# YOUR PARK, OUR PLANET

London Legacy Development Corporation Environmental Sustainability Report 2021/22





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### Our partners





































### Introductory statement

Welcome to our 2021-2022 Environmental Sustainability Report for Queen Elizabeth Olympic Park

LLDC's and the four Growth Boroughs' shared ambition for a more inclusive economy fully aligns with our short, medium, and long-term sustainability objectives – the two themes are interdependent and central to realising our long-term organisational strategy and success. The socio-economic benefits highlighted by the call for a just and equitable response to the challenge of climate change is timely and appropriate as focus increases on London and international targets to achieve net zero carbon emissions by 2030 aligned to a 1.5° temperature rise.

The United Nations International Convention on Climate Change (COP26) was hosted in Glasgow in November 2021, serving to focus local, national, and international zero carbon ambitions, and has been a major driver in shaping our sustainability priorities. The just and equitable transition necessary in achieving net zero carbon is also brought into greater focus considering the looming cost of living crisis facing the UK. This coupled with knowledge of the disproportionate impact of COVID-19 on vulnerable and lower income communities requires us to increase our efforts further in areas beyond technical solutions to our climate change challenges.

The devastating effect of Russia's invasion of Ukraine also carries long term implications for energy trade and security and amplifies the economic impact from the cost-of-living crisis and COVID-19 on our communities and businesses. Through the Mayor of London's London Recovery Programme, we continue to work with our GLA colleagues and borough partners to ensure effective and appropriate support is made available during these challenging times.

Despite external challenges, we can report several sustainability achievements of note. Our strategic partnerships continue to demonstrate their value as we hosted our regular community event Your Neighbourhood Talks which focused on climate change. The event was very well attended and supported by community and sustainability leaders from Queen Elizabeth Olympic Park and the wider community. Contributions to a panel discussion at the event were made by our developer partner Mace; University College London (UCL); and Hackney Wick Community Development Trust. These events are a vital resource for galvanizing our communities and sharing knowledge and opportunities.

The year also saw the completion of our first major development at the award winning Chobham Manor and completion of Phase 1 of our East Wick and Sweetwater development with each achieving high standards of sustainability.

We are seeing a general downward trend in our corporate emissions, although this has been affected by the COVID-19 lockdown period. However, we remain on track for most of our targets and expect to see further progress towards achieving our waste and sustainable use of materials ambitions in future reports.

It is encouraging to see that this report has a noticeably high proportion of new community and sustainable lifestyle initiatives, such as the Library of Things; Discovery Day; and Chobham Manor Post Occupancy Evaluation. These projects demonstrate that socio-economic and inclusion challenges in the context of climate change and sustainability are being considered together as we prepare to serve our communities over the coming years.

Lyn Garner

**Chief Executive** 

### Introduction

Welcome to the eighth Environmental Sustainability Report (ESR) for the London Legacy Development Corporation (LLDC) covering the seventh full year of the opening of Queen Elizabeth Olympic Park.

This report presents progress made in our seven key environmental themes, during the period April 2021 to March 2022 in line with the 2021/2022 financial year, as set out in "Your Sustainability Guide to Queen Elizabeth Olympic Park 2030".

The Mayor of London, neighbouring Boroughs, local communities, and businesses remain central to the sustainable transformation of Queen Elizabeth Olympic Park and its venues. Our activities throughout this reporting period reflect our continued commitment to partnership, collaboration, innovation, and to making progress towards our sustainable development goals.

#### WHO WE ARE

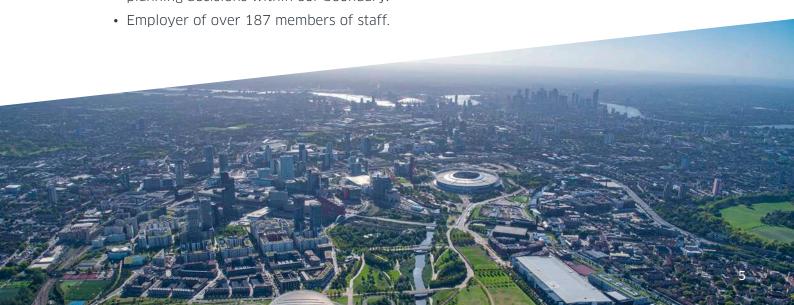
The London Legacy Development Corporation is a Mayoral Development Corporation, formed in April 2012 to use the opportunity of the London 2012 Games and the creation of Queen Elizabeth Olympic Park as a vehicle for inclusive growth and improvement in East London by developing an inspiring and innovative place where people want – and can afford – to live, work and visit.



We achieve our objectives by fulfilling a range of roles and responsibilities that extend beyond the boundaries of the Park itself.

