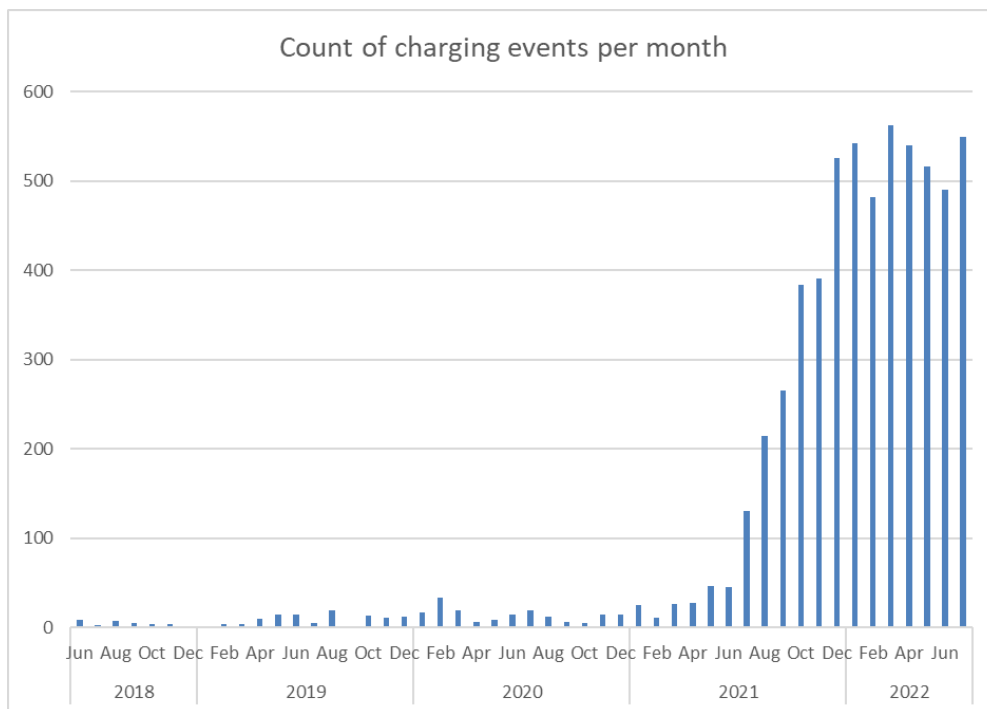
### **3. Delivery of chargepoints to date and forecast to 2027**

3.1 Prior to the EVAP adoption Buckinghamshire-facilitated public chargepoints have been delivered via four main projects:

- a) 24 chargepoints funded by BP Pulse working with the legacy Councils between 2013-2019.
- b) A Rolec installation of 3 chargepoints at High Wycombe Park and Ride, originally delivered by legacy Wycombe District Council in 2017/18 and funded by the supplier.
- c) 20 on-street lamppost-mounted slow 3kW chargepoints, operated by Char.gy and delivered using OZEV ORCS funding in 2019.
- d) 16 fast 7kW chargepoints (32 charging bays) in Buckinghamshire Council car parks, operated by BP Pulse and also delivered using OZEV ORCS funding in 2021.

3.2 As shown in Figure 2, these installations have been successful overall, with usage rates increasing significantly after the installation the 2021 round of BP Pulse chargepoints.

**Figure 2: Count of charging events per month at Buckinghamshire Council-facilitated chargepoints.**



- 3.3 Although overall usage has increased, some chargepoints receive far more usage than others. The reasons for this are unclear at present, although slower chargepoints will naturally receive fewer uses per day on average, owing to the fact that individual vehicles charge over longer periods of time whereas faster chargepoints can serve multiple vehicles per day. We are also aware of maintenance issues at individual chargepoints which will affect their usage rates. We are conducting analysis on the popularity of individual chargepoints and will use this to inform the locations of any future installations.
- 3.4 Table 1 outlines the current (actual figures) and future projection for public charge point availability in Buckinghamshire.
- 3.5 There are several assumptions underlying these projections and these are set out in Appendix 1. Earlier years assume successful installation of all chargepoints currently proposed for this year’s ORCS bids and a successful application to the new LEVI fund in 2023, whilst later years assume steady growth rates for both Buckinghamshire-facilitated and commercially installed but public chargepoints (e.g. at fuel stations).

**Table 1 - Actual- and projected public chargepoints in Buckinghamshire.**

<b>A. Buckinghamshire Council facilitated charge points</b>						
	July 2022 <i>(actual figures)</i>	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027
<i>Charge point units</i>						
Slow (3kW)	20	20	40	160	240	320
Fast (7-22kW)	43	107	167	178	200	225
<b>TOTAL</b>	<b>63</b>	<b>127</b>	<b>207</b>	<b>338</b>	<b>440</b>	<b>545</b>
<i>Charging bays</i>						
Slow (3kW)	20	20	40	160	240	320
Fast (7-22kW)	84	212	328	356	400	450
<b>TOTAL</b>	<b>104</b>	<b>232</b>	<b>368</b>	<b>516</b>	<b>640</b>	<b>870</b>
<b>B. Projection to EVAP 2027 target</b>						
All public charging points	188	245	343	480	672	1000
<b>C. Number of points to be delivered by commercial sector (difference: B-A)</b>						
	125	105	136	142	232	455

- 3.6 Past 2025, it is anticipated that the proportion of slower chargers will increase, as the government’s emphasis is on maximising on-street chargepoints going forward, which are more likely to be lamp-post or bollard-style units and tend to be slower (3kW).

#### 4. Progress against EVAP policies

4.1 The EVAP was adopted in June 2022, setting nine objectives for improving electric vehicle infrastructure over the next five years. Whilst we are still in the early stages of delivery, Table 2 sets out our progress to date.

**Table 2: Progress against EVAP objectives, as of October 2022**

EVAP Objectives	Progress
<p>Support the uptake of EVs within Buckinghamshire through the provision of a comprehensive network of EV charging infrastructure</p>	<p>We have appointed a full time Electric Vehicle officer to focus on coordinating projects and funding bids.</p> <p>We have appointed BP Pulse as our preferred supplier for installations funded through OZEV, within car parks.</p> <p>Buckinghamshire currently have charge points across various locations with another 128 charge points to be added pending the outcome of the recent ORCS bid.</p>
<p>Contribute to reducing carbon and air pollutant emissions from transport by supporting the UK-wide transition to EVs</p>	<p>EV ownership is steadily increasing, as a proportion of all privately-owned vehicles. The number of BEVs registered in Buckinghamshire increased by around 10% between Q1 and Q2 2022, alongside growth in hybrid vehicles. This will significantly reduce tailpipe emissions where these are replacing petrol- or diesel vehicles.</p>
<p>Ensure that the EV infrastructure network is future-proofed, to allow for new technologies and trial innovative solutions</p>	<p>We recently hosted an EV car club trial in Marlow, using induction-based recharging pads. However, this scheme has recently closed due to lack of funding and pending improvements to the technology.</p> <p>Our existing BP Pulse chargepoints are modular in design, allowing for technology updates in future.</p> <p>Our (unsuccessful) bid to the Pilot LEVI fund focused on innovation and included: in-pavement Gul-E type cable channels; smart lamp post style chargers, an induction charged electric vehicle car club and a first of its type 'Grid Constrained Modularised Hybrid ECVI Solution', as well as a community based and charity led approach.</p>

EVAP Objectives	Progress
Provide a range of publicly funded charging infrastructure to support different charging requirements, including for those without off-street charging at their home	<p>Our first ORCS bid of 2022 has been submitted, which aims to install 128 charge points in Buckinghamshire Council-managed car parks.</p> <p>Our second ORCS bid aims to install charge points in Parish and Town council car parks.</p> <p>We plan to submit a bid to the government's main LEVI fund when this becomes available in 2023/24.</p>
Support Buckinghamshire Council staff to transition to EVs through salary sacrifice and vehicle leasing schemes	<p>We currently have a salary sacrifice scheme in place for Buckinghamshire Council employees with CPC Drive/Tusker, accessible via intranet resources. This allows the price of a new car to be offset against salaries, with additional savings available for employees choosing EVs.</p> <p>The staff pool cars currently available to legacy Aylesbury Vale District Council staff will be closing in 2023. Their replacement, if any, will be included within the remit of the Fleet team service review in 2023.</p> <p>EV charge points are available in car parks in proximity to all main council offices.</p>
Increase the council's EV fleet capacity and provide any necessary charging infrastructure	<p>Using funding from DEFRA we have commissioned the retrofit of a Refuse Collection Vehicle to use a battery powered electric motor. Completion expected end 2023.</p> <p>1 BEV car is in use serving the Family Time centres. A further 12 electric and hybrid vehicles are on order for Family Time centres, Highways Technicians, the waste team and Stony Dean school.</p> <p>We currently operate a small fleet of pool cars for former AVDC staff, which have been active since 2016. However this will cease in 2023 (as above).</p> <p>Under the new Highways Maintenance Contract with Balfour Beatty, a number of significant measures to reduce carbon impact will be in place, including a move to electrify the vehicle fleet.</p>
Work with developers, local businesses, parish	ORCS bid 2 aims to encourage uptake of EV

EVAP Objectives	Progress
and town councils to encourage provision of privately funded charge points	infrastructure by parish councils. We have approached parish councils for lists of desired locations. These will be shortlisted in the near future in preparation for our bid to OZEV.
Work with local public transport and taxi and private hire companies to facilitate charging infrastructure and support the transition to zero emission vehicles	We have not yet engaged directly with taxi and/or private hire firms to facilitate charging infrastructure, although we aim to do so in 2023. Our Hackney Carriage and Private Hire Licensing Policy <sup>5</sup> adopted in September 2021 aims to only issue licences to ultra-low or zero emission vehicles by 2030, and now requires newly-licensed vehicles to have a Euro 5 or 6 emissions rating as a minimum.
Encourage use of EVs as part of a sustainable transport network, including active travel and public transport, whilst reducing the need to travel overall	Policies to encourage EV use as part of a wider transport network will be defined further in Local Transport Plan 5 (in development).  Recent data from our E-scooter trials indicate between 20-29% of riders used an e-scooter to replace an existing car/van journey.

## 5. Accessing external funding for charge point projects

- 5.1 To date 36 charge points (equating to 52 charging spaces) have been delivered using £143,146 from the OZEV ORCS fund. These funds were granted to the Council in 2019 and 2021 and funded 75% of the cost of the charge points, the rest being funded by the supplier.
- 5.2 There are currently three main projects ongoing which require external funding to deliver against our EVAP objectives:
- a) '2022 ORCS bid 1' – a bid to the ORCS fund for 128 charging bays in Buckinghamshire Council-owned car parks.
  - b) '2022 ORCS bid 2' – a second bid to the ORCS fund to be submitted by the end of 2022/23 which aims to support town and parish councils installing chargepoints in their own car parks.

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<sup>5</sup> Buckinghamshire Hackney Carriage and Private Hire Licensing Policy:  
<https://www.buckinghamshire.gov.uk/parking-roads-and-transport/taxis-and-private-hire/taxi-licence-applications/hackney-carriage-and-private-hire-licensing-policy/about-this-policy/>

- c) LEVI fund next steps – allocation of funding to bring forward trials of 2 elements of our previous bid: on-street chargepoints and in-pavement cable channels.

#### ORCS Bid 1 update

- 5.3 We have procured BP Pulse as our preferred supplier for the delivery of ORCS funded points. We submitted a bid in July 2022 for funding from the OZEV ORCS fund for 128 charging bays in Buckinghamshire Council owned car parks. This aims to fund the installation of 64 new charging units (serving two parking bays each) across 16 car parks (i.e. four units per car park). Approximately 40% of the project is to be funded by BP Pulse.
- 5.4 The agreed sites and their associated costs are listed in Appendix 2 and are all 7kW-rated ‘fast’ charge points. In the event that the bid is successful, BP Pulse aims to deliver these charge points by the end of March 2023.
- 5.5 Previous installations in Council car parks have been made challenging by high grid connection costs, as some sites are too far from the robust power grid connections provided by Distribution Network Operators (DNOs) needed to support faster charging rates. This is the primary driver behind increases in costs for certain sites, as the cost of the charging units themselves is a relatively small proportion of the total. ORCS funding cannot be used to cover excessive DNO connection costs above a set limit.
- 5.6 Therefore, prior to submitting our bid to OZEV we worked with BP Pulse to identify the costs at these high connection cost sites. By taking a strategic approach to the determination of appropriate locations across the county we were able to minimise these costs. Therefore only a small amount of Council EV capital funding (relative to the scale of the bid) would be required in the event of a successful bid to unlock these sites, whilst providing a spread of coverage across the county. This is a much lower amount than originally anticipated.

#### ORCS Bid 2 update

- 5.7 We intend to submit a second ORCS bid this financial year (i.e. 2022/23), which aims to target more rural areas by focusing on town and parish council car parks. We asked for expressions of interest from town and parish councils via the Community Boards in July and September 2022 and are working with interested councils to confirm potential sites for installation (see Appendix 4 for a list).
- 5.8 Assuming the Council submits an application for funding for a similar number of chargepoints as in ORCS Bid 1 but expecting a higher proportion of these to be ‘high connection cost’ sites due to their remote locations, a significant proportion of the Electric Vehicle capital fund will be required for this purpose this financial year.

### Pilot LEVI fund bid and next steps

- 5.9 In June 2022, we submitted a bid to OZEV's 'pilot' Local Electric Vehicle Infrastructure fund. This was an initial £10m fund intended to explore innovative new approaches to charge point delivery and is a precursor to a larger £400m fund due to commence in 2023/24.
- 5.10 Our bid to this fund, which proposed Wendover as a 'demonstration town' for various electric vehicle infrastructure, was unsuccessful. This included:
- a) Up to 20 in-pavement cable channels (Gul-E system)
  - b) 20 lamp post and/or bollard style charge points
  - c) Up to 2 induction charging pads with wheelchair-adapted EV car club vehicles
  - d) Grid Constrained Modularised Hybrid ECVI Solution trial (i.e. a solar car port serving multiple charging bays)
- 5.11 Officers recently met with representatives from the Energy Saving Trust who administer the LEVI fund on behalf of OZEV. We will include their feedback in our future bid to the main fund in 2023 which should increase our chances of success.
- 5.12 We are aware that the Wendover Community Board has allocated £21k to Climate Action Wendover (CLAW) for the purpose of trialling the Gul-E system in Wendover. Therefore, it was recommended and agreed at with the Cabinet Member for Transport on the 29<sup>th</sup> September 2022 that £90k of this year's EV capital funding allocation should be used to proceed with the in-pavement cable channel trial and/or installation of on-street charging points across the county.
- 5.13 In addition to the CLAW project in Wendover the Transport Strategy team will develop proposals for trial locations, focusing on areas with low availability of off street parking. These areas are identified in Figure 3 of the EVAP<sup>6</sup> and are generally the denser urban areas, including: Aylesbury, High Wycombe, Buckingham, Amersham, Chesham, Gerrards Cross, Wendover, and the outskirts of Slough and Maidenhead.

### LEVI main fund proposals (2023)

- 5.14 We intend to re-submit an updated bid to the main LEVI fund for the 'Wendover Electric Vehicle Demonstration Town' project, although criteria for receiving funding from this grant scheme are still unclear at this time.

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<sup>6</sup><https://buckinghamshire.moderngov.co.uk/documents/s43677/Appendix%204%20Electric%20Vehicle%20EV%20Action%20Plan.pdf>



## **6. Future Governance for EVAP decision-making**

- 6.1 Subject to feedback from local consultations, we propose that future decisions on electric vehicle charge point installations and use of the electric vehicle capital funding are presented to the Cabinet Member for Transport for approval.
- 6.2 Progress updates will be provided via Cabinet Member Reports on EVAP progress, the annual report on progress against the Climate Change and Air Quality Strategy, and any further updates requested for the Transport Environment and Climate Change Select Committee.
- 6.3 A monthly internal officer-based 'Electric Vehicle Working Group' has been set up to allow different teams within the Council to share information on the actions being undertaken in support of the EVAP. This group does not have a decision-making role but ensures that schemes and funding bids are coordinated across the Council,

## **7. Buckinghamshire Council transition to electric fleet**

- 7.1 Buckinghamshire Council maintains a small number of BEVs as part of its fleet of service vehicles. Some of these were introduced prior to adoption of the EVAP, but there has been a significant increase in the number of BEVs ordered in recent months.
- 7.2 There are three Nissan Leaf vehicles owned by the Council. Two of these were purchased by AVDC in 2016, which are maintained as part of the pool car fleet but are scheduled to be withdrawn next year (see Table 2). A third Nissan Leaf is operated by the Parking Services team for visiting their sites (also purchased in 2016).
- 7.3 A project is underway to 'upcycle' an existing refuse collection vehicle as a battery-powered vehicle, to operate in the north of Aylesbury<sup>7</sup>, funded by the Government's Air Quality Grant<sup>8</sup>. This project was started prior to the adoption of the EVAP but will serve as the blueprint for future upcycling efforts.
- 7.4 Since the adoption of the EVAP, one further BEV has joined the Council's fleet, as part of the Family Time Service (Castlefield Contact Centre). A further 10 vehicles (plus two hybrid petrol vehicles) are on order for use by several different teams within the Council including Highways Technicians, a school, Waste and Major Projects teams, three of which are scheduled to join the fleet in November.

