

LONDON LEGACY
DEVELOPMENT CORPORATION

CLIMATE ACTION STRATEGY

LONDON LEGACY
DEVELOPMENT
CORPORATION



CONTENTS

EXECUTIVE SUMMARY	3
FOREWORD	5
INTRODUCTION	7
BASELINE AND SCOPE	12
OUR CLIMATE VISION, AIMS AND COMMITMENTS	21
GOVERNANCE, TRANSPARENCY AND ACCOUNTABILITY	25
APPENDIX 1: DELIVERY PLAN	29
APPENDIX 2: CLIMATE BUDGET	32
GLOSSARY	38
REFERENCES	40

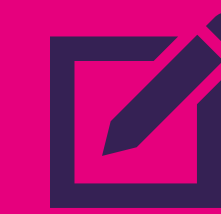
EXECUTIVE SUMMARY

The London Legacy Development Corporation's Climate Action Strategy from 2024 onwards provides the framework for climate action against all LLDC's activities. It outlines why we need to intensify our actions, the rigorous approach we will adopt to delivery and acknowledges that we can only achieve our targets working in partnership with others.

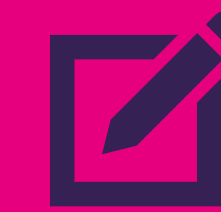
This will be delivered through:

- ▶ Delivering 1.5°C aligned new developments
- ▶ Decarbonising our existing assets and activities
- ▶ Maximising onsite generation and procuring renewable energy
- ▶ Decarbonising the district heating network
- ▶ Better understanding the risks and opportunities posed by climate change
- ▶ Mitigating and adapting to climate change
- ▶ Reducing the financial impact of climate change
- ▶ Supporting the realisation of local benefits from the transition to a 1.5°C aligned future
- ▶ Offsetting residual emissions and being accountable

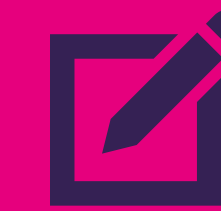
LLDC COMMITS TO:



**NET ZERO CARBON
IN 2030 SCOPES 1
AND 2 EMISSIONS**



**NET ZERO CARBON
IN 2038 SCOPE 3
EMISSIONS**



**CLIMATE RESILIENCE
IN OUR BUILDINGS,
PUBLIC SPACES AND
INFRASTRUCTURE**

“

There are challenges ahead that mean we'll need to work with our partners to successfully deliver our strategy. ”

Lyn Garner CEO

FOREWORD

I'm proud to introduce LLDC's Climate Action Strategy, evolving the sustainability legacy of the 2012 London Olympic and Paralympic Games.

As the UN's annual Conference of Parties (COP) meetings remind us, the climate emergency is impacting us all – albeit unequally. If we are to minimise the worst impacts of climate change, we require clarity of mission and change of pace. Being “better than most” is no longer good enough. Our response to the climate emergency must meet the scale of the challenge and adopt science-based targets to get us to where we need to be.

Our Climate Action Strategy ensures LLDC plays its part in a city-scale response – led by the Mayor of London – delivered locally. If the Mayor of London is to deliver against his net zero carbon target it is vital that LLDC plays its part, and that we continue to build on the achievements made to date. This strategy targets net zero carbon in 2030 for LLDC-controlled emissions, and 2038 for emissions from our value chain – supporting a just transition to a zero carbon future, and a more resilient Park and neighbourhoods.

LLDC is at an exciting stage of regenerating this part of east London, with inclusivity at the heart of everything we do. The Climate Action Strategy supports the right of all communities to a liveable climate – for current and future generations. We also recognise that there are challenges ahead that mean we'll need to work with our partners to deliver successfully; our Climate Action Strategy sets out this challenge and provides confidence based on clear stepping stones to success.



Lyn Garner
LLDC Chief Executive Officer

CLIMATE ACTION STRATEGY

INTRODUCTION

The London Legacy Development Corporation (LLDC) 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.