#### We are a:

- Regeneration agency
- Landowner and developer, using some of our land to build new neighbourhoods.
- Estate manager, overseeing the maintenance of the parklands and former Olympic venues.
- Events host we provide a platform for a range of events from international sporting and music events to local community events.
- Local Planning Authority publishing our own Local Plan (that sets out the policies and principles that developers must follow when building within this area) and making planning decisions within our boundary.



# **Our Sustainability Framework**

Our environmental sustainability commitments are divided across seven key themes. These were set out in 'Your Sustainability Guide to Queen Elizabeth Olympic Park 2030' which was published in 2012.



Zero carbon homes and a reduction in carbon emissions across all our areas of work.



Reduce water demand, tackle local flooding and reduce water course pollution.



Zero waste direct to landfill through minimising waste production and increasing reuse.



Use locally sourced, low environmental impact and socially responsible materials.



Provide a variety of usable open spaces that promote and protect biodiverse habitat and wildlife.



Create well connected places that facilitate the use of sustainable modes of transport to and across Queen Elizabeth Olympic Park.



Inspire healthy, inclusive and sustainable lifestyles.

### **NEW CONSTRUCTION**These targets apply

These targets apply to all new buildings we have or will design or develop following the Olympic and Paralympic Games as part of the Legacy Communities Scheme.

Progress
against
these
themes
extends
across
four key
areas of
our work

### VENUES AND PARKLANDS

These targets apply to the maintenance and operation of the Park, along with the venues for which we are responsible.

#### **EVENTS**

These targets apply to events that take place across the parklands and in the venues of which the LLDC maintains ownership.

#### **CORPORATE**

This covers the performance of our office and activities of our staff.

# Energy and CO<sub>2</sub>



Climate change and the climate emergency continues to guide our approach to sustainability at Queen Elizabeth Olympic Park. Designing and building energy efficient buildings to reduce their emissions and reducing the environmental impact from our services continues to be our primary focus for sustainability.

The following section highlights key targets and commitments within our sustainability policy that are central to achieving our net zero carbon ambitions.

#### TARGET: 25% reduction in operational emissions intensity over five years in venues and parklands

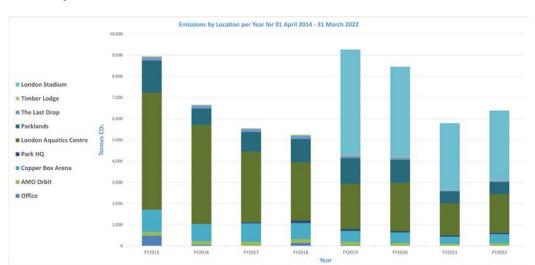
The chart provides a summary of our global emissions trend for scopes 1, 2 (and 3\* where data is available). The trend reflects the easing of COVID 19 lockdown restrictions which continued throughout 2021 and into early 2022.

#### \*Scope 1,2 & 3 definitions.

**Scope 1:** Emissions resulting from fuels we use such as gas or diesel to power machinery.

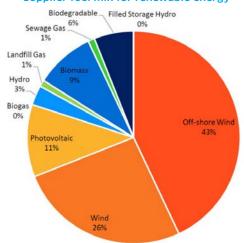
Scope 2: Emissions resulting from fuels our suppliers use such as gas or diesel to provide services such as electricity or cooling.

Scope 3: Emissions resulting from fuels such as oil or gas, and other services provided such as waste or water management from other service providers or service users (such as tenants) where we have little or no control over their operations.

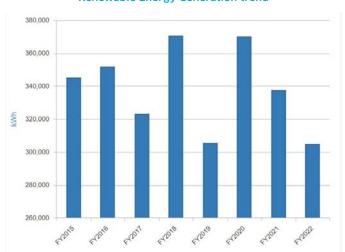


Energy consumption during this period is still dominated by electricity generation from conventional fossil fuel sources, and we continued with our renewable energy tariff through our supplier as a means improving the attributes of our electricity consumption. The chart provides a summary of our supplier fuel mix for renewable energy. During this period, we purchased 3,232 MWh of renewable (REGO backed) energy and generated 304 MWh of electricity locally through solar PV installations across our estate.

#### Supplier fuel mix for renewable energy



#### Renewable Energy Generation trend



**COMMITMENT:** Provide low carbon site lighting and use energy efficient park maintenance **equipment.** Installing low carbon lighting (replacement) across the public realm.

- LED floodlight replacement at London Stadium.
- Initiated studies into the decarbonisation of the district energy network by our concessionaire.

TARGET: Achieve Zero Carbon Homes on LLDC-led development before 2016 with 65% reduction in emissions over Building Regulations 2013 through fabric improvements and on-site features. 40% reduction in emissions over Building Regulations 2010 for non-residential buildings. Zero Carbon standard when defined.