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<sup>7</sup> Buckinghamshire Council to convert first refuse vehicle to electric thanks to government grant: <https://www.buckinghamshire.gov.uk/news/buckinghamshire-council-to-convert-first-refuse-vehicle-to-electric-thanks-to-government-grant/>

<sup>8</sup> DEFRA Air Quality Grant: <https://www.gov.uk/government/collections/air-quality-grant-programme>

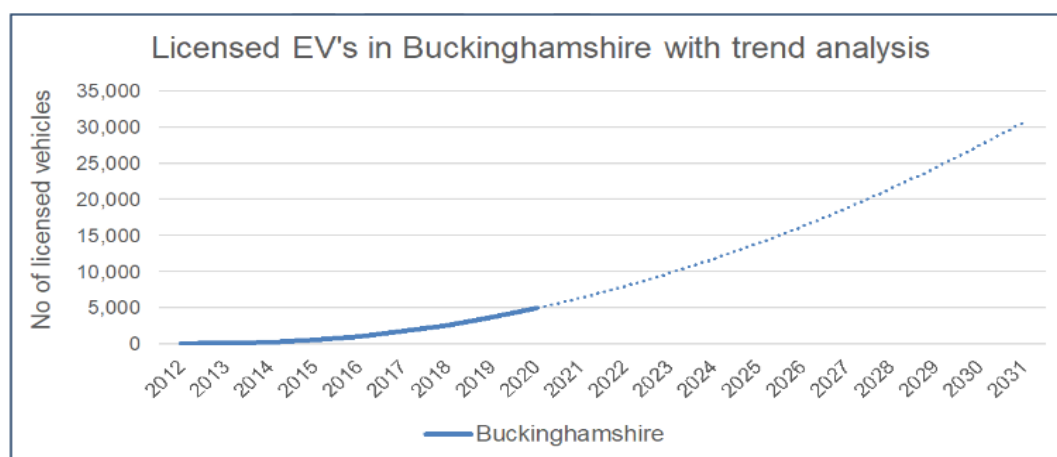
- 7.5 Implementation of all fleet projects described above will bring the number of BEVs in the Council's fleet to 15 vehicles, a five-fold increase compared to 2021. Although we hope to increase this number further, there are concerns that the range of most BEVs on the market at present are still too low for working in some more rural parts of the county, particularly in the former AVDC area.

## **8. Next Steps**

- 8.1 In the likely event that our first ORCS bid is successful, the Parking Services and Transport Strategy teams will project manage the delivery of these chargepoints by end of March 2023.
- 8.2 The Transport Strategy team are preparing a second bid to ORCS to fund the installation of charge points in suitable parish council locations across Buckinghamshire to support BEV car owners in more rural areas.
- 8.3 The Transport Strategy team will engage with Wendover Community Board/Parish Council to identify appropriate locations for a trial of in-pavement cable channels as well as on street charge points. Depending on timings will either fund these through the Council's capital budget or include these within our bid to the main LEVI fund.
- 8.4 The Transport Strategy team will continue to analyse public requests for chargepoints to identify appropriate locations across the county for the installation of on-street charge points and/or cable channels. A paper will be presented to the Cabinet Member for Transport with recommended locations and specific cost estimates in preparation for any future funding opportunities (including LEVI).
- 8.5 The Council will need to procure suppliers who specialise in on-street charging points as well as in-pavement cable channels.

## APPENDIX 1

Number of licensed EVs in Buckinghamshire with a projection to 2030 (Jacobs analysis):



Actual and projected public chargepoints in Buckinghamshire:

<b>A. Buckinghamshire Council facilitated charge points</b>						
	July 2022 (actual figures)	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027
<i>Charge point units</i>						
Slow (3kW)	20	20	40	160	240	320
Fast (7-22kW)	43	107	167	178	200	225
<b>TOTAL</b>	<b>63</b>	<b>127</b>	<b>207</b>	<b>338</b>	<b>440</b>	<b>545</b>
<i>Charging bays</i>						
Slow (3kW)	20	20	40	160	240	320
Fast (7-22kW)	84	212	328	356	400	450
<b>TOTAL</b>	<b>104</b>	<b>232</b>	<b>368</b>	<b>516</b>	<b>640</b>	<b>870</b>
<b>B. Projection to EVAP 2027 target</b>						
All public charging points	188	245	343	480	672	1000
<b>C. Number of points to be delivered by commercial sector (difference: B-A)</b>						
	125	105	136	142	232	455

Assumptions underlying projections of future charge point growth in Buckinghamshire:

\* We assume that ORCS Bid 1 chargepoints (from the bid currently being processed by OZEV) will be installed by March 2023, as set out in the project plan submitted to OZEV. This features 64 charging units serving 128 parking bays (all 7kW).

\*\* We assume here that:

1. ORCS Bid 2 is successful - estimating similar number of off street charge points (approx. 60) in parish and town council car parks, with installation complete by March 2024.
2. Work on 'LEVI follow up' is progressed, with funding for 20 on-street lamp post style points (3kW) as per September 2022 meeting with Cabinet Member.

\*\*\* We assume here that:

1. We proceed with a similar scheme to the Wendover Demonstration Town (proposed for the Pilot LEVI bid) in 2023. This is assumed to include:
  - a. Around 20 on-street lamp-post style points – assumed these are 3kW and have 1 bay each, similar to our existing Char.gy chargepoints.
  - b. At least 2 induction pads for car club use only (7-11kW) – 1 bay each.
  - c. Solar car port with 12 charging points, between 7-22kW depending on load and power supply.
2. Roll out of 100 fully funded on street chargers across the county.

\*\*\*\* The EV Action Plan target is 1000 public charging spaces by 2027. The rationale for this is:

- The National EV Infrastructure Strategy's vision is that by 2030 they expect there to be around 300,000 public chargepoints as a minimum in the UK (a 10 fold increase)
- Population of UK – 67m, population of Bucks – 543k (0.81%)
- Assume same split then Buckinghamshire would need 2430 chargers by 2030 (we have rounded to 2500)
- Working backwards, this would mean 941 points by the end of the EV Action Plan (2027). We have therefore suggested a target of 1000 publicly available charging spaces by 2027 (the end of the plan).

## APPENDIX 2

Agreed Buckinghamshire car park locations for ORCS Bid 1, 2022, including total costs and ORCS funding required for each site.

Site	Town	Number of parking bays
Exchange Street	Aylesbury	8
Penncroft	Beaconsfield	8
Warwick Road	Beaconsfield	8
Swan Pool	Buckingham	8
Neville Court	Burnham	8
The Broadway	Farnham Common	8
Station Road	Gerrards Cross	8
Packhorse	Gerrards Cross	8
Kingsmead	High Wycombe	8
Duke Street	High Wycombe	8
Railway Place	High Wycombe	8
Dean Street	Marlow	8
Institute Road	Marlow	8
West Street	Marlow	8
High Street	Prestwood	8
Red Lion Way	Wooburn	8
<b>TOTAL</b>		<b>128</b>

### APPENDIX 3

Timeline for all three current funding proposals for new chargepoints in 2022/23 (ORCS bid 1, ORCS bid 2 and LEVI main fund).

Milestone	Start	Finish
BP Pulse brought on board to deliver charge points and conduct site surveys	February 2022	May 2023
ORCS Bid 1 and Pilot LEVI bids submitted	June 2022	
(LEVI bid rejected)	August 2022	
ORCS bid 1		
Installation work for ORCS bid 1 sites	October 2022	March 2023
ORCS bid 2		
Engagement with Parish Councils	October 2022	December 2022
Finalisation of site selection	December 2022	
Obtain site surveys and DNO installation quotes	January 2023	February 2023
Submission of bid to OZEV	March 2023	
Installation work for ORCS bid 2 sites	June 2023	November 2023
LEVI pilot fund – next steps		
Develop initial proposals for new location(s)	October 2022	December 2022
Procure on-street charge point operator	January 2023	March 2023
Procure installer for in-pavement cable channels	January 2023	March 2023
Installation of on street charge points and channels	Summer 2023	Onwards
LEVI 'Wendover EV Demonstration Town' bid		
Submission of revised bid to OZEV	Summer 2023	
Installation of LEVI-funded infrastructure	Late 2023/Early 2024	

## APPENDIX 4

Potential Locations being investigated for ORCS bid 2, following initial engagement in September/October 2022.

Street Name	Town	Potential number of charging bays
Aylesbury End	Beaconsfield	8
Hedgerley Lane	Beaconsfield	8
London End	Beaconsfield	8
Maxwell Road	Beaconsfield	8
Mayflower Way	Beaconsfield	8
Station Road	Beaconsfield	8
Stephens Lane	Beaconsfield	8
Windsor Road	Beaconsfield	8
Memorial Hill Car Park	Brill	8
(Not Specified)	Great Missenden	8
Pavillion Car Park	Haddenham	8
Edmond's Road Car Park	Lane End	8
Lane End Playing Fields Car Park	Lane End	8
Lane End Village Hall Car Park	Lane End	8
Snells Wood	Little Chalfont	8
Pavillion or Memorial Hall	Pitstone	8
Village Centre Car Park	Stokenchurch	8
Village Hall Car Park	Weston Turville	8
Winslow Public Hall Car Park	Winslow	8
(Not Specified)	Wooburn & Bourne End	8
	<b>TOTAL</b>	<b>160</b>

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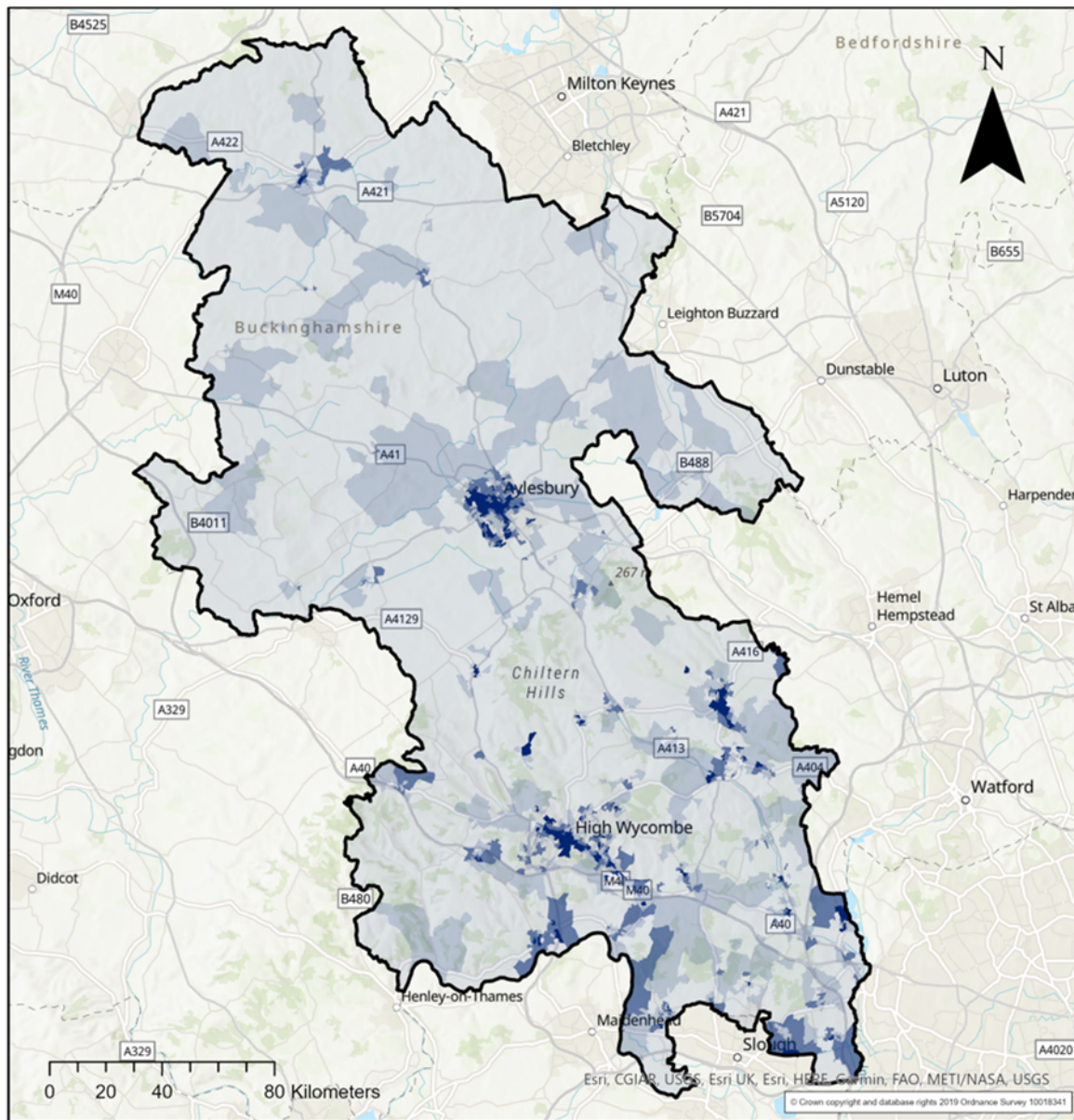
### Appendix 5 - Areas with limited off-street parking availability (February 2022)

Legend

 Buckinghamshire\_border

Limited Off-Street Parking Availability

-  0 - 25%
-  25% - 50%
-  50% - 75%
-  75% - 100%



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# Buckinghamshire Electric Vehicle Action Plan 2022-2027



# Buckinghamshire Electric Vehicle Action Plan

## Introduction

This document represents Buckinghamshire Council's first 5-year Action Plan to support the transition to Electric Vehicles (EVs). The aim of this is to reduce carbon emissions and improve air quality as set out in the Council's Climate Change and Air Quality Strategy (2021). This Plan has been developed with advice from the Energy Saving Trust<sup>1</sup> and following feedback from EV users and infrastructure providers. It is accompanied by an in-depth Electric Vehicle Study looking into the challenges facing EV infrastructure provision in Buckinghamshire.

Globally, we are facing a climate emergency and the UK is committed to reducing Greenhouse Gas emissions to net zero by 2050. Part of this includes phasing out internal combustion engine (petrol and diesel) vehicles. Fully petrol- or diesel vehicles will no longer be sold in the UK after 2030<sup>2</sup>. To support the transition to electric vehicles the Government has recently published their Electric Vehicle Infrastructure Strategy, which aims to increase the number of public charging points by 10-fold, equating to a minimum of 300,000 electric vehicle charge points by 2030<sup>3</sup>. For Buckinghamshire this would generate a minimum requirement for 2430 chargers (1 point for every 223 residents) by 2030. £1.6 billion funding for new electric vehicle charge points was announced in March 2022 in support of this ambition.

Within the Buckinghamshire Climate Change and Air Quality Strategy we have committed to **achieve net zero carbon emissions for Buckinghamshire by 2050**<sup>4</sup>. Transportation currently contributes 51% of those emissions in Buckinghamshire, with 65% of these generated by car use<sup>5</sup> (see Figure 1). Our aim is for residents to move towards being less dependent on vehicles for their daily lives, especially for shorter journeys, and to take up more sustainable and active modes of travel. However, EVs provide a good alternative to combustion engine vehicles as they generate zero 'tailpipe' emissions and have a lower whole-life carbon footprint.

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<sup>1</sup> <https://energysavingtrust.org.uk/service/local-government-support-programme/>

<sup>2</sup> New petrol/diesel hybrids will be phased out after 2035, and petrol/diesel HGVs by 2040.

<sup>3</sup> DfT – Taking charge: the electric vehicle infrastructure strategy:

<https://www.gov.uk/government/publications/uk-electric-vehicle-infrastructure-strategy>

<sup>4</sup> Buckinghamshire Council Climate Change and Air Quality Strategy:

<https://www.buckinghamshire.gov.uk/environment/energy-and-climate-change/the-climate-change-and-air-quality-strategy/climate-change-and-air-quality-strategy/>

<sup>5</sup> <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2019>

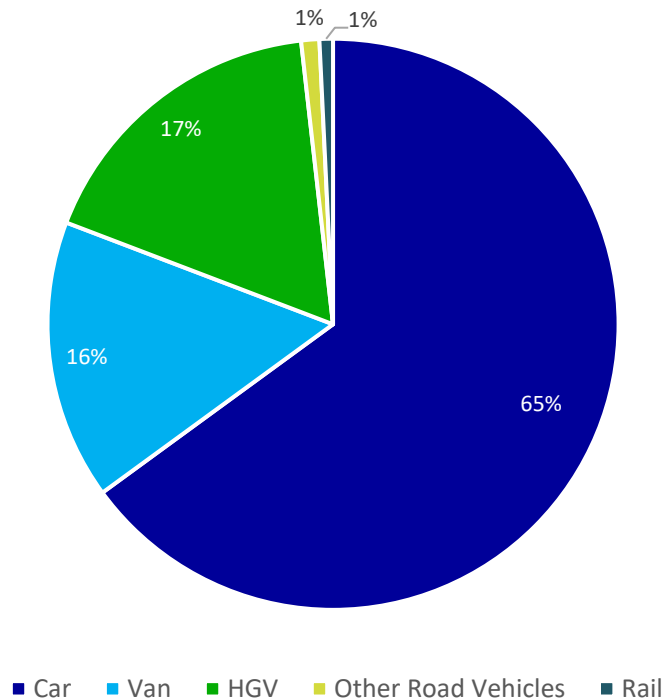


Figure 1: Carbon sources from transportation in Buckinghamshire, 2019

The transition to EVs will be influenced by factors outside the control of Buckinghamshire Council, and in some cases beyond that of the UK Government. Overcoming challenges regarding the global supply of batteries and vehicles, the purchase cost of EVs currently being comparatively more expensive than petrol/diesel vehicles, as well as difficulties meeting power demand and the prohibitive cost of new electricity grid connections in certain areas, are outside the influence of the Council. However, Buckinghamshire Council can help to ensure infrastructure is in place to help residents transition to EVs.

