

Climate Action Plan Annual Update

Committee name	Residents' Services Select Committee
Officer reporting	Jo Allen, Place Directorate
Papers with report	Appendix 1 – Low Carbon Supplier Charter
Ward	All

HEADLINES

This report aims to provide an update in relation to the objectives set out in the Strategic Climate Action Plan (2021). It also outlines the work undertaken in meeting the 22/23 priorities to ensure the Council is making sufficient progress towards achieving carbon neutrality across its own operations by 2030.

RECOMMENDATIONS

That the Residents' Services Select Committee notes the contents of this report and seeks any points of clarification from officers.

SUPPORTING INFORMATION

General

This report identifies progress against the objectives that make up the Council's aspirations to achieve carbon neutrality across operations by 2030, as detailed within the Climate Action Plan and Progress Report approved by Cabinet in August 2022.

The Action Plan details six corporate commitments and a suite of objectives across nine key themes, to ensure that all the Council's operations are set within the context of the declared climate emergency.

Six Corporate Commitments	Nine Key themes
<ul style="list-style-type: none">• To lead and inspire our residents, businesses, and schools to reduce their own carbon emissions.• To become 'Carbon-Neutral' by 2030.• To achieve 100% clean electricity across the Council's services by 2030.• To raise awareness and develop the potential of young people to respond to the challenge of	<ul style="list-style-type: none">• C1 Community Leadership.• C2 The Council's Own Operations.• C3 Building Better Places.• C4 Using and Producing Clean and Green Energy.• C5 Waste Management.

<p>the climate emergency.</p> <ul style="list-style-type: none"> • To enhance opportunities for biodiversity across the Borough and particularly in urban areas. • To remain open to the opportunity to go further, to be innovative and creative to exceed the stated goals wherever possible. 	<ul style="list-style-type: none"> • C6 Climate Change Adaptation and Mitigation. • C7 Carbon Offsetting. • C8 Sustainable Transportation. • C9 Transparency, Communication & Reporting.
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In addition, a series of priorities were set for 2022/23; these include:

- Identification of assets to be retained and prioritised for carbon savings.
- Identifying large gas consuming assets and prioritising actions to determine solutions in particular relating to the Civic Centre. All building managers will be contacted to prioritise gas and electricity savings.
- Securing the toolkits and methodologies to accurately record and monitor emissions associated with fleet mileage.
- To progress work on identifying opportunities for electricity generation from solar power.
- To progress work on identifying opportunities for tree planting to offset carbon emissions.
- To improve carbon reporting and identify a consistent toolkit for capturing all emissions to enable robust data to be uploaded to the Council website for scrutiny.
- To develop a programme of work that sets the targets for all the objectives and action plans set out in the Plan.
- To embed the actions from the Plan in the emerging Corporate Strategy.
- To ensure all objectives and workstreams set out in the Plan have a home in subsequent Service plans.
- To develop an engagement strategy with schools, communities, and businesses.
- To commence work on understanding the carbon footprint associated with procured services and work towards securing low carbon procurement frameworks.

The above is in addition to business-as-usual operations relating to emissions reductions, for example, flood and air quality action plans, waste management along with other work linked to the Plan across the Council.

Following the appointment of a new Climate Manager seconded in October 2022, the focus has been to establish and document a clear roadmap to ensure that the Council is on the right path to achieve the aspirations detailed within the action report.

Highlights Include

Grants

The Council is able to take advantage of grant funding via a bid process. Multiple applications have been tendered with numerous successful awards achieved, including:

Green Homes Grant (GHG) Local Authority Delivery Scheme (LADS) Phase 1A November 2020 – December 2021 (completed)

An initial competition (Phase 1A) was launched in August 2020 with a delivery deadline of March 2021, whereby BEIS allocated £76m of funding to 57 LA projects. The Council was awarded a grant of £3,862,804. This project delivered:

- 412 Loft Insulations
- 607 Cavity Wall Insulations
- 97 Windows have been completed as part of the Green Homes Grant

Social Housing Decarbonisation Fund (SHDF) Wave 1 April 2022 – March 2023

A successful grant submission was achieved, and the Council was awarded £1,581,432. When this project reaches completion, the aim is to apply measures to 158 cavity wall properties in the Borough.

Public Sector Decarbonisation Scheme (PSDS) Wave 3b 1st April 2023 – 31st March 2024

A grant has been achieved for £13,751,385.00, to cover the refit of 4 key sites which account for nearly 50% of our carbon footprint. The refit will include ASHP (Air source heat pumps), BMS upgrade (Building Management System), insulation, double glazing and loft insulation.

- Civic Centre
- Winston Churchill Hall
- Hillingdon Leisure Centre
- Highgrove Leisure centre

A bid for Social Housing Decarbonisation Fund (SHDF) Wave 2 was submitted in October 2022. This is to improve the energy efficiency of 100 of the lowest SAP and EPC rated properties and to achieve a minimum EPC C rating. Officers are awaiting an update on the outcome.

