

London Borough of Hillingdon

The Strategic Climate Action Plan
Progress Report
2024

Report for Residents' Services Select
Committee
February 2024

Introduction

The Council's Commitment

- 1. The Council declared a climate emergency in 2020 and set upon a path to achieve carbon neutrality from its own operations by 2030.
- 2. In July 2021, the Council adopted its own Strategic Climate Action Plan following lengthy consultation and involvement from a diverse range of respondents, including residents, climate action groups and businesses.
- 3. The Plan sets out the Council's corporate commitments and key objectives to meet the ambitious 2030 target. It reflects the Council strategy:
 - A green and sustainable borough: Hillingdon will be a sustainable, carbonneutral borough, protecting Hillingdon's heritage, built environment and valued green spaces. Residents will live in pleasant neighbourhoods with access to sustainable waste management and transport.
- 4. The plan is further divided into 6 Corporate Climate Commitments and then core objectives set against 9 key themes. The Plan is designed to direct and capture all the work associated with tackling the Climate Emergency in one place.

What is the Interim Progress Report?

- 5. The Council has committed to delivering an annual review of the Strategic Action Plan which is normally developed in June/July once outturns from energy contracts are provided for the previous financial year.
- 6. This progress report is therefore designed to take a high-level review of the current position of the Council's work in relation to the Action Plan. The report sets out the updated carbon footprint and compares the previous three years of reporting outputs from the baseline year (2019/20) to 22/23. The annual report that will be drafted in June/July 2024 will consider the latest energy outturns for the financial year 2023 to 2024.
- 7. In addition, the Council committed to a full review of the plan in 2024 so that it is kept up to date and relevant with goals and objectives and appropriately tailored to current demands and resources.

Background

Introduction

8. At the heart of the Plan is the Council's the carbon neutral target for 2030. The target relates to Scope 1 and 2 emissions associated with the corporate building stock that Council's operations but applies to the assets that are:

under our direct operational control and financial management. (C2.1, Strategic Action Plan)

9. This means that operational assets such as the Civic Centre, libraries, depots etc... are captured by the 2030 target. Assets such as housing stock or leased out buildings are not covered by the target. Appendix A includes the list of assets under our financial management, i.e. the Council pays the energy bills.

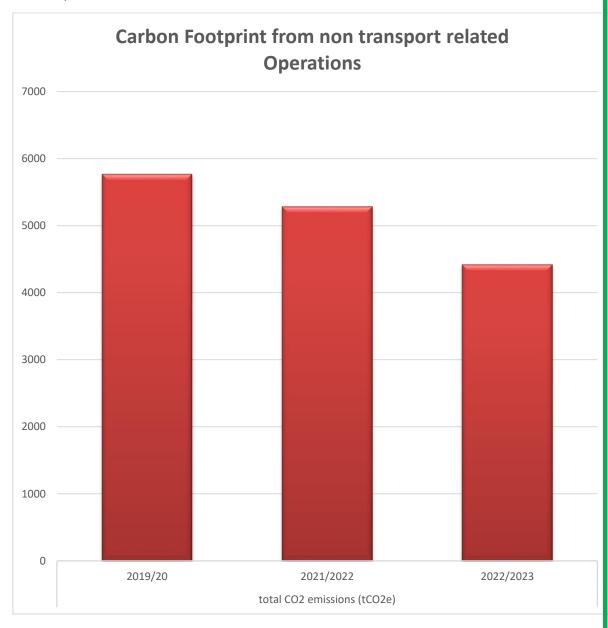
Scope 1	Scope 2	Scope 3
These include emissions from activities owned or controlled by the Council that release emissions into the atmosphere.	These include emissions released into the atmosphere associated with your consumption of purchased electricity, heat, steam and cooling.	Emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as Scope 2 emissions.
They are direct emissions. Examples of Scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, and vehicles. This includes the burning of gas in boilers for space and water heating.	These are indirect emissions that are a consequence of the Council's activities, but which occur at sources that other control. This includes electricity consumption to enable Council operations.	Examples of Scope 3 emissions are business travel by means not owned or controlled the Council such as the purchase and supply of materials. This is excluded from the Carbon Neutral commitment by 2030