Buckinghamshire Council is not the only facilitator of EV charge points, and the Action Plan also addresses the need to increase commercially provided EV chargers to provide a comprehensive charging ‘network’ across the area. New regulations also now mandate the installation of EV chargepoints in new housing developments<sup>6</sup>. It should be noted that EV charging provision is a relatively new and rapidly evolving market, and in general income from charge points does not currently cover costs of installing, operating and maintaining them.

There are currently 175 public chargers in Buckinghamshire<sup>7</sup> and for the purpose of this document, these are grouped into 3 main categories (more information can be found in Appendix 2):

- **Slow (3-6kW)**
- **Fast (7-22KW)**
- **Rapid (25-99kW)**

<sup>6</sup> Approved Document S: infrastructure for charging electric vehicles, DLUHC 2021: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1046250/consultation-response-electric-vehicle-charging-in-residential-and-non-residential-buildings.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1046250/consultation-response-electric-vehicle-charging-in-residential-and-non-residential-buildings.pdf)

<sup>7</sup> <https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-january-2022>

We recognise an increasing demand for faster ‘rapid’ and ‘ultra-rapid’ (100kW+) chargers, to increase convenience for EV users and the attractiveness of EVs to replace petrol and diesel vehicles. However, installation of rapid charge points requires more robust connections to the power network, and this is constrained in some parts of the County. Distribution Network Operators (DNOs) are aware of this and are seeking to increase power connectivity to meet this new demand. The national Electric Vehicle Infrastructure Strategy aims to focus ‘rapid’ charge point provision on the strategic road network (i.e., motorway) service stations, at least in the short term.

## Electric Vehicle Action Plan Vision

As well as our work to increase the number of trips made by walking, cycling and public transport, we will continue to monitor the reduction in carbon emissions in 5-year periods. The Buckinghamshire Climate and Air Quality Strategy includes transport focused actions that will help us do this. This document outlines specific actions focused on EV uptake and is supported by our vision statement.

*“To expand the electric vehicle infrastructure network in Buckinghamshire to ensure that electric vehicles are a convenient and affordable option for vehicle owners, as part of a holistic and sustainable transport network”*

We will support the national ambition for EV charging provision and we want to continue to facilitate and fund public charging points where we can. **We aim to have increased the number of publicly available charging spaces in Buckinghamshire by 10-fold, to 1000 spaces, within the lifetime of this plan.**

## Action Plan Objectives

Action Plan objectives to support this vision have been developed and identified as part of the EV Study:

1. Support the uptake of EVs within Buckinghamshire through the provision of a comprehensive network of EV charging infrastructure
2. Contribute to reducing carbon and air pollutant emissions from transport by supporting the UK-wide transition to EVs
3. Ensure that the EV infrastructure network is future-proofed, to allow for new technologies and trial innovative solutions
4. Provide a range of publicly funded charging infrastructure to support different charging requirements, including for those without off-street charging at their home
5. Support Buckinghamshire Council staff to transition to EVs through salary sacrifice and vehicle leasing schemes
6. Increase the council’s EV fleet capacity and provide any necessary charging infrastructure
7. Work with developers, local businesses, parish and town councils to encourage provision of privately funded charge points

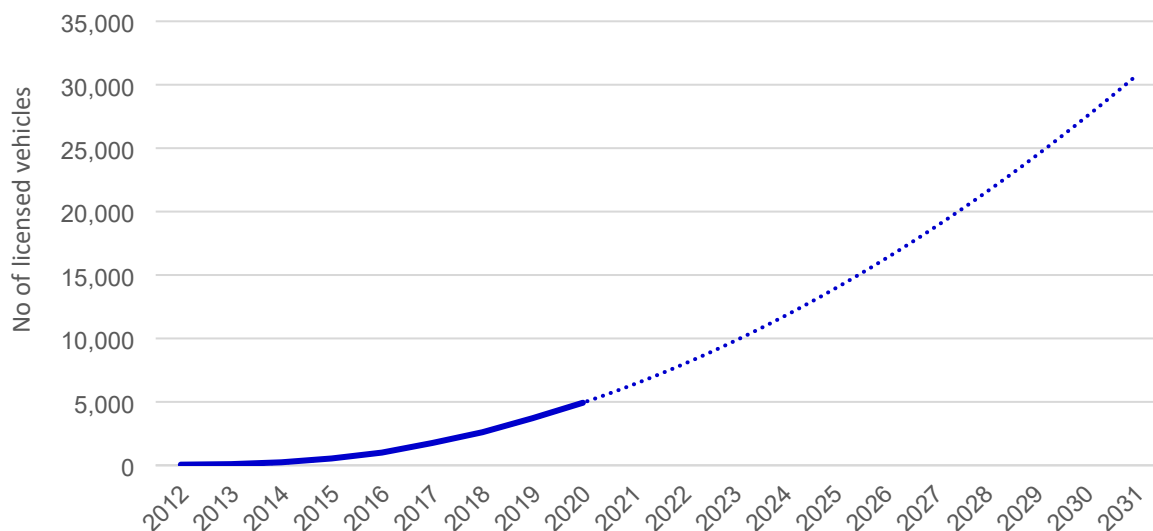
8. Work with local public transport and taxi- and private hire companies to facilitate charging infrastructure and support the transition to zero emission vehicles
9. Encourage use of EVs as part of a sustainable transport network, including active travel and public transport, whilst reducing the need to travel overall

## Uptake of EVs in Buckinghamshire

The uptake of EVs in Buckinghamshire is higher than the UK and South-East of England average. This can be attributed in part to Buckinghamshire having relatively affluent residents and the trend of early uptake in EVs being from people with higher incomes. This is expected to increase in the future as the price of EVs reach parity with petrol/diesel vehicles. However, the overall uptake rate in Buckinghamshire and the UK as a whole remains slow when compared to what is needed to achieve transport decarbonisation.

Figure 2 shows the number of licensed EVs in Buckinghamshire with a projection to 2030<sup>8</sup>. A projected growth curve to 2030 for registered EVs in Buckinghamshire based on recent sales results in a total of approximately 30,000 vehicles. This is significantly below the figure that would be required if the UK is to hit the forecasts produced by the UK’s Committee on Climate Change (CCC), which equates to approximately 110,000 vehicles in Buckinghamshire alone. It is therefore clear that a significant acceleration in the uptake of EVs is required through the remainder of the 2020s to meet the CCC target.

Figure 2: Number of registered EVs in Buckinghamshire up to Q2 of 2021 and forward projection



There are a number of barriers and constraints to transitioning to EVs that have been considered in the development of this Action Plan:

**Range** – One common barrier to driving an EV is concern over the range or distance that an EV can travel before recharging is required. However, new battery technology means that recent EVs have much greater ranges. Ranges have increased from less than 100 miles to

<sup>8</sup> Buckinghamshire EV Study (Jacobs) 2021

200+ miles, which is more than adequate for the vast majority of UK drivers' daily driving requirements. The average commute in Buckinghamshire is 25 miles per day, meaning daily charging would likely be unnecessary. Even company car users which average of 17,500 miles a year do not typically exceed 70 miles per day.

**Disparity of charging types** – One of the most often cited barriers is the lack of charging infrastructure at destinations. However, availability is increasing, and charger compatibility has improved significantly in recent years, with all manufacturers (apart from Tesla) working towards the Open Smart Charging Protocol, to further standardise charging types and connectors.

**Rapidly evolving EV charging technology** – Prior to 2016 most EVs charged at 3kW alternating current (called 'slow' charging), which was adequate to fully recharge most batteries (typically up to 24 kWh) overnight. EV charging technology has evolved and a limited number of compatible vehicles can now recharge from 0% to 80% in 15-30 minutes. However, installation and therefore availability of 'fast' and 'rapid' charge points is constrained by the power supply itself which requires more robust connections to the local grid.

**Choice of vehicles is expanding** – in Autumn 2021 there were over 100 different EV models available on the UK market with a good degree of choice across the various classes of cars and, increasingly, vans. Some manufacturers have also announced an intention to produce only 100% battery electric vehicles from the mid-2020s (e.g., Jaguar, Alfa Romeo).

**Price of vehicles** – EV prices generally remain high, although a few models came to the market in 2021 priced under £40,000. However, the second-hand EV market is still small. Due to the falling price of batteries and increasing maturity of vehicle production techniques, it is estimated that price parity between EVs and petrol/diesel vehicles will occur in the mid to late 2020s.

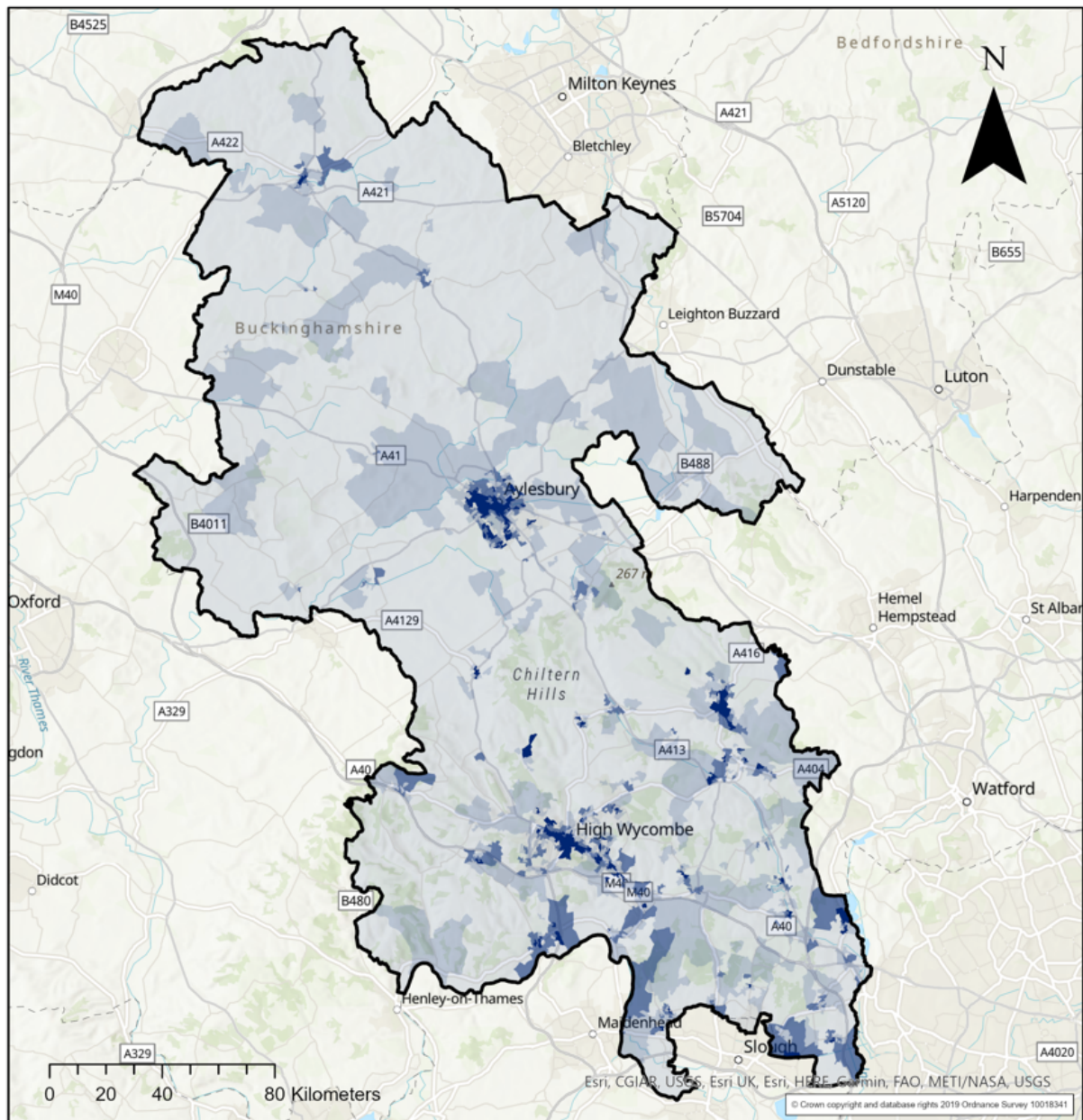
**Supply of vehicles** – Consumers currently report relatively long waiting times for EVs, and there have been instances of models being removed from sale for periods in the UK due to an excess of demand over supply. Instability in vehicle supply impacts the usage of charge points, leading to challenges for sustaining and planning a cohesive public charging network. The lack of production capacity is a global issue and further expansion of capacity is needed in the coming years.

**On-street charging** – Whilst there are existing government schemes to support the installation of charge points for homes with access to off-street parking under permitted development rights, there are limited options to install charging infrastructure where there is no access to off-street private parking space. Residents without access to off-street parking might therefore be discouraged to shift to EVs for this reason. Some local authorities have begun trialling systems to allow charging across pavements, however, there remain several technical and regulatory difficulties with these.

We have reviewed data on parking provision across Buckinghamshire. Figure 3 shows the density of dwellings with limited off-street parking. From this research we have identified several key areas where we would like to support more on street charging provision. These are concentrated in denser urban areas, including Aylesbury, High Wycombe, Amersham, Chesham, Gerards Cross, Wendover, and the outskirts of Slough and Maidenhead.



Figure 3 - Areas with limited off-street parking availability (February 2022)<sup>9</sup>



Legend

Buckinghamshire\_border

Limited Off-Street Parking Availability

- 0 - 25%
- 25% - 50%
- 50% - 75%
- 75% - 100%

<sup>9</sup> Buckinghamshire EV Study (Jacobs) 2021

## **Current EV charging provision in Buckinghamshire**

At the time of writing there are 175 public chargers in Buckinghamshire (35 of these are classed as 'rapid' chargers)<sup>10</sup>. In addition to this, charge point operators and businesses are also investing commercially in the network. These tend to be in areas where demand for EV charging is already high such as larger towns and along major traffic routes.

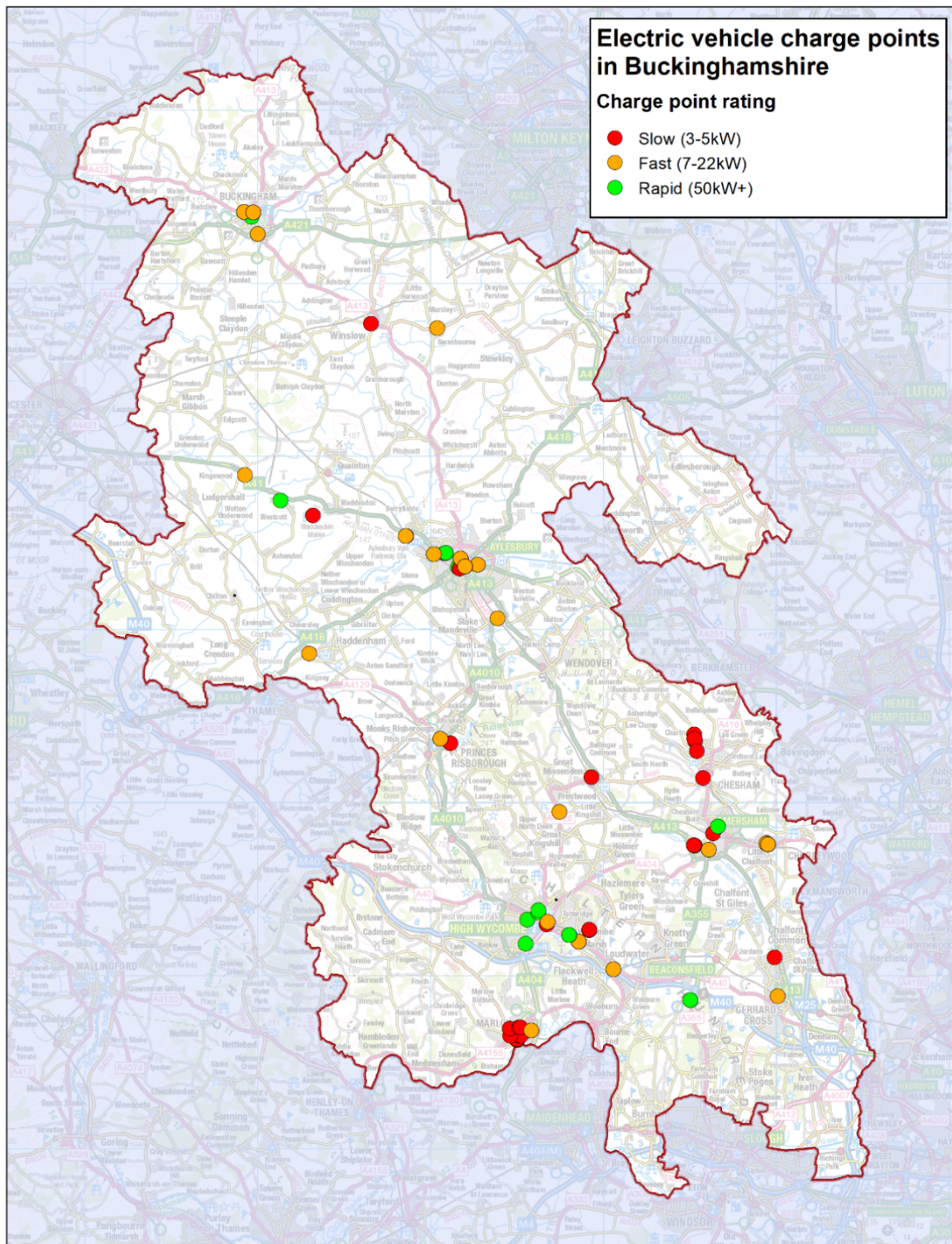
Current EV charging provision is outlined in Figure 4 below and is primarily concentrated within the main towns of Buckinghamshire namely Aylesbury, Chesham, Amersham, Buckingham, High Wycombe, and Marlow. Rural areas of Buckinghamshire currently have much less coverage and this is something we want to address. Where we cannot facilitate the provision of charging points in these locations ourselves, we will be working with charge point operators, parish and town councils, and businesses to encourage their installation.

