

**NEWLY FORMED ENVIRONMENT GROUP,
BASELINE CARBON FOOTPRINT REPORT AND
SPEND TO SAVE UPDATE**

Presented by the Head of Projects and Funding Delivery

SUMMARY

The Authority adopted a new Environment Policy on 27 April 2023 (Paper A/4332/23) with a strategy and action plan sitting behind as a working document at that point in draft format. At the June Scrutiny Committee the draft Strategy and Action Plan was discussed and Scrutiny Committee proposed the action plan be brought to future meetings to update on progress.

Following the June Scrutiny Committee officers have now formed an Environment Group consisting of various levels of Authority Officer to support and feed into the work on the Action Plan. This group will refine the strategy, action plan and work to support while championing the delivery of the plan.

A number of other work streams are ongoing and include environmental training, biodiversity net gain, further benchmarking, the "spend to save" projects and consultancy appointment to look at options for decarbonising Lee Valley White Water Centre, all of which are dealt with in the body of this report.

Members are asked to agree on the direction of travel and continue to make comments on the strategy and action plan to the Head of Projects & Funding Delivery. Members are also asked to agree on the frequency of reporting in particular the "spend to save" programme, action plan and baseline carbon footprint.

RECOMMENDATIONS

- Members note: (1) the report; and
- Members approve (2) an annual report on the baseline carbon footprint, and report on spend to save and the action plan is brought to Scrutiny Committee each November.

ENVIRONMENT GROUP

- 1 An officer group has been formed to work on the strategy and action plan and to create a group of champions that will promote the environmental work that

we are undertaking. A call for volunteers was completed through our internal communication system and four front line staff have put themselves forward to be representatives on the group. The group has developed and is working to a terms of reference document and will meet bimonthly for the next year as we develop our programme of action. The group is made up of the following officers:

Chairperson - Head of Projects & Funding Delivery
Head of Asset Maintenance
Head of Property
Head of Legal
Senior Business Support Manager
Conservation Manager
Research Officer
Farm Manager (venue rep)
Volunteers Officer
Ranger
PR/Comms
Management Support Officer

One representative from Senior Management Team is invited to sit on each meeting

- 2 The Environment Group will work on projects which will seek to understand costs and actions which will contribute towards our goal of becoming carbon neutral. It will look at the base line and regular monitoring of our carbon footprint and ensure actions are effective at continuing to reduce our carbon output year on year.

BASELINE REPORT 2022 - 2023

- 3 During 2022 and 2023 we collected the required data to work out our carbon footprint. Once all of the figures were received we commissioned the Association of Public Service Excellence (APSE) to produce a report and calculate our carbon footprint as a base line (**Appendix A**). The report calculated the Authority's carbon footprint for 2022/23 as 2,208 tonnes of CO₂e and the aim will be to seek through the Strategy and Action Plan to monitor this and seek to reduce eventually to net zero. The report details the emissions by source allowing us to identify the poorest areas of performance and the most energy hungry activities. The report identifies the Scope 1, 2 and 3 emissions and makes further recommendations on data gathering for ongoing monitoring. Finally the report makes recommendations on future work to improve our actions for reaching carbon neutrality. This is the first real opportunity to understand what our carbon footprint is and where the major points of use are.
- 4 The Environment Group will review the recommendations from the report and look to revise any future or ongoing data collection and actions arising from it.
- 5 Officers have also produced from the data and the APSE report a headline infographic (**Appendix B**) which details some of the key areas of our performance. In summary, it shows Leisure Services Contract (LSC) venue electricity and water use are areas to look at. Authority venue gas usage is also high and the small amount of recycling at LSC venues is also an area for concern. Business travel has been split into modal categories and can now be monitored year on year.

- 6 Now the Authority has some electric vehicles this will appear on a comparison report for business travel next year. A survey is also being completed for all staff on their modal split of travel to work and this figure will be able to be calculated in future years.

TRAINING

- 7 Senior Management Team and Heads of Service have all undertaken Carbon Literacy training provided by APSE.
- 8 An e-learning package for all staff to introduce them to the Policy and Strategy and to also give them an awareness of environmental issues and the carbon problem has been developed and written and is currently with the HR team to be put into the e-learning format. We hope to roll this out in the New Year.

BIODIVERSITY NET GAIN

- 9 Senior Management Team have been discussing Biodiversity Net Gain (BNG) and the implications and opportunities this may present for the Regional Park and how it might contribute to the Authority's Environmental Policy. BNG originates with the Environment Act 2021 and it is now expected to become mandatory in January 2024, following a delay to the original November date. Under the terms of the Act all planning permissions granted in England (with a few exemptions) will have to deliver at least 10% BNG. This will need to be delivered on-site by the developer, off-site by the developer or through a third party, or as a last resort via the purchasing of Statutory Biodiversity Credits. The Authority is already being approached and is likely to continue to receive inquiries from developers, local authorities and other organisations seeking to use our land to meet offsetting requirements required by development taking place both within and outside the Regional Park. This has the potential to generate income to improve habitats and the environment within the Regional Park but also requires a 30 year commitment as part of the funding agreement.
- 10 Officers will be considering how can we use the BNG requirements to help enhance the Park's environment, its climate resilience and its role in addressing climate change through the type of habitats we create as part of our own BNG for new projects and whether we can seek to fund other environmental improvements via off setting from other non-Park developments. Clearly there is considerable potential for the Authority to deliver the required (or more) biodiversity net gain within its own landholdings as part of for any future developments to meet the objectives of the Environmental Strategy. We have already started to consider this and a significant increase of 35.66% was achieved through the development of the new LVIC with LBWF being an early adopter of the BNG regime. A separate paper on BNG will be presented to Members in the New Year.