 To date 1,000 homes have been built to this standard. In this reporting period 302 homes were completed to this standard at East Wick Phase 1. Non residential properties also achieved BREEAM Excellent standard.



Published "Preparing for 1.5 degree future" framework and guidance document for all LLDC developments.



East Wick Phase 1

The document initially published in the previous reporting period was officially released for practical application through the procurement, planning, design and delivery purposes in the current reporting period.

The report provides pragmatic guidance for the delivery of exemplar residential developments in the context of the climate emergency. The report is aligned with the Paris Agreement 1.5°C future and sets out LLDC's vision and aspirations for the built environment.

This framework and guidance compliment and strengthen the existing policies and objectives set out in "Your Sustainability Guide to Queen Elizabeth Olympic Park 2030" and "Legacy Communities Scheme: Development Specification and Framework". The updated guidance helps to ensure LLDC keeps pace with industry, technological, social, environmental, and political landscapes, and is designed to inform project briefs, design, preplanning, and post-occupancy audits throughout the lifetime of a project.



### **Materials**

Minimising carbon dioxide equivalent ( $CO_2e$ ) emitted during the extraction and manufacturing of materials for the construction of our housing and commercial property developments presents a significant challenge. As operational energy efficiency improves (and increasingly becomes renewably sourced), our journey towards true zero carbon must focus on the embodied carbon within the materials we use

This section highlights our key targets and commitments to manage and reduce the environmental impact from the use of materials throughout the life cycle of our developments, and other circular economy initiatives to promote and support the sustainable use of materials in our communities.

#### Activities to reduce the environmental impact of materials:

TARGET: achieve 15% reduction in embodied carbon in new construction, as compared to industry baseline and carry out whole life carbon assessments on new developments from 2020.

300 hundred homes were completed during this reporting period at our East Wick (Phase 1) development. Planning permission was sought for this development in 2014. At that time the RICS Professional Guidance, Methodology to Calculate Embodied Carbon (1st edition) was used to establish the industry baseline. Since then, the methodology has been updated to reflect the growing understanding of the embodied carbon of construction materials. Most notably in 2020, using the London Energy Transformation Initiative (LETI) Embodied



East Wick Phase 1

Carbon Primer to address past assumptions and knowledge gaps.

Several approaches were used to reduce the embodied carbon of materials on the project, including design considerations, contractor engagement, material choice and construction techniques. The as-built embodied carbon footprint of East Wick Phase 1 was calculated to be 25.4% lower than the calculated baseline, performed better than the 15% reduction target.

TARGET: achieve at least 20% of construction materials to be from a reused or recycled source by value. (Revised to be measured by mass).

This target was revised to be measured by mass due to challenges in accurately recording value data. Throughout the lifetime of the East Wick Phase 1 development, the mass quantity of reused or recycled materials as a proportion of the total mass was 35%.

TARGET: achieve at least 25% recycled content of aggregate within new buildings and infrastructure (by weight).

Materials data collated to date demonstrates that our development at East Wick Phase 1 exceeded this target, achieving a 35% use of recycled aggregates in new buildings, public realm, and infrastructure.

### Waste



Reducing the environmental impacts from waste through improved design; specification; reuse; and recycling is a key priority for our construction projects and public realm.

#### Activities to reduce the environmental impact of waste:

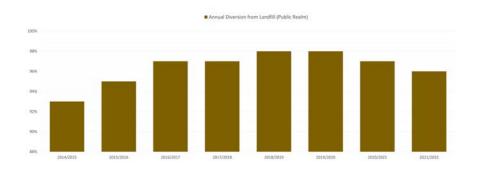
TARGET: 95% of construction, demolition and excavation waste diverted from landfill (excluding hazardous material).

#### East Wick (Phase 1)

Throughout the lifetime of the project (2018 to 2022) 99.3% of waste was diverted from landfill.

#### **Chobham Manor**

Although the first year of the development at Chobham Manor achieved 93% diversion from landfill, the target was achieved for all subsequent years, peaking from 2018 to 2020 with 98% diversion from landfill achieved.



#### TARGET: zero municipal waste directly to landfill by 2025

Zero municipal waste to landfill was again achieved during this reporting period. Working with our Park contractors and waste handlers we have retained high levels of diversion from landfill through energy recovery from waste, and recycling.



To date, most of our waste (40%) is combusted for energy recovery, 32% recycled and 28% composted.

#### Reducing the use of single use plastic bottles on the Park

Seventeen new refill stations have been added by businesses on the Park and nearby surrounding areas. We now have thirty-nine (up from twenty-two in the previous reporting period) businesses offering refill stations to visitors, providing access to free drinking water at various locations, and raising awareness of the impact of single use plastic bottles on the natural environment.