Lighting

Street Lighting

An extensive street lighting replacement programme has been undertaken in recent years, delivering a 59.24% kWh reduction in usage since the programme started.

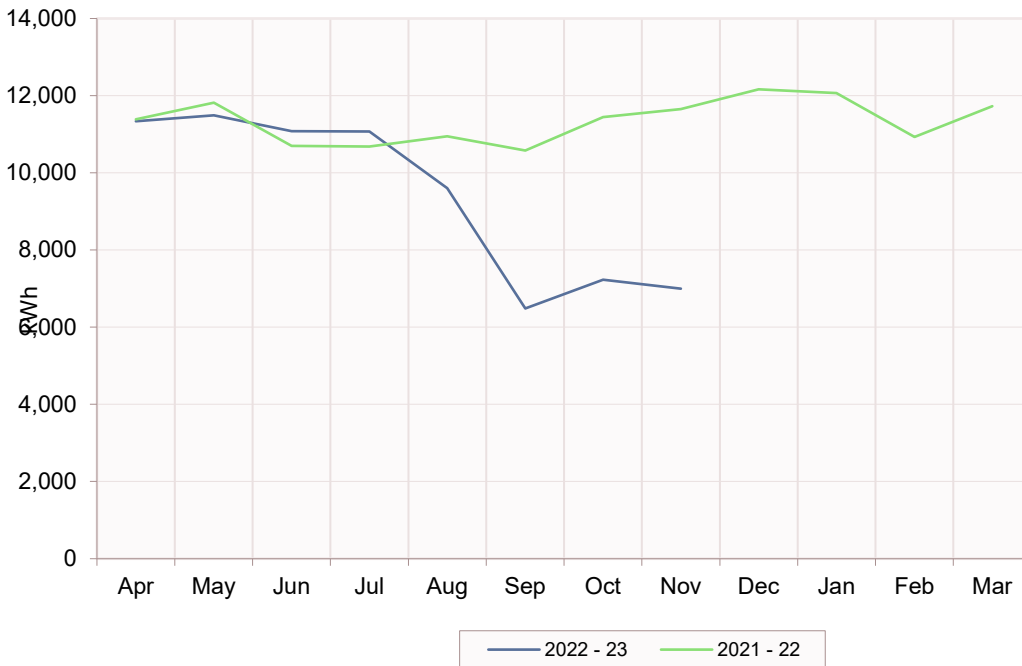
More recently the highways team have been conducting a trial across six sites of a standalone off grid LED street lighting luminaire, coupled with Hybrid solar PV wind turbine, solar charge controller, battery storage and smart lighting control and monitoring.

LED Car Parks

Since the commencement of the LED scheme in September 2022, 720 light fittings have been replaced as part of the LED scheme, with a further 728 in the current pipeline for 23/23.

One of the schemes, Grainges Car Park, has seen consumption reduce by approximately 38% per month or an average of 3,421 kWh per month. The total reduction between September and November 2022 is -12,962 kWh which translates to an avoided energy cost of -£3,147.

Grainges Car Park



Boiler Replacement Programme

A programme is currently underway to replace communal gas boilers, with over 20 sites tendered to date. Heathfield Rise, a general needs housing scheme comprising of 36 dwellings spread across two blocks, was replaced in 2021 and is currently reporting a 16.09% kWh reduction in usage.

In parallel Council housing stock boilers are being replaced with more energy efficient ones. Those that are currently non-condensing deliver between 76-78% efficiency when new. The latest condensing boilers are considered to be around 90% efficient and up to 95% if they remain in a condensing mode. Further analysis on usage is currently under review and will form part of the Cabinet update in 2023.

Green Spaces

Trees for Cities Partnership Agreement and Planting Programme 2021-23

The Trees for Cities tree-planting programme enables environmental offsetting through planting trees to mitigate air quality damage and offset the carbon impacts and help us work towards and achieve our sustainability objectives.

The proposed tree planting programme for 2021-23 has now been confirmed as follows:

2021/22

- Yeading Open Space – 9,000 – 13,500 whips
- Stockley Park – 91 standards
- Dawley Road – 2,570 whips

