



## **MEETINGS OF THE STATUTORY ADVISORY COMMITTEE & THE CONSULTATIVE COMMITTEE**

**30 NOVEMBER 2023**

**Report Title:** Environmental Sustainability Year 1 Progress  
**Report of:** Mark Evison, Head of Park and Environmental Sustainability  
**Purpose:** To inform the committees of the progress made establishing an Environmental Sustainability Policy, Strategy and Action Plan for the Park and Palace.

**Local Government (Access to Information) Act 1985** N/A

### **1. Recommendations**

**Consultative Committee:**

To note the content of the report and provide any feedback to the SAC.

**Advisory Committee:**

To note the content of the report and agree any comments / advice to the Trustee Board.

### **2. Executive Summary**

The Environmental Sustainability Policy and Strategy was approved by the Trustee Board in July 2022 and was presented the SAC and CC in November 2022. During the first year efforts have been focussed on gathering information to understand environmental impacts and to establish baselines to measure future performance. This report provides a brief overview of progress for the year 2022-23

### **3. Background**

3.1 The Environmental Sustainability Programme comprises eight categories covering the wide range of activity and events that take place at the Park and Palace.

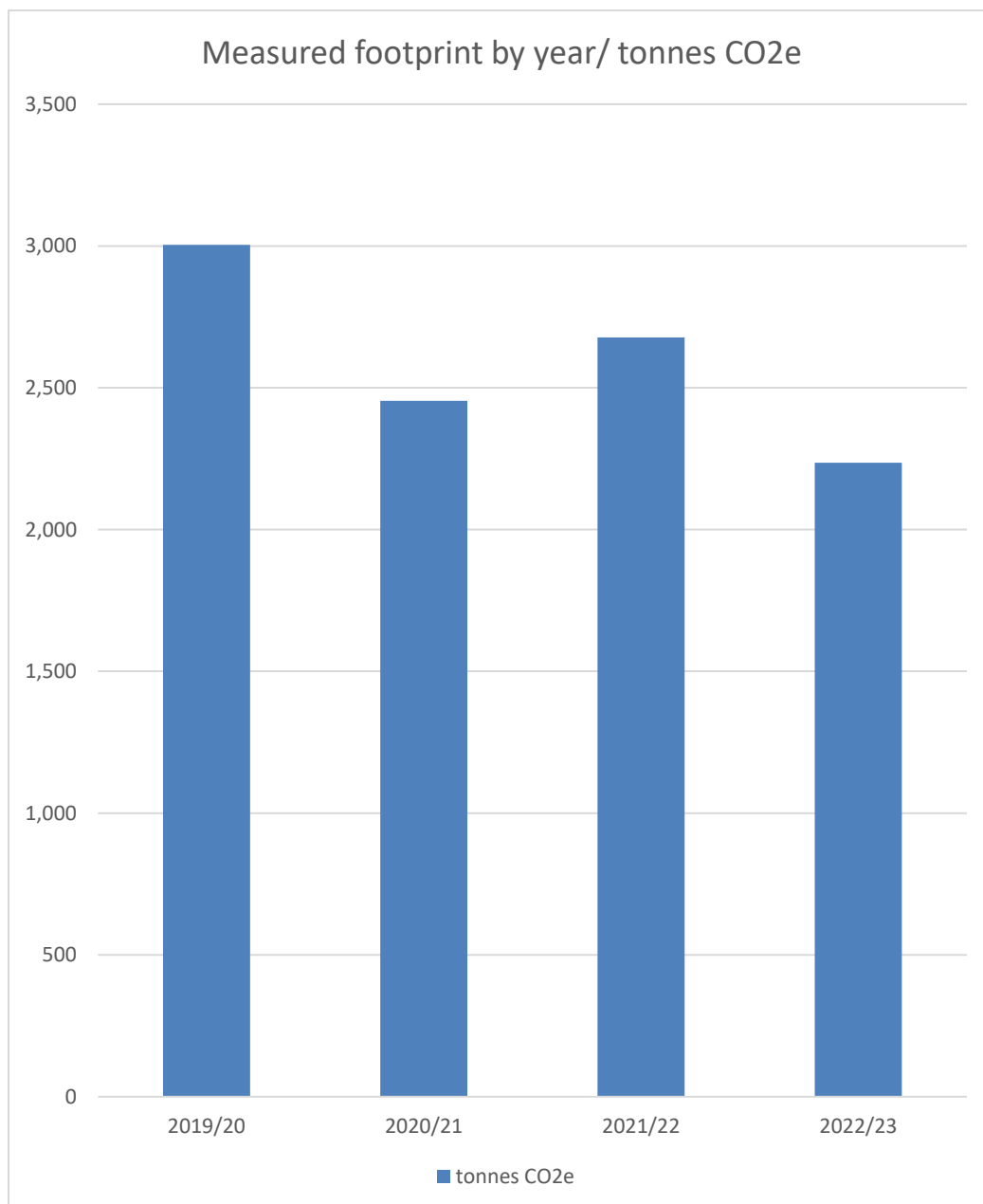
3.2 Biodiversity

The Park continues to be managed with biodiversity in mind. New bird and bat nesting boxes have been installed. The tree and woodland management plan caters for dead wood habitats where practicable. Glyphosate is no longer used for general weed control on site, but only for targeting invasive species such as Japanese knotweed.

### 3.3 Carbon Footprint

3.3.1 The carbon footprint for the Park and Palace has been calculated as far as practicable for the last four years. Pre-covid the figure was 3,000 tonnes CO<sub>2</sub>e based on the Palace's electricity and gas consumption plus waste disposal. This is equivalent to the annual emissions of around 250 homes. The figure drops during the lockdown years. Public activity in the Palace reduced during this time, but charitable activity and filming continued so the building was still in use.

