Colchester City Council

Environment and Sustainability Panel Meeting

Grand Jury Room, Town Hall, High Street, Colchester, CO1 1PJ
Thursday, 08 February 2024 at 18:00

The Environment and Sustainability Panel explores methods of conservation of natural habitats and biodiversity through adapting existing practices or creating new ecologically diverse environments. The Panel encourages renewable energy generation and carbon footprint reduction in both the public and private sectors by examining air and water quality, plastic and waste reduction and renewable energy generation. The Panel monitors

the progress and implementation of the Council's Emergency Climate Action Plan and regularly reports to Cabinet and Full Council.

Access to information and meetings

You have the right to attend all meetings of the Council, its Committees and Cabinet. You also have the right to see the agenda (the list of items to be discussed at a meeting), which is usually published five working days before the meeting, and minutes once they are published. Dates of the meetings are available here: https://colchester.cmis.uk.com/colchester/MeetingCalendar.aspx.

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Environment and Sustainability Panel - Terms of Reference (but not limited to)

1. To acknowledge our “Climate Emergency” and translate aspirations into actions.

2. To explore methods of conservation of natural habitats and biodiversity, whether through adapting existing practices and places or creating new ecologically diverse environments with sustainable practices built in.

3. To engage, communicate and collaborate with strategic partners, external bodies, Parish Councils and local communities, to encourage biodiversity enhancement and sustainable practices through their work.

4. To encourage environmental stewardship focusing on carbon footprint reduction by improving air quality, water quality, plastic and waste reduction and renewable energy generation in both public and private spheres across the City.

5. To be a leading voice for environmental sustainability, promoting innovative environmental practices, having influence across the City and beyond, including public and private sector policy, at regional and national levels.

6. To promote, monitor and regularly report to Cabinet and Full Council upon progress and implementation of the Council’s Climate Emergency Action Plan and it's goal to be net carbon neutral by 2030.

COLCHESTER CITY COUNCIL
Environment and Sustainability Panel
Thursday, 08 February 2024 at 18:00

The Environment and Sustainability Panel Members are:

Councillor Steph Nissen	Chairman
Councillor Tracey Arnold	Deputy Chairman
Councillor Molly Bloomfield	
Councillor Pam Cox	
Councillor Paul Dundas	
Councillor Andrew Ellis	
Councillor Mark Goacher	
Councillor Sue Lissimore	
Councillor Venessa Moffat	
Councillor Natalie Sommers	

The Environment and Sustainability Panel Substitute Members are:
All members of the Council who are not Cabinet members or members of this Panel.

AGENDA
THE LIST OF ITEMS TO BE DISCUSSED AT THE MEETING
(Part A - open to the public)

Please note that Agenda items 1 to 6 are normally dealt with briefly.

1 **Welcome and Announcements**

The Chairman will welcome members of the public and Councillors to the meeting and remind those participating to mute their microphones when not talking. The Chairman will invite all Councillors and Officers participating in the meeting to introduce themselves.

2 **Substitutions**

Councillors will be asked to say if they are attending on behalf of a Committee member who is absent.

3 **Urgent Items**

The Chairman will announce if there is any item not on the published agenda which will be considered because it is urgent and will explain the reason for the urgency.

4 **Declarations of Interest**

Councillors will be asked to say if there are any items on the agenda about which they have a disclosable pecuniary interest which would prevent them from participating in any discussion of the item or participating in any vote upon the item, or any other registerable interest or non-registerable interest.

5 **Minutes of Previous Meeting**

The Councillors will be invited to confirm that the minutes of the meeting held on 6 December 2023 are a correct record.

Environment and Sustainability Panel draft minutes 6 December 2023 7 - 16

6 **Have Your Say! (Hybrid Council Meetings)**

Members of the public may make representations to the meeting. This can be made either in person at the meeting or by joining the meeting remotely and addressing the Committee via Zoom. Each representation may be no longer than three minutes. Members of the public wishing to address the Committee remotely must register their wish to address the meeting by e-mailing democratic.services@colchester.gov.uk by 12.00 noon on the working day before the meeting date. In addition, a written copy of the representation will need to be supplied for use in the event of unforeseen technical difficulties preventing participation at the meeting itself.

There is no requirement to pre-register for those attending the meeting in person.

7 **Housing stock and sustainability** 17 - 22

The Panel will consider a report outlining key initiatives, improvements, and future plans to enhance sustainability, and improvements in CCC's housing stock energy performance.

8 **Colchester City Council Fleet Transition Strategy** 23 - 48

The Panel will consider a report setting out the new Colchester City Council Fleet Transition Strategy which sets out a pathway for Colchester to transition to a zero-tailpipe emission fleet. It shows the requirements needed including infrastructure, personnel, and capital investment.

9 **Climate Emergency Action Plan Update** 49 - 54

The Panel will consider a report detailing key progress and updates from actions in the Climate Emergency Action Plan (CEAP), and other relevant updates since the last meeting on 6th December 2023.

10 **Work Programme 2023-2024** 55 - 58

The Panel will consider a report setting out its work programme for the current municipal year.

11 **Exclusion of the Public (not Scrutiny or Executive)**

In accordance with Section 100A(4) of the Local Government Act 1972 to exclude the public, including the press, from the meeting so that any items containing exempt information (for example confidential personal, financial or legal advice), in Part B of this agenda (printed on yellow paper) can be decided. (Exempt information is defined in Section 100I and Schedule 12A of the Local Government Act 1972).

Part B
(not open to the public including the press)

Environment and Sustainability Panel

6 December 2023

Present:	Councillor Tracey Arnold (Deputy Chair) Councillor Molly Bloomfield Councillor Pam Cox Councillor Mark Goacher Councillor Sue Lissimore Councillor Natalie Sommers
Substitutes:	Councillor Michael Lilley for Councillor Steph Nissen Councillor William Sunnucks for Councillor Paul Dundas
Also present:	

107. Minutes of the previous meeting

RESOLVED that: the minute of the meetings of 21 September 2023 be confirmed as a correct record.

108. Have Your Say!

Elia Valentini attended the meeting remotely and addressed the Panel in accordance with the Council's Have Your Say! arrangements. He was a concerned resident and environmental activist, and asked whether it was possible to access a report detailing what the Panel had achieved to date, in terms of result and initiatives addressing its Terms of Reference, with particular emphasis on work supporting the implementation of the Council's Climate Emergency Action Plan. Would this information be made publicly available?

Mel Rundle, Head of Sustainability, confirmed that a review of the work of the Panel over the preceding couple of years would take place, and this would afford an opportunity to also consider the Panel's Terms of Reference to determine whether they were still relevant, or whether amendments were required. A report would be presented to the next meeting of the Panel, if this was possible, and would be publicly available.

Steven Vince attended the meeting and addressed the Panel in accordance with the Council's Haye Your Say! arrangements. He had visited the last meeting of the Panel to speak about the City Council's involvement in criminal practices in relation to village green 241 which was situated on Coast Road, West Mersea, and was still waiting for his concerns to be addressed. The Council was the owner of the green and was breaching both the Commons Act and the Enclosure Act by leasing it and

charging people to use the green, and this unlawful practice had to stop. Mr Vince called for the City Council to abide by the law, considering that the legal costs which would be incurred in rectifying the situation would be far exceeded by punitive costs if the matter was not resolved.

The Head of Sustainability confirmed that she and other Officers had visited Mr Vince and Councillor Powling in West Mersea on 16 November following Mr Vince's contact with the Monitoring Officer and Chief Executive of the Council. She had explained at this meeting that the issues would not be quick to resolve and Mr Vince would receive a substantive response at the earliest opportunity. She and other Officers had a meeting with the Council's legal team in the coming week to consider the position. She had the documentation which Mr Vince had shared with Officers, and legal advice would be sought before Mr Vince was responded to. Mr Vince reiterated the fact that taking money from the public for the use of a village green was a criminal offence, and this had to stop.

Alan Short, attended the meeting and addressed the Panel in accordance with the Council's Have Your Say! arrangements. He spoke of his concern in respect of the continuing inclusion of Middlewick Ranges in the Local Plan as a designated area for the development of 1,000 houses. Since the Ranges had been included in the Local Plan, additional information had come to light from experts about the ecology and biodiversity which was present in the area, and the fact that it had been proven that green spaces provided great benefits for improved mental health. The Local Plan was due to be reviewed at the beginning of the next year, and he believed that the Panel was the right body to consider the ecology and sustainability of the Ranges. He considered that it would be more appropriate to designate the Ranges as an area of scientific interest or country park to preserve a unique site of over 200 years of grassland, and he requested that the Panel formulate an independent view. He was concerned that the designated area appeared to have been exceeded by 30% in a brochure which was being circulated to prospective developers, and urged the Panel to act.

A Panel member requested that an item be added to the work programme of the Panel containing a full report on the environmental impact of proposed developments in the area, containing a summary of all the environmental reports which had been provided. It was necessary to obtain a full picture of the environmental impact of the proposed development on the Ranges.

A Panel member considered it nonsensical that any developer on the site would have to find a site of similar area to replace the biodiversity which would be lost through any development there, when the biodiversity was already in place on this site. He was further concerned that the proposed limit of 1000 homes would be exceeded, and called on the Panel to take these concerns seriously. He considered it was wrong that this area of such rich biodiversity be included in the Local Plan and believed that it should be removed now.

The Head of Sustainability advised the Panel that an environmental report would require funding for a specialist ecological expert. The Terms of Reference of the Panel allowed it to make recommendations to Cabinet, and consideration of the requests could be added to the work programme of the Panel.

Martin Pugh, attended the meeting and addressed the Panel in accordance with the Council's Have Your Say! arrangements. He supported the comments which had been made previously made in respect of Middlewick Ranges. He was a senior ecologist for Essex Wildlife Trust for 18 years, and Middlewick Ranges was one of the most important and most significant wildlife site he was aware of. The area was part of a very important wildlife corridor which allowed wildlife to move throughout Colchester, and it was very concerning to hear of its inclusion in the Local Plan. He advised the Panel that there was a scientific consensus that irreplaceable habitats could not simply be re-created elsewhere, and ecosystems would be lost on both the Ranges and on the compensation site. Since the initial reports had been submitted, a huge volume of new information had come forward, and the Panel heard that the Ranges were home to 1,400 species of invertebrates, including a beetle threatened with extinction. The data needed to be reviewed, together with the huge volume of information which would be provided by local naturalists. The Panel was advised that a proposed development in Norfolk had been discontinued recently, as data from local naturalists had not been considered. A review of the Ranges site would be very valuable as habitat could not be recovered once it had been lost.