BENCHMARKING

- 11 Officers have undertaken a number of benchmarking meetings with colleagues from Hertfordshire organisations and are now linked into actions and activity across the county. This has been a useful exercise and continues to support with lessons learnt from other local authority's work that can be adopted on our journey. We continue to work with APSE to ensure we are up to date with current activity across the country. Further conferences and workshops both in

person and on-line continue to be attended in the main by officers from the Environment Group including one on the current electric vehicle market in October and the Herts County Council Sustainability Annual Event in November. We have also been invited to be part of a review group being led by London Legacy Development Corporation (LLDC) by their sustainability lead looking at any synergies and activity within Queen Elizabeth Olympic Park and surrounding areas.

SPEND TO SAVE PROGRAMME

- 12 The "spend to save" programme has continued to deliver projects to reduce our energy usage. The list of projects developed continues to be reviewed and updated. Some projects have been investigated and are not viable for a range of reasons such as, cost, to either pay back times too long, technology not able to be fitted to that building etc. Some projects are awaiting funding allocation. Currently five projects have been completed and several are still ongoing or awaiting contractor procurement. A full update on the list of works is included with this report (**Appendix C**). The main and current element is the fitting of LED lights across venues and a total of £1.326m has been allocated to this project which is due to commence later this month, the works will take place at WWC, LVAC, LVRC, LVHTC and to a lesser extent LVVP which has already had the Arena lighting replaced with LED's.

LEE VALLEY WHITE WATER CENTRE DECARBONISATION EXERCISE

- 13 Officers have commissioned APSE to undertake a carbon assessment and make recommendations on actions and costs for the Lee Valley White Water Centre to seek to make it operationally carbon neutral. This is the first step in understanding what is feasible at one of our major venues, what the projected costs might be and how and when an operational carbon neutral point can be achieved. We expect this piece of work to be completed over the winter period and will have a final report early in the new year.

ENVIRONMENTAL IMPLICATIONS

- 14 Any environmental implications are set out in the body of this report.

FINANCIAL IMPLICATIONS

- 15 There are currently no financial implications arising directly from the recommendations in this report.

HUMAN RESOURCE IMPLICATIONS

- 16 There are no human resource implications arising directly from the recommendations in this report.

LEGAL IMPLICATIONS

- 17 There are no legal implications arising directly from the recommendations in this report.

RISK MANAGEMENT IMPLICATIONS

- 18 There are no risk management implications arising directly from this report.

EQUALITY IMPLICATIONS

- 19 There are no equality implications arising directly from the recommendations in this report.

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PREVIOUS COMMITTEE REPORTS

Executive	E/234/11	Environment Strategy	24 November 2011
Authority	A/4137/12	Draft Environment Strategy	26 January 2012
Executive	E/234/12	Contaminated Land Strategy	20 September 2012
Executive	E/399/15	Contaminated Land Strategy	26 March 2015
Authority	A/4208/15	Contaminated Land Strategy	30 April 2015
Scrutiny	S/59/21	Scrutiny Scoping Review – Environmental Policy	18 November 2021
Scrutiny	S/61/22	Scrutiny Scoping Review – Environmental Policy	23 June 2022
Scrutiny	S/62/23	Scrutiny Scoping Review – Environmental Policy	28 February 2023
Executive	E/804/23	Environment Policy	23 March 2023
Authority	A/4332/23	Environment Policy	27 April 2023
Scrutiny	S/64/23	Environment Strategy, Action Plan and Baseline Information	22 June 2023

APPENDICES ATTACHED

- Appendix A APSE Baseline Report 2022-23
 Appendix B Headlines for Baseline 2022-23 Infographic
 Appendix C Spend to Save Monitoring Sheet

LIST OF ABBREVIATIONS

APSE	Association of Public Service Excellence
BNG	Biodiversity Net Gain
LLDC	London Legacy Development Corporation
LVWWC	Lee Valley White Water Centre
LVAC	Lee Valley Athletic Centre
LVRC	Lee Valley Riding Centre
LVHTC	Lee Valley Hockey and Tennis Centre
LVVP	Lee Valley VeloPark
LVIC	Lee Valley Ice Centre
LED	Light-Emitting Diode
CO ₂ e	Carbon Dioxide Equivalent
LSC	Leisure Services Contract

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Lee Valley Regional Park Authority

Consultancy support – Scope 1, 2 and 3 Carbon Emissions – 2022/23

Report

Report produced in September 2023



APSE (Association for Public Service Excellence) is a not for profit local government body working with over 300 councils throughout the UK. Promoting excellence in public services, APSE is the foremost specialist in local authority front line services, hosting a network for front line service providers in areas such as waste and refuse collection, parks and environmental services, leisure, school meals, cleaning, housing and building maintenance.

APSE Energy is APSE's local authority energy collaboration. The vision for the collaboration is to form an "effective collaboration of a large number of local authorities to enable and facilitate the local municipalisation of energy services. By this we mean the public and community, as well as private, ownership and managerial control of local energy generation, supply networks and delivery of energy efficiency works. Local authorities working together in this way would have great influence and would be able to deliver economies of scale in green energy to promote economic growth and combat fuel poverty.

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LEE VALLEY REGIONAL PARK AUTHORITY

CONSULTANCY REPORT – CARBON FOOTPRINT FOR SCOPE 1, 2 & 3 EMISSIONS

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1 Introduction

This report provides the results of the carbon footprint for Lee Valley Regional Park Authority which can be used to monitor performance for emitting carbon in the organisation's own operations. The carbon footprint has been undertaken in accordance with best practise guidance by the Greenhouse Gas Protocol and calculated using conversion factors for the carbon dioxide equivalent (CO₂e) published by the Department for Energy Security and Net Zero (DESNZ).