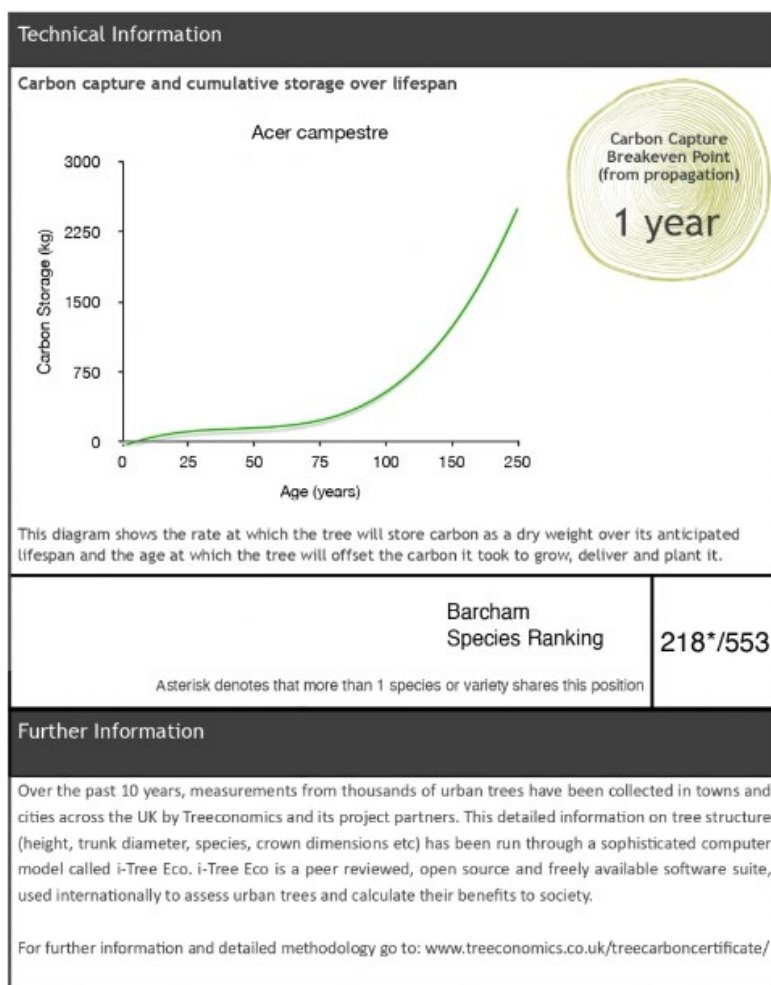
2022/23

- Rosedale 500- 1000 whips and 20-30 standards
- Stonefield Park 500 whips and 20-30 standards
- Philpots Farm up to 4,000 whips

Planting season runs each winter between November and March, and for the last 4 winters the numbers are;

- 2022/23: Still planting but numbers of standards currently 8,479 (currently not including trees for cities projects)
- 21/22: 11,655 standards and whips
- 20/21: 14,288 standards and whips
- 19/20: 469 standards (pre trees for cities partnership)
- 18/19: 601 standards (pre trees for cities partnership)

Barcham are a contracted supplier of trees and provide a calculator that shows the Carbon capture and cumulative storage over a tree's lifespan; an example below is based on an Acer field maple that is particularly recommended for urban and street plantings.



Further analysis on stock and carbon capture reporting will form part of the Cabinet update in 2023 and a priority for 2024.

School Screening

Schools screening can effectively reduce exposure to air pollution. It creates a defensive barrier that disperses air pollutants from roads away from the playground.

Since the start of the programme, 39 schools have had screens installed, with 12 schools currently in the validation phase. As part of this programme 12 recreation (play) grounds have also been completed.

Carbon Offsetting

A GHG emissions inventory was undertaken in 2020 providing base data for 2018-19 and 2019-20 financial years. A further assessment of emissions has been commissioned to undertake a review for 2020-21 and 2021-22 financial years. This will also provide recommendations on improved reporting and year-on-year performance tracking, innovative technological solutions and additional ways to reduce The Council's carbon footprint.

A review is also being undertaken of the 20 buildings with the highest energy performance. The focus of the energy survey is to identify active decarbonisation opportunities that will have a meaningful reduction to Hillingdon's carbon footprint targets.

Biodiversity

Under the Environment Act 2021 all planning permissions granted in England will have to deliver at least 10% biodiversity net gain. The expected implementation of the new legislation is November 2023. Biodiversity Net Gain (BNG) aims to leave the natural environment in a measurably better state than before. A Biodiversity feasibility study is being commissioned across the Borough.

The outline scope of this study will include:

- Tree planting / carbon capture which provides the options to sell your captured carbon in the form of verified carbon credits called woodland carbon units (WCUS) under the woodland carbon code.
- Biodiversity (nature-based solutions outlining viability, report on UK habitat survey)
- Improving quality of green spaces

Renewable Energy

Renewable energy technology is ever developing and improving. Future solar PV tech is predicted to increase massively in efficiency and output in the coming years.

There is potential for solar projects to mitigate carbon emissions by replacing carbon intensive sources of heat and power without the effects of fossil fuels giving clean renewable energy.

An analysis and opportunities review is currently underway across the Borough with a view to further expand the Council's adoption of this solar technology across the corporate estate.