#### **Library of Things**

In partnership with London Legacy Development Corporation (LLDC), Stour Studios and Sustainable Hackney, the much-anticipated Library of Things finally fully launched at The Old Baths in Hackney Wick.

The service allows residents to borrow useful household items such as drills; carpet cleaners; projectors; or camping gear at affordable prices, before returning them for other neighbours to use. Borrowing household items in this way is a convenient and environmentally sustainable alternative to buying. Over 460 residents have borrowed items since the library's opening in 2021 avoiding an estimated 4.1 tonnes of waste.

Find out more at: **libraryofthings.co.uk/hackneywick** 



Find out who helped bring Library of Things to Hackney Wick!

# **Biodiversity**



Queen Elizabeth Olympic Park consists of 226 hectares of green space and public realm, of which 49.1 hectares is permanent Biodiversity Action Plan (BAP) habitat connected to the wider London green infrastructure network, contributing to the maintenance of a valuable, wildlife rich ecosystem.

This section highlights our key targets, commitments, and efforts to increase and protect biodiversity.

Activities to enhance and protect biodiversity and wildlife on the Park during this reporting period.



Commitment: Maintain parkland access while ensuring the protection and improvement of habitats.

#### **Discovery Day - Green Spaces and Wild Places**

The Green Spaces and Wild Places discovery day held at Queen Elizabeth Olympic Park supports our commitment to protect and improve natural habitats. Through sharing our learning and imparting the value and importance of nature and the natural environment with our local communities and future generations, we are helping to safeguard the future of biodiversity at Queen Elizabeth Olympic Park and beyond.

Over 200 apprentices, trainees and school children from Newham, Hackney, Waltham



Forest and Tower Hamlets received guided tours and learnt more about the industrial history of the Park, but also career paths in horticulture, and environmental management from leading experts. Discovery day was sponsored by LLDC, the Royal Parks and the Tree Council.

#### Commitment: Enhance the ecological value of the site.

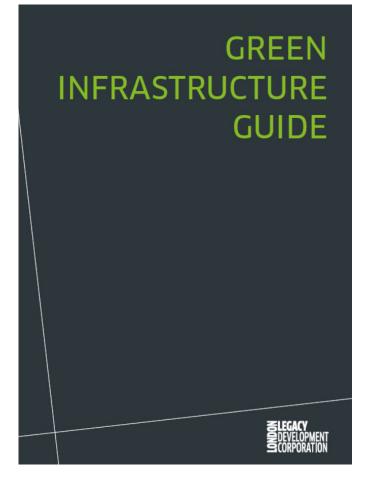
Elm are an important tree species providing valuable habitats for varied and rare creatures such as the white-letter hairstreak butterfly; and tussock moths and are a source of food for honeybees. In response to Dutch elm disease in recent decades which affects mature elm trees, the development of disease resistant cultivars has offered some assurance for their long-term survival.

LLDC supported Elm Planting Week, a campaign to encourage the planting of more disease resistant elm trees across London by planting elm trees at Queen Elizabeth Olympic Park.



#### Commitment: Enhance and protect the Park's blue-ribbon network.

LLDC published a Green Infrastructure Guide to support the delivery of green and blue infrastructure across the Park and the wider communities. The guide draws on LLDC's experience of successfully delivering green infrastructure projects that protect and enhance biodiversity. The guide is a useful reference for developers and designers, primarily operating close to Queen Elizabeth Olympic Park, but also wider integrated areas, placing green infrastructure at the heart of development and regeneration projects. The guide highlights best practice in the application of naturebased solutions to improve biodiversity, address challenges associated with the climate emergency and social inequalities.



### Water



Queen Elizabeth Olympic Park consists of 226 hectares of green space and public realm and includes over 90,000 seating capacity across all our venues. Maintaining our green spaces and servicing our visitors places high demand on water sources.

This section highlights key targets, commitments, and achievements to manage and reduce the overall environmental impact from water usage to support our sustainability ambitions.

TARGET: Implement water efficiency and water recycling initiatives across the Park to protect and improve on the 40% reduction in potable water use designed into the venues.



Water efficiency measures across the Park are varied, with a breadth of approaches explored in achieving our targets. Our water consumption follows a similar pattern to that of energy use, with large reductions in water usage following the opening of the Park followed by a small increase in 2019, dropping off in 2020 to increase again towards normal operating consumption in 2022.

No significant measures have been installed during this reporting period aside from general maintenance, and no conclusions have been drawn in relation to water performance regarding the data trend due to the exceptional circumstances resulting from COVID 19 lockdown.