As a development corporation we are the long-term custodian and place maker for Queen Elizabeth Olympic Park (the Park). It is therefore our responsibility to ensure that the Park and the new neighbourhoods being developed are resilient to the threats of climate change. In recent years the Park has experienced higher temperatures; increasing rates of flooding in the north of the Park; and intense rainfall causing flooding incidents across our estate.

LLDC acknowledges that the built environment and cities are a major contributor to climate change. The built environment directly contributes 25% of the UK's emissions¹, and led (in 2021) to the Mayor of London committing to a net zero carbon target of 2030 for London.

As a functional body to the Mayor of London LLDC is committed to the Mayor's climate emergency response. All our carbon reduction efforts are aligned with the Mayor's Zero Carbon Action Plan to limit global warming to 1.5°C. Our Climate Action Strategy targets net zero carbon in 2030 for LLDC-controlled emissions, and 2038 for emissions from our value chain.

LONDON LEGACY
DEVELOPMENT
CORPORATION



¹ UKGBC Whole Life Carbon Roadmap (2019)

LLDC as an organisation

In delivering its vision LLDC plays many different roles. We are a regeneration agency, landowner, developer, estate manager, visitor destination, innovation district and a local planning authority². Like any organisation we evolve and change responding to the objectives and priorities and development pipeline of the time.

Due to contractual and ownership arrangements we have varying levels of control and influence over our developments, occupied assets, subsidiaries and joint ventures. As the majority public sector landowner of Queen Elizabeth Olympic Park we see ourselves as steward of the Park and the builder of new communities on it. We have a responsibility to ensure that we are resilient to climate change and fit for the future while mitigating our impact on global and local temperatures by being 1.5°C aligned.

We cannot achieve our goals on our own and are committed to partnering with occupiers; developer partners; and stakeholders such as the Greater London Authority; the neighbouring boroughs; suppliers; investors; and wider industry to deliver and realise the change required.