- 10. There are 5 key components that contribute to the Council's carbon neutrality target associated with the Scope 1 and 2 emissions and considered later in this report:
 - i. Emissions from corporate assets where the Council has operational control and financial management of energy purchasing
 - ii. Emissions from operational transportation (including grounds maintenance)
 - iii. Carbon reduction from sequestration i.e. coverage of tree canopies on Council land
 - iv. Carbon reduction from renewable energy production i.e. solar panels
 - v. Carbon reduction from sourcing green energy.
- 11. The Council separately made a commitment for Scope 3 emissions to be carbon neutral by 2035. This will be considered further in the 2024 Annual Review.

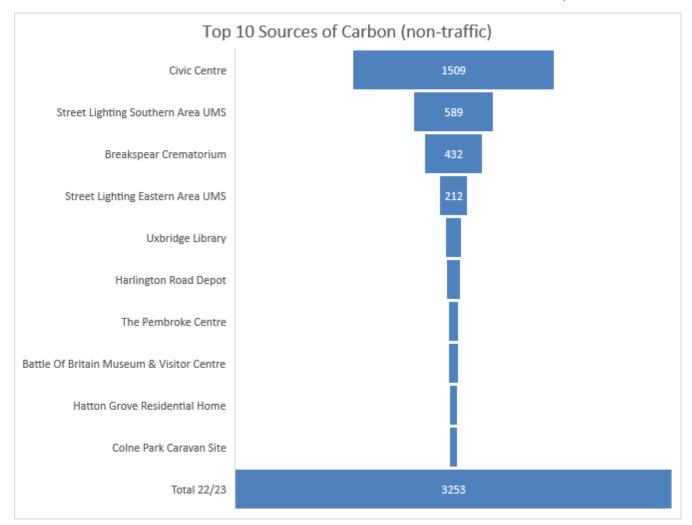
Progress on Target

Progress on emissions from corporate assets

- 12. The 2021 Strategic Climate Action Plan ('the Plan') reported baseline data from the 2019 fiscal year ending in March 2020. This data was based on best practice and the availability of information. The baseline has subsequently been refined as more information has become available and further analysis of the assets and their operational status may alter it further.
- 13. The graph below shows the carbon footprint associated with corporate assets (non-transport). It shows steady progress to reducing the non-traffic related emissions within the scope of the 2030 carbon neutral target. It must be noted that this represents the position on 31 March 2023.



14. The above graph relates to the 135 different assets (see appendix a) amounting to a carbon footprint of 4456 tCO2. The chart below shows the contribution of the top 10 assets. 75% of the carbon footprint comes from just 7% of the operational assets. This illustrates where the focus for further interventions will have most impact.



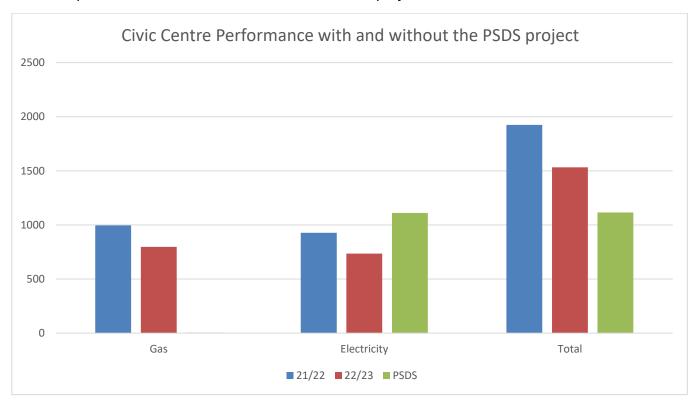
Next Steps

- 15. The progress on reducing the emissions stems from a number of interventions alongside decommissioning or disposal of assets. In order to capture this work and understand the forecast position the following work is being undertaken:
 - i. Work has commenced with the Corporate Property team to identify the specific measures for each of the assets
 - ii. Work has commenced to identify the programme of work moving forward
 - iii. The carbon data is going to feed into the asset management strategy
 - iv. Work has commenced to identify the assets that are not in our operational control. Currently it is assumed that those under the Council financial management are also under operational control which needs to be tested further.