Stuart Johnson had submitted a written statement to the Panel, and although the reading of submitted statements was no longer provided for under the Council's Have Your Say! arrangements, the Chair consented to the Democratic Services Officers reading it on this occasion. Mr Johnson that the Essex Air Quality Consortium had recently launched a new website called Essex Air to provide information on air quality to residents of Essex, along with information about how they can play a part in making it better. This website included data from live air pollution monitors in Chelmsford, Southend on Sea, Thurrock and Tendring, however, there was no such information available to the residents of Colchester, despite the terrible statistic on the website that air pollution contributed to 5.5% of the deaths in Essex in 2021. The latest data for air pollution in Colchester available in the annual report was 12 months out of date. When will Colchester City Council act to provide live air quality information like other authorities in Essex?

In response to Mr Johnson's enquiry, the Chair of the Panel confirmed that Officers would provide an answer to his question after the meeting.

109. Essex Climate Action Commission Update

The Panel considered a report outlining some of the key actions which had been completed by Essex County Council that have been fed back to the Essex Climate Action Commission (ECAC), and outlining where Colchester City Council had been involved with these actions.

Ben Plummer, Climate Emergency Project Officer, attended the meeting to introduce the report and assist the Panel with its enquiries. The ECAC had been created 3 years ago and was made up of 30 people from different backgrounds including academics, business people, local government and the Young Essex Assembly. A report had been produced called 'Net Zero, making Essex Carbon Neutral' which outlined a set of recommendations and actions to make Essex carbon net zero by

2050. Essex County Council (ECC) Officers brogh updates on actions they were taking to the ECAC, which in turn offered advice and guidance. The report considered some of the key actions that Essex was working on, including land use and green infrastructure. Recent guidelines on biodiversity and net gain, and the provision of offsite credits to developers had been a topic of recent discussion between the 2 authorities.

The Panel was referred to the Officer's report which contained detailed information about the environmental themes which were contained in the Commission's report which were:

- Land Use and Green Infrastructure
- Energy and Waste
- Built Environment
- Transport
- Community Engagement
- A just transition to the green economy

A Panel member enquired about the Council's policy in relation to offsetting biodiversity net gain, and wondered whether this was now to be encouraged? The Climate Emergency Project Officer confirmed that ECC had examined 2 areas where the possibility of selling biodiversity net gain credits had been explored in great detail, and the reports which had been presented to the ECAC in relation to this work would be circulated to the Panel. The Council was at an early stage of discussing similar sites which could be offered in a similar manner.

In discussion, the Panel wondered whether there was scope to align the Climate Emergency plans more closely between the Council and ECC. It was suggested that 2 areas which had been missing from the discussion were farming practices, as Essex was a very rural county, and food systems. The Climate Emergency Project Officer confirmed that the Council did sit on an Essex Climate Action Anchor working group including other public sector organisation. Although it was difficult to maintain ongoing dialogue with ECC due to the limitations of available Officer time, the ECAC reports were very useful.

A Panel member suggested that ECC could take over Middlewick Ranges and turn the area into a country park for all to enjoy. Referencing the draft Electric Vehicle (EV) Charging Strategy, he wondered whether this would include existing petrol stations, noting that Essex Fire Service was concerned about the safety aspect pf EV charging points in petrol stations for the same reason that other electrical devices could not be used in these areas.

Louise Tennekoon, Climate Action Engagement Manager at Essex County Council attended the meeting remotely and advised the Panel that as part of the ECAC's work, there were a number of farmland owners coming together in farm clusters to implement sustainable practices. It was accepted that more work was needed in respect of sustainable food systems, and this was an area which would benefit from further consideration. She would endeavour to obtain additional information about potential issues with EV charging points in existing petrol stations.

The Panel acknowledged that one of the Air Quality Management Areas (AQMA) in Colchester had been removed in 2018, and discussions were ongoing around the potential removal of the remaining AQMAs, and this demonstrated that improvements in this area had been made.

RESOLVED that: the contents of the report be noted.

110. Domestic Energy Efficiency Funding and Support

The Panel considered a report providing detailed information regarding the delivery and successes of various domestic energy efficiency grants that were available to low-income households and residents with qualifying health conditions.

Keith Parker-Larkin, Domestic Energy Efficiency Improvement Coordinator, attended the meeting to present the report and assist the Panel with its enquiries. He was responsible for administering the various domestic energy grants which were available to residents of Colchester. The Panel received a presentation which provided detailed analysis of the 3 Grant schemes which had been administered – Local Authority Delivery, Phase 3 (LAD3), Energy Company Obligation, Local Authority Flexible Route, Phase 4 (ECO4 Flex) and the Home Upgrade Grant, Phase 2 (HUG2).

The LAD3 Grant was a government backed scheme administered by the Department for Energy Security and Net Zero (DESNZ) and was only available to owner-occupiers on gas-grid fuelled properties with an energy performance certificate (EPC) rating between D-G. The Council had been awarded funds of £599,823.23 to carry out surveys and install measures, with an additional award of £90,000 for admin and management costs. The project had ended on 31 March 2023 and out of a target of 57 properties, only 36 had achieved retrofit measures, which was due to a number of factors such as market capacity of installers who were suitably qualified, and delays to the scheme from the Council's managing agents, Warmworks. The grant funding of £277,584.12 which had not been spent was returned to DESNZ. A wide variety of measures had been installed into properties under the LAD3 scheme, and every property improved was required to have improved its EPC rating by 2 bands.

The HUG2 scheme was currently open until the end of March 2025, and was available to properties which were off-gas only and had an EPC rating between D-G. The Council had been awarded £2,060,000 which equated to an average spend of £18,000 across 120 properties. Properties which qualified for the funding had been identified and written to, and approximately 700 letters had been sent across a number of areas, and potentially qualifying properties had also been identified and written to. Applications for the scheme would be managed by the Councils agent Warmworks, however, telephone applications were managed by the Energy Savings Trust. The Council had carried out a number of promotional events, including events in Community Centres, attending coffee mornings, however, interest in the scheme had been disappointing. Marketing through paid social media posts was being considered to try to promote the scheme, and it was considered that the current poor

levels of interest could be caused by mis-information and a lack of trust that the letters which had been sent were genuine.

The ECO4 Flex scheme was a government backed scheme which was administered by Ofgem, and which had £1billion available nationally each year until 31 March 2026. It was available to all property fuel types and was only open to owner-occupiers, private sector tenants and landlords. There were various eligibility routes to funding under the scheme, meaning that it could be available to a much greater number of properties that other schemes. Over 70 applications had already been made under the scheme, which was higher than all the applications which had been made under the preceding ECO3 scheme for Colchester, which was extremely positive.

A Panel member shared the Domestic Energy Efficiency Improvement Coordinator's concerns that some residents would not believe that the offered support was genuine. It was suggested that it may beneficial to consider the approach that had been taken by other Council's to emulate success which had been achieved elsewhere. The Panel offered its support to help promote the various funding which was available and invited Officers to ensure that Panel members were kept up to date with any promotional events, the details of which could be passed on to their residents. Panel members offered to use their social media channels to promote the availability of grants, and would pass on details of suitable events in their wards to the Domestic Energy Efficiency Improvement Coordinator.

The amount of £40,000 which had been spent on a single property was questioned, and the Domestic Energy Efficiency Improvement Coordinator explained that Warmworks had sent out a surveyor to visit the property who would have worked out which measures were able to be installed, and in that particular case exterior wall insulation had been fitted at significant expense. The decision on whether or not such installations were considered to be cost-effective was not made by the Council, but was down to the surveyors in each case. The Panel were assured that the Domestic Energy Efficiency Improvement Coordinator's post was funded until March 2024, and discussions were taking place for this post to continue into the future, either on a full-time or part-time basis.

A Panel member noted the various issues which the Council faced when both trying to promote the various funding which was available, and implementing improvements in properties. The Panel heard that 25% of Colchester residents were renting their property, and it was suggested that the Domestic Energy Efficiency Improvement Coordinator should consider working with the Council's own Private Landlord Team to better reach both these residents and their landlords. Colchester Borough Homes (CBH) had made good progress in this area as a volume social landlord, and it was suggested that this organisation may be able to offer advice on this subject. The Domestic Energy Efficiency Improvement Coordinator advised the Panel that discussions were taking place with the Council's communications team around the best way to promote the subsidies which were available, and consideration was being given to using paid for adverts on social media. It was also intended to try to encourage referrals to be made to the schemes via healthcare providers, as the benefits on health of warm homes were significant. It was noted that the uptake on the funding which was available had been disappointing

nationally, and the volume of schemes which were on offer was confusing to potential customers. The Council had tried to simplify what was being offered to residents through information on its dedicated webpages.

A Panel member questioned what controls were in place to ensure that money which was spent on improvements to housing was appropriate and delivered value for money. The Domestic Energy Efficiency Improvement Coordinator explained that all money spent was subject to both internal and external audit, and would be considered by either DESNZ or Ofgem who would ensure that any spend had been acceptable. The Pane was assured that the Council was not directly responsible for allocating funding of this nature under the current schemes on offer.

In discussion, the Panel wondered whether it would be possible to include the guidelines for eligibility in communications concerning the schemes. It did consider that it would support the idea of paid for advertising on social media channels, as if messages were seen to be promoted by the Council as a trusted provider, this may go some distance to alleviating fears which residents may have. Although it was heartening that residents were becoming more aware of scams, this did mean that greater effort was required on the part of the Council to provide greater assurance that what was being offered was genuine.

RESOLVED that: the contents of the report be noted.

111. Council Climate Action Scorecards Summary

The Panel considered a report which outlined the results of the Council Climate Action Scorecards and the ways in which the Council was already addressing some of the identified gaps in the assessment.

Ben Plummer, Climate Emergency Project Officer, attended the meeting to present the report and assist the Panel with its enquiries. The Panel received a presentation providing a summary of the Council Climate Action Scorecards, which had been produced by Climate Emergency UK and which undertook an assessment of local authority climate action from January 2019 to March 2023. All local authority Climate Action Plans had been reviewed, and the Council had obtained a score of 52%, which was above the district average of 43%. A revised Action Plan had been published at the start of 2023 which contained improvements as a result of the review which had been carried out.

The Council had been praised by the assessors for the variety of shared transport schemes which it was operating, as well as the setting of targets for the retrofitting of Council houses and future performance. The Council's work in phasing out the use of glyphosate herbicides was recognised, together with the work which was being undertaken with local schools and businesses. The comprehensive nature of the Council's Climate Emergency Action Plan was praised, together with the manner in which it was reported to the Panel.

The Climate Emergency Project Officer considered that since March 2023, the Council had carried out further actions which would have improved its score in the

assessment. Examples of these actions included working to get an energy support helpline with Better Housing, Better Health, and the development of supplementary planning documents on active travel, climate change and biodiversity. Additionally, a new question had been introduced into the Council's procurement process concerning the environmental impact of the process, and e-learning on environmental awareness had been prepared for staff and carbon literacy for Councillors.
Following the assessment, areas for improvement had been identified which were being addressed by Officers, including consideration being given to including the risk of climate change in the Council's Strategic Risk Register, addressing air quality issues in the city, ongoing community engagements and the reduction of single-use plastics.