TARGET: Achieve potable water uses of no more than 105 litres per person per day, reducing demand through using rainwater/ greywater harvesting, and water efficient fittings and appliances.

The image below provides a snapshot of a typical Buildings Research Establishment (BREEAM) Code for Sustainable Homes Summary score. For the water sections of these assessments the properties at Chobham Manor achieved 50% of the number of credits available for water efficiency through utilising technologies such as flow restrictors or low flow rate taps, low water consumption fittings and appliances.

	How this home scored										
Category		Percentage of Category Score attained  10 20 30 40 50 60 70 80 90 100	What is covered in the category								
Energy	66		Energy efficiency and CO <sub>2</sub> saving measures								
Water	50		Internal and external water saving measures								
Materials	87		The sourcing and environmental impact of materials used to build the home								
Surface Water Run-off	75		Measures to reduce the risk of flooding and surface water run-off which can pollute rivers								
Waste	87		Storage for recyclable waste and compost, and care taken to reduce, reuse and recycle construction materials								
Pollution	25		The use of insulation materials and heating systems that do not add to global warming								
Health & Wellbeing	75		Provision of good daylight quality, sound insulation, private space, accessibility, and adaptability								
Management	100		A Home User Guide, designing in security, and reducing the impact of construction								
Ecology	88		Protection and enhancement of the ecology of the area and efficient use of building land								



## Transport and travel

As a major commuter hub and visitor destination, many of the Park's transport-related environmental issues relate to the movement of people and goods to, from, and around the Park. We are committed to facilitating the use of more sustainable modes of transport.

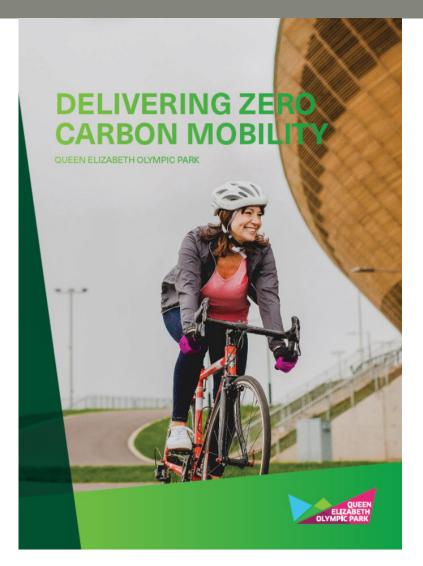
COMMITMENT: Support demand management techniques to discourage private transport and encourage public transport, car-sharing, car-clubs, cycling, and walking.

Published Zero Carbon Mobility evidence base.

Our Zero Carbon Mobility report provides an evidence base for achieving zero carbon mobility neighbourhood status by 2030.

The findings from the study help to demonstrate the benefits of a zero-carbon neighbourhood and how it can support social equality, employment, economic growth, improve air quality and prosperity for residents, businesses and visitors to the Park.

The report builds on our existing work and commitments to provide sustainable transport and connectivity at the Park, highlighting infrastructure design, technology, and communication as complimentary approaches to actions such as electric vehicle infrastructure provision, last mile freight and modal shifts.





## **Sustainable Lifestyles**

Commitment to: Promote educational initiatives and research programmes to enable sustainable behaviour to become the norm in and around the Park.

Through the Estate Management Strategy, develop incentives and programmes for residents to optimise sustainable lifestyles.

#### **Sustainable Fashion Accelerator**

Through a Sustainable Fashion Accelerator in partnership with the Trampery, thirty-three local businesses were supported to explore and implement changes in their business that would lead to more environmentally and socially sustainable products and practices, through the development of the Good Work Standard for Fashion.



The programme set out to support local high-growth fashion brands to scale their businesses whilst reducing the environmental impact of their goods and services. Not only did the programme increase revenue and resilience for twenty-four out of thirty-three businesses, but the activities also resulted in an increased awareness and adoption of environmental and social impact measures and policies (ninety-eight new environmental and social governance policies were implemented). The engagement resulted in new sourcing and manufacturing procedures, and use of new and alternative materials.

#### **Cool Spaces**

Cool spaces are indoor spaces and outdoor areas where Londoners can take respite on hot days. Climate change projections for London predict that London's average summer temperatures will increase resulting in hotter, drier summers and increased rainfall during warmer winters. This presents a risk to people, places, and biodiversity susceptible to extreme heat.

The GLA's Cool Spaces Initiative seeks to counter these challenges and risks by establishing a network of cool spaces across London that provide a refuge to people and nature. Queen Elizabeth Olympic Park has open and accessible cool spaces that include:

- Access for people with disabilities; children; older people; pregnant women and people with underlying health issues
- Toilets available (and signposted)
- Free drinking water
- Tree canopies and shaded seating.
- A river
- Seating available.