The reporting year is for the financial year of 2022/23.

The carbon footprint is categorised into scopes, which cover:

Scope 1 (direct) emissions are from activities owned or controlled by the organisation. Examples of Scope 1 emissions include emissions from combustion in organisation owned or controlled boilers, furnaces and vehicles.

Scope 2 (indirect) emissions are associated with purchased electricity, heat, steam and cooling. These indirect emissions are a consequence of the organisation's energy use, but occur at sources that the Authority does not own or control. Examples include grid supplied electricity and heat provided through a heat network.

Scope 3 (other indirect) emissions are a consequence of the organisation's actions that occur at sources the Authority does not own or control and are not classed as Scope 2 emissions. Examples of Scope 3 emissions include business travel by means not owned or controlled by the Authority (grey fleet), disposing of its own waste and purchased goods in the supply chain etc.

2 Carbon Footprint

2.1 Carbon Reporting Boundaries

The organisational boundaries determine what emissions are the responsibility of the Authority or others. This can be based on who owns, operates, or exerts control over certain assets. The buildings categorised under Scope 1 & 2 within this reporting are those where energy is purchased or acquired and consumed by the Authority. The vehicles categorised under Scope 1 are vehicles that the Authority own, lease and operate purely for its own operations.

Scope 3 emissions are classified under 15 different categories as detailed under Appendix B. As Scope 3 emissions are under the influence of the Authority, but not under its direct control, it can be difficult to obtain the necessary data to calculate the associated carbon emissions from some Scope 3 sources. One of the larger contributors to carbon emissions is purchased goods and services.

Emissions from assets a company owns and leases to another entity, but does not operate, is typically included in Scope 3.

Typical emissions included under Scope 3 for an organisation would include waste, water supply and wastewater, leased buildings and contractor vehicle usage.

The largest contributor for Scope 3 is likely to be from purchased goods and services, which is generally very difficult to gather data and calculate emissions. This category includes all upstream (i.e. cradle-to-gate) emissions from the production of products purchased or acquired by the Authority in the reporting year. Products include both goods (tangible products) and services (intangible products).

Cradle-to-gate emissions include all emissions that occur in the life cycle of purchased products, up to the point of receipt by the organisation. Relevant purchases may include capital goods, such as office supplies, office furniture, computers, telephones, travel services, IT support, outsourced administrative functions, consulting services, janitorial, landscaping services, maintenance, repairs and operations.

The Authority should set up procedures to record all emission sources related to its operations for future reporting, and it is likely that the overall emissions will increase as the data quality improves.

Selected Scope 3 data has been included which includes Transmission and Distribution and Well to Tank as explained below. These Scope 3 emissions are directly associated with emissions from electricity, gas and vehicles.

Transmission and Distribution

Transmission and distribution (T&D) factors are used to report the Scope 3 emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the premises).

Well to Tank

Fuels have indirect Scope 3 emissions associated with the production, extraction, refining and transport of the fuel before their use known as Well-to-tank (WTT). WTT emissions have been recorded for:

- Electricity
- Gas
- Transmission and Distribution
- Owned Vehicles

2.2 Carbon Emissions

2.2.1 Scope 1, 2 and 3 Emissions for 2022/23

The set of data below shows a summary of the carbon footprint for the year of 2022/23.

Table 1: Carbon emissions by source for 2022/23

2022/23			
Emissions Source	Scope	% Split	TonnesCO2e
Gas	1	6%	134
Wood Pellet	1	0%	1.0
Fuel	1	3%	67.8
Electricity	2	16%	353
Gas - WTT	3	1%	23
Woodchip WTT	3	0%	4
Fuel - WTT	3	1%	16
Electricity - T&D	3	1%	32
Electricity - WTT	3	4%	84
Business Travel Car	3	0%	6.6
Business Travel - Flight	3	0%	3.4
Business Travel - Public Transport - WTT	3	0%	0.2
Water Supply	3	0%	8.5
Water Treatment	3	1%	14.8
Waste	3	0%	4.9
Leased Assets	3	66%	1,464
Solar PV Export to the Grid	Offset		- 8.3
Total		100%	2,208