At present, we do not enforce maximum stay times at any of our charge points. However, we have been made aware of some users 'over-staying' at charge points (parking vehicles at charge points for longer than is necessary to charge them). At present this is discouraged through the parking charges within our car parks, but we will investigate options to maximise turnover and the continued availability of charge points for multiple users.

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<sup>10</sup> Numbers of charge points based on DfT statistics: charging speeds as published on Zap Map: <https://www.zap-map.com/live/>

Figure 4: Existing charging infrastructure in Buckinghamshire (February 2022)



## Action plan outcomes

To achieve the objectives of the Action Plan, this section explains the actions we will be taking and the expected outcomes, over both the short and medium term. These are outlined in more detail in Table 1 below.

### Short term (to 2024/5)

- Double the number of EV charging spaces across Buckinghamshire, compared to February 2022 (this equates to 175 new parking bays) by 2023/4, focusing on coverage in areas currently without access to a charge point.
- Work with a medium-term strategic EV supply partner to help facilitate EV charger provision and provide data on EV use in Buckinghamshire. This arrangement will be reviewed at the end of the contract period.
- Investigate opportunities for income generation for the Council via publicly funded charging points, recognising that although currently the income from charge points does not generally cover costs of installing, operating and maintaining them, this situation may change over time as usage rates increase.
- Maximise opportunities to secure grant funding from Government via the Office for Zero Emission Vehicles (OZEV). Within the restrictions placed on the use of this funding, we will:
  - Increase the number of EV charge points in council-owned car parks near residential areas, focusing initially on areas where there is a higher uptake in EVs (under the On-Street Residential Charge point Scheme (ORCS)<sup>11</sup>), and provide technical support for town and parish councils wishing to secure funding via ORCS.
  - Using the new Local Electric Vehicle Infrastructure (LEVI) fund<sup>12</sup>, we will increase the number of on-street EV charge points, prioritising areas where there is limited off street parking and public support.
- Work with EV charge point suppliers in the roll out of their networks of chargepoints on a commercial (100% privately funded) basis across Buckinghamshire.
- Work with EV charge point suppliers and DNOs to future proof the technology and power supplies to support Buckinghamshire's developing EV charging network.
- Take a strategic view to provision, ensuring there is a spread of EV charging points of different types across Buckinghamshire. Develop a system for recording and prioritising residents' requests for on-street EV chargers.
- Trial innovative charge point technologies and on street charging solutions (including induction charging, cable channels, solar canopies).
- Work with England's Economic Heartland, the DNOs and EV charge point suppliers to investigate the feasibility of installing ultra-rapid charge point hubs on strategic road links, including through the government's new Rapid Charging Fund.

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<sup>11</sup> [On-Street Residential Chargepoint Scheme guidance for local authorities - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/guidance/on-street-residential-chargepoint-scheme-guidance-for-local-authorities)

<sup>12</sup> [Apply for local electric vehicle infrastructure \(LEVI\) pilot funding - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/apply-for-local-electric-vehicle-infrastructure-levi-pilot-funding)

- Install EV charging points at Buckinghamshire Council offices and depots to support staff to take up EVs and transition the council's fleet to EVs. Collaborate with other public agencies to provide greater charging provision for public service fleet vehicles.
- Review and update Buckinghamshire's parking standards for new developments, in line with new building regulations requirements for new developments<sup>13</sup>.
- Undertake promotional activities targeting residents and local businesses to dispel commonly held myths about EVs and highlight price comparison to running costs of a petrol/diesel vehicle.
- Ensure the accessibility of charge points, in terms of both physical usage and payment methods.
- Work with suppliers to improve charge point reliability and investigate mechanisms to discourage 'over-staying' at charge points longer than necessary to complete a full charge.

### **Medium Term (2025-27)**

- Continue to provide and extend a high quality, efficient and comprehensive publicly available EV charging network across the council area. Support the delivery of 1000 charging spaces across Buckinghamshire by 2027.
- Ensure the proper maintenance and continued operation of all charge points installed in partnership with Buckinghamshire Council and at Buckinghamshire Council facilities.
- Investigate options for providing on-street charge points in areas with high levels of properties without access to private home chargers (see Figure 2). Install chargers in consultation with ward members, Community Boards and residents.
- Continuously monitor utilisation of publicly funded charging infrastructure and engage with the commercial sector to identify when further charging infrastructure should be installed to meet demand.
- Continue to work with developers, local businesses, town and parish councils to increase the number of publicly available EV chargers.
- Encourage EV transition within the council's supply chain through our contract procurement processes.
- Look at ways to integrate, promote, and secure funding for zero emission vehicles within the wider transport network (e.g., buses<sup>14</sup>, rail and freight) alongside other decarbonisation measures within the development of the council's next Local Transport Plan (Buckinghamshire LTP5).
- Work with DNOs to understand options to bring fast- or rapid EV charging to locations with limited electricity supply, to ensure EV charging supply is spread evenly across Buckinghamshire.
- Promote options for increasing the uptake of EVs by staff through salary sacrifice options, the Council's Vehicle Leasing Scheme, or other Government supported schemes.

<sup>13</sup> [Infrastructure for charging electric vehicles: Approved Document S - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/infrastructure-for-charging-electric-vehicles)

<sup>14</sup> <https://www.gov.uk/government/publications/apply-for-zero-emission-bus-funding>

- Consider the introduction of emissions-based parking schemes as part of the forthcoming work on the Buckinghamshire Parking Strategy.
- Monitor technological development and maturity of solutions to transition HGVs to EV. This should include monitoring of developments for other fuel solutions such as hydrogen.

These actions were derived from the findings of the accompanying EV study and are outlined in more detail in Table 1 below.

Table 1: Electric Vehicle Action Plan Recommendations for Key Actions

Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>1a. Increase the number of publicly available EV charge points at Buckinghamshire Council-operated facilities to give residents, visitors, and fleet operators the confidence to transition to EV.</b></p>	<p>Public opinion surveys consistently show the opportunity to charge at publicly available charge points is highly valued. It is increasingly important as charging trends move away from home charging to address range anxiety and support residents without the ability to charge at home.</p> <p>As the supply of vehicles increases, it will be important to give users confidence that facilities exist to support their journeys, particularly within a rural county such as Buckinghamshire where there are higher than average commuting distances.</p> <p>Residents who do not have access to off-street parking will require public facilities.</p>	<p>Double the number of public charging facilities to 2023/24, with aim to support the provision of 1000 publicly available charging spaces by 2027.</p> <p>Initial ORCS bid to be undertaken with EV supply partner.</p>	<p>Buckinghamshire Council Council EV supply partner OZEV funding grants</p>

Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>1b. To keep pace with the uptake in EVs, deliver more ‘fast’ and ‘rapid’ chargers in co-ordination with the private sector.</b></p>	<p>A high-level assessment on the potential number of future rapid charge points has been undertaken as part of the accompanying EV Study. This suggests that between 310 and 887 rapid chargers are likely to be required in Buckinghamshire by 2025 based on forecast EV uptake. Due to the uncertainties explained in this document, it is difficult to predict the precise number of rapid charge points required. Monitoring of charge point usage will be undertaken to inform future charging provision. We will also work with DNOs to identify suitable locations for rapid and ultra-rapid charge points hubs.</p>	<p>Provision of additional fast charge points in the short term to 2024, and rapid charge points in the medium term to 2027.</p>	<p>Private sector landowners EVCP Suppliers Buckinghamshire Council England’s Economic Heartland DNOs x 3</p>
<p><b>1c. Engage with the EV charge point industry on an ongoing basis to facilitate commercial roll out of chargers, increasing the number of publicly available EV chargers and workplace chargers</b></p>	<p>It will be important to continue providing sufficient charging infrastructure to give users confidence that facilities exist to support their journeys.</p>	<p>Monitoring of utilisation and engagement with sector to determine further phases of infrastructure delivery over the medium to long term (2023+)</p>	<p>EVCP Suppliers Businesses Buckinghamshire Council</p>
<p><b>2a. Undertake trials to facilitate charging in residential areas where residents do not have off-street parking.</b></p>	<p>Most areas without off-street parking are concentrated in denser urban areas. We are already trialing new on-street induction charging in Marlow and will investigate the introduction of other solutions for at home on-street charging.</p>	<p>Medium term to 2023+</p>	<p>Buckinghamshire Council Trial EV supplier partners</p>

Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>2b. Look at opportunities for implementing further on-street charge points including a means of recording and prioritising residents' requests for on-street EVCPs.</b></p>	<p>Several challenges exist to the provision of on street chargers, as noted within the accompanying EV Study. Using lessons learnt from the early introductions of on street chargers in Buckinghamshire, future on street charging points should be supported with EV only bay markings and accompanying Traffic Regulation Order.</p>	<p>Medium term (2023+)</p>	<p>Buckinghamshire Council In conjunction with Community Boards and Parish and Town Councils</p>
<p><b>2c. Seek external funding from forthcoming sources, including but not limited to the Government's ORCS, LEVI, and Rapid Charging Fund.</b></p>	<p>In support of the national EV Infrastructure Strategy £1.6 billion funding for new electric vehicle charge points was announced.</p> <p>This is comprised of two main funding streams: the £450 million Local Electric Vehicle Infrastructure (LEVI) fund which aims to improve on-street charge point provision; and the £950 million Rapid Charging Fund (RCF) which aims to install rapid charge points at motorway- and major A-road service stations. Alongside ORCS, these offer significant opportunities to improve charge point coverage, but have not yet come fully on-stream. We will submit a bid for the £10m LEVI trial fund in the first instance.</p> <p>This will help to fund trials in Recommendation 2a and assist with developing a new service offer to provide on-street charge points (Recommendation 2b).</p>	<p>Short term to 2023</p>	<p>Buckinghamshire Council</p>



Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>3a. Procure a strategic commercial partner to help deliver the Council's EV-charging ambitions in off-street areas.</b></p>	<p>A coordinated and consolidated procurement exercise maximising the scale of the opportunity is likely to realise best value and leverage investment.</p> <p>Buckinghamshire Council has recently completed this exercise. The arrangement will be reviewed at the end of the current contract period (2027).</p>	<p>Short term to 2027</p>	<p>Buckinghamshire Council</p>
<p><b>3b. Where possible, establish a coordinated approach to setting tariffs for usage of charge points commissioned by Buckinghamshire Council in partnership with commercial operators.</b></p>	<p>Each charge point type (ultra-rapid, rapid, fast, and slow) will have different tariffs to reflect the fact that they are different products (e.g., a rapid charger will cost more to use than a slow charger).</p> <p>However, this recommendation will seek to ensure that tariffs are consistent for each charge point type that is commissioned by Buckinghamshire Council.</p>	<p>Medium term to 2026</p>	<p>Buckinghamshire Council EVCP suppliers</p>
<p><b>3c. Understand the potential for other procurement approaches or partnership working with England Economic Heartland (EEH)</b></p>	<p>This could help to provide a region-wide EV network that operates with consistent infrastructure. This approach would be most effective when planning a network of ultra-rapid and rapid charging hubs.</p>	<p>Short term to 2023</p>	<p>Buckinghamshire Council England's Economic Heartland Neighbouring local authorities DNOs x3</p>
<p><b>3d. Conduct procurement of a strategic commercial partner to help deliver on-street charge points.</b></p>	<p>The same rationale for Recommendation 3a will apply once a preferred approach to on-street charging has been defined through our trials.</p>	<p>Medium term to 2027</p>	<p>Buckinghamshire Council</p>

Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>4. In partnership with an EV supplier, continue to maximise available Government funding to increase the number of EV charge points in Buckinghamshire</b> (including OZEV's ORCS and LEVI schemes; Charging Infrastructure Investment Fund; Ofgem funding; and forthcoming funding referenced in Recommendation 2c.</p>	<p>The Council is dependent on external funding to expand its network of EV charge points. This agreement needs to be adaptable to changes in bid criteria and funding sources and is dependent on staff resources.</p>	<p>Ongoing through the length of the plan</p>	<p>Buckinghamshire Council Council EV supply partner</p>
<p><b>5a. Where possible future proof technology and the infrastructure deployed in future phases of charge point rollout.</b></p>	<p>The demand for ultra-rapid charging is currently limited by the low number of vehicle models with this capability. Additionally, the technological solutions for vehicle to grid and inductive charging are relatively immature. However, these technologies are likely to play a key role in the future.</p>	<p>Integrate requirements for keeping pace with innovations into contracts with commercial partners - ongoing through the length of the plan</p>	<p>Buckinghamshire Council EV charger supply partners</p>
<p><b>6a. To implement measures to support the transition of the Council's fleet to EV where possible.</b></p>	<p>The Council is already progressing a programme of fleet transition to EV. This includes purchasing chargepoints for the fleet.</p>	<p>Medium term (2026)</p>	<p>Buckinghamshire Council Term Contractors</p>

Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>6b. Review options to increase the uptake in EVs for staff through increased workplace chargers and EV purchasing support through salary sacrifice schemes.</b></p>	<p>Increasing charging infrastructure at Council workplace destinations could encourage greater EV uptake from Council employees and contractors.</p> <p>Collaborating with other public agencies within the County will provide greater charging provision for all public service fleet vehicles.</p>	<p>Short term to 2023</p>	<p>Buckinghamshire Council Car Leasing Partners</p>
<p><b>6c. Encourage EV transition through contract procurement. Building on existing and new contracts, the Council would be able to influence providers of services.</b></p>	<p>Ensuring that the Council is encouraging change and use of new technology through the supply chain.</p> <p>This is consistent with Buckinghamshire Council's Climate Change and Air Quality Strategy (Action 32): Work with key suppliers to identify opportunities to reduce emissions from their products/services.</p>	<p>Ongoing through the length of the plan</p>	<p>Buckinghamshire Council Contractors</p>
<p><b>7a. Implement promotional measures to dispel commonly held myths regarding EVs. This would involve using existing communications channels available to the Council to engage residents and local businesses.</b></p>	<p>EVs are often perceived as impracticable and more complicated to use. Due to higher than average commuting distances in Buckinghamshire, many residents have range anxiety, which is contributing to their slow uptake.</p>	<p>Short term to 2023</p>	<p>Buckinghamshire Council Private car manufacturers Government</p>
<p><b>7b. Investigate measures to discourage 'over-staying' at charge points</b></p>	<p>EV charge point use may increase to the point where demand outstrips the availability of charge points. Individuals parking for longer than needed to charge their vehicle reduce availability for others. At present this is a relatively rare occurrence but may become more common as EVs become more widespread.</p>	<p>Medium term to 2027</p>	<p>Buckinghamshire Council EVCP suppliers</p>

Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>8. Within the development of the new Local Transport Plan ensure integration of zero emission vehicles within the wider transport network, seeking to reduce car use through buses, e-car clubs, e-bikes, taxis, shared and micro-mobility, and potentially Mobility as a Service in the longer term.</b></p>	<p>Electrification of cars will play a key role in decarbonisation. However, this on its own will not achieve CO<sub>2</sub> reduction targets or tackle other issues such as congestion on roads, improving health/ wellbeing, and placemaking within communities.</p>	<p>Ongoing through to 2025 (expected adoption of LTP5)</p>	<p>Buckinghamshire Council  Car Club Suppliers  E-Bike / E-Scooter Suppliers</p>
<p><b>9. Supporting the transition of local buses and public passenger transport services to EV and/or hydrogen, including seeking grants from central government.</b></p>	<p>The Council proposed trialing the use of electric buses as part of its 2021 Bus Service Improvement Plan (BSIP). However, no BSIP funding was received by the Council in 2022. Securing funding through grants from central government is required to support the transition of buses and other forms of local passenger transport to zero emission vehicles. We will consider applying for any future rounds of the Zero Emission Bus Regional Areas (ZEBRA) scheme, should these become available. The Council has already committed to only issue new taxi licenses to ultra-low or zero emission vehicles by 2030<sup>15</sup>.</p>	<p>Medium term to 2027</p>	<p>Buckinghamshire Council  Public Transport Operators  Government</p>

<sup>15</sup> <https://www.buckinghamshire.gov.uk/parking-roads-and-transport/taxis-and-private-hire/taxi-licence-applications/hackney-carriage-and-private-hire-licensing-policy/about-this-policy/>

Recommendation	Rationale	Timescales	Responsible organisation (s)
<p><b>10. Reviewing and updating current parking standards for new developments to include EV charging infrastructure in line with new Building Regulations requirements</b></p>	<p>The UK Government has announced that new homes and buildings in England will be required by law to install EV charging infrastructure. We already have EV charging requirements as part of our planning processes, and this will need to be included within the new Buckinghamshire Local Plan.</p>	<p>Medium term to 2027</p>	<p>Buckinghamshire Council Developers</p>
<p><b>11. Consider the introduction of emissions-based parking schemes, which would incentivise the uptake of EVs, as part of the Council's forthcoming Parking Strategy review.</b></p>	<p>Emissions-based parking schemes have been successfully implemented by several other local authorities. They help to promote EVs and other lower emitting vehicles (Euro 6 or later) by charging them less for parking than more polluting vehicles. These schemes do not have to be implemented in every car park and could be used to target specific sites in Air Quality Management Areas. In addition to incentivising EVs this would also contribute to improved air quality.</p>	<p>Medium term to 2025</p>	<p>Buckinghamshire Council</p>
<p><b>12. Monitoring technological development and maturity of solutions to transition vehicle types such as HGVs to EV and/or hydrogen.</b></p>	<p>Although the preferred solution for fueling HGVs in the future has not been identified, in the long-term CO<sub>2</sub> reductions are still required. This should include monitoring of technological developments for other solutions (e.g., hydrogen, noting there is a hydrogen hub in south of Buckinghamshire).</p>	<p>Monitoring over short to long term and look for opportunities to run trials</p>	<p>Buckinghamshire Council Commercial suppliers and operators</p>

Recommendation	Rationale	Timescales	Responsible organisation (s)
<b>13. Continuous engagement with local Distribution Network Operators (DNOs) including: UK Power Networks (UKPN), Western Power Distribution (WPD) and Scottish &amp; Southern Electricity Networks (SSEN) to address key points of weakness in the power network in Buckinghamshire.</b>	Provision of cost-effective and affordable power connections is fundamental to the delivery of charging infrastructure as these are often prohibitively expensive to the installation of new charging points.	Ongoing through the length of the plan	Buckinghamshire Council DNOs Government

## Buckinghamshire Council-owned car parks: prioritisation for EV charging infrastructure

One of our first actions in this plan is to increase the number of EV charge points in council-owned car parks near residential areas, maximising use of the funding available via the On-Street Residential Charge point Scheme (ORCS) and focusing initially on areas where there is currently limited coverage.