For further information, visit: Cool Spaces

#### Air quality monitoring outside Bobby Moore Academy

Through our innovation and research partnerships, three air quality monitors were installed outside Bobby Moore Academy primary school on the Park to understand the impact of air quality interventions in or around schools.

Sensors installed collected air pollution data typically associated with road transport, namely PM10 and PM2.5. Particulate Matter, measuring less than 10 and 2.5 micrometres (less than 1/5th the diameter of a human hair) respectively.

The data and information collected from the sensors will be used to help improve understanding of the impact of local traffic on air quality in the vicinity of the school and inform the planning and development of interventions in relation to our Zero Carbon Mobility objectives.

Aeternum Air Quality Sensors at QEOP Nov '21 - Jan '22









#### Your Neighbourhood Talks COP26 & Net Zero Carbon

The Your Neighbourhood Talks event focused on zero carbon living and the impacts of climate change on the Park and its communities.

To align with the November 2021 United Nations Climate Change Conference (COP26) in Glasgow, Your Neighbourhood Talks presented an opportunity for the local communities to share interest and concerns in relation to the climate emergency.

The event, hosted by Change Please at Timber Lodge included a panel discussion chaired by



LLDC Youth Board member Kaitlene Koranteng, and included Ben Coulter - Head of Sustainability at LLDC; Alex Russell - Executive Chair at Hackney Wick and Fish Island Community Development Trust; Isabel McAllister - Responsible Business Director at MACE; and Dr Kate Jones - Chair of Ecology and Biodiversity Genetics, Evolution & Environment at UCL.

The panel shared their unique perspectives, knowledge and understanding of the effects of, and responses to climate change with a particular focus on local communities and opened a crucial dialogue around solutions towards better climate resilience, wellbeing, and social justice.

The event also included a marketplace of stalls from local community groups and businesses with further information on activities and initiatives around the Park.

#### **Understanding Climate Risk Report**

LLDC commissioned a preliminary climate risk and adaptation study to consider the short, medium, and long-term climate risks facing the area to 2050 and beyond. The study will help to develop understanding of how climate change might influence environmental conditions in and around the Queen Elizabeth Olympic Park area and inform the development of a Climate Change Adaptation and Resilience Strategy for Queen Elizabeth Olympic Park. The study was informed through analysis of the 2018 MET Office Climate Projections (UKCP18), supplementary desktop research and a workshop with LLDC (internal) stakeholders.

The most significant climatic trends facing the area included:

- o Warmer and drier summers
- o Heatwaves and droughts
- o Milder winters with increased rainfall

Six key risks identified through the study (heat stress, water stress, flooding, natural capital, pests and disease and food security), were considered in the context of people, businesses, venues and events and assets. These findings were discussed in relation to the LLDC core strategic areas of New Construction, Corporate activity, Venues & Parklands, and Events management.



Relative to other parts of Greater London Queen Elizabeth Olympic Park has a relatively high baseline adaptive capacity considering the recent and sustainable development of the area and its supporting infrastructure. While this doesn't obviate the risks highlighted above, it provides a strong basis for LLDC to develop a robust climate resilience action plan.

COMMITMENT: Develop an occupant engagement programme to achieve a 15% reduction in emissions over five years, with savings to be maintained each year.

A Post Occupancy Evaluation study at Chobham Manor (Phase 1) will help inform the design of future developments.

Early findings from the post occupancy evaluation (POE) at Chobham Manor underline the importance of good design, robust sustainability standards, resident engagement and building management in creating liveable and inclusive new neighbourhoods for mitigating against climate change. The

early findings, indicate that the 259 homes built in the first phase of the development are outperforming the average UK new build home in terms of electricity, water, and heat, using around half the heat energy. This is largely due to the fabric energy efficiency standards specified by LLDC during early design stages.



# Summary of performance against our sustainability targets

Below we provide an overview of how we are performing against our sustainability targets.

- **Red** Indicates that the target has not yet been met. Significant challenges are present, and we continue to work towards achieving these targets.
- **Amber** Indicates that the target has not yet been achieved, but we are on track and all signs indicate the target will be achieved.
- **Green** The target has been achieved. Either no further activity is required, or we are actively working to maintain the achievement.

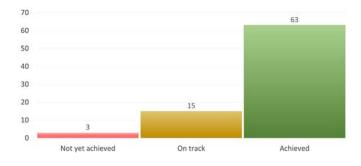
#### Commentary on our performance

We continued to make progress in maintaining our target achievements to date and seeking to improve upon more challenging targets.

Notably the ambitious target of 65% reduction on 2013 Building Regulations remains a key challenge and impacts performance on other emissions related targets. However, our development at East Wick (Phase 1) achieved a 64.2% reduction, demonstrating that we are close to realising this ambition.