Chart 1: Carbon emissions by source for 2022/23

Emissions By Source

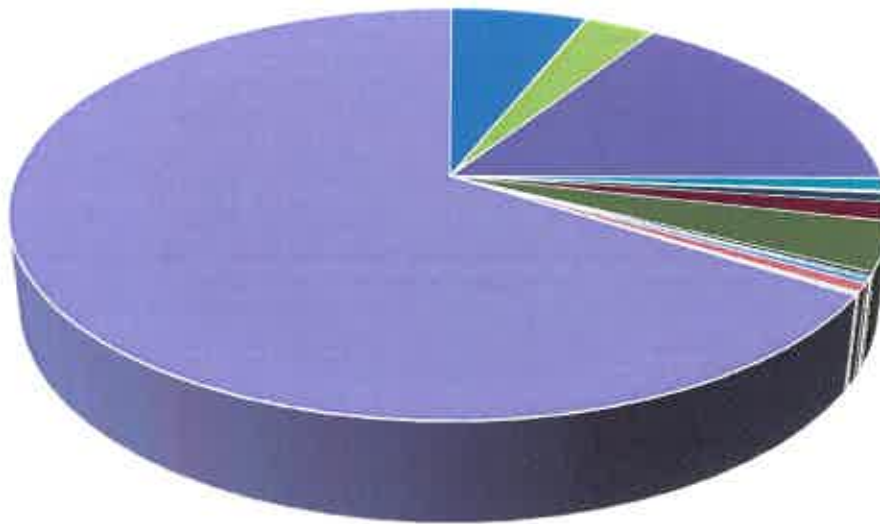
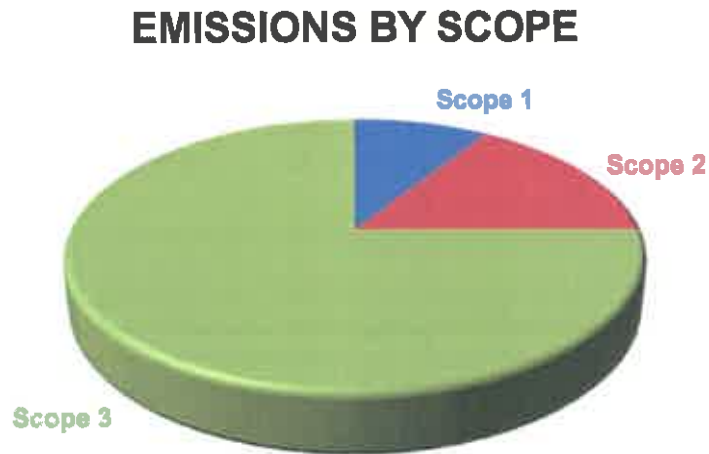


Table 2: Carbon emissions by scope for 2022/23

Emissions Source	% Split	TonnesCO ₂ e
Scope 1	9.1%	202
Scope 2	15.9%	353
Scope 3	75.0%	1,661
Solar PV Export to the Grid		- 8.3
Total	100%	2,208

Chart 2: Carbon emissions by scope for 2022/23



3 Notes and Observations

3.1 Scope 1 and 2

Appendix A is an Excel spreadsheet that shows a breakdown of the emissions by source in the 2022/23 year. This can be used to develop a carbon strategy by identifying and approaching assets with the highest emissions.

Biomass

The CO₂ emissions for woodchip is set as 'net zero' to account for the CO₂ absorbed by fast-growing bioenergy sources during their growth. The CO₂e emissions come from N₂O and CH₄ emissions which are not absorbed during growth.

The Authority stated that 20,300 kg of wood pellets were delivered to Myddelton House.

Authority Owned Vehicles

Data for the litres of fuel consumed at depots and also the amount of fuel consumed by owned vehicles has been provided. As the vehicles fill up at the depots there is a level of double counting, so the emissions have been calculated from the fuel consumed at the depots and the fuel recorded for each vehicle has been discarded.

3.2 Scope 3

Flights

Emissions from aviation have both direct (CO₂, CH₄ and N₂O) and indirect (non-CO₂ emissions e.g. water vapour, contrails, NO_x) climate change effects. Two sets of emission factors are available to report on that includes the indirect effects of non-CO₂ emissions and one that represents direct effects only. The calculations in this reporting include the direct effects only.

Water

Water treatment data was not provided and has been calculated assuming that 95% of the water supply is returned to the sewer. In future, it would be more accurate to use invoiced data for the water treatment.

Waste

The Authority provided data for waste which is collected from its assets. The waste collectors do not record the different type of recycled waste so this has been calculated assuming that this is open loop recycled waste. General refuse has been calculated as going to combustion.

Leased Assets

The leased assets are leisure facilities that are owned by the organisation but operated by a private leisure operator. These six buildings account for 66% of the total emissions and are by far the greatest contributor to the overall emissions.

3.3 PV Generation

Data was provided for the electricity generation from solar PV at Holyfield Hall Farm. This has not been deducted from the total emissions as this is already taken into account from the mains electricity meter data.

The carbon avoided through the solar panels is:

- Grid supplied electricity = 27.8tCO₂e;
- Transmissions and Distribution = 2.5tCO₂e;
- Well-to-Tank = 6.6tCO₂e;
- Total = 36.9tCO₂e.

42,942kWh of electricity, equivalent to 8.3 tCO₂e, is exported to the grid from this PV system. This could be counted as a carbon offset and has been deducted from the gross carbon emissions.

4 Recommendations for Gathering Data Going Forward

4.1 Scope 1 and 2 Emissions

The Authority should develop a procedure for gathering and storing data as it is made available. The benefit of this is that the carbon reporting process is streamlined and progress towards targets can be tracked.

4.2 Scope 3 Emissions

Scope 3 emissions are separated into 15 different categories which includes waste, staff travel and the purchased goods supply chain. Scope 3 emissions can amount to a higher proportion of total emissions than Scope 1 and 2 combined and represent the most significant opportunity to reduce carbon emissions and the impact to climate change. So, understanding these risks through accurate and consistent measurement, evaluation and reporting should improve both resilience and reputation.

ASPE Energy can provide further guidance on how to gather Scope 3 data from third parties and assist in calculating emissions.

5 Conclusion and Recommendations

- Use carbon footprint data and Appendix A to develop a strategy to become net zero carbon. APSE Energy can provide a desktop investigation to provide a trajectory up to the zero-carbon target year and give an indication of what measures could be taken and their potential capital cost and cost/carbon savings;
- Sense check all data to confirm accuracy;
- Develop policies and procedures for improving the capturing of data going forward to report on Scope 1, 2 and 3 emissions;
- Develop policies to request emissions data from suppliers to gather Scope 3 data.