Figure 5 shows a map of Buckinghamshire Council-owned public car parks and current EV charge point installation within these car parks. Table 2 then outlines a list of priority locations in these car parks for future EV charge point installation under the ORCS scheme application criteria<sup>16</sup>.

<sup>16</sup> [On-Street Residential Chargepoint Scheme guidance for local authorities - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/guidance/on-street-residential-chargepoint-scheme-guidance-for-local-authorities)

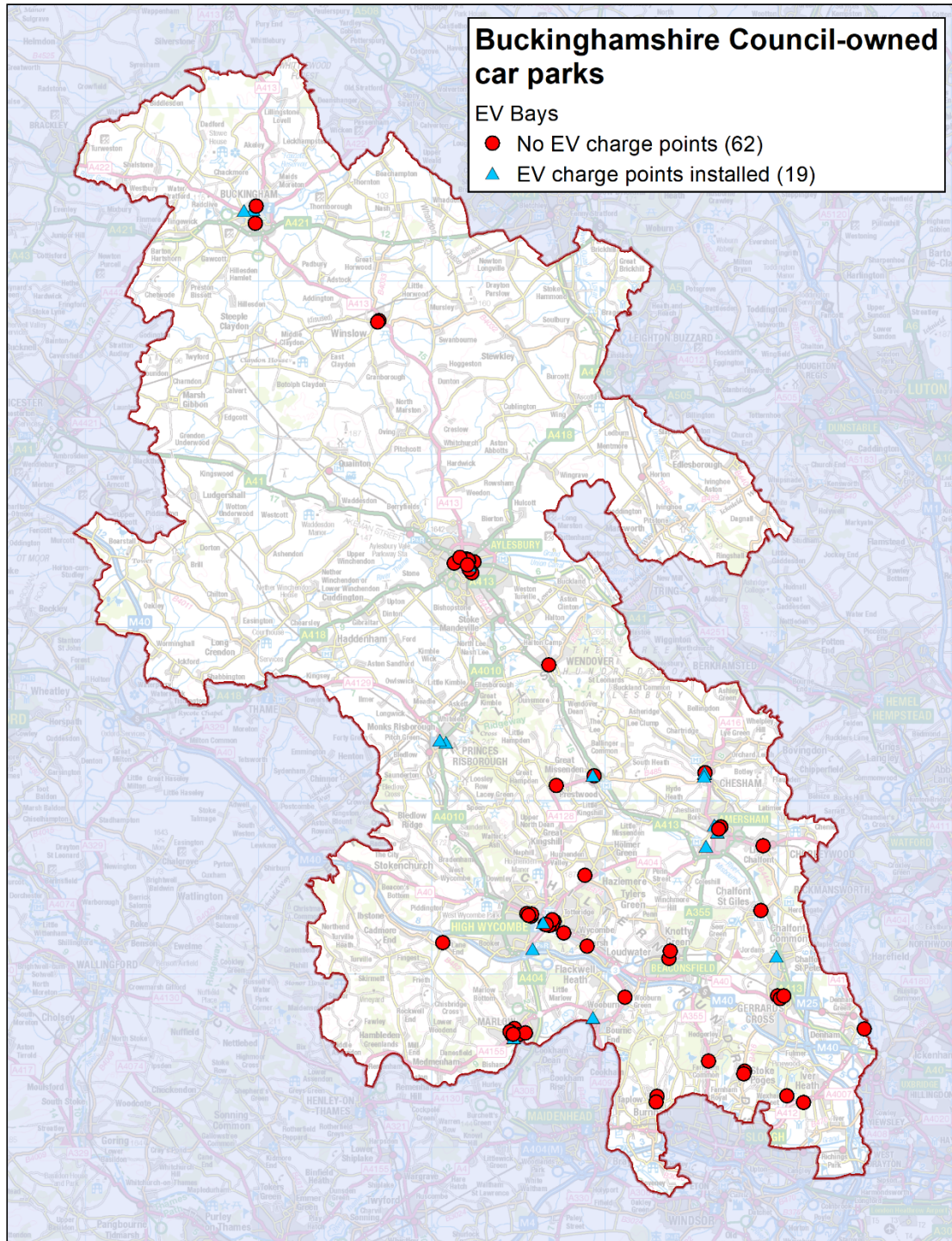


Figure 5: Buckinghamshire Council-owned car parks, highlighting those with existing EV charge points.

ORCS has specific criteria for EV charger locations and so these locations were determined based on the following criteria:

- Car park must be fully owned and directly operated by Buckinghamshire Council;
- Must be located in residential areas, as determined within the Buckinghamshire EV Study and a requirement of ORCS;

- A maximum stay time of more than 4 hours, to allow time to fully charge vehicles;
- Accessible and does not charge for parking between 6pm and 8am, to allow residents to charge overnight;
- Must not serve only a specific destination (such as a library or leisure centre), as this does not meet the criteria for ORCS;
- Must not already have EV charge points installed as our aim is to increase coverage across Buckinghamshire;
- Must have at least 40 parking spaces to lessen impact of reducing overall parking availability due to new EV charging bays;
- Not a multi-storey car park, as installation costs may be prohibitive, but to be considered where this would serve a large number of residents; and
- Should have access to sufficient power supplies to support multiple ‘fast’ (7-22kW) charge points.

Table 2: Priority car park locations for future electric vehicle charge point installation

Site	Town	Postcode	Capacity	Priority level
Chiltern Avenue	Amersham	HP6 5AH	119	High
Chiltern Pools	Amersham	HP6 5AH	61	High
Penncroft	Beaconsfield	HP9 1PB	101	High
Warwick Road	Beaconsfield	HP9 2PE	49	High
Railway Place	High Wycombe	HP11 1XS	184	High
Snells Wood	Little Chalfont	HP7 9QA	47	High
Institute Road	Marlow	SL7 1BN	61	High
Liston Road	Marlow	SL7 2NJ	167	High
Central	Marlow	SL7 2NJ	184	High
Council Offices (KGVH)	Amersham	HP6 5AW	173	Medium
Aqua Vale	Aylesbury	HP20 1RJ	128	Medium
Exchange Street	Aylesbury	HP20 1UR	278	Medium
Hampden House (multi-storey)	Aylesbury	HP20 1QX	364	Medium
Upper Hundreds (multi-storey)	Aylesbury	HP20 1AG	305	Medium
Walton Street (multi-storey)	Aylesbury	HP21 7QX	525	Medium
Catlings	Chesham	HP5 1DS	55	Medium
Duke Street	High Wycombe	HP11 2DJ	169	Medium
WDC Offices - Rear	High Wycombe	HP11 1BB	109	Medium
West Street	Marlow	SL7 2BS	61	Medium

These sites are currently undergoing a feasibility study to assess access to power supplies, any physical constraints, and to understand installation costs. Working with our strategic EV supply partner and the 3 local DNOs the aim is to install new ‘fast’ charge points at as many of these locations as possible over the next 2 years. Further detail on the rationale for selecting these points can be provided on request.



## Appendix 1: Recommendations for EV charge point provision in car parks, by settlement

Table 3 provides recommendations for EV charging provision in council-owned car parks for each main settlement in Buckinghamshire. The number of chargers suggested is based on a high level assessment of the power availability (this is not necessarily the same as the connectivity costs). It is important to note that settlements without Buckinghamshire Council owned car parks are, by necessity, currently excluded from the table.

Table 3: Recommendations for individual settlements (listed in order of settlement hierarchy).

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
High Wycombe	Provision of rapid chargers to help build a strategic base charging network.	<p><b>Railway Place Car Park - 2 x 43+ kWh rapid chargers</b></p> <p>To accommodate terraced housing within the vicinity of the car park to the east. This car park is also located in an area that is forecast to have the highest EV uptake in High Wycombe, which is why the residential use case has been prioritised.</p> <p><b>Swan Multi-Storey Car Park - 2 x 43+ kWh rapid chargers</b></p> <p>Due to its high residential potential and to supplement the existing fast charging provision.</p> <p><b>Easton Street Car Park - 2 x 43+ kWh rapid chargers</b></p> <p>Due to high residential potential and to supplement the existing fast charging provision.</p>	Base network to be implemented in the short term to 2023.
Aylesbury	Provision of rapid chargers to help build a strategic base charging network.	<p><b>Waterside Car Park (classed as Waitrose &amp; Partners on Google Maps) - 2 x 43+ kWh rapid chargers</b></p> <p>To complement existing fast charging provision and to provide for terraced housing to the south of the site. It is also located near to</p>	Base network to be implemented in the short term to 2023. Prioritisation of sites may be necessary with remaining sites delivered post 2023.

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
		<p>the A413, which is the most direct road from the south and would provide good on-route charging potential for fleet vehicles.</p> <p><b>Waterside North (Managed On-Street) - 2 x 43+ kWh rapid chargers</b></p> <p>To complement the approved provision (8 fast chargers) and to provide some provision for terraced housing to the south of the site. It is also located near to the A413, which is the most direct road from the south and would provide good on-route charging potential for fleet vehicles.</p> <p><b>Whitehall Street Car Park - 2 x 43+ kWh rapid chargers</b></p> <p>To accommodate nearby terraced housing and to encourage turnover due to its smaller capacity.</p>	
Amersham	<p>No immediate improvements are required because there are already two council car parks and some commercial sites with EV charging infrastructure. The recommended site for delivery is a medium to long term timescale based on the outcome of monitoring and EV uptake in the area.</p>	<p><b>Chiltern Avenue - 4 x 22 kWh fast chargers and 2 x 7 kWh fast chargers</b></p> <p>To accommodate users of the Chiltern Lifestyle Centre and due to forecast increase in EV uptake.</p>	By 2025.

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
Chesham	Provision of rapid chargers to help build a strategic base charging network. However, the EV uptake in Chesham is forecast to be low, so this can be brought forward in the medium term.	<p><b>Albany Place Car Park - 2 x 43 kWh rapid chargers</b></p> <p>To accommodate potential EV ownership in terraced houses to the east in the medium to long term.</p> <p><b>Water Meadow Car Park - 2 x 43+ kWh rapid chargers</b></p> <p>To accommodate potential EV ownership in terraced houses to the south in the medium to long term.</p>	By 2025.
Gerrards Cross	<p>Create a network of EV charging infrastructure in the town.</p> <p>Strengthening of the connection into Station Road Car Park is required. This should be undertaken through liaison with the DNO provider for the area.</p>	<p><b>Bulstrode Way Car Park - 4 x 22 kWh fast chargers</b></p> <p>To facilitate users that want to use the centre of Gerrards Cross.</p>	<p>Installation of EV Charging Points should be completed by 2025.</p> <p>Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.</p>
Marlow	Increased provision of EV charging infrastructure in Marlow.	<p><b>Institute Road Car Park - 4 x 22 kWh fast chargers and 2 x 7 kWh slow chargers</b></p> <p>Due to its proximity to the library and High Street.</p> <p><b>Marlow Central Car Park - 4 x 22 kWh fast chargers and 2 x 7 kWh slow chargers</b></p> <p>Due to its proximity to Riley Park as well as shops along High Street and Marlow Road.</p>	By 2023.

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
Beaconsfield	Create a network of EV charging infrastructure in the town. EV uptake is not forecast to be as high as other areas of Buckinghamshire, which is why this is a medium term timescale.	<p><b>Warwick Road Car Park - 4 x 22 kWh fast chargers</b></p> <p>Due to its proximity to shops on Station Road.</p> <p><b>Penncroft Car Park - 4 x 22 kWh fast chargers</b></p> <p>Due to its proximity to shops on Station Road.</p>	By 2025.
Buckingham	Provision of rapid chargers to help build a strategic base charging network.	<p><b>Western Avenue Car Park - 2 x 43+ kWh rapid chargers</b></p> <p>Due to its high on-route charging potential</p>	By 2023.
Chalfont St Peter	EV uptake is forecast to be lower than other areas of Buckinghamshire, which is why this is focused on a medium term timescale.	<p><b>Church Lane Car Park - 4 x 22 kWh fast chargers</b></p> <p>Due to its proximity to the town centre.</p>	By 2025.
Burnham	Strengthening of the connection into Burnham is required to ensure that EV charging infrastructure can be provided in Council Car Parks. This should be undertaken through liaison with the DNO provider for the area.	None.	Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.
Iver	Strengthening of the connection into Langley Park Country Park is required to ensure that EV charging	None.	Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
	infrastructure can be provided. This should be undertaken through liaison with the DNO provider for the area.		
Hazlemere	Monitor the uptake and usage of EVs in the area and liaise with Shell to understand whether they are planning to install EV charging infrastructure at their forecourt in the next three years.	<b>Beaumont Way Car Park – 4 x 22 kWh fast chargers</b>  Depending on the outcome of the liaison with Shell, there is the potential to install these chargers to support local businesses.	Decision to be made by 2025.
Princes Risborough	Monitor the uptake and usage of existing infrastructure across both car parks to understand whether further provision is required in the short term.	<b>Horns Lane Car Park – 4 x 22 kWh fast chargers</b>  In the medium term, there is the potential to install these chargers to serve the High Street depending on the outcome of monitoring existing infrastructure.	Monitoring to be undertaken until 2023 and decision on whether to install more infrastructure should come forward to be taken by 2025.
Bourne End and Wooburn	Monitor the uptake and usage of existing infrastructure in Bourne End to understand whether further provision is required in the short term.  Liaise with the DNO to improve the power connection into Wooburn.	<b>Wakeman Road Car Park – 4 x 22 kWh fast chargers</b>  In the medium term, there is the potential to install these chargers to serve the library, Community Centre and businesses along The Parade depending on the outcome of monitoring existing infrastructure.	Monitoring to be undertaken until 2023 and decision on whether to install more infrastructure should come forward to be taken by 2025.  Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.
Little Chalfont	Create a network of EV charging	<b>Snells Wood Car Park - 2 x 22 kWh fast chargers</b>	Infrastructure to be installed by 2025.

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
	<p>infrastructure in the town.</p> <p>Monitoring of the network to understand usage and plan future provision.</p>	To serve local businesses along A404 Chalfont Station Road and the Village Hall.	Monitoring to be undertaken until 2023 and decision on whether to install more infrastructure should come forward to be taken by 2025.
Prestwood	Strengthening of the connection into Prestwood is required to ensure that EV charging infrastructure can be provided in Council Car Parks. This should be undertaken through liaison with the DNO provider for the area.	None.	Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.
Farnham Royal / Common	Strengthening of the connection into Farnham Royal/ Common is required to ensure that EV charging infrastructure can be provided in Council Car Parks. This should be undertaken through liaison with the DNO provider for the area.	None.	Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.
Chalfont St Giles	Strengthening of the connection into Chalfont St Giles is required to ensure that EV charging infrastructure can be provided in Council Car Parks. This should be	None.	Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
	undertaken through liaison with the DNO provider for the area.		
Winslow	Strengthening of the connection into Winslow is required to ensure that EV charging infrastructure can be provided in Council Car Parks. This should be undertaken through liaison with the DNO provider for the area.	None.	Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded. This should be prioritised because it would form a key part of the strategic network and provide additional provision in the north of Buckinghamshire.
Lane End	Strengthening of the connection into Lane End is required to ensure that EV charging infrastructure can be provided in Council Car Parks. This should be undertaken through liaison with the DNO provider for the area.	None.	Liaison with the DNO should be completed by the end of 2022, with clear indication of when the network will be upgraded.
Wexham	Monitor the number of EVs using Black Park Country Park to understand whether further provision is required in the short term.  In the medium term, review whether EV infrastructure is required based on the number of EVs	Black Park Country Park would be suited to fast charging infrastructure. However, the number of chargers installed will depend on monitoring data.	Monitoring to be undertaken until 2025 and decision on whether to install more infrastructure should come forward to be taken.