3.3.2 The carbon footprint for 2022/23 reduced to 2,243 tonnes CO<sub>2</sub>e, the calculation includes most aspects including repairs and maintenance in the Park, fuel used for heating and some site-based vehicles, and water consumption and disposal.



A number of energy saving changes have contributed to this reduction.

3.3.3 Gas consumption for 2022/23 is down by 21% on the previous year. That's 1.8 million kWh, equivalent to 338 tonnes CO<sub>2</sub>e. This reduction can be attributed new actuation valves installed allowing automatic control. The ongoing work to replace old lighting systems with new LED luminaires and motion sensors has helped to reduce demand from lighting across the Palace.

3.3.4 Efficiencies have also taken place the Ice Rink. The plant was reprogrammed in December 2022, so it doesn't freeze the ice to as low a temperature when not required (-4.5°C rather than -7°C) and secondly, plexiglass was installed around the rink to replace the old nets, this effectively raised the barrier height by 1.89m. This now helps hold the cold air over the ice pad, reducing demand on the plant. The result is that the Ice Rink plant's average monthly electricity consumption for January to August 2023 reduced by over 32%.

### 3.4 Energy Management

3.4.1 The Palace has a large and complicated electrical distribution system. Installed in the 1980s the 100+ sub-meters are almost all mechanical and require manual readings. Monthly readings have been taken for 12-months to build a pattern and ascertain which systems consume the most energy. The top ten systems will now be investigated to establish whether any reductions can be made. The investigations are also helping to disaggregate power consumption by third parties (e.g. the TV mast or event clients) to help refine the understanding of which Scopes the carbon emissions fall into.

3.4.2 We were delighted to be awarded a Local Energy Accelerator grant by the Greater London Authority (GLA) in 2022. This funded a clean energy feasibility study which assessed the possible ways of reducing the carbon footprint of the Park and Palace.