6 Glossary

Term	Definition
Carbon dioxide equivalent (CO ₂ e)	The carbon dioxide equivalent (CO ₂ e) allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO ₂ and includes the six greenhouse gases with the greatest global warming potential (GWP).
Carbon footprint	A carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by a person, organisation, event or product. A carbon footprint is measured in tonnes of carbon dioxide equivalent (tCO ₂ e).
Authority Vehicles	Vehicles that are owned or controlled by the Authority. This does not include employee-owned vehicles that are used for business purposes.
Degree Day	A heating degree day (HDD) is a measurement designed to quantify the demand for energy needed to heat a building. It is the number of degrees that a day's average temperature is below a baseline temperature, which is the temperature below which buildings need to be heated.
Electricity	Electricity used at sites owned/controlled by the organisation. This is reported as a Scope 2, indirect emission. The conversion factors used are for the electricity supplied by the grid that the organisation purchases - they do not include the emissions associated with the transmission and distribution of electricity.
Employee Vehicles	Travel for business purposes in assets not owned or directly operated by the organisation. This includes mileage for business purposes in cars owned by employees, public transport, hire cars etc.
[Natural] Gas	Primary fuel sources combusted at a site or in an asset owned or controlled by the organisation.
MPAN & MPR	The MPAN (Meter Point Administration Number) and MPRN (Meter Point Reference Number) are unique numbers assigned to the electricity and gas supplies. This information has been provided as a reference and can be used to identify each meter.
Solar PV	Solar Photovoltaic panels to generate renewable electricity from the sun.
Transmission and Distribution	Transmission and distribution (T&D) factors are used to report the Scope 3 emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the premises).
Wastewater	Water returned into the sewage system through mains drains.
Water Supply	Water delivered through the mains supply network.

Appendix B – Data that should be gathered to report on Scope 3 emissions

The reporting of Scope 3 emissions is discretionary. The table below provides further guidance on the information required to calculate emissions from Scope 3.

Item	Category	Details Required
1	Purchased goods and services	<p>This category includes all upstream (i.e. cradle-to-gate) emissions from the production of products purchased or acquired by the Authority in the reporting year. Products include both goods (tangible products) and services (intangible products).</p> <p>This category includes emissions from all purchased goods and services not otherwise included in the other categories of upstream scope 3 emissions (i.e. category 2 through category 8 below).</p> <p>Cradle-to-gate emissions include all emissions that occur in the life cycle of purchased products, up to the point of receipt by the Authority. Cradle-to-gate emissions may include:</p> <ul style="list-style-type: none"> • Extraction of raw materials • Agricultural activities • Manufacturing, production, and processing • Generation of electricity consumed by upstream activities • Disposal/treatment of waste generated by upstream activities • Land use and land-use change • Transportation of materials and products between suppliers • Any other activities prior to acquisition by the reporting company <p>Relevant purchases to the Authority may include capital goods, such as office supplies, office furniture, computers, telephones, travel services, IT support, outsourced administrative functions, consulting services, janitorial, landscaping services, maintenance, repairs and operations.</p> <p>For accurate carbon reporting emissions, the Authority should request cradle-to-gate emission factors for materials used by suppliers to produce purchased goods such as Environmental Product Declarations (EPDs). It is likely that many suppliers will not be able to provide all the emission data.</p> <p>If an EPD cannot be provided, supplementary information required includes the volume of product (kg) and the carbon emission factor (kg CO₂e).</p>

		A policy should be developed so that suppliers in the supply chain are required to provide this data as part of the contract, where the volume of goods is noteworthy.
2	Capital goods	<p>Capital goods are final products that have an extended life and are used by the Authority to manufacture a product, provide a service, or sell, store, and deliver merchandise. Capital goods are treated as fixed assets or as plant, property, and equipment (PP&E). Examples of capital goods include equipment, machinery, buildings, facilities, and vehicles.</p> <p>The required information is the same as Category 1 above.</p> <p>A policy should be developed so that suppliers in the supply chain are required to provide this data as part of the contract.</p>
3	Fuel- and energy related activities (not included in Scope 1 or Scope 2)	Transmission and distribution (T&D) losses have been included and calculated from the data provided in Scope 2.
4	Upstream transportation and distribution	<p>Category 4 includes emissions from:</p> <ul style="list-style-type: none"> ● Transportation and distribution of products purchased in the reporting year, between suppliers and its own operations in vehicles not owned or operated by the Authority. ● ● Third-party transportation and distribution services purchased by the Authority in the reporting year (either directly or through an intermediary), including inbound logistics, outbound logistics (e.g. of sold products), and third-party transportation and distribution between the Authority's own facilities. <p>The Authority requires data on:</p> <ul style="list-style-type: none"> ● Quantities of fuel (e.g., diesel, petrol, jet fuel, biofuels) consumed ● Amount spent on fuels ● Distance travelled ● Vehicle type <p>This may include managed assets - Vehicles that are used by the Authority but are not owned by the organisation and generally do not appear on the organisation's balance sheet, for example, maintenance</p>

		<p>contractor vehicles, outsourced refuse and recycling trucks, road sweepers, grounds maintenance mowers etc.</p> <p>A policy should be developed so that suppliers using their own vehicles are required to provide this data as part of the contract.</p>
5	Waste generated in operations	<p>This includes emissions from third-party disposal and treatment of waste generated in the Authority's owned or controlled operations in the reporting year. This category includes emissions from disposal of both solid waste and wastewater.</p> <p>The Authority should request volume and emissions data from the waste treatment company applicable to its own waste stream. If this cannot be provided, the emissions can be calculated by requesting the volume of waste, type and disposal method:</p> <p>Example of data required:</p> <p>Total weight (kg) of waste type and disposal method e.g.</p> <ul style="list-style-type: none"> • 5,000kg municipal waste to landfill • 500kg organic garden waste to composting • 1,000kg metal recycled • 1,000kg plastic recycled • 1,000kg paper recycled <p>Data is required for the volume of supply and wastewater in cubic metres (m³) from water bills.</p> <p>Local authorities have an important role in waste prevention and sustainable waste management through awareness-raising campaigns, providing separate collection for recycling and food waste, and implementing waste-to-energy schemes. It is therefore voluntary on whether the Authority choose to include the emissions from waste associated with the whole borough, or just the Authority's own operation.</p>
6	Business travel	<p>Travel for assets not owned or directly operated by the Authority. This includes mileage for business purposes in cars owned by employees, public transport, hire cars etc.</p> <p>Require details for:</p>