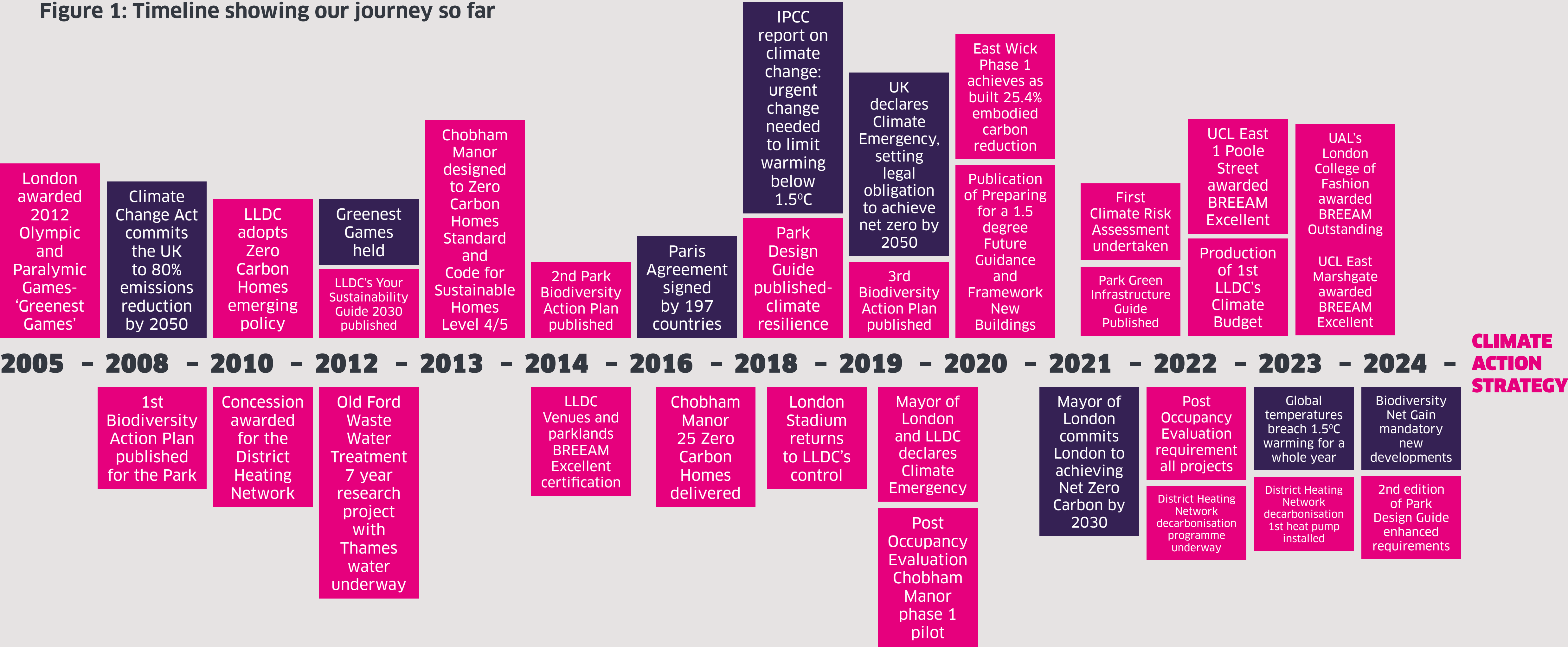
Our journey so far

In 2012 LLDC adopted an ambitious sustainability policy, for the time, which has guided activity over the last 12 years. However, with the science becoming clearer and the imperative to act stronger, now is the right time for this revised climate action strategy aligned to a 1.5°C future demonstrating our continued commitment and leadership on sustainability. The diagram **(figure 1)** on the next page outlines our journey so far.

² Planning authority functions will return to the four local boroughs on 1st December 2024



Figure 1: Timeline showing our journey so far



KEY

 LLDC activity

 External milestones

The bigger picture

This strategy sits within a wider legislative and policy framework. As a response to international and national policy, it has been developed to facilitate our delivery of the Paris Agreement on Climate Change (2015) and requirements under the UK Climate Change Act (2019), which enshrined into law a target for net zero emissions by 2050 and measures for climate adaptation. The UK Climate Change Committee (CCC) describes the need for rapid decarbonisation and improved climate resilience, and this strategy considers the CCC's associated carbon budgets, which indicate the rate at which the UK must decarbonise and improve its climate resilience.

At a city level the strategy has been developed to support LLDC's delivery of the Mayor of London's Net Zero Carbon 2030 target; the GLA's London City Resilience Strategy 2020; the Mayor of London's Environment Strategy; and the draft recommendations of the (interim) London Climate Resilience Review 2024.

Getting to 1.5°C alignment

Our critical path for 1.5°C alignment involves improving the energy efficiency of owned and operated buildings; minimising the carbon emissions in the construction and operation of our developments; implementing nature based solutions to enhance the resilience of the Park; and minimising exposure to climate risks. We can't do it on our own, so we will collaborate with our Park partners; occupiers; and suppliers to help them to reduce their emissions.

The key to delivering this goal will be to ensure that sustainable behaviours and practices are embedded within our culture, becoming business-as-usual. In developing this strategy, we took a Science Based Target approach to inform our trajectory for net zero.

This document summarises LLDC's emissions scope (in line with the Greenhouse Gas Protocol); our emissions reduction pathway; the actions required to reach our net zero goal; and our delivery strategy. LLDC's Climate Action Strategy includes direct (scopes 1 and 2) and indirect (scope 3) emissions from across our value chain.

Our objective is for LLDC to be net zero carbon for all scope 1&2 emissions in 2030, and 2038 for scope 3 emissions from our value chain.