The Panel was advised that the assessment which had been carried out represented a snapshot in time of activity, and that all local authorities faced different challenges or circumstances, meaning that direct comparisons were often difficult. Some areas of the assessment were not considered to be particularly relevant to most local authorities, including questions on food strategies which Council's had little influence over.

In discussion, the Panel suggested that consideration be given to examining the work of the highest scoring Council in each of the categories to identify areas of best practice, together with a more detailed examination of the categories against which the Council had been assessed to identify the most effective actions which could be taken to generate improvements. The Climate Emergency Project Officer confirmed that the scorecards were being examined in this way, but cautioned the Panel that work should not be undertaken solely with the aim of increasing the Council's score, but because the work had merits in its own right, and would improve the position of the Council and its residents.

A Panel member enquired whether or not the Panel could make a recommendation to the Local Plan Committee that it should examine the work of high scoring Councils in the Planning and Land Use category and factor this work into its own examination of the Local Plan. Officers would find out whether such a recommendation was possible.

RESOLVED that: the contents of the report be noted.

112. Climate Emergency Action Plan Update.

The Panel considered a report which detailed key progress and updates from actions in the Climate Emergency Action Plan (CEAP) and other relevant updates since its last meeting on 21 September 2023.

Ben Plummer, Climate Emergency Project Officer, attended the meeting to present the report and assist the Panel with its enquiries. The Panel heard that he updates contained in the Officer's report had been covered in previous discussions at the meeting, and there were no additional substantial points to be highlighted at this time.

RESOLVED that: the contents of the report be noted.

113. Work Programme 2023/2024

The Panel considered a report outlining its work programme for the current municipal year.

Mathew Evans, Democratic Services Officer, attended the meeting to present the report and assist the Panel with its enquiries.

RESOLVED that: the contents of the report be noted.

Environment and Sustainability Panel

8 February 2024

Report of	**Director of Assets (Interim) Colchester Borough Homes**	**Author**	**Mark Wicks**
Title	**Housing stock and sustainability**		
Wards affected	**Not applicable**		

1.0 Executive Summary

Colchester Borough Homes (CBH) and Colchester City Council (CCC) are committed to enhancing the energy performance of its housing stock and contributing to sustainability goals and create energy-efficient living spaces for its residents. This report outlines key initiatives, improvements, and future plans to enhance sustainability, and improvements in CCC's housing stock energy performance.

2.0 Recommended Decision

Report is for information only; panel are asked to note the contents.

3.0 Summary of progress and applied measures

There are a number of measures and initiatives in place and planned to improve the energy efficiency of CCC Housing Stock.

3.1 Housing stock

3.1.1 EPC (Energy Performance Certificates)

An Energy Performance Certificate (EPC) is a document that details the energy efficiency of a property, providing a rating from A (most efficient) to G (least efficient). It includes recommendations for improving energy efficiency.

3.1.2 SAP Scores

The Standard Assessment Procedure (SAP) score measures the overall energy performance of a dwelling. It considers factors such as insulation, heating systems, and renewable technologies to provide a holistic view of energy efficiency.

A property with a SAP between 69 and 80 will achieve an EPC rating of C.

3.1.3 EPC Target 2030

The Governments Clean Growth Strategy includes a commitment to improving the energy efficiency of homes and buildings. The target set for rented properties is a minimum EPC C (SAP 69) by 2035 and 2030 for ‘fuel poor’ households. In addition, Colchester City Council’s Asset Management Strategy 2022-26 sets a target of 100% of stock rated at EPC ‘C’ or above (where this is practical, cost-effective, and affordable).

3.1.4 Average SAP Score Improvement

Since 2021, CCC has made commendable progress, with the average SAP score across its housing stock increasing from 75.02 to 75.71. This signifies a consistent effort to enhance the overall energy performance of properties.

3.1.5 EPC Ratings Above C (SAP 69)

Currently, CCC's housing stock is in a healthy position with 86.3% of properties with an EPC rating of C or above, surpassing the benchmark set by the National Federation of ALMOs (Arm's Length Management Organisation) Value for Money review, which reported an upper quartile result of 72.32 in December 2023.

3.1.6 CO_2 Emission Reduction

The average CO_2 levels generated from heating CCC homes have seen a notable reduction of 55kg per property annually. Additionally, the average CO_2 level is 22kg lower than benchmarked averages, as reported by Parity Portfolio energy modelling software.

3.1.7 Future Improvements

CCC is committed to ongoing enhancements through the Capital Works Programme, ensuring a sustained and steady trajectory of energy performance improvements across its housing stock. In addition, specific projects are in progress to further boost energy performance.

3.1.8 Planned Improvements via the Social Housing Decarbonisation Fund (SHDF) Project

CCC is actively involved in the Social Housing Decarbonisation Fund (SHDF) project, aiming to implement energy-efficient measures to 105 properties with a current EPC rating of 'D' or lower.

In addition, further, other retrofit works are planned, targeting the improvement of at least an additional 25 properties by the summer of 2025.

3.1.9 Strategy for improving housing stock

Colchester Borough Homes and Colchester City Council are committed to improving the energy performance of the housing stock. Our strategy involves prioritising the improvement of the worst-performing properties first. Despite facing challenges, we are in a favourable position, as only 13.7% of our housing stock requires enhancements. This targeted approach allows us to efficiently work towards our goal, ensuring energy efficiency and sustainability is provided to our customers.

3.2 Enhanced control and monitoring

In order to effectively improve energy efficiency and sustainability of the existing stock it is important to provide customers with effective methods of control. Smart devices also provide a methodology for measuring the effectiveness of completed energy improvement works. There is currently a key project underway which involves the installation of 'Switchee' Smart Thermostats.

3.2.1 Switchee Smart Thermostats

Switchee functions as an intelligent thermostat, facilitating the control of heating and hot water in our customer's homes. Upon installation, this device contributes to a potential 15% reduction in energy consumption, leading to lowered bills. Switchee is engineered to adapt to daily routines, automatically managing on/off cycles based on preferences. Additionally, it enables remote control of heating and hot water via a mobile app, offering convenience anytime, anywhere. Equipped with five sensors, the device monitors home performance and detects issues early on, enabling prompt resolution. Switchee ensures complete security and early issue identification, preventing them from escalating into larger problems. The devices also furnish real-time data on usage, allowing for effective monitoring of completed retrofit measures.

An initiative is currently in progress to implement 600 Switchee devices across 600 homes within the CCC Housing Stock as part of a pilot program. Properties earmarked for substantial retrofitting are included in this initial phase. As of mid-January 2024, 159 devices have been successfully installed and are operational. The installation of these devices aims to assist CBH and its customers in effectively maintaining their homes and reducing their carbon footprint.

3.3 Estate improvement and biodiversity

3.3.1 Cycling and Waste Recycling

Since 2020, advancements have been made in enhancing waste recycling and cycling facilities for Colchester City Council Housing Stock. We've created 13 designated recycling areas within the existing housing stock. Additionally, bicycle storage facilities have been added to four existing blocks. Furthermore, we've successfully delivered 24 new properties equipped with recycling provisions adhering to Colchester City Council planning standards in force at the time (these have now been superseded). These properties also feature bicycle provisions, such as sheds with bike loops, bike lockers, or bike racks. These improvements further reflect the commitment to promoting sustainability in line with established standards.

3.3.2 Discontinuation of Glyphosate for weed control

The decision to discontinue Glyphosate for weed control has led to noticeable changes in weed management across our estates.

3.3.3 Hard Surfaces

Previously, Glyphosate was efficiently used to treat weeds on hard surfaces, unfortunately, manual methods such as strimming are less effective and time-consuming. To help address this, an additional operative has been employed, however, the contractor now conducts fewer visits per year to manage weeds on hard surfaces.

3.3.4 Shrub Borders

Glyphosate was previously used for spot treatment, but now, alternative herbicides are employed. The additional cost associated with this is covered by existing budgets. A mixed approach of spot treatment and manual weed removal is now implemented, along with a mulching program to suppress weed growth.

3.3.5 Mulching Program

Mulching has proven effective in weed control, with mulched borders showing significantly less weed growth. The program, utilising wood chips from the Council's Tree Team, aligns with sustainability goals and helps reduce costs.

While alternative methods are being explored, such as mechanical weed control, the transition away from Glyphosate requires careful planning and ongoing adjustments to ensure effective weed management across all estates.

3.3.6 Wildflower areas and Tree Planting

Good progress has been made in creating wildflower areas and tree planting across CCC estates. These initiatives link closely with themes 1 and 4 of the Council's Climate Emergency Action Plan - 'Adapting to a changing climate' and 'Enhance biodiversity and protect our environment'.

3.3.6.1 Wildflower Areas

- Three wildflower areas have been developed on HRA (Housing Revenue Account) land. These areas are thriving and positively impacting local wildlife.
- Plans are underway to replicate this model across all estates to enhance biodiversity, aligning with the Council's Climate Emergency Action Plan.

3.3.6.2 Tree Planting

- During winter of 2022/23, 30 trees were planted across various estate locations.
- An additional 50 trees were planted in partnership with the Council's Greening Team and the Local Authority Tree Fund in Greenstead, focusing on areas near main transport routes to mitigate pollution.
- This winter, another 20 trees have been planted in similar locations to further enhance air quality and green infrastructure.

3.4 Conclusion

In conclusion, Colchester Borough Homes (CBH) and Colchester City Council (CCC) are steadfast in their commitment to enhancing the energy performance of their housing stock and promoting sustainability. The report outlines various initiatives and improvements aimed at achieving these goals.

Efforts to improve energy efficiency, as evidenced by the increase in average SAP scores and the high percentage of properties with EPC ratings above C, demonstrate significant progress. Additionally, the reduction in CO_2 emissions and ongoing plans for future improvements through projects like the Social Housing Decarbonisation Fund (SHDF) highlight the continued dedication to sustainability.

The introduction of Switchee Smart Thermostats and advancements in waste recycling and cycling facilities further underscore CCC's proactive approach to enhancing energy efficiency and promoting biodiversity.

Initiatives such as wildflower areas and tree planting align closely with broader environmental objectives, reflecting a holistic commitment to sustainability.

Moving forward, CCC remains focused on prioritising improvements to ensure energy efficiency and sustainability are accessible to all residents, while continually seeking innovative solutions to further enhance environmental stewardship.

4.0 Alternative Options

4.1 Not applicable

5. Background Information

5.1 Adopting a comprehensive approach to its sustainability and improving the energy performance and sustainability of CCC Housing Stock is a key feature of the Colchester Housing Asset Management Strategy, January 2022.

6. Equality, Diversity and Human Rights implications

6.1 This report has no equality, diversity, and human rights implications.

7. Standard References

7.1 All of the updates provided in this report contribute to the Strategic Plan 2023-2026 theme of 'Respond to the climate emergency'.