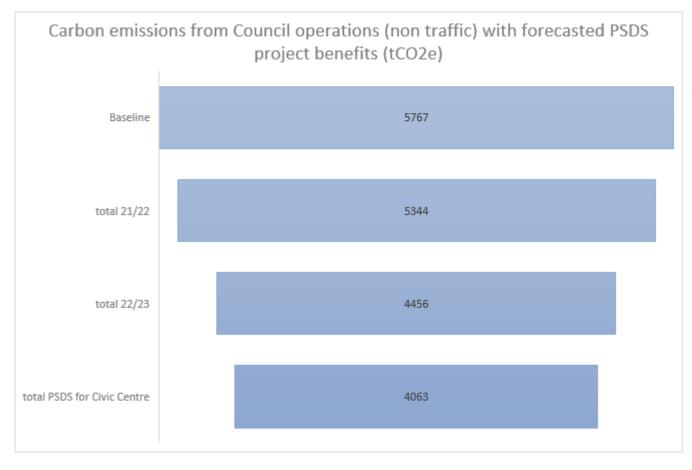
v. To ensure that the Appendix A list of assets is all encompassing with particular regard to the Council leisure centres which are not included within the carbon data captured above.

Public Sector Decarbonisation

- 16. A major workstream currently under way relates to the Public Sector Decarbonisation Scheme (PSDS). The PSDS provides grants for public sector bodies to fund heat decarbonisation and energy efficiency measures.
- 17. The Council secured £13,751,385 through Phase 3 of the PSDS. The funds, with match funding from Section 106, will deliver large scale carbon reduction interventions at:
 - Civic Centre, Uxbridge
 - Hillingdon Leisure Centre
 - Highgrove Leisure Centre
 - Winston Churchill Theatre and Hall
- 18. The first of those projects relates to the Civic Centre. The project involves removing the gas based heating system and replacing with more efficient air source heat pumps, secondary glazing, and additional insulation.
- 19. The Civic Centre is the largest individual contributor to the carbon footprint so the PSDS project will result in a major impact. The table below shows the forecasted improvements to the Civic Centre with the PSDS project intervention.



- 20. The project results in a near complete removal of gas with electricity based air source heat pumps taking on the cooling and heating load. This raises the electricity demand but ultimately results in a 40% (approx.) reduction in the carbon footprint.
- 21. It should be noted that the carbon performance will improve further. Electricity consumption falls within scope 2 whereas gas consumption is a scope 1 emission because it is burned at source usually within a boiler. As a fossil fuel, there is negligible change to the carbon conversion factor associated with gas; in contrast, the carbon conversion factor associated with electricity is linked to the wider carbon footprint of the national grid. An electricity based heating/cooling system will, without any further interventions, have a declining carbon footprint on the basis of a higher renewable energy creation on the national grid. Moving the Civic Centre to electricity based heating and cooling will positively expose it to wider national renewable energy progress.
- 22. Secondly, an electricity based heating/cooling system becomes more attractive to localised renewable energy generation. In theory, an air source heat pump that derives all its electricity from solar panels will result in a zero carbon output.
- 23. When factoring in the PSDS Civic Centre project, the forecast carbon footprint from operational assets (non-traffic) shows a 30% reduction from the 2019/20 baseline position reported in the Climate Change Strategy. The project is due be completed by the end of 2024 meaning reductions will start to be realised within the next reporting window.