BASELINE AND SCOPE

In developing our strategy, we have concentrated on realising best practice with an evidence-based approach. The strategy considers the breadth of our emission sources, potential climate risks and the evolving nature of LLDC as a development corporation. We are committed to embedding climate action across all our activities – working to the latest standards, using industry best practice and advice – including collaboration with our partners and stakeholders. A systemic challenge requires a systematic approach.

Emissions scope, baseline, and decarbonisation pathway

LLDC is a complex organisation with a range of assets and activities. Our emissions baseline reflects this, with emissions resulting from a large park and public realm; neighbourhood-scale development projects; sporting/ events venues; historic film studios; and a variety of leisure/ food and beverage destinations. Across this portfolio we have varying levels of operational control and influence.

In developing this strategy, we reviewed our carbon footprint using the Greenhouse Gas Protocol. The Science Based Targets methodology was used to determine our emissions baseline and decarbonisation pathway and the realistic control and influence we have.

LLDC's emissions scope and baseline will be regularly reviewed to ensure they accurately reflect the corporation's emissions, and its operational control and influence over them.

The strategy focuses on LLDC as a corporate organisation and the activities we undertake rather than as a city or place – though we do recognise the wider influencing role we have with residents, workers and visitors to the area, especially as the Park receives approximately 20 million visits a year.

Carbon emissions baseline – The breadth of our emission sources

The focus for many organisations and authorities has been on the emissions they can control – scopes 1 and 2. Scope 3 (indirect emissions) constitute the majority of our total carbon footprint, resulting from everything we buy; build; invest in; and lease to others. Scope 3 emissions also occur in the waste produced by our activities and because of the commuting and business travel patterns of employees. In pursuit of 1.5°C alignment, we need to consider these emissions. Our developing approach to LLDC's scope 3 emissions (what, where, and why they occur) should prompt innovative solutions to dramatically reduce carbon emissions associated with our activities.

This strategy includes scope 1, 2 and scope 3 emissions because LLDC intends to show leadership and join the increasing number of organisations who are trying to make this standard practice. Depending on the scale of activity in a particular year

– and as we enhance our knowledge of our scope 3 data – our scope 3 emissions reported are likely to increase but this will help drive our understanding and delivery approach.