8. Consultation

8.1 There are no consultation considerations for this paper. Consultation and active engagement with our customers were an essential part of the Asset Management Strategy and continues to be a vital aspect of planned and future energy retrofit projects.

9. Publicity Considerations

9.1 There are no specific publicity considerations.

10. Financial implications

10.1 There are no direct financial implications of the updates provided in this report.

11. Health, Wellbeing and Community Safety Implications

11.1 The provision of good quality, energy efficient homes promotes good health for our customers, combined with the provision of more facilities to support cycling, and biodiversity enhancements our communities and customer's physical and mental health is likely to see real benefits.

11.2 There are no anticipated impacts on community safety from the project updates presented in this report.

12. Health and Safety Implications

12.1 There are no health and safety implications beyond those assessed and managed at individual project level.

13. Risk Management Implications

13.1 There are no risk management implications beyond those assessed and managed at individual project level.

14. Environmental and Sustainability Implications

14.1 The updates provided in this report for various projects are all geared towards minimising emissions and mitigating environmental impacts throughout the Council.

Environment and Sustainability Panel

Item **8**

8 February 2024

Report of	**Head of Neighbourhood Services**	**Author**	**Robert Doran 01206 282612**
Title	**Colchester City Council Fleet Transition Strategy**		
Wards affected	**All wards**		

1. Executive Summary

1.1 The new Colchester City Council Fleet Transition Strategy sets out a pathway for Colchester to transition to a zero-tailpipe emission fleet. It shows the requirements needed including infrastructure, personnel, and capital investment.

2. Recommended Decision

2.1 To note the content of and endorse the approach to the proposed new Colchester City Council Fleet Transition Strategy.

3. Reason for Recommended Decision

3.1 One of the key priorities of the Strategic Plan for 2023 – 2026 is “responding to the climate emergency” and “delivering modern services for a modern city”. A key element is to reduce the carbon footprint and to remain on track for the Council to be net zero by 2030.

4. Alternative Options

4.1 Options are set out within the Colchester City Council Fleet Transition Strategy that consider the commitment to transition the fleet to fully electric vehicles, the use of Hydrotreated Vegetable Oil (HVO) as a drop in fuel or continuing the with the replacement of vehicles with the latest Euro engine diesel vehicles.

5. Background Information

5.1 On 17 July 2019, Colchester City Council declared a climate emergency, acknowledging that urgent action was required to mitigate the impact of climate change. One of the key priorities of the strategic plan 2023-2026 is to 'respond to the climate emergency'. A key element is to improve air quality and reduce the Council's direct carbon emissions and achieve a carbon neutral carbon footprint by 2030.

5.2 The Climate Emergency Action Plan identifies the Council's fleet as accounting for approximately 25% of its total emissions. As the grid continues to decarbonise and purchased electricity becomes 'greener', emissions from the Council's fleet will become an increasingly larger portion of the overall footprint. An action from the Plan is to take a phased approach to renewal of the fleet as new technologies and associated infrastructure become available.

5.3 At its meeting on 17 December 2020, the Environment and Sustainability Panel considered and endorsed the introduction of a Fleet Transition Forward Plan. Three years on and following the first tranche of electric and hybrid powered vehicles, the plan has been refreshed with a proposed new Colchester City Council Fleet Transition Strategy.

6. Equality, Diversity and Human Rights implications

6.1 The relevant Equality Impact Assessment for the Council's Procurement Strategy can be found HERE

6.2 Through the Council's procurement strategy, officers will ensure that all procurement and purchasing documentation recognises, understands, and supports the Council's policies with regards to equal opportunities, diversity, and human rights.

7. Strategic Plan References

7.1 Fleet operations are a key element of the way the Council delivers its services to residents and businesses and therefore underpins much of the activity that will deliver against the strategic priorities. The proposal directly links to the vision, themes, and objectives of the Strategic Plan 2023-26 – A City Fit for the Future: Respond to the climate emergency.

8. Consultation

8.1 Frontline staff and service managers involved in the operational management of core services that require vehicles will be consulted and will continue to be involved at all stages of the procurement and selection process to ensure that vehicles are fit for purpose and appropriate.

8.2 Demonstration electric vehicles will continue to be tested with teams and feedback received will be considered.

8.3 Continued networking with other Local Authorities that have tried and tested alternatives to diesel fuelled vehicles will be made to gain real world knowledge in how these vehicles perform over a long period.

9. Publicity Considerations

9.1 The introduction of EV and hybrid fleet vehicles is a demonstration of the Council's commitment to tackling the Climate Emergency and demonstrates positive progress on the journey to being net zero carbon for Council operations by 2030. Public communications will reflect this commitment when new vehicles come on board.

9.2 The vehicle fleet underpins many of the Council's core frontline teams and is a highly visible asset out in communities supporting services that benefit residents, local businesses, and visitors to Colchester. Livery will be attached to the vehicles as appropriate.

10. Financial implications

10.1 A fleet replacement programme is in place and will require capital investment in the future per the programme. As set out in the strategy, careful consideration and business cases will be devised for any replacement vehicles to determine the most appropriate type of vehicle to purchase. Additionally, through the procurement process, due consideration will be given to the comparison and value for money provided by outright or leasing.

11. Health, Wellbeing and Community Safety Implications

11.1 Less tailpipe emissions from the council's fleet will have health benefits not only for staff but for the public. As recycling collection vehicles service each property within the city, reduced or no tail pipe emission will be welcomed. With fully electric vehicles the driving experience for a driver and crew where applicable is more pleasant due to a quieter driving experience.

12. Health and Safety Implications

12.1 The Council has a corporate responsibility to ensure that all fleet and transport operations comply with national standards.

13. Risk Management Implications

13.1 The Council will seek to mitigate against any potential risks by following a compliant procurement process and ensure contingency plans are in place for any failure of vehicles that may impact on core services.

13.2 Without these vehicles it would make it difficult for the Council to undertake its duties under the Environmental Protection Act 1990 and the Clean Neighbourhoods and Environment Act 2005.

14. Environmental and Sustainability Implications

14.1 The consideration of environmental and sustainability implications of the decision being taken is set out in the table below:

Sustainability theme	**Positive environmental impact**	**Neutral impact/ Not applicable**	**Negative environmental impact**	**What are the positive and negative impacts on carbon reduction / environment?**	**How will positive impacts be enhanced/ encouraged? And negative impacts minimized or eliminated**
Energy	Y			Positive impacts are reducing tailpipe emissions as the council transitions to a fully electric / Hydrogen or alternative fuel in the short term. Switching to electric vehicles will increase electricity use but using electricity will have less emissions associated with it than diesel production and use.	Introducing an electric fleet to the council will enhance our goal to be carbon neutral by 2030. Communications can be shared throughout Colchester showing residents and businesses the commitment to making Colchester a cleaner environment for both residents and visitors.
Waste				N/A	N/A
Procurement	Y			Procurement will follow the council rules. Services will be involved in vehicles requirements and specifications before decisions are made to procure. The fleet strategy shows a criterion before vehicles are purchased which includes if a vehicle is required, what size vehicle is required and if there is a more	

				environmentally friendly alternative option.	
Biodiversity and green spaces		Y		N/A	N/A
Transport	Y			Within the Fleet Strategy services will be asked to ensure the following principles are agreed and considered at each stage, • Review the data systems in place to track, monitor and evaluate the fleet. • Undertake robust evaluation of operational need and financial viability. • Challenge the number and size of vehicles. • Explore both lease hire and purchasing options, considering existing budgets. • Base decisions on expert recommendations and guidance	The council continues to view all future fleet requirements and looks to procure vehicles producing less greenhouse gas emissions.
Adaption		Y		n/a	n/a
Water			Y	The mining of materials for electric vehicles does use a large amount of water which is difficult to mitigate.	n/a
Digital		Y		A majority of the fleet will be fitted with telematics to monitor fleet journeys and determine efficiency of trips.	n/a
Community	Y			Positive impacts on a carbon emission reduced fleet, alongside other benefits such as reduced noise and improved local air quality	

				The council will be role-modelling and may demonstrate to others action they can take to reduce their environmental impact	
Housing/ Development		Y		n/a	n/a
Carbon Emissions saving	Y			Transitioning the fleet to alternative lower emission fuels or electric vehicles will have a positive impact on the environment including staff and residents. Although the carbon emissions associated with mining materials for electric vehicles are high, the lifetime emissions of using electric vehicles over fossil fuel alternatives is lower.	A continued vehicle replacement cycle will factor in low carbon emission vehicles at every stage.

Colchester City Council

Colchester City Council: Fleet Transition Strategy 2023/24

Contents

Abbreviations

Battery electric vehicles	BEV
Carbon dioxide equivalent	CO_2e
Climate Emergency Action Plan	CEAP
Colchester City Council	CCC
Electric vehicle	EV
Electric refuse collection vehicle	eRCV
Hydrotreated vegetable oil	HVO
Internal combustion engine	ICE
North Essex Parking Partnership	NEPP
Refuse Collection Vehicle	RCV
Street Care & Safety	SC&S
State of charge	SoC
Tank To Wheel	TTW
Ultra-low emission vehicles	ULEV
Well To Tank	WTT
Whole life costs	WLC

1. Introduction

This document is to set out the strategy for the Colchester City Council's (CCC) fleet to move to a carbon neutral fleet by 2030 if operationally and commercially viable. This is in line with the Council's commitment to tackle the climate emergency, which was declared in July 2019 and set out in the Climate Emergency Action Plan (CEAP).

By 2030 the Council's ambition is to transition to a fully tail pipe carbon neutral fleet. During this programme, diesel and petrol vehicles will be replaced, where practicable, with electric vehicles (EV), but other options may be considered such as hydrogen and low emission alternative fuels including hybrid vehicles.

The CEAP identifies the Council's fleet as accounting for approximately 25% of its total emissions. As the grid continues to decarbonise and purchased electricity becomes 'greener', emissions from the Council's fleet will become an increasingly larger portion of the overall footprint. An action from the CEAP is to take a phased approach to renewal of the fleet as new technologies and associated infrastructure become available.

1.1. Vision and Objectives

Effective management of fleet related assets is critical to the delivery and performance of Council services. This Fleet Transition Strategy sets out and controls the management of Council fleet related assets.

The objectives of the Fleet Transition Strategy are:

- Ensure assets fit for purpose - All vehicles/plant and equipment will be 'fit for purpose' in terms of condition and suitability for the intended use.
- Ensure assets are used effectively – Assets will be treated as a corporate resource, and the need to own/maintain the vehicles/equipment will be regularly challenged and the performance of assets will be monitored and reported with the aim of eliminating unnecessary expenditure.
- Support sustainability - Assets, which run efficiently, maximise value for money, are environmentally and energy efficient contributing directly to delivering reductions in carbon emissions inclusive of the environmental life cycle of the vehicle and component parts (including fuel).
- Safety - The vehicle/plant or equipment must secure the minimum health and safety risk to our staff and members of the public.