Carbon emissions from Council Transportation

- 24. The Council's operational carbon footprint also includes emissions associated with transportation from day to day activities. This includes refuse collection, street cleaning and grounds maintenance.
- 25. Capturing the data associated with the fleet is complicated and an area that requires further work. The last reporting year was 2021/22.

FY	Owned Vehicles		Leased Vehicles	
2021/22	Distance	GHG Emissions	Distance	GHG Emissions
Units	Miles	tonnes CO₂e	Miles	tonnes CO₂e
Quarter 1	2,154,000	1507.79	313,150	180.74
Quarter 2	0	0.00	0	0.00
Quarter 3	0	0.00	0	0.00
Quarter 4	0	0.00	0	0.00
Totals	2,154,000	1,507.79	313,150	180.74

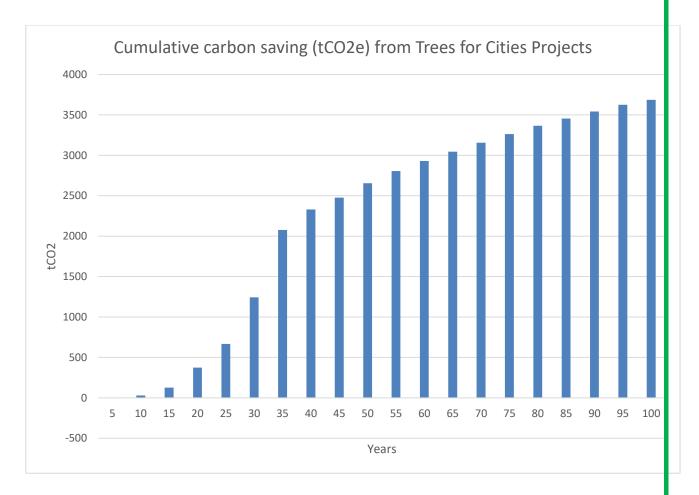
Next steps

- 26. Capturing the data associated with the operational transportation is a priority. Although it is understood a considerable amount of work has gone into refining routes and improving the performance of vehicles to reduce emissions; for example, in 24/25 there will be a significant amount of electric vehicles within the fleet replacing older diesel powered vehicles. This has not yet been captured in the context of this plan.
- 27. Consequently, it is essential to develop the toolkit, backdate performance (if feasible) and understand the trajectory.

Carbon Reduction from sequestration

- 28. The Council embarks on large scale tree planting on an annual basis. Trees play a crucial role in carbon sequestration, i.e. removing carbon from the atmosphere. Carbon offsetting is often undertaken through new tree planting and is used as a way of 'reducing' a carbon footprint.
- 29. As a consequence, the Council's trees play a vital role in carbon management.

 Between the planting season of 2021 to 2024 the Council has planted approximately 25000 whips (seedlings) and 1000 standards (more mature).
- 30. The carbon performance of this new tree planting is minimal in the first decade and is generally negative in the first five years due to delivery, disturbance of soil and planting requirements. However, as the trees mature, the carbon sequestration exponentially increases as shown on the following graph for the Trees for Cities project in Hillingdon from 2021 to 2023 (approximately 18500 whips):



Next steps

- 31. One area that is of benefit is the existing tree canopy across council land. These are often mature trees and perform a vital role in carbon absorption. Further work needs to be undertaken to determine a) the carbon value of these trees and b) how this will be considered to impact the Council's carbon footprint.
- 32. Separately, a tree planting action plan needs to be developed to properly forecast where and when the next trees will be planted and how they link into the carbon footprint and other environmental aspirations, i.e. biodiversity and air quality.