Settlement	Improvement Requirements	Recommended Sites for Delivery	Timescales
	visiting the Country Park.		
Great Missenden	Monitor the uptake and usage of existing infrastructure in Link Road Car Park to understand whether further provision is required in the short term.	None.	Monitoring to be undertaken until 2023 and decision on whether to install more infrastructure should come forward to be taken by 2025.



## Appendix 2: Explaining charging infrastructure speeds and applications<sup>17</sup>

Wired chargepoints are normally classified according to their power rating. Each charger type has an associated set of connectors that are designed for low- or high-power use, and for either AC or DC charging.

### 1. Slow (3-6kW)

The most common type of slow charger is 3.6 kW (16A). They typically take between 6 to 21 hours to fully charge an electric car, depending on the battery size. For this reason, they are often used to charge overnight, in workplaces and in long stay car parks, where vehicles can be left for longer periods of time.

Charging on a three-pin plug will typically see the car draw 2.3 kW (10A), while the majority of on street lamp-post style chargers are rated at 5.5 kW.

### 2. Fast (7-22KW)

Fast chargers are typically rated at either 7kW or up to 22kW (single or three phase 32A). A 7kW single phase charger will typically take between 3-7 hours to recharge depending on battery size. 7kW chargers are popular at workplaces and home and also tend to be installed in destinations such as car parks, supermarkets and leisure centres where you are likely be parked at for an hour or more.

Charging rates when using a fast charger will depend on the car's on-board charger, with not all models able to accept 7 kW or more. These models can still be plugged in to the charge point but will only draw the maximum power accepted by the vehicle.

### 3. Rapid (25-99kW)

There is more variation in the rapid charger types currently installed. These are commonly used at short stay locations such as motorway services, fast food restaurants and some supermarkets. Commonly installed types include:

- Rapid AC three phase chargers are typically rated from 43kW (63 A) and capable of charging vehicles to 80% in 20—40 minutes car depending the model's battery capacity and starting state of charge.
- Rapid DC chargers provide a power output at 50 kW (125 A) using either the CHAdeMO or CCS charging connectors. Both types can charge an EV to 80% of capacity in 20 minutes to two hours depending on battery capacity and starting state of charge.

### 4. Ultra-rapid (100kW+)

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<sup>17</sup> Adapted from <https://www.zap-map.com/charge-points/connectors-speeds/>

Ultra-rapid chargers are the fastest way to charge an EV, often found at motorway services or locations close to main routes. Rapid devices supply high power direct or alternating current – DC or AC – to recharge a car as fast as possible.

Ultra-rapid DC chargers provide power at 100 kW or more. These are typically either 100 kW, 150 kW, or 350 kW – though other maximum speeds between these figures are possible. These are the next-generation of rapid charge point, able to keep recharging times down despite battery capacities increasing in newer EVs.

For those EVs capable of accepting 100 kW or more, charging times are kept down to 20-30 minutes for a typical charge, even for models with a large battery capacity. Even if an EV is only able to accept a maximum of 50 kW DC, they can still use ultra-rapid charge points, as the power will be restricted to whatever the vehicle can deal with.

All rapid devices have charging cables tethered to the unit, and rapid charging can only be used on vehicles with rapid-charging capability.

There are also wireless chargers, which are available with speeds of 3.3kW, 6.6kW and 20kW.



## Report to Transport, Environment and Climate Change Select Committee

<b>Date:</b>	3 November 2022
<b>Title:</b>	<b>Home to School Transport in Buckinghamshire</b>
<b>Cabinet Member(s):</b>	Steven Broadbent, Cabinet Member for Transport
<b>Contact officer:</b>	Cheryl Platts, Transport Policy & Improvement Manager
<b>Ward(s) affected:</b>	none specific
<b>Recommendations:</b>	<b>That the TECC Select Committee note the update on home to school transport in Buckinghamshire</b>

### 1. Executive summary

- 1.1 The purpose of this paper is to provide an update on home to school transport. This paper also provides an introduction and progress update on the Client Transport Improvement Programme.

### 2. Content of report

#### Background

- 2.1 Transport Services supports and enables high quality, efficient and safe transport solutions so that children and adults are able to get to school, work and access public services.
- 2.2 This briefing paper covers the Client Transport Service, within Transport Services, which provides home to school transport for eligible children of statutory school age (5 to 16 years old), pupil referral unit (PRU) transport, and travel assistance for eligible Post-16 (of sixth form age) students and young people with SEND up to the age of 25.
- 2.3 In 2021/22 the Council provided home to school transport for approximately 7,850 children and young people. This comprised of 7,200 students who were eligible for

school transport assistance in line with the Council's [Home to School Transport Policy](#), made up of approximately 4,700 mainstream students and 2,500 students with SEND. In addition to eligible students, the Council transported approximately 650 non-eligible "spare seats" (i.e. paid-for school bus transport) students on some of our school buses.

- 2.4 The service also provides social care transport for 245 adults with additional needs, and 49 children with special educational needs and disabilities (SEND) who either have social care plans (i.e. respite arrangements) or who are children in care.
- 2.5 Over the last 5 years there has been a significant demand increase in SEND Transport in line with demographic growth. Locally the demand for SEND Transport has increased in line with the growth in Education Health Care Plans (EHCPs) though at a lower rate of growth. Since 2017-18 an additional 517 children in 2021-22 were provided with Council-arranged transport in line with statutory requirements. This equates to a 26% increase in demand for SEND transport over this period, in comparison to a 39% increase in EHCPs.

The percentage change of eligible young people with SEND year on year and vs. 2017-18 are shown in the table below.

School year	Total no. of eligible SEND young people (including PTBs)	% change in total number of eligible SEND young people from previous year	% change in total number of eligible SEND young people since 2017-18
2017-18	2,024	-	-
2018-19	2,306	14%	14%
2019-20 <sup>1</sup>	2,106	-9%	4%
2020-21	2,296	9%	13%
2021-22	2,541	11%	26%

## Policy Context

- 2.6 The Council's [Home to School Transport Policy](#) describes the policy for home to school travel assistance and the criteria applied to determine eligibility. Our policy discharges our statutory duty. The key areas of statutory duty are to:
- Make transport arrangements for all eligible children. For eligible children of statutory school age (5 to 16 years), the travel arrangements must be free of charge to parents/carers. There are four categories of statutory school age

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<sup>1</sup> Decrease is attributed to the Covid-19 pandemic

students living in Buckinghamshire and attending their nearest suitable school who are eligible for Council funded travel assistance:

- children who live beyond the statutory walking distance
  - children from low income families
  - children whose walking route to school is unsafe
  - children with Special Educational Needs (SEN), a disability or a mobility difficulty and who are unable to travel independently from home to school.
- Prepare and publish an annual transport policy statement specifying the arrangements for the provision of transport, or otherwise that the authority considers necessary to make, to facilitate the attendance of all persons of sixth form age receiving education or training.
  - Encourage, enable and assist the participation of young people with special educational needs and disabilities up to the age of 25 in education and training.
- 2.7 Nationally, as is the case at Buckinghamshire Council, all other councils are facing increased pressures on home to school transport budgets, particularly SEND Transport.
- 2.8 In May 2019 the LGA [commissioned a research report](#) to understand the drivers of increased pressures on home-to-school transport budgets; how councils seek to bring budgets under control; and what they need to support them to do this. Key issues identified which are in line with the experience in Buckinghamshire are:
- Market pressures affecting the cost of mainstream and SEND home to school transport
  - Increasing numbers of children with Education Health Care Plans (EHCPs)
  - Increasing complexity of needs
  - Increasing distance travelled due to school occupancy and distribution of specialist provision

### **School Transport – School Term Start Update**

- 2.9 Over the last two to three years there has been a marked improvement in the school term start arrangements. This is evidenced by:
- An effective issuing of bus passes. Whilst a few temporary school bus passes were in use in September 2020, all school bus passes (approximately 4,200 passes) were issued by the stated deadlines in August 2021 and August 2022.
  - An improved online Spare Seat application process. This has enabled parents to have better information on the availability of spare seats before they apply.

This has improved the success rate for parents to secure paid-for seats from about 50% in 2020, to 84% in July 2021 and 89% in July 2022.

- A reduction in customer contact. When comparing our peak customer enquiry period from July to September, there has been a 37% reduction in school transport enquiries. This can be attributed to a significant improvement in school transport communications with better online information and personalised letters in 2022.
  - From 1 July to 30 September 2021 we received 5,091 school transport enquiries, of which 70% were responded to within 5 working days.
  - From 1 July to 30 September 2022, we received 3,195 school transport enquiries, of which 84% were responded to within 5 working days.
- A reduction in complaints. When comparing our total number of Stage 1 and Stage 2 complaints from July to September 2021 (29 complaints) vs. July to September 2022 (23 complaints), there has been a 21% reduction in school transport complaints.
- An increase in Personal Transport Budgets. Personal Transport Budgets (PTBs) were introduced in 2021. As at March 2022, 370 PTBs had been taken up for the 2021-22 academic year. In comparison, as at 30 September 2022 almost 440 PTB offers had been made (including over 230 PTB renewals) for the 2022-23 academic year.

### **The Client Transport Improvement Programme**

2.10 Since 2020 Client Transport has been on an improvement journey, which is tracked and managed through a Client Transport Improvement Programme. The programme is overseen by the Service Director for Transport Services with a board membership which includes the Corporate Director for Communities, the Cabinet Member for Transport and other senior officers from across the Council. The objectives of the programme are:

- To improve the customer experience.
- To ensure that the service has effective budgetary control.
- To ensure that the service operating model is sustainable, effective and efficient with robust contract management.
- To reduce demand and need for Council arranged transport through providing alternative transport solutions.

2.11 The key achievements of the Client Transport Improvement Programme to date include:

- Transport retendering complete. Since January 2021 a total of 1,300 contracts have been retendered covering all school, college, PRU and adult social care transport. School transport retendering has delivered annual savings of approximately £3m.
- Increase in the number of school bus routes run commercially. In 2021 and 2022 the service successfully encouraged the set-up of 18 new commercial school bus routes. It is faster to book and secure a seat with a commercial operator, which results in a better customer experience for parents/carers. It has also enabled a significant reduction and remodelling of the Council's school bus provision to ensure the Council's provision is focused on providing transport for children who qualify under the Council's policy.
- Personal Transport Budgets (PTBs) introduced in 2021. As at 30 September 2022, 437 PTB offers had been made for the 2022-23 academic year. PTBs give young people and their families the freedom and flexibility to make their own travel arrangements to suit their lifestyle, rather than relying on council provided transport.
- Client Transport went live with Capita ONE in February 2021. This is the same administration system used by Children's Services to manage education records, enabling shared visibility of the single client record, and greater accuracy in data management.

### **Key Current Projects**

- 2.12 Autumn 2022 School Transport Policy Consultation at [www.buckinghamshire.gov.uk/school-transport-consultation](http://www.buckinghamshire.gov.uk/school-transport-consultation) – a 6.5 week consultation from 19 October to 4 December 2022. The consultation includes proposals for:
- Simplifying school bus ticket charges for the Spare Seat scheme to make it easier for parents / carers to know upfront how much they will have to pay before applying for a seat. Three options for change are proposed.
  - Updates to our school transport policies to make them clearer and easier to understand.
- 2.13 Pilot of Real Time Passenger Information (RTPI) and e-ticketing on school buses – we are developing a project proposal to trial RTPI and e-ticketing technology in 2023.
- 2.14 Implementing Independent Travel Training from September 2023 in collaboration with Buckinghamshire schools and families – ITT helps young people with SEND to develop the skills, confidence, and knowledge to use transport safely.

### 3. Legal and financial implications

#### Legal implications

- 3.1 Section 508B and section 509AA of the Education Act 1996 set out duties on the Council to arrange travel or other arrangements as it deems necessary for pupils of compulsory school age and of sixth form age (Post-16) to enable them to attend educational establishments. For compulsory school age eligible pupils, the arrangements must be free of charge, whereas for Post-16 students the arrangements can include financial assistance.
- 3.2 In addition to the statutory duties under the Education Act 1996, there are a number of overarching duties that are relevant to the Council's [Home to School Transport Policy](#) and our [Post-16 Transport Policy Statement](#). These include duties under:
- The Education and Skills Act 2008 to encourage, enable and assist participation of young people with SEND up to the age of 25.
  - The Children and Families Act 2014 in relation to the local offer

#### Financial implications

- 3.3 The total approved budget for Home to School Transport in 2022/23 is £23.2m. Last financial year the outturn was a net expenditure of £23.1m which was a £2.0m higher cost than budgeted. In 2021/22 the outturn net expenditure was:
- Mainstream (primary and secondary transport) at £7.4m
  - Pupil Referral Unit Transport at £0.7m
  - Pre-16 SEND Transport at £11.3m
  - Post-16 SEND Transport at £2.6m
  - Post-19 SEND Transport at £1.1m
- 3.4 The Q1 outturn reports a £1.1m higher cost than budgeted for Transport Services. This consists of:
- a £1m cost pressure within Home to School Transport due to increased contract costs. This includes adjustments for the expected increase in PTB costs as families transfer over at the start of the academic year, with a subsequent reduction in contract costs, and a 3% increase given to Home to School contracts to mitigate rising fuel prices
  - a £0.1m adverse pressure currently forecast within Client Transport due to staffing costs.
- 3.5 A key part of the Client Transport Improvement Programme is seeking to control costs in the context of a demand-led statutory service. This has been achieved through activities such as retendering, vehicle optimisation, remodelling routes,



introducing alternatives such as PTBs and introducing charging for Post-16 SEND council arranged transport in addition to school bus ticket sales.

- 3.6 Owing to the statutory requirements to provide home to school transport the Council is legally obliged to ensure provision. This national cost pressure is particularly acute for rural county authorities. Nevertheless, all options to control costs whilst meeting statutory requirements are being pursued.

#### **4. Corporate implications**

- 4.1 The provision of home to school transport assistance to eligible young people is a statutory duty, which links to our corporate priorities in the following ways:

- Strengthening our communities – the provision of transport enables children and adults across the county to access vital services.
- Supporting the vulnerable – transport assistance is put in place to help eligible students with SEND to get to school.

#### **5. Next steps and review**

- 5.1 The key next steps for the Client Transport Improvement programme are:

- [School Transport Public Consultation](#) - This 6.5 week public consultation exercise went live on 19 October 2022. The key change proposal is to simplify the current charging rates for spare seats to make it easier for parents to understand.
- Pilot Real Time Passenger Information and e-ticketing on school buses - A project proposal is being developed to enable a trial of the technology in 2023.
- Implement Independent Travel Training (ITT) in September 2023 - ITT is a proven method of enabling young people with SEND to develop the skills, confidence, and knowledge to use transport safely.

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**Transport, Environment &  
Climate Change Select Committee –  
Pollution in Buckinghamshire’s Rivers  
and Chalk Streams Rapid Review**

## Contents

Introduction.....	3
Aim of the Rapid Review.....	4
Context.....	5
Summary of Recommendations.....	7

## Introduction

I would like to start this report by introducing myself. I am Robert Carington, Buckinghamshire Councillor for Ridgeway West and Vice-Chairman of the Transport, Environment and Climate Change Select Committee (TEEC). In January 2022, the Select Committee invited me to lead a rapid review group to investigate pollution in Buckinghamshire's rivers and chalk streams. I was joined in this by five other colleagues, the Chair of TEEC Cllr Bill Chapple OBE, Cllrs Peter Brazier, Mick Caffrey, David King and Adam Poland-Goodyer.

We held an extensive series of evidence gathering sessions over Teams or in person over a three-month period where we heard evidence from voluntary organisations, council officers, water companies, Ofwat and Natural England. We also received written evidence from other organisations such as the Environment Agency. We very much hope that the recommendations made in this report will be able to achieve real change in addressing and delivering achievable solutions to the very real problem of pollution in Buckinghamshire's beautiful rivers and chalk streams.

I would like to extend my thanks to my colleagues on the review group, our scrutiny officer, Chris Ward, Karen Fisher (Strategic Flood Manager at the Council), other officers from the Environment team and Transport for Bucks and to the two Cabinet Members for the Environment Peter Strachan (2021/22) and Gareth Williams (2022/23) for their support.

Cllr Robert Carington, November 2022



Cllr Robert Carington  
Ridgeway West



Cllr Peter Brazier  
Ivinghoe



Cllr Mick Caffrey  
Stone & Waddesdon



Cllr Bill Chapple OBE  
Aston Clinton & Berton



Cllr David King  
Amersham & Chesham Bois



Cllr Adam Poland-Goodyer  
Aylesbury West

## Aim of the Rapid Review

The Transport, Environment and Climate Change Select Committee recognise the importance of the natural environment in Buckinghamshire. In particular, the rivers and chalk streams in the county are highly regarded by Buckinghamshire residents and visitors. Chalk streams are unique as they provide pure, clear water from underground chalk aquifers and springs where wildlife can grow and thrive. These environments are rare, with an estimate of 85% of the known chalk streams in the world located in southern and eastern England; nine significant chalk streams alone can be found in the Chilterns Area of Outstanding Natural Beauty (AONB).<sup>1 2</sup>

The Select Committee was concerned to hear of reports of increased discharge events by water companies and HS2 work potentially polluting the chalk aquifer beneath the Misbourne Valley. As a result, Members were keen to undertake a cross party Rapid Review to gain a better understanding of the current health of Buckinghamshire's waterways and areas of responsibility, understand concerns, and hear how these are being addressed. In addition, the Rapid Review wanted to identify areas for potential improvement through, for instance, increased partnership and collaborative working.