Note: This strategy is not intended to cover the Council's grey fleet (vehicles that are owned and driven by an employee for business purposes)

This strategy is well aligned with elements of the Strategic Plan in that it helps the Council's response to the climate emergency, delivers modern services to the city and supports the improvement of health and wellbeing of staff and residents.

2. Fleet Profile

The total number of vehicles as of July 2023 is 124, however the fleet profile will fluctuate due to housing growth, changes in legislation or the result of other county wide projects including the emerging Colchester and Essex Waste Strategies.

The fleet portfolio is made up of a diverse range of vehicles from small cars, vans, light goods caged and tipper vans, tail-lift box vehicles, sweepers, JCB's and a range of heavy goods vehicles.

A current breakdown of the fleet is provided below in table 1.0, and the lifespan and replacement programme are detailed in table 1.1.

Vehicle Type	No. of vehicles	Service	Electric	Hybrid	Diesel
RCV	36	R&W	0	0	36
Resilience RCV	5	R&W	0	0	5
Road Sweepers	6	SC&S	0	0	6
JCB	2	Depot	0	0	2
Cage Tippers	21	SC&S	0	0	21
Car/Van/4x4	54	SC&S, NEPP, Helpline, Greening	19	4	31

- R&W – Recycling & Waste
- SC&S – Street Care & Safety
- NEPP – North Essex Parking Partnership

Table 1.1 – Lifespan and replacement programme for the fleet.

Vehicle Type	Vehicle Count	Purchase year - CCC owned	End of lease agreement	Estimated life span from new	Replacement due
Refuse Collection Vehicles	28	2018(14) 2019(12) 2020(1) 2021 (1)		7 Years	2025(14) 2026(12) 2027(1) 2028 (1)
Refuse Collection Vehicles (Contract spare/spot hire)*	5		2025 (3) Spot hire (2)		
Food Waste Vehicles	7	2020		7 Years	2027
Food Waste vehicle resilience	1	2021			2023

Vehicle Type	Vehicle Count	Purchase year - CCC owned	End of lease agreement	Estimated life span from new	Replacement due
Sweepers	6	2019		7 Years at time of purchase. 3/5 years now modelled depending on specification.	2026
JCB	2		2026	3-year contract hire	2026
Cage Tippers	19 +2 hired	2022(19)	Spot Hire (2)	7 Years	2028
Large size vans	3 (2 + Luton)	2018 2021	Spot Hire (1)	7/10 years should electric be an option	ASAP
Medium size vans	4 (2 GREEN, 1 BD, 1 PEST)		Spot Hire (4)	7/10 years should electric be an option	ASAP
Small size vans	12 (6 EV,1 BD, 1 GREEN,4 SC&S)	6 EV 2022	Spot Hire (6)	7/10 years should electric be an option	6 owned - 2030 7/10-year estimated life. 6 hire - ASAP
NEPP vans	4		2023	7/10 years should electric be an option	2024
NEPP cars	25	2021 (5) Used vehicle (12)	2023 (8)	7/10 years should electric be an option	2029 7/10-year estimated life.
Cars - Hybrid	4 (Helpline)	2021		7/10 years should electric be an option	2028
4x4	2	2022		7 Years	2029

Total 124

*Contract spare/hired vehicles that are not CCC owned therefore not part of the councils Fleet Strategy.

2.1. Corporate Fleet Assets Roles and Responsibilities

Leadership and Cabinet

Under the Scheme of Delegation by the Leader of the Council to Cabinet Members, the Portfolio Holder for Neighbourhoods and Waste has delegated executive powers of implementation within the confines of the Council's budget and policy framework.

Head of Neighbourhood Services and Fleet & Depot Manager

Under the Scheme of Delegation by the Leader of the Council to Officers, the Head of Neighbourhood Services has delegated powers to act within the approved budget and policy objectives of the Council in relation to fleet.

Overarching responsibility for the compliance of all requirements associated with the Council's Vehicle Operators Licence and for the delivery of strategic fleet procurement, maintenance, and management rests with the Head of Neighbourhood Services and the Fleet & Depot Manager.

The Fleet & Depot Manager will provide advice and guidance for all departments within the Council on all aspects related to vehicle, plant, and equipment assets operation related matters, including provision of driver training if required.

Directorates/Service Departments

Timely identification and clear communication of requirements to deliver services including the pursuit of alternative environmentally suitable modes of travel. Production of evidence-based business cases including financial commitment to seek amendments to fleet portfolio. Managing staff to ensure they comply with CCC policies and procedures, Transport and Road Traffic laws. Suitably manage drivers to ensure adherence to regulations and that there is no damage to the assets in their control and that the safety of themselves and others is not compromised in any way.

Drivers/Operators

Compliance with all elements of CCC driver policies, transport, and road traffic laws. Use the assets in accordance with operating instructions and return them in good condition. Provide feedback via their service department on the suitability of vehicles currently in service and any demonstration vehicles they are asked to trial.

Strategic Procurement

Provide specialist advice and support to Fleet & Depot Manager and lead the procurement process and compliance with CCC and public procurement regulations.

Financial Services

Work with the Head of Neighbourhood Services, the Fleet & Depot Manager and service departments to produce, maintain and monitor a sustainable financial plan to support the strategy to ensure approved budgets are not exceeded. Provide appropriate financial analysis on business cases, work with the Head of Neighbourhood Services, the Fleet & Depot Manager and service departments to identify appropriate funding for additional assets outside of the approved plan and challenge to ensure maximum efficiency and sustainability.

2.2. Storage and Supply of Fuel

Fuel is supplied from the Shrub End depot. The procurement and distribution of this fuel is managed by the Head of Neighbourhood Services and the Fleet & Depot Manager

Fuel use for the current CCC vehicle fleet excluding vehicles/plant that fuel away from Shrub End is estimated at 514,124 litres (financial year 22/23 figures from TimePlan Fuel Management system).

The Council's Greenhouse Gas Report identifies that the Councils fleet emits an estimated 1,354.9tCO_2e *per annum.*

2.3. Fleet Asset Replacement and Management Process

The Council has identified the current core fleet asset needs via the formation of a live asset register. Services have and will continue to be required to confirm a continuing need for the assets. Investment in such assets is needed to enable the delivery of core functions and responsibilities. For additional new vehicles or vehicle modifications/enhancements services must provide an approved business case clearly demonstrating the necessary ongoing funding is in place or which other parts of the fleet profile is to be reduced to accommodate any increased funding costs.

The financial investment required to support such a large and diverse asset replacement programme must not be underestimated and poses a very real challenge, with only minimal capital allocations secured significant additional funding is necessary to keep services operational. With demands exceeding available financial resources the need for a robust replacement plan is essential to prioritise replacements based on necessity.

The asset register will identify assets coming to end of operating life and/or when an asset is coming to the end of its funding arrangement or when cost of replacement has risen. The Fleet & Depot Manager will engage with services to determine if there is an ongoing future need and if so, explore marketplace advances to inform replacement options including Ultra Low Emission Vehicles (ULEV).

Replacement factor considerations:

- condition of vehicle
- mileage of vehicle
- age of vehicle
- service unit's requirement needs.
- whole life costs incurred to date.
- projected future maintenance costs if retention is considered.
- existing fuel type and carbon impact
- alternative marketplace fuelling options available and viable.

2.4. Decarbonising the Vehicle Fleet

Since declaring a climate emergency on 17 July 2019, the Council has taken action to calculate the emissions from its activities and operations and set an emissions baseline from which to measure progress against towards the net zero emissions target by 2030.

The way in which Council vehicles are operated and renewed is seen as a vital part of the response to the climate emergency and the expectation that the Council becomes a leader in the fight to reduce the conurbations carbon emissions.

The Government's Road to Zero Strategy The Road to Zero (publishing.service.gov.uk) presents a challenge to drastically reduce carbon emissions by 2030. For fleet management, that means taking a 4-step approach to sustainability:

1. Collecting accurate data around vehicle use
2. Managing and reducing demand
3. Switching to Hydrotreated Vegetable Oil (HVO) a paraffinic, premium quality second-generation renewable fuel that provides a cleaner-burning alternative for use in diesel engines. Whilst not the full solution it offers a significant important interim intervention in reducing greenhouse gas emissions by up to 90%. while other technologies are developed, (Section 5 of this paper provides further information on HVO).
4. Investing in ultra-low-emission vehicles (ULEVs) and infrastructure where accessible and proven in the marketplace

Green vehicle technology is developing rapidly all the time, and the purpose of this strategy is not to second guess what future technology will emerge within the marketplace or predict the corporate transformation programme outcomes, including understanding how and where services will be delivered across the city. At the heart of this strategy is a bold aim to significantly reduce the current carbon emissions and transition as many of the vehicles to be a ULEV fleet over the forthcoming years where these are marketplace available and proven effective, as well as promoting healthier forms of travel such as walking and cycling.

2.5. Marketplace Overview

Industry acknowledges that the ULEV marketplace is yet to mature particularly in terms of the large goods vehicle fleet, with some types of vehicles not widely available. Whilst over the past year development of the larger type of vehicle has expanded onto the market, these new market entrants' longevity and fitness for purpose remains in part unproven, however rapid progress is now being made.

As part of the Government's Green Industrial Revolution, and following extensive consultation with car manufacturers and sellers, the Government has confirmed that the UK will end the sale of new petrol and diesel cars and vans by 2030; this date was put back to 2035 in a recent Government announcement. The Government also announced plans to phase out new diesel heavy goods vehicles (HGVs) by 2040 as part of a move to decarbonise all forms of transport.

2.6. Pathway to Achieve a Zero Tail Pipe Emissions Fleet

This Strategy's pathway details a series of steps to be fully considered before procurement is pursued:

- Where possible, in the first instance the fleet will continue to be rationalised as transformation programmes develop, ensuring that vehicle utilisation is maximised whilst balancing a growing city and the operational needs of service departments.

- To compliment the fleet profile and encourage alternatives to services the introduction of a pool of electric bikes will be evaluated to encourage active travel where it is safe and appropriate to service delivery to do so.
- When a vehicle is due to be replaced, it will be replaced with an ultra-low emission vehicle (ULEV) as the vehicle of preference e.g., small van fleet. Essentially, and with consideration to existing Council infrastructure and current availability, these are likely to be full electric vehicles or a petrol hybrid configuration at the present time.
- When a ULEV is not available, economically viable or cannot secure the necessary supporting infrastructure needs, the replacement vehicle will as a minimum be Clean Air Zone compliant and options of using Hydrotreated Vegetable Oil (HVO) fuel which provides a straightforward alternative to diesel to significantly lower carbon emissions by as much as 90% maybe considered. There exists some controversy regarding the use of HVO, with the Environment Agency stopping its use by contractors in 2022. However, a recent study carried out by Balfour Beaty Vinci and Imperial College has determined that the emissions factors are credible if the provenance of the ingredients is assured i.e., made from waste material sources in the UK), and compliant with the Renewable Transport Fuel Obligation (RTFO).