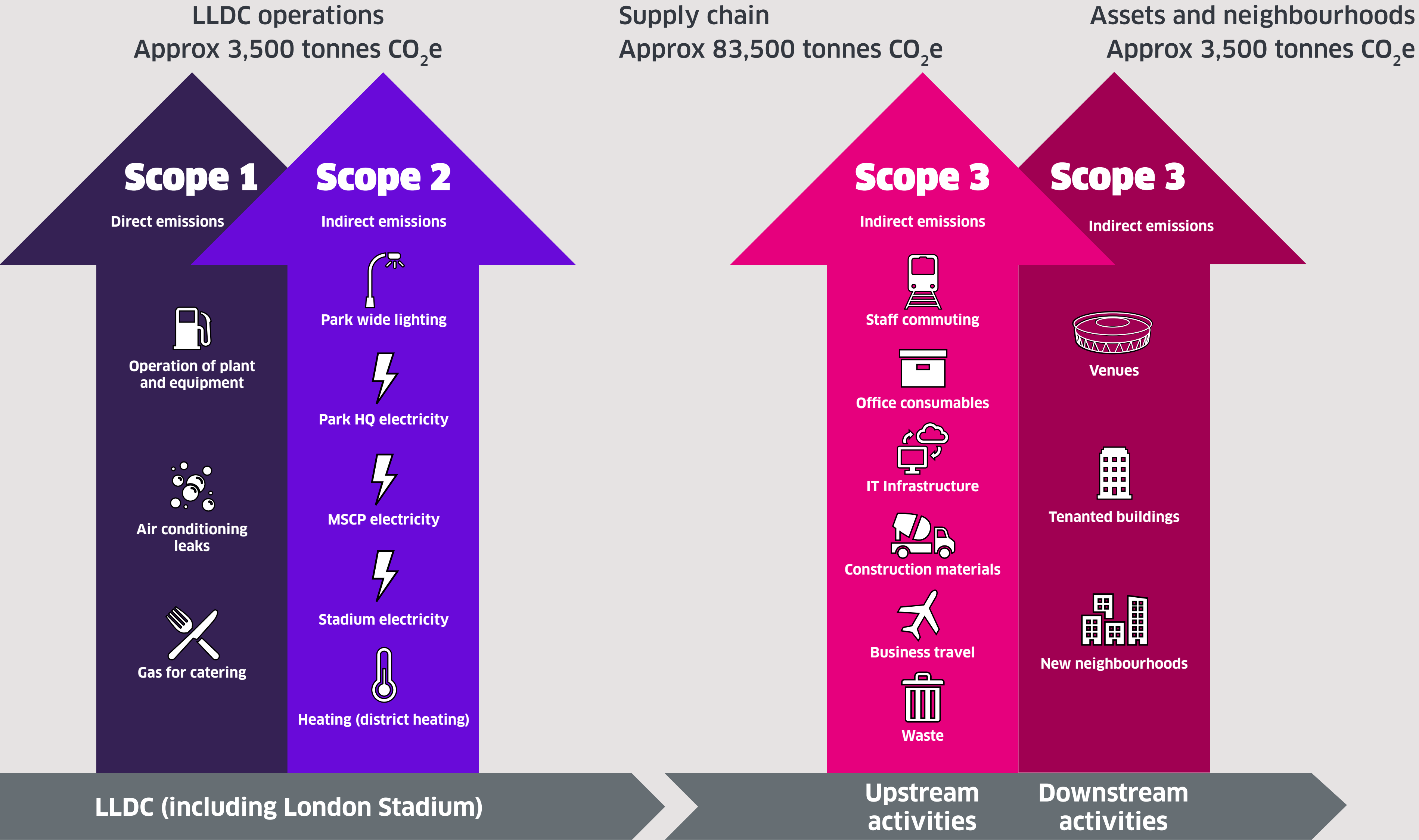
Carbon Footprint

An updated emissions baseline was calculated using measured data from financial year 2022/23 for scopes 1 and 2. Our scope 3 emissions were calculated using some measured utility data for leased assets but predominantly expenditure data was used for the same period. A key action for this strategy is to better refine our scope 3 reporting processes, reducing reliance on expenditure data.

The diagram **(figure 2)** on the next page gives an overview of LLDC's carbon footprint.



Figure 2: Overview of LLDC’s carbon footprint.



As figure 2 shows approximately 96% of LLDC's emissions are from its scope 3 activities such as its development projects, supply chain and its tenanted assets. Approximately 4% of its emissions are scope 1 and 2 emissions, and of these scope 1 and 2 emissions, emissions associated with London Stadium account for 89% of emissions, with the remainder primarily being from lighting across the Park and public realm.