Carbon Reduction from local renewable energy sources

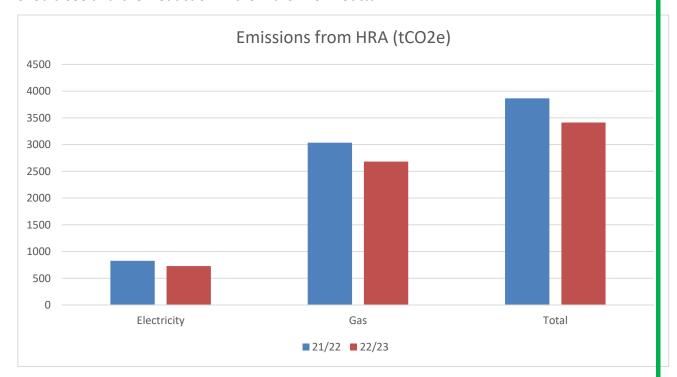
- 33. The Council's carbon footprint can be reduced through the localised creation of electricity from renewable sources. PVs are the most widespread example of this type of energy generation. There are PVs on the roof of the Civic Centre but not of a scale to have a meaningful impact on the carbon footprint.
- 34. It is likely that large scale electricity generation from PVs will be required to offset the Council's carbon footprint. Options are being considered but further work is necessary to progress this, particularly given the project lead in times for delivery and grid connections etc...
- 35. Approximately 5MW of solar power is required to reduce 2000tCO2 per annum. A 5MW requires approximately 25acres or 10hectares.

Carbon Reduction from purchasing green electricity

- 36. Certifying the grid electricity consumed in the Council's operational assets as coming from renewable sources will also reduce the carbon footprint. Until recent years the Council purchased Renewable Energy Guarantees of Origin (REGO). REGOs allow the Council to attribute zero carbon to the electricity demand within the scope of the certificate. Therefore, the Council effectively buys electricity from a renewable source which in theory immediately impacts the carbon footprint.
- 37. However, the cost of REGOs has risen dramatically on top of already higher than usual energy costs and are not actively sought in the same way as previously.
 Next steps
- 38. To consider the purchasing and certifying of renewable energy in the context of the carbon footprint.

Outside of Scope of target - HRA

- 39. Although the HRA building stock falls outside the scope of the Council's carbon neutral target, it is still important to monitor emissions and work to reducing them.
- 40. The graph below shows a steady reduction in emissions in the last two reporting years (i.e. to March 2023). Further interventions have been undertaken which should see a further reduction in the March 2024 outturn.



Next steps

41. As with the work on the corporate assets, there is a need to capture the programme of activity and the highly positive work undertaken to date.

Wider Climate Actions

Theme	Progress	Commentary
Community Leadership	Development Required	The focus has been on getting the Council's 'own house in order' which means further development of the work on community leadership is required. Work has been undertaken with the Friends of the Earth and wider Council objectives reflected in the Plan have a significant resident facing element, e.g. flood risk work, waste management activity. However, further development of the work around these objectives is required.
The Council's Own Operations	Very Positive	As set out in the report, the progress against this objective is very positive. The primary issue is to capture all this positive work in the context of the Plan which will allow for trajectory analysis of the carbon neutral target. In turn, this will allow for the appropriate focus of attention and will assist with informing other workstreams, for example waste collection and asset disposal. Capturing it will also be a significant communications boost that itself can incentivise others to take action.
Building Better Places	Very Positive	Progress against this objective is very positive. The Council implements the policies of the London Plan which are highly progressive in securing zero carbon development. This is also the route to securing Section 106 funds to facilitate actions elsewhere in this plan.

		Work is necessary to determine whether the current cost of offsetting 1tCO2 (i.e. £95) from new development is sufficient. Anecdotally, the current level is too low, but an evidence base is needed to secure a higher level and for this to be pursued through the local plan.
Using and Producing Clean and Green Energy	Moderate	As set out above, the cost of REGOs has constrained the purchasing of them. Procuring clean energy needs to be considered in the context of this strategy. Work on large scale solar farms is ongoing but realistically, progress will only be reported as positive on submission of a planning application.
Waste Management	Very Positive	Progress against the waste management objectives is very positive. The Plan effectively mirrors the Waste Management strategy of the Council and doesn't introduce anything fundamentally different. There is however a need to capture the work in the context of this Plan.
Climate Change Adaptation and Mitigation	Positive	Progress against this objective is positive largely due to the work on the Local Flood Risk Management Strategy and other flood risk related activity. There is more to be done on water efficiency and public facing campaigns, but these are programmed. A climate change adaptation and mitigation action plan needs to be programmed as a workstream.
Carbon Offsetting	Positive	Progress against this objective is positive largely due to the tree planting and ongoing green space management. More work is required to align this work with the objectives of the plan with particularly focus on the biodiversity work which needs to be