Whilst ambitious, this strategy takes a measured approach in investing limited funds in the rapidly evolving area of electric or other ultra-low emissions vehicle (ULEV) technology and recognises that the Council is not best placed to stay on the cutting edge of technology development.

Electric vehicle infrastructure requirements are scalable, and Colchester's relatively small geography mitigates some of the concerns about electric vehicle range for being a suitable ULEV technology pathway for the Council to pursue currently.

The Council, like any organisation looking to invest in a large number of electric vehicles faces a challenge: charging infrastructure and capacity. Surveys of our sites suggest the capacity is limited to only charge a small number of vehicles.

To realise this strategy and achieve 94 new ULEV replacements including Large Goods Vehicles (LGV's) significantly bolstering the 23 vehicles already forming part of our ULEV fleet, investment in enabling infrastructure is key and will necessitate funding to upgrade the substation at the existing depot to address the current incoming main capacity limitations of 100kw to achieve 500kw, a large capacity network, a standard EV charger is rated at 7.2 kw and a larger chargers at 40kw / 50kw.

Investigations have shown that axillary sites can generally accommodate between 2 – 3 chargers without the need for infrastructure upgrades although each proposed location will need to be surveyed for confirmation.

2.7. How Electric Vehicles Stack Up

Electric vehicles are only one of several ULEV technologies within the transport marketplace but are one of the most advanced and readily available. Replacing existing

petrol or diesel vehicles with electric vehicles (EVs) brings the environmental benefits of lowering carbon emissions and reducing local air pollution.

Development continues throughout the motor industry with new market entrants emerging in increasing numbers now including the Large Goods Vehicle market.

2.8. Renewals Cycles for EV

Currently ICE vehicles have a life cycle between 5 and 7 years. However, with less wear that EV's have the life of the vehicles can be extended. There may be some instances where battery degradation happens sooner depending on usage. Individual cells may be replaced which can be costly, however not as costly as replacing complete battery packs. Renewals schedules may differ with types and makes of vehicles depending on battery warranties terms and possible hydrogen fuel cell warranties.

Table 2.0 – Fleet transition timeline

Year	RCV	Food Waste	Sweepers	JCB	Tippers	Large van	Medium van	Small van	Cars/4x4	Totals
23/24		1				1	4	10		16
24/25									12	12
25/26	14									14
26/27	12		6	2		2				22
27/28	1	7							8	16
28/29	1				19				4	24
29/30									2	2
30/31								6	5	11

*The above does not include contract spares or spot hired fleet.

Table 2.0 indicates what can be transitioned and in which year it is scheduled to happen should budget allow and the relevant charging infrastructure be available.

- Green - vehicles are readily available.
- Amber - only certain types of vehicles available.
- Red - vehicles not readily available or in very early stages of development.

Should Hydrogen be a source of fuel all vehicle types would be within the red category as these fuel alternatives are in very early stages of production.

2.9. Potential Costings

Table 3.0 – Costs for RCV dependent on fuel types

Fuel type	Cost new	Additions	Fuel running costs
Electric - Purchase	£425,000	Off board charger £20,000	£0.32 Per kWh (day)* £0.23 per kWh (night)*
Electric - Hire & Maintenance	£693,000 over a seven-year term		£0.32 Per kWh (day)* £0.23 per kWh (night)*
Diesel	£210,000	£0	*£1.25 per litre (*11.10.23)
Hydrogen	£750,000	Hydrogen fuel tank required to store hydrogen at a depot £250,000	£6.50 per kg
*Running cost shown at current market price October 2023			

Table 4.0 – Costs for Vans dependent on fuel types

Fuel type	Size	Cost new	Fuel running costs
Electric	medium	£28,000	£0.32 Per kWh (day)* £0.23 per kWh (night)*
Diesel	medium	£19,000	£1.25 per litre
Electric	Large	£54,000	£0.32 Per kWh (day)* £0.23 per kWh (night)*
Diesel	Large	£27,000	£1.25 per litre

*kWh per hour is our current tariff, in addition to these costs are the following, standing charge £11.19 per day, Site Fee £0.07 per day, Agreed availability charge £1.04 per kVa and a settlement charge of £0.02 per day.

3. Considerations

The Council has an ambition to transition all its current fleet to EV by no later than 2030. To achieve this aim, this strategy sets the following objectives:

- Make effective and robust informed decisions.
- Ensure efficient and effective fleet management.
- Improve and future proof service delivery.
- Enhance fleet performance.

It is proposed that, as the Council formulates its transition from diesel to greener fleet options, the following principles are agreed and considered at each stage and during the procurement process:

- Review the data systems in place to track, monitor and evaluate the fleet.
- Undertake robust evaluation of operational need and financial viability.
- Challenge the number and size of vehicles.

- Explore both lease hire and purchasing options, considering existing budgets.
- Base decisions on expert recommendations and guidance

3.1 Establish a transition team.

The successful transition of the CCC fleet to a zero-emission fleet will require CCC to establish a small team encompassing fleet management and the main vehicle operating departments, estates, energy management, human resources (for grey fleet), procurement and finance. The robust appraisal of need and utilisation, changing vehicle procurement to a model based on WLC, funding the new fleet, putting in place the charging infrastructure to support new BEVs and addressing issues like home-based charging, will require input and resources from all the groups identified above, as well as a governance and reporting structure with full senior management team engagement.

The move to zero tailpipe emissions is a once in a generation transformation and is not just a project for the Fleet & Depot Manager.

4. Infrastructure

4.1 Current

In 2022 the Council invested in ten wall mounted EV chargers at its St. Johns car park. These chargers have been utilised to charge fully EV's from Street Care & Safety, Environmental and NEPP services. In addition, two EV chargers were added to the Priory Street car park; one has a double socket that is publicly accessible and an additional single unit for the use of CCC's car club.

In the summer of 2023 six double EV charging points were erected at the Council's head office, Rowan House. Of these six double units, five of these are a single-phase units, while the sixth is a three-phase charging unit. These are now currently being utilised.

4.2 Additional Requirement

To implement infrastructure to transition the entire RCV fleet (currently thirty-six CCC owned vehicles) we would require an electrical substation.

In 2020 the Energy Savings Trust (EST) compiled a report on how CCC could decarbonise the RCV fleet by transitioning them to fully electric vehicles. Section eight of that report looked at Electric Vehicle Charging Infrastructure (EVCI). Below is an extract from the report:

It tells us that ideally, vehicles should be charged overnight from 20:00 to 08:00 hrs, to avoid a negative impact on the local and national grid by charging during periods of peak use. It is therefore important that CCC negotiates low overnight and weekend off-peak tariffs for electricity at all sites, where electric vehicles may be based. It is also important to avoid charging weekdays during the 16:00 to 19:00 hrs peak period, when grid demand is at its maximum, grid GHG (greenhouse gas) emission intensity is high, due to the use of gas generation, and the unit cost per kWh is also at its peak. However, if there is on-site generation for photovoltaic (solar), that should be used if available.

With several battery electric vehicles on the fleet, the infrastructure cost can be spread, and it is very likely that large parts of the charging infrastructure will outlive the vehicles, especially the expensive cabling and groundworks.

Cars and vans up to 60 kWh battery size can be charged overnight in less than 12 hours with 7.4 kW AC chargers but eRCVs will require more expensive 40 kW DC chargers, or 3-Phase AC supplies for on-board AC chargers.

4.3 Meeting the demand for EV charging – tracking data

Using the tracking data from the CCC fleet, the EST were able to estimate the charging capacity needed to meet peak demand. That peak occurs when several vehicles return with a low State of Charge (SoC) which will happen on the longer trips, or trips with high energy use due to a large load (tonnes collected) or many hydraulic movements (bin lifts and compactions).

There are several options for charging EVs. The simplest is to build sufficient site capacity (kW or kVA) to meet the simultaneous maximum demand for charging all the EVs from the grid connection at the full rate, supported by the charger regardless of the local "domestic" site load. This can be expensive, especially if it requires significant upgrades to the local grid infrastructure.

The alternative is to use some method of moderating the supply available to the chargers. This could be achieved by simply restricting the time when banks of chargers are operational or, with more sophisticated controls, limiting the power available to each charger and reallocating that capacity as vehicles are fully charged.

The issue with timed charging, which must be based on predicted need, is it that there is a higher risk of some vehicles not having an adequate charge to complete the *following* day's workload if they return with a much lower than anticipated SoC.

It is also possible to link the management of the energy available for charging EVs to the site's "domestic" load so that the charging control system can maximise the current it draws as the load from the rest of the site falls. Each step-up in charger management requires more investment in the charging system but should avoid even more expensive capacity upgrades in the local grid and gives the fleet team greater visibility around demand and driver behaviour.

The EST determined the capacity required from four possible charging strategies.

- The first is the capacity required for all the chargers to operate simultaneously at full power – this is the simplest option, and many vehicles will be fully charged in less than eight hours leaving unused capacity throughout the rest of evening.
- The second strategy considered assumes that all the vehicles return with 10% battery capacity and there is a charge management system in place to spread charging over the whole overnight period by restricting the capacity available to the chargers.

- The third strategy uses the tracking data, considers the mileage driven by the vehicles during the day and determines the electricity (kWh) required to return the vehicles to a fully charged state.
- The fourth and final strategy is much riskier. It allows the vehicle to run down throughout the week by ensuring that each vehicle has enough power to complete the next day's workload and is only fully recharged over the weekend. This final strategy only works with a very predictable daily workload and does not accommodate changes made at short notice. It is a high-risk strategy and should only be considered if the site capacity is severely constrained, upgrade is very expensive, and the vehicles have a very predictable work pattern.

Table 5.0: Site capacity required by different charging strategies.

Strategy	Description	kW	Notes
1	Simple maximum capacity – all 100% charged	1,040	Very Expensive
2	Smart - worst case – all 100% charged	533	Expensive as over 400kVA
3	All departures 100% charged	498	Optimal
4	No unnecessary off-site charging, not all 100%.	351	High risk

It may be difficult to create the 500 kW of headroom predicted to be needed to fully charge the eRCVs overnight. The EST believe this may be a worse case estimate but only a long-term detailed on-site evaluation of an eRCV across all the CCC routes will determine that. Dennis Eagle has a policy of limiting the initial number of eRCV to two and these will provide all the data needed to confirm the impact of an eRCV fleet.

4.4 Electric Vehicle Charging Infrastructure Recommendation

CCC will need at least 526 kVA capacity to charge a large fleet of electric RCVs (assuming a power factor of 0.95).

If the entire fleet (including the smaller vehicles) is moved to electric power, then even that capacity may not be sufficient and consideration should be given to other options like installing onsite battery storage or charging some of the fleet at other Council sites, or, (for the smaller vehicles at least,) whether charging at employee homes is practicable and finally - probably as an option of last resort - a further upgrade of the site capacity which will be expensive.