		<p><u>Vehicle</u></p> <p>Fuel type, size of vehicle and distance for:</p> <ul style="list-style-type: none"> • Car • Motorbike • Taxis • Bus • Rail <p><u>Flights</u></p> <ul style="list-style-type: none"> • Airport travelled to/from • Number of passengers • Class type • Distance <p><u>Ferry</u></p> <ul style="list-style-type: none"> • Foot or car passenger • Distance
7	Employee commuting	<p>This category includes emissions from the transportation of employees between their homes and their worksites.</p> <p>Emissions from employee commuting may arise from:</p> <ul style="list-style-type: none"> • Car • Bus • Rail • Other modes of transportation <p>Staff would be required to provide method of transport and distance travelled. It may be difficult and time consuming to collect accurate data.</p>
8	Upstream leased assets	<p>This category is applicable from the operation of assets that are leased by the Authority.</p> <p>If the Authority procures the energy then this should be considered as Scope 1 and 2.</p> <p>If the landlord is responsible for the Scope 1 and 2 emissions, the Authority should include the reporting under Scope 3. An example may</p>

		<p>include an office that the Authority lease from a private landlord. All energy bills may be included as part of the lease and the energy contract is under the name of the landlord. The Authority should therefore request the energy data from the landlord and include this under Scope 3.</p> <p>Data required include the Scope 1 and 2 data from the leased asset.</p>
9	Downstream transportation and distribution	<p>This category includes emissions that occur in the reporting year from transportation and distribution of sold products in vehicles and facilities not owned or controlled by the Authority in the reporting year.</p> <p>It is assumed that this category is not applicable to the Authority as it does not manufacture and sell products.</p>
10	Processing of sold products	<p>It is assumed that this category is not applicable to the Authority as it does not manufacture and sell products.</p>
11	Use of sold products	<p>It is assumed that this category is not applicable to the Authority as it does not manufacture and sell products.</p>
12	End-of-life treatment of sold products	<p>It is assumed that this category is not applicable to the Authority as it does not manufacture and sell products.</p>
13	Downstream leased assets	<p>This category is applicable where the Authority is the landlord to a lessee.</p> <p>If the Authority procures the energy on behalf of a lessee then this should be considered as Scope 1 and 2. An example of this is where the Authority may lease a premises to a lessee and include all energy costs as part of the lease. The energy contract is under the name of the Authority and is therefore reported under Scope 1 and 2.</p> <p>If the lessee is responsible for the Scope 1 and 2 emissions, the Authority should include the reporting under Scope 3. An example of this is a shop that the Authority own and the occupant pays for the energy bills and the contract is under their name. The Authority should request the energy data from the shop occupier and report this under Scope 3.</p>

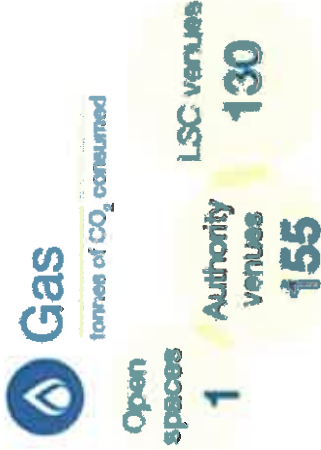
		Data required include the Scope 1 and 2 data from the leased asset.
14	Franchises	It is assumed that this category is not applicable to the Authority as it does not operate any franchises.
15	Investments	<p>This category includes scope 3 emissions associated with the Authority's investments in the reporting year, not already included in scope 1 or scope 2. This category is applicable to investors (i.e. organisations that make an investment with the objective of making a profit) and organisations that provide financial services. This category also applies to investors that are not profit driven (e.g. multilateral development banks). Investments are categorised as a downstream scope 3 category because providing capital or financing is a service provided by the organisation.</p> <p>Category 15 is designed primarily for private financial institutions (e.g., commercial banks), but is also relevant to public financial institutions (e.g., multilateral development banks, export credit agencies) and other entities with investments not included in scope 1 and scope 2.</p> <p>The Authority's scope 3 emissions from investments are the scope 1 and scope 2 emissions of investees.</p> <p>For purposes of greenhouse gas accounting, this standard divides financial investments into four types:</p> <ul style="list-style-type: none"> • Equity investments • Debt investments • Project finance • Managed investments and client services <p>An example of the information required is the Scope 1 and 2 emissions from the bank where an investment is in place. This is based on the Authority's proportional share of investment in the investee. If the Authority has £1million invested in the bank and the banks total investments amount to £100million, the Authority should report on 1% of the banks Scope 1 and 2 emissions.</p> <p>It is assumed that this information will be difficult to collate from third parties and that the total emissions will be proportionally small compared to other emission sources and these emissions could be excluded from the reporting.</p>

NEW MUNICIPALISM

Delivering for local people and local economies



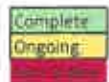
Waste



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Environmental and spend to save actions and projects currently being delivered/developed by the Authority
Progress