## Methodology

The review group gathered evidence as follows:

14 March 2022 – In person meeting with voluntary sector organisations and stakeholders to hear about their work and understand their concerns:

- Chilterns Chalk Stream Project & Chilterns Conservation Board
- Chiltern Society
- National Farmers Union
- River Chess Association & Impress the Chess
- River Thames Conservation Trust

20 April 2022 – Discussion with council officers from the Strategic Flood Team and Highways.

11 May 2022 – In person meeting with Thames Water and Anglian Water. The Environment Agency and Affinity Water were invited but unable to attend this session, instead providing written statements.

17 May 2022 – Teams meeting with the Water Services Regulation Authority (Ofwat)

17 June 2022 – Teams meeting with Natural England

22 June 2022 – Review Group meeting to discuss and consider all evidence gathered to date and to identify areas of recommendation

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<sup>1</sup> <https://www.gov.uk/government/news/new-strategy-launched-to-protect-chalk-streams>

<sup>2</sup> [https://s3.eu-west-2.amazonaws.com/assets.therivertrust.org/Legacy-uploads/Chalk-streams-dossier\\_June-2019\\_FINAL\\_FINAL-1.pdf](https://s3.eu-west-2.amazonaws.com/assets.therivertrust.org/Legacy-uploads/Chalk-streams-dossier_June-2019_FINAL_FINAL-1.pdf)

## Context

The Government’s Environmental Audit Committee recently concluded that every single river in England is contaminated by chemicals and made recommendations on how to overhaul the situation.<sup>3</sup> Buckinghamshire’s rivers and chalk streams, like many others across England, are impacted by a range of different factors. This includes pollution from sewage, highways, agriculture, water abstraction and flooding. The Environment Agency states that the majority of the county’s rivers have a moderate status – none have a good or high status.<sup>4</sup>

Buckinghamshire falls within two river basin districts: Anglian and Thames:<sup>5</sup>

River Basin District	Management Catchment	Operational Catchment
Anglian	Ouse Upper and Bedford	Great Ouse Upper
		Ouzel and Milton Keynes
Thames	Thames and Chilterns South	Thame
	Colne	Chilterns South

There are two water supply and wastewater treatment companies in Buckinghamshire: Anglian Water and Thames Water. Both these organisations need to have a Drainage and Wastewater Management Plan which is a long-term plan from 2025-2050 that is costed, sets out the future risks and pressures on drainage and wastewater systems, and identifies actions required to manage them. The water companies also have Water Resources Management Plans that are published every five years and outline how water supplies will meet current and future need. Affinity Water supplies water only across southeast England, specifically in the Misbourne community of eastern Buckinghamshire.

Thames Water and Anglian Water have storm overflows which are designed to act as relief valves when the sewage system is at risk of being overwhelmed by flow which can happen due to heavy rainfall, groundwater infiltration, blockages or equipment failure. Storm overflow releases should only occur in these exceptional circumstances. In Buckinghamshire, the Rivers Trust reports that:

- In 2021, 43 out of 56 monitored storm overflows had a total of 1,891 spills counted for a total duration of 27,907 hours.
- In 2020 there were 1,543 total spills counted with a total duration of 22,795 hours.
- In 2019 there were 2,213 total spills counted with a total duration of 27,907 hours.<sup>6</sup>

Importantly, it is not known whether the overflow situation is improving or not as there is no consistent national baseline data due to inconsistent storm overflow monitoring. Nonetheless, the percentage of storm overflows being monitored has increased in England each year (2020 = 80%, 2021 = 89%) and is expected to reach 100% monitoring by 2023. In 2020, there were 44 serious pollution incidents nationally, more than half of which

<sup>3</sup> <https://committees.parliament.uk/work/891/water-quality-in-rivers/publications/>

<sup>4</sup> EA statement to the inquiry

<sup>5</sup> <https://environment.data.gov.uk/catchment-planning>

<sup>6</sup> <https://theriverstrust.org/sewage-map>

originated from Anglian Water (11) and Thames Water (13).<sup>7</sup>

Thames Water launched its Smarter Water Catchment Plan in 2020 which is a ten-year partnership plan to improve water quality in the River Chess.<sup>8</sup> Affinity Water have been involved in river improvement projects across its region over the past few years, including the Smarter Water Catchment Plan, and have also halted water abstraction from the Chess thereby improving natural water flow and quality.<sup>9</sup>

***“Our rivers and chalk streams are the life blood of humanity”  
Cllr David King, Member of the Inquiry Group***

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<sup>7</sup> <https://www.gov.uk/government/publications/water-and-sewerage-companies-in-england-environmental-performance-report-2020/water-and-sewerage-companies-in-england-environmental-performance-report-for-2020>

<sup>8</sup> <https://www.thameswater.co.uk/media-library/home/about-us/responsibility/smarter-water-catchments/river-chess-smarter-water-catchment-plan.pdf>

<sup>9</sup> <https://www.affinitywater.co.uk/news/action-to-restore-chalk-streams>



## Summary of Recommendations

The Transport, Environment and Climate Change Select Committee Rapid Review group recommend that:

- 1) The Cabinet Member for Transport should investigate the use of new and practical gully technology with the intention of reducing harmful chemicals from the highways entering the watercourse.
- 2) The Cabinet Member for Transport should consider pollution contribution as a category that impacts the frequency of gully cleaning in the future programme of maintenance.
- 3) The Cabinet Member for Environment & Climate Change and the Cabinet Member for Homelessness & Regulatory Services should liaise to implement an update on the council website to include a page on water quality. This page should contain signposting for residents on who to contact regarding issues such as pollution incidents, spillages on highways and misconnections.
- 4) The Environment Agency (EA) should assign a dedicated, single point of contact that is of suitable seniority that can signpost queries from Local Authorities to the relevant Environment Agency Team or contact.
- 5) The Leader writes to the Secretary of State for Environment, Food and Rural Affairs regarding the council's concern with engagement from the EA on this particular inquiry and other concerns reported to the Council regarding the EA's discharge of its statutory functions and its conduct.
- 6) The Cabinet Member for Environment & Climate Change to lobby Anglian Water and Thames Water to invest in further catchment programmes in the county that emulate the benefits of the River Chess Smarter Water Catchment programme.
- 7) Anglian Water and Thames Water submit annual reports to the TECC Select Committee on the progress towards reducing the amount and duration of storm overflows and discharge events in the county, as well as improving their infrastructure in Buckinghamshire.
- 8) The Cabinet Member for Environment & Climate Change should engage with the incoming new CEO of the River Thames Catchment Trust and support the Trust's expansion into the Upper Great Ouse catchment area.
- 9) The Deputy Cabinet Member for Environment lobbies further regarding the enactment of Schedule 3 to the Flood and Water Management Act 2010 with further support from the Council if necessary.
- 10) A communications campaign be promoted through existing channels (e.g. newsletters and planning informatives) to encourage residents to ensure that their builders/contractors connect the right drain to the right place on works that are exempt from checks by Building Control.

Please read on to understand more fully the reasoning and evidence behind the recommendations.

## Key Findings & Recommendations

After carefully considering the evidence we collected across a number of meetings, three key themes emerged, and the review group wish to report on our observations and key findings as follows:

### ***Water Pollutants & Run-off***

- The urban and transport sector accounts for 19% of the poor river water quality in the Thames River Basin.<sup>10</sup>
- Road gullies are designed to divert surface water run-off from highways and divert it into the surface water drainage network. The gullies include gully pots which trap solids to reduce contaminated sediment from entering watercourses.
- It was reported that diffuse urban pollution is a significant issue for most of the chalk streams in Buckinghamshire due to surface water from road run-off carrying pollutants directly into watercourses. These pollutants include decomposing plant and animal matter (humus) and by-products from vehicles such as hydrocarbons, oil, brake dust, tyre fragments, hydraulic fluids, and anti-freeze.
- The River Chess Urban Pollution Study, one of the work streams from the Smarter Water Catchment Programme, heard from the Chilterns Chalk Stream Project and Chesham Town Council regarding numerous problems related to contaminated surface water run-off in the catchment. Examples included:
  - Skottowe's Pond being contaminated by run-off and oil originating from Park Road. The gullies on St Mary Road drain directly into the pond. Fish kills had also been reported.
  - Dirty surface water run-off down Amersham Road and entering the surface water system at the Moor Road roundabout.
- The inquiry group heard of instances where technology can be utilised in gullies to remove further pollutants from flowing surface water. One example is an adaptor that fits into standard road gullies and skims surface water to remove contamination without impacting flow or silt maintenance procedures. The waste it collects can then be recycled. This type of product could potentially remove 95% of oil and pollutants that enter the gully if regularly maintained and replaced when necessary.

### **Recommendation 1 - The Cabinet Member for Transport should investigate the use of new and practical gully technology with the intention of reducing harmful chemicals from the highways entering the watercourse.**

- The group heard some concerns around gully pot maintenance as it appeared to be reactive rather than proactive. When gully pots become blocked or filled with silt then excess silt is washed downstream. A longstanding concern had been the issue of the maintenance of the Sustainable Drainage System (SuDS) in Fullers Hill in Chesham which could not cope with the amount of sediment coming down the hill. Additionally, the group heard that the maintenance programme did not appear to consider the location of gully pots that lead directly to rivers.
- In 2021-22, the Council undertook a proactive maintenance programme to clear all gullies in Buckinghamshire and is repeating this exercise in 2022-23. Whilst the inquiry group recognise the value of increased activity of gully maintenance, thereby prolonging the life of the council's highway asset, there is merit in a smarter approach to a future maintenance programme that takes water pollution into account.
- During our meeting with Transport for Buckinghamshire (TfB), officers seemed open to this approach and commented that the software system has the capability to incorporate pollutant contribution to the maintenance schedule.
- Additionally, TfB plan to gather samples from gullies which could then be analysed and used to inform the future programme of maintenance.

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<sup>10</sup> Thames Water statement to the inquiry

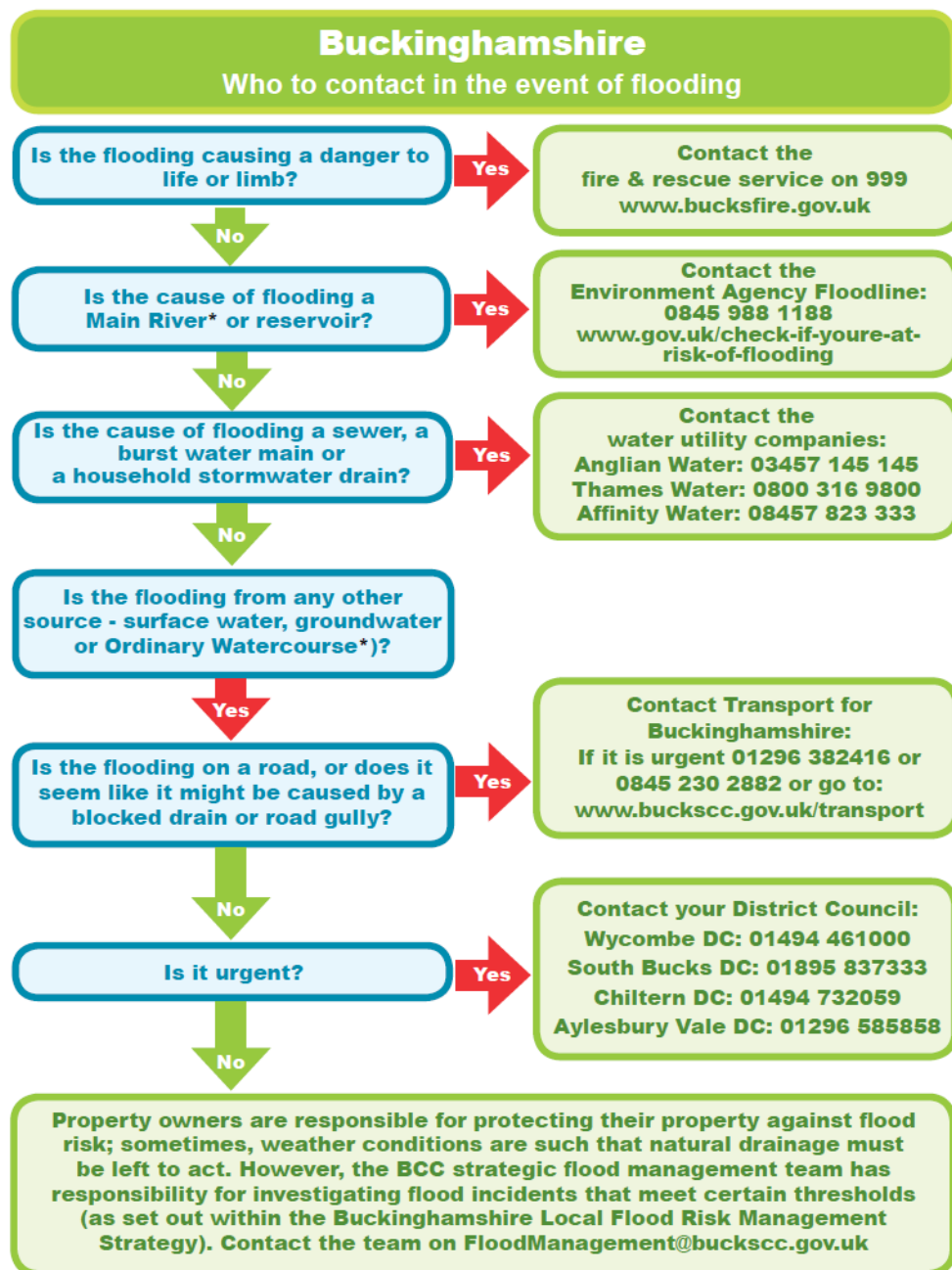
**Recommendation 2 – The Cabinet Member for Transport should consider pollution contribution as a category that impacts frequency of gully cleaning in the future programme of maintenance.**

### ***Communications & Engagement***

- At the outset of the inquiry, the group understood that whilst the Council does not have responsibility for water quality, the Council does work in partnership with the Environment Agency and the water companies. The EA is responsible for regulating water quality in rivers and chalk streams and managing water pollution incidents. The EA investigate and carry out enforcement action against companies and businesses that cause water pollution (e.g. water companies). Private landowners whose land has a watercourse running through or adjacent to it are ‘riparian owners’ which means they are responsible for maintaining their banks and keeping it free of debris that could wash downstream. Ofwat is the economic regulator that investigates complaint escalations with the water companies or anti-competition allegations.
- The Council has responsibility for Flooding & Flood Risk Management and Environmental Health and has pages on its website with advice for residents in connection with these services. However, Members feel that there is currently a ‘gap’ on the council website with no webpage for water quality. Given the growing level of public concern on water quality, the group feel that the Council, as a trusted organisation, should create this page to outline responsibilities and signpost Buckinghamshire residents to the correct organisations. Careful consideration should be given on which part of the website hosts this.
- This webpage should also include information on:
  - Misconnections which water companies may investigate.
  - Highway spillages (chemicals, fuel, oil etc) which TfB investigate and resolve.
- For flooding, the council website contains a link to a useful legacy council responsibility flowchart<sup>11</sup> (see next page):

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<sup>11</sup> [https://www.buckscc.gov.uk/media/4517638/bccfloodflowchart\\_publicnov2014.pdf](https://www.buckscc.gov.uk/media/4517638/bccfloodflowchart_publicnov2014.pdf)



- Whilst the chart requires updating for the unitary council as it refers to the legacy county and district councils, the group appreciate the ease to navigate it and feel that a similar one should be developed for water quality and incorporated into the new water quality webpage. The finalised chart, which should be developed by the team that hosts the webpage, may also be concise enough to share on social media.
- As well as containing hotlines to report water pollution incidents, the inquiry group suggest it should seek to include direct contact details of senior contacts within the signposted organisation and/or team email addresses. This should then be shared with partner organisations.

**Recommendation 3** – The Cabinet Member for Environment & Climate Change and the Cabinet Member for Homelessness & Regulatory Services should liaise to implement an update on the council website to include a page on water quality. This page should contain signposting for residents on who to contact regarding issues such as pollution incidents, spillages on highways and misconnections.

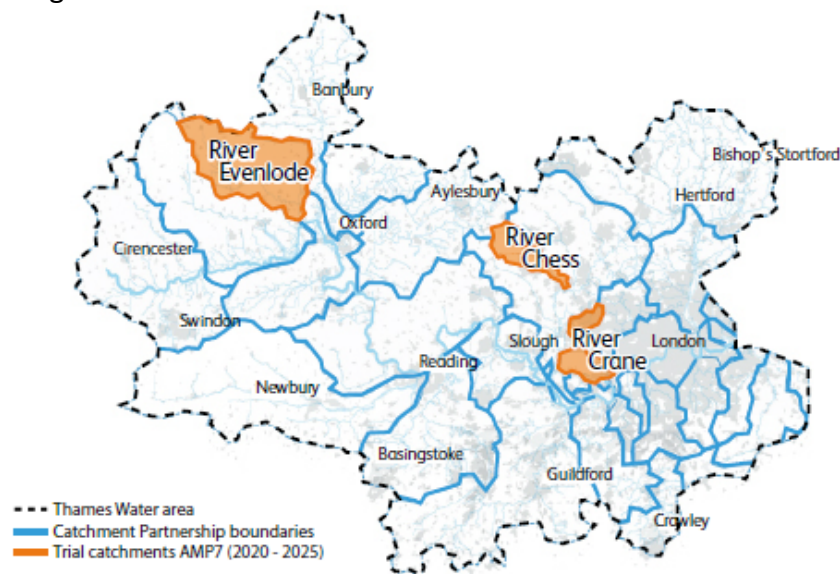
- The EA is split into various geographical team areas. Buckinghamshire sits across a number of these teams, namely:
  - Thames
  - Anglian Great Ouse
  - Hertfordshire and North London Area

- The group heard consistent reports throughout the inquiry that it could be challenging to find the correct contact at the EA. This was particularly noticeable when the query or issue is beyond the remit of an individual's existing EA contact network. The group heard of an experience of being referred to various EA officers when a water quality issue was raised. The response time was slow and fragmented as it did not address all the concerns raised. In this example, it was not clear who the correct contact was.
- Overall, the Council has a positive working relationship with established EA teams and contacts within Planning and Flooding. This may be due to the Council having a dedicated EA contact for these areas given that these are statutory council functions. It was felt that additional direct contacts in areas such as water quality, groundwater and HS2 concerns would be beneficial.
- The inquiry group can see the benefit of an EA single point of contact to signpost queries from council officers. Importantly, this contact must be of suitable seniority to ensure that the right team and/or contact is referred to the Council in a timely manner.