Despite gaining high diversion rates from landfill on site, composting and ambition for zero event waste to landfill remains to be achieved.

Aside from these we continue to maintain our achievements across several environmental ambitions, most notably with biodiversity, energy performance in new developments, construction waste and lifestyles. This is highlighted in the number and variety in community engagement and lifestyle initiatives delivered, consistently high recycling and landfill diversion achievements.



### Summary of performance against our sustainability targets

	NEW CONSTRUCTION	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
	Minimum Code for Sustainable Homes Level 4 for all new homes.									
	Zero Carbon Homes on LLDC-led development before 2016.									
	65% reduction in emissions over Building Regulations 2013 through fabric improvements and on-site features. *									
ENERGY	Permit up to 35% of emissions mitigation through allowable solutions in surrounding communities as part of the LLDC's regeneration remit.									
ENERGI	35% reduction in emissions over Building Regs by 2010 for non-residential buildings; Zero Carbon when required by government.				Target Revised <sup>1</sup>					
	15% reduction in emissions by 2020 from in-use energy through engagement with occupants of LLDC led developments.									
	Support the extension of the district heating network beyond the Park following connection to the Stratford Halo/Genesis development.									
	Explore provisions to mitigate fuel poverty.									
	Initiate studies to optimise the use of the Old Ford Water Recycling Plant and non-potable water network for irrigation and toilet flushing.							Target Removed <sup>2</sup>	Target Removed <sup>2</sup>	Target Removed <sup>2</sup>
WATER	Potable water use of no more than 105 litres per person per day in homes in LLDC led developments.									
WALEK	Rainwater harvesting and greywater treatment incorporated in new LLDC led developments.									
	Maximum 5% of construction, demolition and excavation waste directly sent to landfill (excluding hazardous material).									
	Monitor and report on construction waste using an appropriate Site Waste Management Plan.		Target Removed <sup>3</sup>	Target Removed <sup>3</sup>	Target Revised					
WASTE	Zero municipal waste directly sent to landfill by 2025. Interim target of 30% maximum municipal waste directly to landfill by 2020.						Target Removed <sup>4</sup>	Target Removed <sup>4</sup>	Target Removed <sup>4</sup>	Target Removed <sup>4</sup>
	All new buildings have adequate internal and external storage space for recyclable household waste.									
	Promote on-site compost facilities to reduce the amount of household waste sent to landfill. **									
	15% reduction in embodied carbon in new construction, as compared to industry baseline.									
	Minimum 25% recycled content of aggregate within new buildings and infrastructure (by weight).									
A	Minimum 20% of construction materials to be from a reused or recycled source (by value).									
MATERIALS	100% of timber products from legal and sustainable sources supported by appropriate evidence as defined by the UK Central Point of Expertise on Timber (CPET).									
	No use of HFCs where acceptable alternatives exist.									

<sup>\*</sup> Consultation with partner organisations has led LLDC to refine its outcome-led approach to net zero carbon (with associated design guide). This approach continues to prioritise fabric energy efficiency (FEE), now in association with broader design considerations

4. Target is now included in other corporate waste.

<sup>\*\*</sup> Achieving over 80% waste diversion from landfill and working with event's organisers to improve this through provision of guidelines and support.

Target revised due to changes in building regulations.

Old Ford trial completed.
 Target revised to accommodate differences in collating and reporting on waste data from different contractors.

	T					
	Public areas to contribute to Biodiversity Action Plan and link to existing natural corridors.					
BIODIVERSITY	Incorporate Sustainable Urban Drainage Systems (SUDS) into streets and the public realm where feasible enabling species-rich planting and local irrigation.					
	Design buildings and public space to reduce the urban heat island effect.					
	Design walkable and cycle-friendly neighbourhoods with safe streets and paths, and secure cycle parking in homes, offices, and venues.					
	No home to be more than 350m away from a bus stop.					
ċ	20% of car parking spaces to have access to electric charging facilities.					
TRANSPORT	Support demand management techniques to discourage private transport and encourage public transport, carsharing, car-clubs, cycling and walking.					
	Ensure provision of shower and changing facilities in offices to support commutes by cycle.					
	Parking ratios to be London Plan standard or less.					
	Develop an occupant engagement programme to achieve a 15% reduction in emissions over five years, with savings to be maintained each year.					
<b>\</b>	Through the Estate Management Strategy, develop incentives and programmes for residents to optimise sustainable lifestyles.					
LIFESTYLES	100% of homes to have smart meters for the collection of energy consumption data to make more efficient use of resources.					
	Facilitate IT infrastructure including superfast broadband and Wi-Fi to support working from home and venues in and around the Park.					