Key



Environmental Improvement Projects	Progress
Sofitalbrook – creation of a new 200 acre Country Park with significant habitat enhancement.	Ongoing
St Paul's Field – creation of a new footpath with environmental improvements	Ongoing
Middlesex Filter Beds – re wetting for environmental and biodiversity improvements	Ongoing
North Wall Road – potential greening/rewilding project	Ongoing
East India Dock Basin – desilting and environmental and biodiversity improvements	Ongoing
Following the pandemic the Authority has continued hybrid working (reducing traffic movements for business and home of office as well as traveling costs by continuing with virtual meetings)	Complete
BAP Projects	
River restoration on the River Lynch at Dobbs Weir – funded through S106 with HCC	Ongoing
Installation of Floating reedbeds on the Lea Navigation at Lee Park Way – funded through the GLA's Rewild London fund	Complete
Enhancements to Hall Marsh Scraps - enhancements identified through the Lee Valley Wader Strategy	Ongoing
Range of enhancements to the Regional Parks open water habitats in partnership with local landowners, as identified through the 2021 Lee Valley Wetland Assessment (a project has been completed this year on Stanstead Innings)	Ongoing
Range of enhancements on Water Vole habitat across the Regional Park as identified through the Lee Valley Water Vole Survey (2022) (enhancements undertaken this year at Stanstead Innings)	Ongoing
Targeted management of Creeping Marshwort on Walthamstow Marshes including propagation of cuttings under Natural England licence	Ongoing
Working in partnership with British Canoe Union, Angling Trust, EA and CRT to remove the invasive non-native Floating Pennywort from the River Lea and tributaries	Ongoing
Continuing to fund the Hertfordshire Water Vole and Invasive Non-native Species Project to co-ordinate the targeted work for Water Vole conservation in the region	Ongoing
Supporting local groups to continue their work to enhance waterways in the south of the Park (Tottenham and Hackney)	Ongoing
Delivery of a range of environmental enhancements funded through the North London Reinforcement Project (specific projects include creation of a bat hibernaculum, pond restoration and grassland restoration)	Ongoing
Training Activity	
SMT and HOS to undertake Carbon Literacy Training from Association of Public Service Excellence (APSE) as an external provider- spring 2023	Complete
Officers attending APSE seminars and conferences	Ongoing
Spend to Save Projects (The following spend to save projects are being investigated at a range of venues and sites. The list under each is not an exhaustive list and just a small number of examples of energy saving or generation projects being specifically looked at for each site).	
VeloPark	
LED lighting (already installed)	Complete
Consider solar control measures such as the application of reflective coating or shading devices to windows.	Ongoing
Add time control to heating system	Not Action
Chiller system be investigated to gain an understanding of its efficiency and possible improvement options	Ongoing
Consider installing building mounted wind turbine(s).	Not Action
Movement sensors and LED lighting to back of house areas and corridors	Ongoing
Hockey & Tennis Centre	
Consider solar control measures such as the application of reflective coating or shading devices to windows.	Ongoing
Add time control to heating system.	Ongoing
It is recommended that the heat generator system be investigated to gain an understanding of its efficiency and possible improvements.	Ongoing
Some windows have high U-values - consider installing secondary glazing.	Not Action
Add local temperature control to the heating system.	Ongoing
LED lighting to back of house and public areas with movement sensors	Ongoing
White Water Centre	
It is recommended that the chiller system be investigated to gain an understanding of its efficiency and possible improvements.	Ongoing
Consider installing building mounted wind turbine(s).	Ongoing
Consider installing solar water heating.	Ongoing
Consider with chefs and kitchen managers how a training programme and monitoring systems with incentives could be implemented.	Ongoing
Engage experts to assess the air conditioning systems in accordance with CIBSE TM 44.	Ongoing
Consider upgrading major time controls to include optimum start/stop.	Ongoing
Consider with experts implementation of an energy efficient equipment procurement regime that will upgrade existing equipment and renew in a planned cost-effective programme.	Ongoing
Enable power save settings and power down management on computers and associated equipment.	Ongoing
Consider engaging experts to review the condition of the building fabric and propose measures to improve energy performance.	Ongoing
Engage experts to propose specific measures to reduce hot water wastage	Ongoing
Consider installing a Hydro-electric generator.	Ongoing
Consider installing a ground source heat pump.	Ongoing
Consider switching to a less carbon intensive fuel.	Ongoing
Consider installing building mounted photovoltaic electricity generating panels.	Ongoing
Consider installing building mounted solar water heating.	Ongoing
Consider upgrading lighting to LED technology.	Ongoing