LLDC's Pathway to Net Zero Carbon

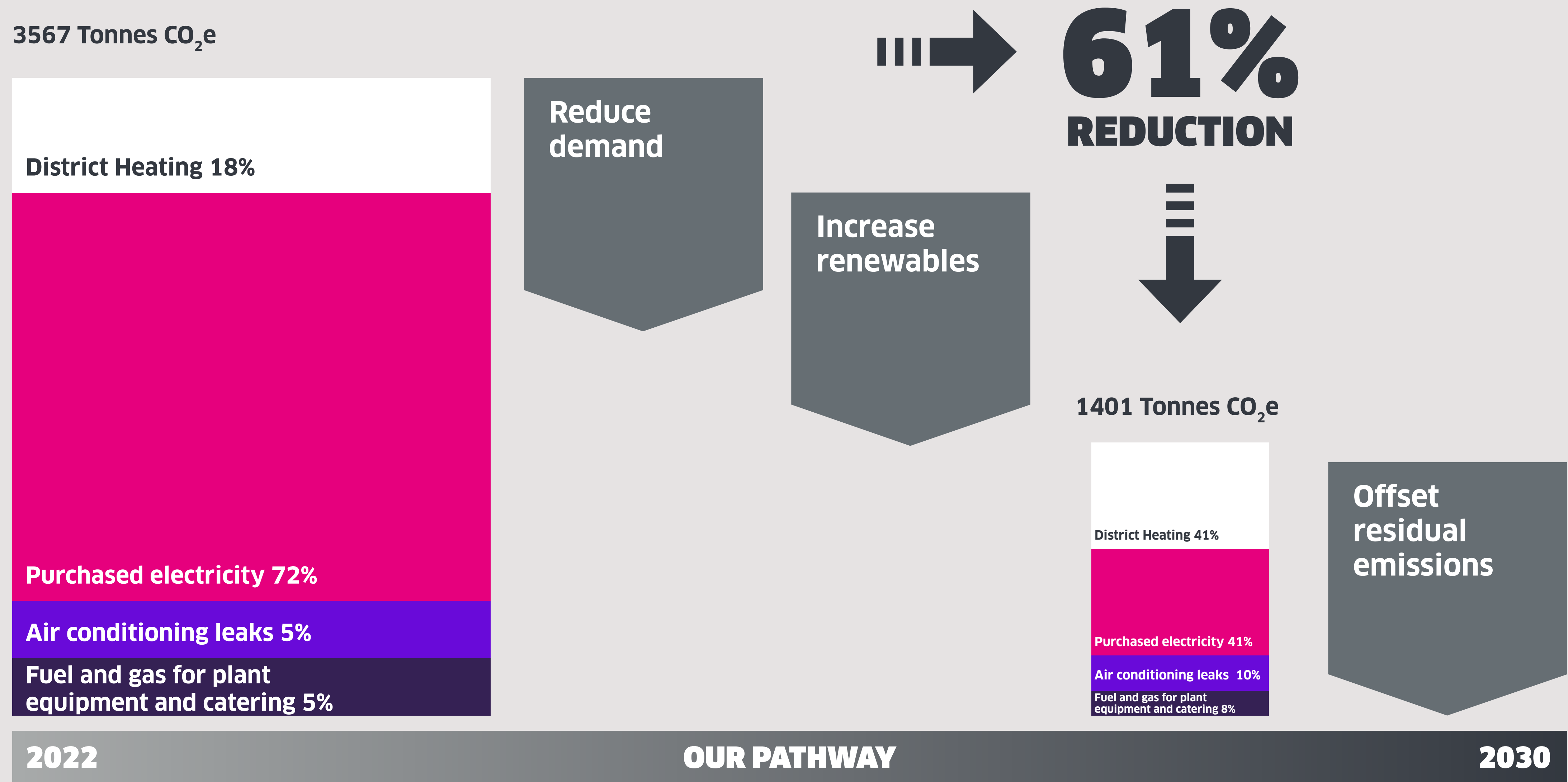
In determining LLDC's pathway to net zero carbon, we have aimed for the earliest reduction in emissions whilst ensuring the credibility of achieving the strategy's target. The strategy meets the Mayor of London's requirement for functional bodies to achieve net zero carbon (scopes 1&2) in 2030. The relative scale of LLDC's scope 3 emissions shows the importance of including scope 3 emissions in the decarbonisation pathway, with a corporate commitment to net zero carbon for scope 3 emissions in 2038.

The content of this strategy in delivering net zero carbon is founded on the energy hierarchy and industry guidance covering our development impact, energy efficiency, renewable energy and offsetting on the journey to net zero carbon.

Underpinning the targets outlined is a series of tools and actions described in the next section and the delivery plan. To date the focus has been on quantifying scope 1 and 2 actions and they are anticipated to result in the following reduction Pathway to net zero in 2030, see **figure 3** (next page). The Pathway figures detailed do not include procuring a green renewable energy tariff from the grid.