**Recommendation 4 – The Environment Agency (EA) should assign a dedicated, single point of contact that is of suitable seniority that can signpost queries from Local Authorities to the relevant EA team or contact.**

**Recommendation 5 - The Leader writes to the Secretary of State for Environment, Food and Rural Affairs regarding the council's concern with engagement from the EA on this particular inquiry and other concerns reported to the Council regarding the EA's discharge of its statutory functions and its conduct.**

- The Thames Water Smarter Water Catchment Programmes are an initiative whereby partners work together to protect and enhance the catchment area. There are three programmes across the Thames Water area with each having £3m invested by Thames Water over the next four years. One of the programmes is in Buckinghamshire: River Chess.



- The partners in the programme have developed a collective vision to enhance the Chess catchment and restore the health of the River Chess by implementing a shared ten-year action plan (2021-2031). The plan covers different themes including:
  - Improving water quality
  - Managing water flow
  - Controlling invasive non-native species
  - Improving wildlife corridors
  - Involving people
  - Working together
- The Council is a key stakeholder in this catchment programme and has representation on the steering group and several working groups.

- The first year, 2021-22, was mainly focused on establishing an evidence baseline against each theme to inform future strategies and intervention locations. Project delivery work across all themes commences from Years Two and Three.
- The inquiry group believes that education is vitally important, particularly to changing habits and informing younger generations on water consumption. The Smarter Water Programme aims to address this through improving facilities for schools, the public and further education (e.g. facilities at Chesham Moor). A pilot water consumption school education programme will also be introduced and continually reviewed over the coming years.
- Anglian Water do not have any catchment programmes in Buckinghamshire but have invested £7m across 16 separate schemes in its area to restore river habitats and improve biodiversity and ecology. Chalk streams do feature in these programmes (e.g. River Lark chalk stream, south of Bury St Edmunds).<sup>12</sup> The inquiry group did also hear that Anglian Water have proposed investing £14.5m in Buckinghamshire to protect and enhance the environment.
- The River Thames Conservation Trust reported that they had submitted a funding request for a project to enhance understanding of the sources of pollution and develop a strategy to target water quality improvement throughout the Thames catchment. Other plans include the potential for a bathing water status location in the Thames. The Trust works closely with various partners, including the EA, Thames Water, the Council, local landowners, and Natural England, so is a good example of a Buckinghamshire catchment that could utilise programme funding from water companies.
- Given the council's position within the Smarter Water Programme and the council's ability to shape local decision-making, the inquiry group feel the Council must use its influence to encourage the water companies to invest more into other catchment partnerships across Buckinghamshire.
- The Council should also promote the Smarter Water programme wherever possible.

**Recommendation 6 – The Cabinet Member for Environment & Climate Change to lobby Anglian Water and Thames Water to invest in further catchment programmes in the county that emulate the benefits of the River Chess Smarter Water Catchment programme.**

- The water industry is the single biggest contributor towards poor water quality in the Thames basin.<sup>13</sup> Five of Buckinghamshire's chalk streams have sewage treatment works discharging treated effluent into them:

River	Sewage Treatment Works
Chess	Chesham
Misbourne	Gerrard's Cross
Colne	Maple Lodge
Wye	Little Marlow
Horsenden	Princes Risborough

- The inquiry heard that the Rivers Chess, Colne and Horsenden are currently failing Water Framework Directive objectives for phosphate. Phosphorous is discharged from treated sewage effluent and has a negative impact on river ecology and water quality.
- When questioned on untreated discharge events, the water companies acknowledged that these are unacceptable and advised that the stance to improve water quality was changing within each organisation – this had been welcomed by all colleagues across the workforce.
- Thames Water plan to reduce the duration of storm discharge events by 50% by 2030. For sensitive catchment areas such as the Chess and Thames, this target is 80% by 2030. The organisation has also made a commitment to provide live sewage discharge notifications at all its 468 sites by the end of 2022.

<sup>12</sup> <https://www.anglianwater.co.uk/news/anglian-water-to-embark-on-river-restoration-programme-as-part-of-300million-fast-tracked-funding/>

<sup>13</sup> Thames Water statement to the inquiry

Other investment plans include:

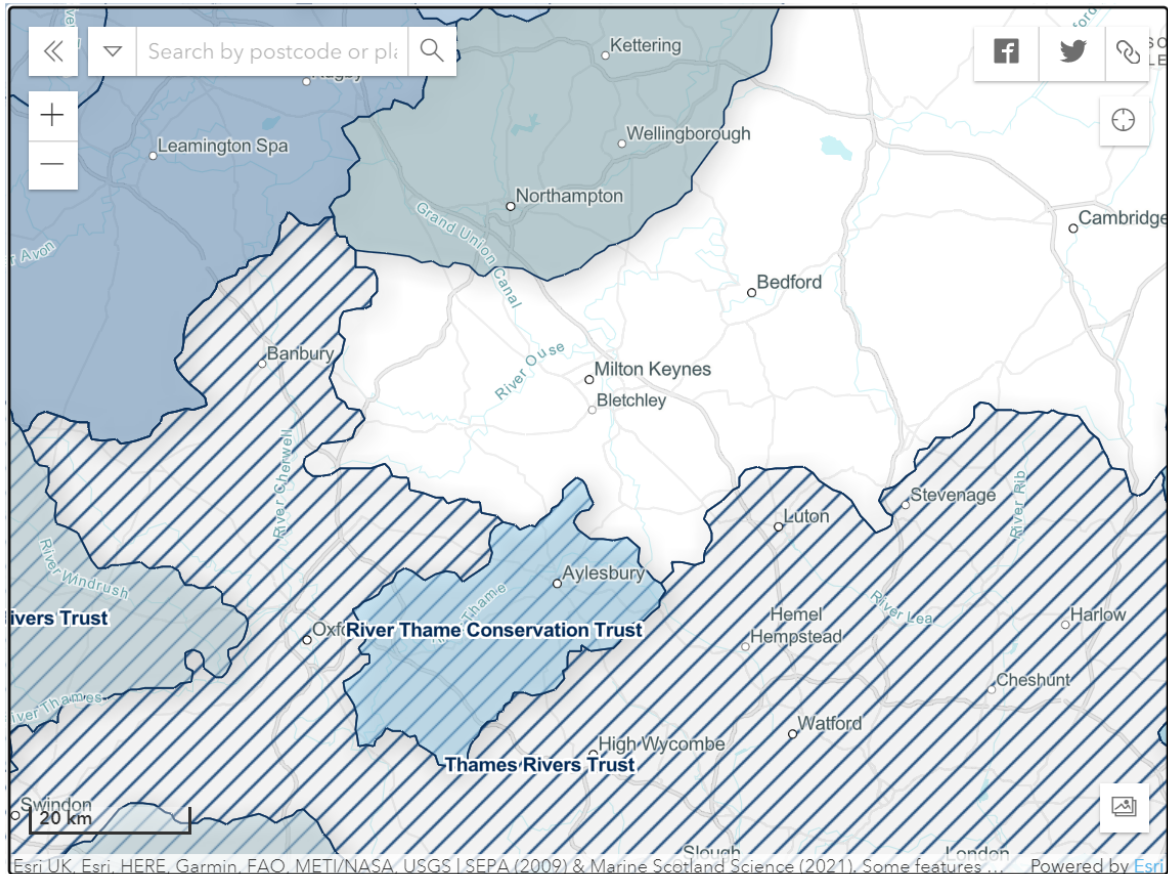
- Chesham: increase sewage treatment capacity from 240L per second to 353L per second which will resolve spills into the Chess.
- Hambledon: Complete 1,700m of lining in 2022/23 to minimise groundwater ingress into the foul sewage system.
- Shabbington and Stone: Increase storm tank capacity at both sites in 2025 as part of the Water Industry National Environment Plan (WINEP).
- Worminghall: Improve output phosphorous in 2024.
- Anglian Water have invested over £200m across its region on an accelerated programme including:
  - £80m installing more storm tanks. More storage tanks mean less chance of plant being overwhelmed thereby having to discharge untreated effluent.
  - £56m increasing capacity at water recycling centres which reduces the risk of environmental spills.
  - £46m on increasing monitoring, reducing spills and pollution and protecting the environment.
  - £21.5m improving bathing water status.
  - £20m installing SuDS.
- The inquiry group welcome the plans for infrastructure investment and the increased levels of monitoring, however the group feel that the water companies must be held accountable to deliver on these promises. We would therefore recommend that the TECC Select Committee should receive annual reports from the water companies to monitor their progress. Should Members not be satisfied, the Select Committee may wish to invite the water companies to a Select Committee meeting for discussion.

**Recommendation 7 – Anglian Water and Thames Water submit annual reports to the TECC Select Committee on the progress towards reducing the amount and duration of storm overflows and discharge events in the county, as well as improving their infrastructure in Buckinghamshire.**

- The Rivers Trust is an umbrella organisation of 65 member Rivers Trusts in the UK. The Trusts work to build nature-based solutions, advise landowners regarding catchment protection, and aim to tackle pollution (including plastics and chemicals). However, the inquiry group note that there is no Trust in the Great Ouse area (indicated below by the white space)<sup>14</sup>:

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<sup>14</sup> <https://theriverstrust.org/about-us/member-trusts>



- The River Thames Conservation Trust has made inroads to expand its activities into the Upper Great Ouse securing funding towards its Water Resilience Project. This involves working with landowners and land managers to help improve water resilience in this catchment upstream of Buckingham.<sup>15</sup>
- Water resilience management schemes use natural processes to improve water management and reduce flood risk. Additional benefits of this includes reducing diffuse water pollution and creating new habitats to support biodiversity.
- The Trust is in the process of changing its name to include the Upper Great Ouse catchment. The inquiry group supports this ambition, particularly as Anglian Water indicated areas in the Upper Ouse would benefit from being part of a catchment partnership. The expansion of a collaborative catchment partnership also has the potential to attract programme funding.
- As the new, incoming CEO joins the Trust in Summer 2022, the inquiry group recommend that the Cabinet Member should engage and offer support to this expansion. Consideration should also be given to what further support the Cabinet Member can offer to the Trust's existing and/or planned water quality projects.

**Recommendation 8 – The Cabinet Member for Environment & Climate Change should engage with the incoming new CEO of the River Thames Catchment Trust and support the Trust's expansion into the Upper Great Ouse catchment area.**

- The group heard that water companies are not statutory consultees in the planning system so are limited in influence and have to accept additional pressure on the existing sewer system by developments. However, the water companies do have the responsibility of ensuring their infrastructure keeps up with developments in council local plans.
- There have been recurring instances of homes being flooded by overburdened sewers in Buckinghamshire (e.g. Farnham Common and Bierton) attributed to incremental development.
- Schedule 3 of the Flood and Water Management Act 2010 has been drafted but not enacted. The

<sup>15</sup> <https://riverthame.org/our-projects/upper-great-ouse-water-resilience-project/>



enactment of Schedule 3 would impact SuDS with the establishment of a county/upper tier SuDS Approving Body (SAB) that would have to approve a developer's 'right to connect' to the sewage system if the SAB is satisfied with the drainage of the development site. Additionally, Schedule 3 would amend Section 106 of the Water Industry Act 1991 to make the right to connect surface water to the public sewer conditional on the SAB approval.

- The Deputy Cabinet Member for Environment, Councillor Jilly Jordan, wrote to Buckinghamshire MPs on 19 September 2021 regarding the management of surface water and flooding from surcharged sewers and the enactment of Schedule 3.
- The responses from all the Buckinghamshire MPs were broadly supportive in addressing this issue. In addition, Sarah Green MP put forward a Chalk Streams (Protection) Bill on 20 June 2022 which aims to give them 'an enhanced status to ensure they're protected from pollution, over-abstraction & other forms of environmental damage.'<sup>16</sup>
- The management of wastewater is important to ensure that the watercourse is not contaminated by flooded sewage systems. This additional strain on the system may also contribute towards the likelihood of a discharge event. The inquiry group would therefore recommend that the Deputy Cabinet Member continues this lobbying activity.


**Recommendation 9 – The Deputy Cabinet Member for Environment lobbies further regarding the enactment of Schedule 3 to the Flood and Water Management Act 2010 with further support from the Council if necessary.**

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<sup>16</sup> <https://bills.parliament.uk/bills/3218>


## Education

- Foul wastewater pipes are narrower than surface water pipes and are designed to only take wastewater from households (e.g. sinks and toilets) to the sewers for treatment. Being wider, surface water pipes are designed to take a higher volume of water (e.g. rainfall from household gutters) to then reach the watercourse.
- Misconnections occur when the wrong drainage is connected to the wrong waste pipe, for instance surface water flowing into foul waste pipes and vice-versa.
- The inquiry group heard that a misconnected 6x6m patio (36m<sup>2</sup>) that drains surface water into a foul wastewater pipe produces a flow volume equivalent to 100 foul wastewater households. This reduces sewer capacity considerably during heavy rainfall, thereby increasing the possibility of a discharge event.
- Residents are required to give notice of works that impact drainage (e.g. extensions and/or new buildings with drainage or alterations to existing drainage systems). This work is checked by Building Control at the Council or private building control companies. Notably, it is separate to the Planning process.
- Around 4,000 applications are received in Buckinghamshire annually and these often have no issues; compliance is reported to be good overall. It is rare for the Council to find storm drains being connected to foul drains as it can only be done in exceptional circumstances where other options have been explored (e.g. nearby stream or use of a soakaway). These checks are also carried out at new build developments as part of the sign-off process.
- However, Building Control have no influence over works that they have no powers to regulate on such as new patios, driveway conversions or some conservatories. This type of work may be more prone to a surface water misconnection given the lack of a local authority check and sign-off process.
- The inquiry group would therefore recommend that the Council promote a communications campaign to make residents aware of this potential issue and its repercussions for water quality. One message may be that householders should seek assurance from their builder or contractor that the right drain is connected to the right place.
- Consideration should also be given to reinforcing messages from the water companies locally by promoting their campaigns. This could be as simple as re-sharing via social media. Examples from the water companies include:
  - Thames Water: Bin it – don't block it and Unblocktober
  - Anglian Water: Never Still and Keep It Clear.
  - Affinity Water: Save Our Streams (SoS).

**Thames Water**  @thameswater · Jun 14  
 Blocked pipes can cost you over £100 to clear 🚰  
 Flushing wipes can cause your pipes to block 🚫

Bin it – don't block it 🗑️

Learn more at [thameswater.co.uk/binit](https://thameswater.co.uk/binit)



2 2 2

**Anglian Water**  @AnglianWater · Mar 22, 2021  
 Every day we go to work to find new and better ways to look after your water. And your region!  
 Find out more at [anglianwater.co.uk/neverstill](https://anglianwater.co.uk/neverstill)



53 21 40

**Affinity Water**  @AffinityWater · Apr 25  
 At @AffinityWater we are developing plans to restore two sections of the #RiverMisborne in Old #Amersham for the local community and wildlife - working with @FiveRiversEC we have developed a questionnaire so you can #HaveYourSay - find out more: [bit.ly/3OEnzMf](https://bit.ly/3OEnzMf)



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**Recommendation 10** - A communications campaign be promoted through existing channels (e.g. newsletters and planning informatives) to encourage residents to ensure that their builders/contractors connect the right drain to the right place on works that are exempt from checks by Building Control.

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**Transport, Environment and Climate Change Select Committee** (Chairman: Bill Chapple, Scrutiny officer: Chris Ward)

Date	Topic	Description & Purpose	Lead Officer	Contributors
2 February 2023	East West Rail	To receive an update on the project	Dr Laura Leech Richard Lumley Susan Browning	Steve Broadbent Peter Martin EWR Reps
	Public Transport	To receive a report including progress on Demand Responsive Pilots	Richard Barker Sara Turnbull James Loader	Steve Broadbent
	Waste Options Appraisal & Strategy *	To provide Members with information regarding: the work being undertaken to assess the future operational arrangements relating to waste collection & street scene services; and the planned approach regarding the Council's future Waste Strategy.	Richard Barker Martin Dickman Claire Oakins	Gareth Williams
30 March 2023	HS2	To receive an update on the project	Dr Laura Leech Richard Lumley	Steve Broadbent Peter Martin HS2 Reps
	New Highways Model	To hear details regarding the mobilisation of the new Highways model	Richard Barker Kevin Goad David Farquhar	Steve Broadbent
	Air Quality Monitoring in Buckinghamshire	To provide an overview of air quality monitoring across the county	Ben Coakley	Gareth Williams

\* This item is subject to waste performance improvement

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