Procurement

To support the Council's strategic Climate Action Plan, a Low Carbon Supplier Charter and Low Carbon Procurement Policy have been developed and incorporated into all new procurements, these will assist with identifying emissions associated with the supply chain and help to secure carbon reduction. This was developed in collaboration with eight neighbouring boroughs given a wider spread of purchasing power presenting increased opportunities to secure low carbon services via its supply chain.

The intention is to ensure that all Council suppliers are committed to joining this important journey to reduce carbon emissions, including initiatives and technology by asking the supply chain to commit to supporting initiatives to tackle climate change and to reduce the greenhouse emissions related to the manufacture, delivery and operation of products and services.

The Council asks that suppliers, by committing to this charter, make reasonable endeavours when tendering for contracts and throughout the contract term to collectively tackle the climate emergency and to set out the actions they will take to reduce their organisation's carbon emissions as detailed in Appendix 1.

Innovation

Innovation/forward thinking and sustainability go hand-in-hand and officers are motivated more than ever to achieve transformational change by supporting innovation. The Council is already taking on some of these innovative solutions as detailed in the main body of this report.

Further dialogue is taking place with market leading innovators including;

Highways

An Innovative approach to road construction and maintenance offering enhanced efficiencies and lower carbon production is already available due to the development in asphalt technology.

Highways in partnership with O'Hara's (and their supply chain) are actively working together to reduce the Council's carbon emissions from highway operations.

Due to the lower production temperature (up to 30 degree lower), less fuel is needed to heat the aggregate compared to conventional hot mix asphalt. This results in lower emission of greenhouse gases which can be 2.4kg of CO2 saved per tonne in comparison.

In addition to the above, Highways are also in discussion with our supply chain in relation to the use and potential trialling of other asphalt materials, including; polymer modified binders, rubberised asphalt using recycled tyres, re-used steel slag.

Green Spaces

Although green walls have been utilised for many years, modern systems now deliver so much more, with research proving their worth in delivering both environmental and economic benefits, particularly their ability to help improve local air quality, both by absorbing carbon dioxide and releasing oxygen, and by trapping dust and other harmful pollutants.

Regulating a building's temperature reducing carbon footprint, providing wildlife habitats and improving air quality are a few of the benefits these systems deliver. It is estimated that a *1m² green wall can absorb up to 2kg a year, while a tree absorbs around 5.5kg.

*arch daily article published March 2022

Partnerships

Officers are working with various likeminded advocates to achieve our Climate aspirations, such as West London Climate Emergency Officers Group and London Environment Directors Network (LEDNet). Working with such groups introduces us to other councils and organisations taking the same journey; they are a forum for innovation and collaboration and to share challenges and opportunities.

LEDNet five strategic priorities, finance and investments, future places, future transport, health and environment, adaptation and flooding are directly linked to:

1. Retrofit London
2. Low carbon development
3. Low carbon transport
4. Renewable power for London
5. One world living
6. Building the green economy
7. Creating a resilient and green London

Working with these groups is key if we are to tackle the national challenge.

Although not new, embracing renewable energy such as solar is a must if we are to reach our target. The new range of enhanced solar roof tiles acts as both roof covering and an electricity generating solution. It can significantly cut a building's carbon footprint. A typical home could save between 1.3 and 1.6 tonnes of carbon per year and make a saving of up to £260 on the annual electricity bill (when using the energy generated) simply by installing solar panels*.

**Energy Saving Trust*

As we move forward and look to adopt numerous new and innovative technologies, we must ensure that the base infrastructure is in place to support these exciting new opportunities and help drive our carbon neutrality ambitions.

PERFORMANCE DATA

A recently commissioned inventory will update our baseline for Scope 1 and Scope 2 emissions, providing two new years of GHG emissions data.

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|---------|---|
| Scope 1 | Emissions for sources that the Council owns or controls directly. |
| Scope 2 | Emissions that the Council causes indirectly when the energy it purchases and uses is produced. |
| Scope 3 | Emissions that the Council causes indirectly itself; all emissions that are not within the boundaries of scope 1 and 2. |

RESIDENT BENEFIT

The Climate Change Action Plan sets out the action the Council has taken to date to significantly reduce its own carbon emissions and the outline actions needed to be fully carbon neutral across the Borough by 2030. Taking action to continue to further reduce carbon emissions and adapt to the impact of climate change will help residents, businesses and communities to avoid disruption to day to day lives, and ensure the Borough is a cleaner and healthier place to live.

FINANCIAL IMPLICATIONS

There are no direct financial implications arising from this report.

LEGAL IMPLICATIONS

There are no specific legal implications arising from this report. Further legal advice will be given as necessary to ensure that the Council continues to meet its obligations under the climate change legislation.

BACKGROUND PAPERS

Nil.

APPENDICES

Appendix 1 – Low Carbon Supplier Charter
[WLA Low Carbon Procurement Charter FINAL April 2022.docx](#)