Careful monitoring of new electric vehicles as they join the fleet will allow the estimate of future demand to be refined and a strategy developed long before the whole fleet has switched to electric power. All CCC EVs should all be equipped with on-board telemetry that is "EV-aware" and can report battery state of charge as well as total kWh received from charge points and distance travelled. This data needs to be linked to good fleet data management system.

5. Alternative Fuels

An alternative replacement fuel is currently available called Hydrotreated Vegetable Oil (HVO), which is a paraffinic diesel fuel that can be used as a direct replacement for diesel. It offers superior operational and environmental performance over fossil diesel with significant environmental benefits in terms of tailpipe emissions, while supporting existing logistical infrastructure. The claimed advantages of using HVO include:

- HVO is a renewable diesel alternative NOT a biodiesel.
- It is manufactured from 100% renewable and sustainable raw materials, certified by the International Sustainability & Carbon Certification (ISCC) (ISCC is the gold standard for environmental, economic, and social sustainability, globally)
- Net greenhouse gas CO_2e reduction of up to 90% versus fossil diesel fuel
- It claims significant reductions in Noxious tail pipe emissions.
- It also claims a significant reduction in NOx (nitrogen oxide) and PM (particulate matter)
- It has approval from many manufacturers including Volvo who provide engines for Dennis Elite vehicles.
- No engine modifications or new infrastructure required to change over.

CCC's Climate Emergency Officer commented on the use of HVO which is shown below,

"This fuel is better than the current diesel option that is used in our vehicles (if this is just standard diesel), especially as 'steppingstone' fuel to the fleet becoming greener. This is just as important as skipping straight to EV (Electric Vehicle), making emissions reductions now is better than waiting four years for EV/Hydrogen fuel options to arise. You always want to reduce emissions as quickly as possible, if you do not lock yourself out of better alternatives (i.e., in this case use of EVs/Hydrogen Fuel where it is viable)."

All the figures shown below are based on these vehicles using regular road diesel. At this time, attention is drawn to the CO_2 tonnes emitted.

Taking the three vehicles highlighted below, running on road diesel they would have emitted 7.283t of CO_2. The Council ran these vehicles on HVO and it is claimed they will have produced 90% less CO_2 equalling to 0.7283t of CO_2 making a CO_2 reduction of 6.5447 tonnes of CO_2 emitted over a one-month period for three RCV's.

Vehicle	Drivers	EEDI	Target MPG	Actual MPG	Diff %	Analysis	Distance (Miles)	Fuel (litres)	CO_2 Tonnes Emitted
VE68YNZ - Dennis Elite 6	0	58	4.00	5.12	27.92%		1373.96	1,220.70	3.077
VN68RYM - Dennis Elite 6	0	57	4.00	5.35	33.84%		977.62	830.18	2.093
VN68RYO - Dennis Elite 6	0	63	4.00	5.10	27.49%		1379.13	1,229.41	3.099
VN68RYP - Dennis Elite 6	0	66	4.00	5.20	30.02%		1123.05	981.70	2.474

Vehicle	Drivers	EEDI	Target MPG	Actual MPG	Diff %	Analysis	Distance (Miles)	Fuel (litres)	CO_2 Tonnes Emitted
VN68RYR - Dennis Elite 6	0	88	4.00	4.49	12.16%		1053.38	1,067.38	2.690
VN68RYT - Dennis Elite 6	0	61	4.00	4.73	18.30%		1032.25	991.69	2.500
VN68RYU - Dennis Elite 6	0	67	4.00	5.28	31.92%		1310.47	1,128.97	2.846
VN68RYV - Dennis Elite 6	0	68	4.00	4.78	19.44%		871.15	828.96	2.089

5.1 HVO and other drop-in fuels

In September 2023 the Energy Savings Trust provided some information on HVO and other 'drop-in' fuels, they said:

"*There has been growing interest in use of this 'drop-in' diesel replacement fuel. Much of the demand is based around its very low BEIS TTW CO_2e conversion factor, 0.0356 $kgCO_2e$/litre1 , versus 2.478 $kgCO_2e$/litre for (average biofuel blend) diesel. While we recognise the theoretical benefits of HVO, there are remaining concerns about the source of its principal feedstock, Used Cooking Oil (UCO) and the use of this fuel under the current sustainability assurance regime. We expect and hope that one significant positive outcome of the DfT's low carbon fuels strategy consultation is to improve the robustness of the assurance process for this fuel and its feedstock.*

In the UK and Europe, where UCO is classified as a waste product and has few approved secondary uses, it is much easier to trace its origin back to its producer than non-European UCO. Fundamentally, we must be certain that the UCO, used as a feedstock for HVO is in fact a waste product. In south-east Asia and the Americas, where almost all of the UCO imported into Europe originate, UCO has sometimes been used as animal feed (mixed with grain) and so in some cases it is not a true waste product, as it has a permitted use.

The high price that UCO suppliers are achieving because of its 'waste' classification in Europe, is resulting in a distortion of the world market: UCO is diverted from the less financially rewarding markets and is replaced with other farmed crops which may include palm oil. In instances where palm oil cannot be harvested, soy is grown instead but this crop has a lower energy yield than palm oil and so even more land must be used for crop planting. The greater demand for palm oil and other types of crop-derived oil contributes to further global deforestation, and other indirect land use change (ILUC) leading to reduction in biodiversity, a loss of ecosystem services and further increases in GHG (greenhouse gas) emissions.

According to the DfT's (2020) complete RTFO data2 , 100% of UCO feedstock for UK HVO came from outside Europe and none of the HVO sold in the UK was produced using UK UCO. 104 million litres of UCO were produced in the UK in 2020 but none of this was used to make HVO for domestic use. In 2021, the provisional figures show only 9% of UCO was European in origin (Spain, Italy, and Czech Republic). This contrasts with 100% of biomethane feedstock coming from Europe in both years.

As quoted on the BEIS conversion factors, "All fuels with biogenic content, such as (average biofuel blend) diesel and petrol and all electricity consumption should have the biogenic CO_2 emissions reported, to ensure a complete picture of an organisation's emissions is created". Instead of the 80-95% carbon reduction sometimes quoted from adopting HVO, the combined TTW, WTT and out-of-scope emissions figure, shows a much more modest reduction in carbon intensity (around 18%)".

5.2 Hydrogen fuel cell electric vehicles (H2FCEVs)

The Energy Savings Trust also spoke about Hydrogen fuel cell electric vehicles writing the following:

"A *common question is around whether H2FCEVs will be suitable for future vehicle replacements on fleets like those operated by a refuse and recycling local authority. H2FCEVs offer potentially convenient rapid refuelling, and zero harmful air quality emissions where vehicles are operating.*

Whilst there is a potential role for 'green' hydrogen in decarbonising heavy transport (distinct from the carbon intensive 'grey' hydrogen and methane-derived 'blue' hydrogen), it is not yet clear whether this will be the best pathway for refuse and recycling local authority vehicles for the following reasons:

- *A hydrogen fuel cell uses more than three times the electrical energy of charging a battery for the same amount of energy to arrive at the wheels of as a BEV. This means more than three times the energy needs to be generated and this comes at both a financial and environmental cost.*
- *When well to wheel factors such as distribution and transport of the hydrogen are taken into account, the energy use of the fuel cell is likely to be between four to six times that of a battery electric equivalent (Zemo Partnership, 2021).*
- *The lower efficiency of producing hydrogen for fuel cells not only means extra cost but is likely to divert renewable power away from the grid (as growing off peak demands of a national battery electric fleet are emerging), thus slowing broader decarbonisation.*
- *Using H2FCEVs simply adds inefficient processes to energy generation and costly additional components and maintenance requirements compared to a BEV. It is highly likely that there will viable high-capacity battery / rapid charging alternative emerging within this decade that will cover all refuse and recycling local authority operations.*
- *H2FCEVs cost significantly more to purchase than BEVs and unlike them, do not offer any savings from reduced energy consumption to offset the higher costs when compared to diesel vehicles.*
- *Fuel cell vehicles are more technically complex than BEVs and thus will require more maintenance expenditure.*
- *Refuse and recycling local authority would ideally need reliable local third-party hydrogen refuelling infrastructure if investing in a fleet of that nature, along with a back-up plan if the refuelling supply becomes unavailable.*

For some hard to electrify vehicles, hybrid solutions that work primarily using a battery and use fuel cells as a range extender may well be helpful options that emerge later in the

decade, but these are not yet commercially available from any OEMs, and local refuelling infrastructure remains critical".

The below link was shared with CCC by Nottingham City Council who are one of the UK's local authority leaders in transitioning their fleet services to fully electric vehicles. It is an article for Einride who carried out extensive research to compare alternative ways to fuel a heavy good vehicle: https://www.einride.tech/insights/battery-electric-vs-hvo-vs-hydrogen-fuel-cell

6. Wellbeing Staff & Residents

The wellbeing of staff and residents is a key factor when transitioning the Council's fleet. The introduction of electric, hydrogen or other low carbon alternative fuelled vehicles will lead to better air quality, which in turn leads to better health outcomes for people working and living where these vehicles will operate due to their zero or low tailpipe emissions. Electric / hydrogen vehicles will help to further drive down air pollution in the city and improve the environment.

For local authorities such as CCC, switching to zero emissions vehicles can generate substantial emission savings, as well as help to deliver carbon neutral targets. For CCC staff they provide a smooth and quiet driving experience while an increase in vehicle torque is a welcomed addition to the drivers carrying heavy loads. The introduction of further zero emission tailpipe vehicles will continue to demonstrate the Council's leadership on the path to net zero and cleaner air.

7. Options

There are many options that the Council can consider when transitioning the fleet in the future. The three main options are shown below:

1. Transition the fleet when due for renewal over to fully electric powered vehicles: This option is in line with the Councils current CEAP. To implement this, significant capital investment would be required to build a suitable charging infrastructure within a suitable location to have the ability to fully charge the Councils vehicles. To procure the highly expensive electric vehicles an analysis of costings would be required to determine if the vehicles are to be purchased or contract hired.

2. To use Hydrotreated Vegetable Oil (HVO) as a drop in fuel. This could be used as a stop gap until a fully zero tail pipe emission fleet is procured. This could be implemented immediately into much of the Council's fleet including the RCV's to reduce the tail pipe emissions that the vehicle emits. More and more Local Authorities are taking this option as they wait for the electric and hydrogen fleet market to develop further.

3. To continue with replacing fleet with the latest Euro engine diesel vehicles: The Council could continue to run with its current fleet and when the current vehicles are due to be renewed, replace them with the latest Euro engine diesel version. In the short term this is the most cost-effective way however this option does not meet with the Councils current CEAP. The electric and hydrogen fleet market continues to develop and with future localised waste strategies and legislation changes local authorities need to ensure the way in which services are to be delivered before making the switch to more sustainable vehicles as vehicle range may factor into procurement decisions.