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Consider upgrading lighting controls to daylight sensing	Ongoing
Athletics Centre	
Replace tungsten GLS lamps with CFLs.	Ongoing
Consider solar control measures such as the application of reflective coating or shading devices to windows.	Ongoing
Add time control to heating system.	Ongoing
Enable power save settings and power down management on computers and associated equipment.	Ongoing
Review the air conditioning energy performance report and seek to implement any outstanding recommendations for action.	Ongoing
Consider fitting existing air curtains with energy saving controls such as door interlocks and occupancy time switches.	Ongoing
Consider applying reflective coating to windows and/or fit shading devices to reduce unwanted solar gain.	Ongoing
Consider a Combined Heating and Power (CHP) system as an alternative to conventional boilers.	Ongoing
Consider installing a ground source heat pump.	Ongoing
Consider installing building mounted photovoltaic electricity generating panels.	Ongoing
Consider upgrading lighting including automatic controls, daylight & occupancy sensing and LEDs.	Ongoing
Fit insulation jackets to valves and flanges within the boiler room to reduce heat losses.	Ongoing
Consider updating the hot water time schedules to save energy over night.	Ongoing
Investigate Daylight harvesting and LED lights	Ongoing
Riding Centre	
Consider solar control measures such as the application of reflective coating or shading devices to windows.	Ongoing
Add time control to heating system.	Ongoing
Some walls have uninsulated cavities - introduce cavity wall insulation.	Ongoing
Some windows have high U-values - consider installing secondary glazing.	Ongoing
Some solid walls are poorly insulated - introduce or improve internal wall insulation.	Ongoing
Consider replacing heating boiler plant with a condensing type.	Ongoing
Replace/improve glazing and/or frames.	Ongoing
Consider implementing a programme of planned lighting systems maintenance to maintain effectiveness and energy efficiency	Ongoing
Fit insulation jackets to valves and flanges within the boiler room to reduce heat losses.	Ongoing
Install occupancy sensing control and zoning to the lighting.	Ongoing
Replace the halogen spotlights in the shop area with LED lamps.	Ongoing
Consider installing a submeter to measure renewable energy produced by the on-site solar PV system.	Not viable
Springfield Marina	
Consider installing weather compensator controls on heating and cooling systems.	Ongoing
Consider adjusting existing, or installing new, automatic external door closers, or consider adopting revolving door solutions.	Ongoing
Consider installing timer controls to energy consuming plant and equipment and adjust to suit current building occupancy.	Ongoing
Consider how building fabric air tightness could be improved, for example sealing, draught stripping and closing off unused ventilation openings, chimneys.	Ongoing
Consider installing automatic closers to loading bay goods doors or shutters.	Ongoing
Consider introducing or improving loft insulation.	Not viable
Consider introducing or improving cavity wall insulation.	Not viable
Consider fitting secondary glazing and/or under glaze sky lights where appropriate.	Ongoing
Consider installing flexible air curtains across loading bay doors.	Ongoing
Consider introducing or improving wall insulation (internal lining) to solid single skin structures.	Not viable
Consider constructing draught lobbies to reduce unwanted air infiltration.	Ongoing
Lobby required in Reception to avoid cold draughts.	Ongoing
No bms control of heating in the corridors and so temperatures not always ideal. Provide local control.	Ongoing
Consider replacing 3 port valves with two port and variable speed pump controls.	Ongoing
Consideration of solar energy collection (either solar thermal and/or photovoltaic) on roof is recommended.	Ongoing
No pipe insulation to heating or hot water services	Ongoing
Lighting to be redesigned and LED's introduced	Ongoing
Stanstead Marina	
Consider installing weather compensator controls on heating and cooling systems.	Ongoing
Consider adjusting existing, or installing new, automatic external door closers, or consider adopting revolving door solutions.	Ongoing
Consider installing timer controls to energy consuming plant and equipment and adjust to suit current building occupancy.	Ongoing
Consider how building fabric air tightness could be improved, for example sealing, draught stripping and closing off unused ventilation openings, chimneys.	Ongoing
Consider installing automatic closers to loading bay goods doors or shutters.	Ongoing
Consider upgrading major time controls to include optimum start/stop.	Ongoing
Consider introducing or improving cavity wall insulation.	Not viable
Consider installing flexible air curtains across loading bay doors.	Ongoing
Consider installing building mounted solar water heating.	Ongoing
Consider replacing or improving glazing.	Ongoing
Consider constructing draught lobbies to reduce unwanted air infiltration.	Ongoing
Consideration of solar energy collection (either solar thermal and/or photovoltaic) on roof is recommended.	Ongoing
Lighting to be redesigned and LED,s introduced.	Ongoing
Improve sealing to large doors for winter operation.	Ongoing
Some glazing is poorly insulated. Replace/improve glazing and/or frames.	Ongoing

Consider installing an air source heat pump or a ground source heat pump.	Ongoing
Dobbs Weir Campsite	
Reduce number of Immersions being used in winter season (5 down to 2) already completed.	Complete
Look at timers for night time lighting and or PIR sensors	Ongoing
Sewardstone Campsite	
Look at timers for night time lighting and or PIR sensors	Ongoing
Edmonton Campsite	
EPC is registered as Golf Shop but this is one building for campsite adjust for both as well.	Ongoing
Investigate LED lighting.	Ongoing
Some windows have high U-values - consider installing secondary glazing.	Ongoing
Some glazing is poorly insulated. Replace/improve glazing and/or frames.	Ongoing
Consider installing an air source heat pump.	Ongoing
Consider installing building mounted wind turbine(s).	Not Started
Roof is poorly insulated. Install or improve insulation of roof.	Ongoing
Consider installing PV.	Ongoing
Myddelton House	
Engage experts to assess the air conditioning systems in accordance with CIBSE TM 44.	Ongoing
Consider how building fabric air tightness could be improved, for example sealing, draught stripping and closing off unused ventilation openings, chimneys.	Ongoing
Consider introducing or improving loft insulation.	Ongoing
Consider upgrading major time controls to include optimum start/stop.	Ongoing
Consider replacing or improving glazing.	Not Started
Consider a metering survey in accordance with CIBSE TM:39 to understand and update the current metering strategy.	Ongoing
Consider reducing heating/cooling set points and setting tighter dead bands between heating/cooling.	Ongoing
Consider adding timer controls to electric point of use hot water units.	Ongoing
Consider changing conservatory heating system from gas and connecting to wood chip boiler.	Ongoing
Consider increasing the server room setpoints to 24C+ This is still within the safe tolerance of server equipment.	Ongoing

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