3.4.3 The main outcomes of the report are several building interventions to reduce demand and the installation of ground source heat pumps. The building interventions include flow restrictors, lighting controls, further conversion to LED lights, insulation and destratification fans to balance warm and cold air. These are being investigated individually to establish cost, viability and timelines. The ground source heat pumps would be a major project, requiring further specialist advice and a future bid to the clean energy fund is being considered. The fees for a consultant to support the trust with a bid for such a grant have been quoted at £10,000.

3.4.4 Options for Solar Panels (PV) were considered in the report, given the constraints of the roof (mostly glass or already at maximum weight capacity with event rigging) there is little scope for installation of solar panels. The report found that, at best, solar panels would meet 6% of the Palace's energy demand.

### 3.5 Events and Catering

3.5.1 The Catering Team are working on a sustainability plan to reduce their environmental impact through areas including, menus, food waste, local sourcing and reducing packaging. The team have been aiming to remove single-use plastic from events. Nearly all customer facing bars and catering outlets are now plastic-free as paper and wooden cutlery are now used.

That's 1.5 million plastic cups and 4 million single-use plastic cutlery items avoided each year.

3.5.2 The Theatre team are working towards the Theatre Green Book standards <https://theatregreenbook.com/> and all productions are required to have Albert Sustainable production accreditation. <https://wearealbert.org/>

### 3.6 Governance, staff and partnerships

3.6.1 The Board has now appointed a lead-Member for Environmental Sustainability, whose role is to support and guide the Board on the organisation's strategic approach to Environmental Sustainability and associated policy and practice.

3.6.2 A staff sustainability attitudes survey was carried out over the summer and 95% of respondents said they were concerned about climate change. The environmental issues of most interest to staff were: climate change (82% of respondents), protection of nature, waste, renewable energy, plastic pollution.

3.6.3 A staff Green Team was set up in 2022-23 to involve staff in the sustainability action plan and to progress sustainability ideas.

### 3.7 Transport

Alexandra Palace and its contractors have a fleet of vehicles and machines, these have been catalogued for the first time to begin a process to assess the carbon impacts. The Park team have replaced two diesel vehicles with electric versions and reduced diesel consumption by almost 40%, the security team now have an electric buggy in place of a diesel vehicle.

### 3.8 Waste Management

Almost 2,000 tonnes of waste was collected at the Park and Palace in the four years from April 2019 to March 2023. The recycling rate for the waste collecting in the Palace was 34%. There have been initiatives by staff and the cleaning contractor to improve this rate including:

- increased separation with options for toner, food waste and batteries
- rejected loads reduced with removal of paper towels from toilets
- improved signs in disposal areas

No waste from Alexandra Park and Palace goes to landfill. Any material that is not recycled is sent to the Edmonton *energy-from-waste* facility (incinerated).

### 3.9 Water Management

The baseline of water consumption has been calculated for 2022-23. Across the whole site 30,000 cubic metres of water were consumed in 2022/23, enough to fill 12 Olympic sized swimming pools.

### 4.0 Summary

This first year has been a journey of discovery, a vast amount of information and data has been collected. The Board, Executive Team and the staff have shown commitment and embraced the challenges of reducing environmental impacts. There have been successes, both large and small. During this time the organisation aligned with the carbon reduction targets set by The Mayor of London to reach net zero by 2030.

A lot of work lies ahead, traditional ways of working will be challenged and building improvements are needed and additional resources will be required to implement them.

A full version of the Annual Environmental Sustainability Report will be presented at a future meeting of the Board.

## 5. Environmental Sustainability Policy and Strategy

The Policy and Strategy documents have been updated to reflect the progress over the previous 12 months. These documents apply to staff across the whole organisation to help change practices and behaviours to reduce the organisation's environmental impact.

## 6. Legal Implications

The Council's Head of Legal & Governance has been consulted in the preparation of this report.

### 7. Use of Appendices

Appendix 1 – ES Policy

Appendix 2 – ES Strategy (updated)

### 8. Background Papers

Julie's Bicycle Sustainability Audit Documents, Wetlands Feasibility Report, AECOM Clean Energy Report