Environment and Sustainability Panel

Item **9**

8 February 2024

Report of	**Head of Sustainability**	**Author**	**Ben Plummer**
Title	**Climate Emergency Action Plan Update**		
Wards affected	**Not applicable**		

1. Executive Summary

1.1 This report details key progress and updates from actions in the Climate Emergency Action Plan (CEAP), and other relevant updates since the last meeting on 6th December 2023.

1.2 Key highlights include:

- The Council has begun participating in a programme to understand ways it can adapt the Events Policy and provide assessment tools for event promoters to help improve the sustainability of outdoor events that take place in Colchester.
- The Solar Together scheme has opened, enabling residents to apply to get solar panels and/or battery storage systems at a cheaper price through a collective bulk buying scheme.
- Supporting launch of the Bikewise scheme through the Safer Colchester Partnership to promote the secure locking of bikes.
- The Council is conducting research on opportunities to offset residual emissions left after action is taken to reduce emissions from its estate. The Council is interested in hearing from organisations that may have projects that could help save carbon emissions, but are struggling to access suitable grant funding to launch them as certain offsetting models may be able to assist.
- The Council will be taking part in a government pilot project to understand and report on climate risks and impacts that Council services may be affected by, and to establish actions that can be taken to respond to these risks.
- Improvements have been made in air quality in Colchester, leading to two air quality management areas being proposed for removal.
- Continued availability of **free adult cycle training** of varying levels from beginner to advanced level training, to improve cycling confidence and understanding of how to cycle safely.

2. Recommended Decision

2.1 The Panel is asked to note the contents of the report and ask any questions they have about the updates provided or progress of any actions in the Climate Emergency Action Plan.

3. Reason for Recommended Decision

3.1 To note the progress made to date and feedback on ongoing work.

4. Alternative Options

4.1 Not applicable.

5. Background Information

Key updates

Green Events Code

5.1 Colchester City Council, alongside Maldon District Council and 10 other local authorities across England are participating in a programme that is looking to understand and overcome the barriers associated with making outdoor events more environmentally friendly. The programme co-ordinated by Vision 2025, a group of outdoor events sustainability professionals, will provide support to each Council to help improve their Events policies and introduce methods for helping event organisers understand the environmental impact of events they are putting on, and encouraging improvements. More information about the project can be found here.

Solar Together

5.2 Solar Together is a scheme whereby residents can get solar panels and/or battery storage for their property at a discounted price. The scheme works by collecting a bulk group of residents who express an interest in having solar panels installed on their property and using this to demonstrate demand to installers. Installers then bid to deliver the solar panel installation works in a 'reverse auction' (i.e. they try to outbid each other to deliver works at the cheapest price). Residents can then get better value for money for their installation than if they were to pay on their own. Residents can express an interest in applying to the scheme by visiting https://solartogether.co.uk/essex/home.

Carbon saving project case studies

5.3 Alongside reducing greenhouse gas emissions from its own estate, the Council is looking at options for reducing greenhouse gas emissions through investing in offsetting projects. The Council is aware that there will be residual emissions from the estate and its operations that cannot be fully decarbonised for technical and financial reasons and is therefore considering offset routes to meet the 2030 carbon neutral target. The Council is interested in hearing of any local carbon saving projects being developed by the community that could benefit from funding. The Council is researching a funding mechanism for these projects called Area Based Insetting, which may enable funding to be made available from a variety of organisations to enable carbon saving projects to go ahead, in return for the organisations claiming carbon savings or corporate social responsibility (CSR) benefits to report. If councillors are aware of any projects, or community groups that may have suitable project ideas, then please contact climate.change@colchester.gov.uk for a project form.

Bikewise campaign

5.4 Safer Colchester Partnership have relaunched the 'Bikewise' campaign that aims to raise awareness of ways to securely lock bikes. Police have supported the campaign by 'tagging' bikes with information indicating how well they have been locked up and ways to improve this. The Secure Bike Park has also had an offer in January for use of the facility for £1 for the whole of January (rather than £1 per day, the standard rate), along with Colchester Bike Kitchen providing free bike marking and registration which enables stolen bikes to be returned to their owners if recovered by the police. See more information on the campaign here.

Climate Adaptation reporting pilot

5.5 The Council has been invited to participate in a government pilot project, testing how local authorities can report on climate change risks and impacts, along with actions being taken to combat these. This will inform the Climate Change Committee's independent advice provided to government as part of the UK's Climate Change Risk Assessment. This is the first time that local authorities have been invited to participate in climate adaptation reporting, many organisations including those in the energy, water, transport and financial sectors amongst others. Participating in this pilot will hep the Council understand the climate risks to its services and raise its importance in decision making where relevant.

Air Quality Management Area improvements

5.6 As reported in the Council's 2023 Air Quality Annual Status Report, air quality in Colchester has been improving, leading to two of the remaining three air quality management areas being proposed for removal. The areas, East Street and Ipswich Road, and Lucy Lane North, Stanway have been found to be in compliance with allowed concentrations of air pollutants. The remaining air quality management area covering many city centre streets is proposed to be amended so that it includes Brook Street and junction with East Street and East Hill, Osborne Street, St John's Street and Mersea Road. A comprehensive report on action the Council has taken to attempt to support improvements in air quality will be presented at the next Environment and Sustainability Panel meeting on 21st March 2024.

Free Adult Cycle Training

5.7 Essex County Council are continuing to provide access to free adult cycle training, to improve cycling confidence. These 1:1 sessions range from the 'adult learn to ride' sessions for adults at a beginner riding level to 'adult advanced cycling' which gives users advice on road positioning, cycling on faster roads and at junctions and roundabouts. Completing the 'adult advance cycling' training is a condition of being able to use the pay as you go electric bike and electric cargo bikes in the secure bike hub, as well as for staff to use any of the Council's electric and electric cargo bikes. Find out more information, including the registration form for sessions here.

6. Equality, Diversity and Human Rights implications

6.1 This report has no equality, diversity and human rights implications.

7. Strategic Plan References

7.1 All of the updates provided in this report contribute to the Strategic Plan 2023-2026 theme of 'Respond to the climate emergency'.

8. Consultation

8.1 There are no consultation considerations for this paper, although several of the projects referenced have consultation elements within them and success in tackling climate change will involve engagement and education of others to influence behaviour change more widely.

9. Publicity Considerations

9.1 There are no specific publicity considerations.

10. Financial implications

10.1 There are no direct financial implications of the updates provided in this report.

11. Health, Wellbeing and Community Safety Implications

11.1 Providing more facilities, and access to training, to support cycling will help encourage more residents to cycle more which can benefit physical and mental health.

11.2 There are no anticipated impacts on community safety from the project updates presented in this report.

12. Health and Safety Implications

12.1 There are no health and safety implications form this report.

13. Risk Management Implications

13.1 There are no risk management implications from this update.

14. Environmental and Sustainability Implications

14.1 The project updates in this report all aim to reduce emissions and environmental impacts across the Council.

Environment and Sustainability Panel

Item **10**

08 February 2024

Report of	**Head of Sustainability**	**Author**	**Matthew Evans** ☎ **ext. 8006**
Title	**Work Programme 2023-2024**		
Wards affected	Not applicable		

1. Executive Summary

1.1 This report sets out the current Work Programme 2023-2024 for the Environment and Sustainability Panel. This provides details of the reports that are scheduled for each meeting during the municipal year.

2. Recommended Decision

2.1 The Panel is asked to note the contents of the Work Programme for 2023-2024.

2.2 The attention of the Panel is drawn to the deferment of the Carbon Management Plan report from this meeting to the meeting of the Panel in March 2024.

3. Reason for Recommended Decision

3.1 The Work Programme of this Panel is kept under review throughout the municipal year to ensure that business is progressed and Members have the opportunity to review upcoming agenda items.

4. Alternative Options

4.1 This function forms part of the Panel's Terms of Reference and, as such, no alternative options are presented.

5. Background Information

5.1 The Environment and Sustainability Panel deals with existing and emerging environmental issues, and will focus on carbon footprint reduction and monitoring and supporting the Council's Climate Emergency Action Plan.

5.2 The Panel's Work Programme will evolve as the Municipal Year progresses and items of business are commenced and concluded. At each meeting the opportunity is taken for the Work Programme to be reviewed and, if necessary, amended according to current circumstances.

6. Equality, Diversity and Human Rights implications

6.1 This report has no equality, diversity and human rights implications.

7. Strategic Plan References

7.1 Environmental Sustainability is integral to the delivery of the Strategic Plan's priorities and direction for the Borough as set out under the four themes of growth, responsibility, opportunity and wellbeing.

8. Consultation

8.1 There are no consultation considerations for this report.

9. Publicity Considerations

9.1 There are no specific publicity considerations.

10. Financial implications

10.1 There are no specific financial implications from this report.

11. Health, Wellbeing and Community Safety Implications

11.1 With the actions provided in the updates, the Council is trying to improve health and wellbeing through the actions it is taking to improve environmental outcomes. The 'co-benefits' of environmental action are well documented. For example, improving the management of our green spaces for biodiversity can bring enjoyment and mental health benefits for residents, supporting residents to cycle more improves both their physical and mental health and increasing the energy efficiency of homes helps to improve thermal comfort and physical health.

11.2 There are no community safety implications from this report.

12. Health and Safety Implications

12.1 There are no health and safety implications from this report.

13. Risk Management Implications

13.1 There are no risk management implications from this report.

14. Environmental and Sustainability Implications

14.1 There are no specific environmental and sustainability implications arising directly from this report.

WORK PROGRAMME 2023-24

Environment and Sustainability Panel
Meeting date / Agenda items -
Environment and Sustainability Panel - **22 June 2023**
1. Overview/Introduction of Climate Emergency Action Plan and key progress. 2. Climate Emergency Action Plan – progress update.
Environment and Sustainability Panel – **20 July 2023**
1. Climate Emergency Action Plan – Progress Update
Environment and Sustainability Panel – **21 September 2023**
1. Ferry Marsh Nature Reserve Improvements 2. Woodland and Biodiversity update 3. Greenhouse gas report review 4. Climate Emergency Action Plan update
Environment and Sustainability Panel – **06 December 2023**
1. Essex Climate Action Commission update 2. Domestic Energy Efficiency Funding and Support 3. Climate Change Scorecards 4. Climate Emergency Action Plan update

Environment and Sustainability Panel – **08 February 2024**
1. Housing and Sustainability 2. Review of fleet transition – moved from December 2023 meeting 3. Climate Emergency Action Plan update
Environment and Sustainability Panel – **21 March 2024**
1. Air Quality Projects update 2. Active and Sustainable Travel projects update 3. Draft Recycling and Waste Strategy – moved from December 2023 meeting 4. Ferry Marsh Update 5. Carbon Management Plan