		progressed further.
Sustainable Transportation	Positive	Progress against this objective is positive due to the work with TFL, schools' campaigns and development of the cycle strategy. Further work on a sustainable transportation strategy needs to be programmed to ensure all the sub objectives of this theme are given attention. Importantly the work against this theme needs to be captured in the context of this Plan so as to ensure there is alignment against the climate change objectives.
Transparency, Communication and Reporting	Development Required	This is an area where progress needs further development. The theme requires the transparent reporting of the carbon footprint and be publicly available which is not currently feasible. Furthermore, there was not a full reporting of the progress in 2022/23 of the carbon footprint; additionally, data on fleet emissions is not as robust as would be expected and the progress reporting of the Plan has not been consistent. Fortunately, 2024 requires a full review of the plan which will help reset this element of the plan and with the new delivery structure set out below, reporting should become more consistent, robust and transparent.

Very Positive	Most actions within the theme have been progressed well
Positive	Some actions within the theme have been progressed well with others programmed

Moderate	Progress has been made against a small number of the actions
Further development required	Further development against most actions in the theme is required or information is not captured.

Priorities for 2024/25

Asset Identification and carbon auditing of building stock

The Council has a range of building assets and work is ongoing to identify those that will still be in use in the long term and those that might be disposed of. Identification of the key carbon producing assets to be retained should be prioritised with energy audits undertaken.

Capturing the work undertaken to date and promoting this in the context of this plan would be beneficial.

Fleet

The carbon footprint associated with the Council's transportation is not sufficiently accurate. Work needs to be prioritised to enable the Council to accurately capture the carbon footprint associated with all its vehicles' movements. The baseline work to understand the makeup of the fleet has been undertaken but the next step is to determine how many miles are completed by each vehicle and what carbon factors are to be used in determining the associated emissions.

Carbon Offsetting – Solar Projects

Solar projects will invariably need to go through the planning system and there will be a lead in time to identify sites, secure planning permissions and grid connections. The sooner these projects come online, the more value they will have in offsetting the residual emissions.

Carbon Offsetting: Climate Parks and Tree Planting

A priority for 24/25 is to understand how much land can be put aside for additional tree planting to assist with carbon offsetting from 2030. Work should also be undertaken to understand the current carbon sequestration associated with the Council's green and open spaces.

Climate Change Adaptation

Recent heatwaves, droughts and floods have all heightened awareness of the need to be more resilient to the impacts of climate change.

The need for an adaptation action plan was set out in the main Plan and work to scope the coverage of this needs to be prioritised for 22/23 with a plan to be delivered in early 23/24.

Improved carbon reporting

The Council has committed to ensuring that its own carbon footprint is made available for scrutiny to satisfy aims of being transparent. This can only be done once there is a consistent capturing, recording and reporting of the carbon footprint.

Work to rationalise and reconcile the carbon information needs to be prioritised with the subsequent data made available publicly.

Programming of Work

The Plan includes a number of objectives and action plans. These broadly capture existing workstreams but work needs to be undertaken to programme actions and agree outputs. This is particularly important in relation to the Community facing work (Objective C1).

Sustainable Transportation Strategy – Programming

There is a lot of work on sustainable transportation but capturing in the context of this Plan is necessary which will allow for overlaps, i.e. with air quality objectives, to be properly identified and workstreams aligned.

Annual Review

There is a commitment to undertake a full review of the Strategic Climate Action Plan. This will need to be undertaken around June with a view to reconcile the objectives and properly programming workstreams.

Governance and Working Groups