	VENUES AND PARKLANDS	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
	25% reduction in operational emissions intensity in LLDC owned venues and parklands by 2020.									
ENERGY	Provide low carbon site lighting and use energy efficient park maintenance equipment.									
	Protect and improve on the 40% reduction in potable water use designed into the venues.									
	Irrigate parklands through rainwater harvesting and greywater.									
WATER	Develop a strategy with the Canal & River Trust (CRT) to enhance and protect the Park's blue ribbon network.									
	Recycle or compost 70% of venues and parkland's waste by 2015.									
	Zero parkland waste direct to landfill by 2030.									
WASTE	100% provision of recycling facilities in public areas.									
	Signs and information across the Park will support recycling and composting.									
	100% of timber and timber products from legal and sustainable sources.									
MATERIALS	Use of recyclable and biodegradable materials for packaging, particularly for food.									

	Provide 102 hectares of publicly accessible open space,					
	capable of being designated as Metropolitan Open Land.					
	Provide 45 hectares of Biodiversity Action Plan habitat and links with existing corridors.					
210	Achieve designation as a Site for Metropolitan Importance for Nature Conservation (SINC) by 2024.	New				
***	Achieve green flag status by 2015.	New				
BIODIVERSITY	Aim to enhance the ecological value of the Park and ensure the land and its natural resources are protected in perpetuity.					
	Landscaping designs that avoid chemical control of weeds, pests and diseases.					
	No peat or peat-based products to be used on site.	New				
	Maintain parkland access while ensuring the protection and improvement of habitats.					
50	Ensure that 95% of visitors to venues and attractions arrive by public transport, cycle or foot.					
TRANSPORT	Facilitate a cycle hire scheme within the Park.					
•/	Encourage the public to use open space for sport, physical wellbeing, leisure activities, social gathering and cultural events.					
LIFESTYLES	Adopt and implement the Mayor's Food Legacy Pledge and the Healthier Catering Commitment.					

	EVENTS	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
ENERGY	Develop guidelines for and commit to delivering low or zero carbon events in the Park.									
•	All LLDC events to limit use of bottled water by encouraging the provision of alternative water supplies.									
WATER	Work with external event companies to reduce potable water usage in the operation of their events.									
	Develop best practices to reduce waste production and require event operators to comply with guidelines.									
WASTE	Zero events waste direct to landfill by 2020. For events held in venues, work towards the target immediately.									Challening Target <sup>7</sup>
MATERIALS	Temporary structures for events must be designed and built for reuse.									
***	Assist the attendees in an appreciation of the Park's biodiversity.									
BIODIVERSITY	Respect and protect open space through attention to event location, pedestrian circulation and sight lines.									
ċ	Ensure that 95% of visitors to events arrive by public transport, cycle or foot.							Target Removed⁵	Target Removed⁵	Target Removed⁵
TRANSPORT	Information provided with tickets on sustainable transport options to the Park.									
LIFESTYLES	Collaborate with the event industry and non-governmental organisations to share knowledge and integrate sustainability into the sector.									

<sup>5.</sup> This target is now included under Venues and Parklands

<sup>7.</sup> Some event operators do not use our waste management services meaning we have no direct control on how their event waste is managed. Work is ongoing in this area to improve communication and engagement.

	CORPORATE	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
ENERGY	Achieve 25% reduction in corporate emissions intensity by 2020 (includes emissions from energy use in office premises as well as staff travel).									
WATER	Measure water intensity against an appropriate benchmark.	New								
	Deliver education programmes for visitors, workers and residents about the reduction and management of waste.									
WASTE	Explore ways to improve our office recycling and reuse rates.	New					Removed			
	Collaborate with universities, NGOs and other research bodies to identify low impact building materials and products.									
MATERIALS	Require all suppliers of goods and services to adhere to our sustainable procurement policy, integrate into supplier contracts.						Target Revised⁵			
***	Encourage staff to take part in biodiversity awareness activities.	New								
BIODIVERSITY	Provide opportunities for local people to get involved in nature conservation work and biodiversiy-related activities.									
50	Maintain our Travel Plan Framework for all new developments and initiatives within the Park.									
TRANSPORT	Encourage sustainable modes of transport for staff commuting and work-based travel.	New								
•/	Promote educational initiatives and research programmes to enable sustainable behaviour to become the norm in and around the Park.									
LIFESTYLES	Provide environmental awareness training for all staff and contractors.									
	Deliver a visitor centre within the energy centre by 2014.									

<sup>6.</sup> Target revised to further improve and integrate responsible procurement practices.

### **Contact us**

If you have any questions regarding any aspect of our work at LLDC please get in touch by writing to the address below or email: info@londonlegacy.co.uk

QueenElizabethOlympicPark.co.uk