Figure 3: Pathway to net zero carbon in 2030 (scopes 1 and 2).



The pathway to net zero in 2038 for scope 3 emissions requires a reduction of 90% of emissions. The data used to support this trajectory has predominantly been derived from financial (spend) information for LLDC's upstream and downstream value chain. The strategy aims to increase the use of directly calculated (or stated by suppliers) carbon emissions for scope 3, aiming to improve the accuracy of this pathway.

Climate Risk – Resilience and adaptation

Queen Elizabeth Olympic Park was the largest new urban park in the UK for over a century and represents a key piece of local green infrastructure. The Park was designed to play a key role in the sustainability commitments of the London 2012 Olympic and Paralympic Games. These commitments included an increase in biodiversity and creation of new habitats as described in the Park's Biodiversity Action Plan.

The original design of the Park included a number of climate resilient features, aimed at protecting businesses and communities against the risks associated with climate change, and minimising further adaptation of buildings and infrastructure to meet the challenges of a changing climate.

For example, the north of the Park is designed to mitigate against a 1-in-100 year flood event, and the widening of the River Lea protects approximately 5,500 homes in the lower Lea Valley from flooding.

The Park and its green infrastructure play a key role in facilitating local walking and cycling by creating safe and pleasant environments. It helps improve air quality and water quality and lessen the impacts of climate change with areas of the Park being cool zones, and the parklands themselves help with natural water attenuation.

However, the parklands, our buildings and neighbourhoods are still feeling the direct impact of climate change and environmental challenges including but not limited to:

- substantial overheating in homes on the Park
- increased river levels and flooding
- flash flooding in certain areas
- increasingly regular algae blooms in the waterways
- changes to the types of species seen on the Park
- urban heat island effect
- increased frequency of high winds and storms
- sewage overflow into watercourses
- contamination from former industrial uses

We therefore need to ensure that we can adapt to our changing climate and that our green infrastructure continues to play its role but that our assets are also prepared for our changing climate.

Risks into opportunities – The LLDC approach

We are currently in a climate emergency, with associated risks and issues. Effective risk management dictates that we have a plan of action. As an evidence base for this strategy, we undertook a review of the climate risks posed to the Park using Met Office UK climate projection data to inform our “Understanding Climate Risk” study.

This included modelling of current climate data projections and a preliminary analysis to understand how climate change can be expected to affect local communities, including the identification of thresholds beyond which significant social, economic, or environmental impacts would be expected.

The study describes local stresses and shocks associated with our changing climate, and how we might mitigate those risks. Even with rapid decarbonisation, we need to be prepared for hotter, drier summers; warmer, wetter winters; stronger winds; more frequent extreme weather events; and rising river levels.

We are already experiencing some of these impacts. It is important that we go beyond mitigation and management of the immediate impacts to LLDC as a corporation – recognising that there are opportunities for social, economic and environmental outcomes that can deliver benefits for everyone. This strategy is designed to manage climate-related risks and opportunities.

Figure 4 overleaf summarises the risks and opportunities associated with climate risk at Queen Elizabeth Olympic Park.



Figure 4: LLDC Climate risks and opportunities

POTENTIAL RISKS

- ▶ **Risk** to health, wellbeing and productivity from high temperatures
- ▶ **Risk** to infrastructure, buildings, events from high temperatures
- ▶ **Risk** to shortages of water supply for the parklands, business and residents
- ▶ **Increased** levels of flooding
- ▶ **Threat** of wild fires in the parklands
- ▶ **Threat** of drought
- ▶ **Threat** to energy security
- ▶ **Threat** of more intense storms and **threat** to life from winds across the Park
- ▶ **Risk** of increased insurance premiums – assets uninsurable
- ▶ **Risks** to natural capital of the Park including biodiversity, soil degradation
- ▶ **New and emerging pests** and diseases, invasive and non-native species affecting people, the parklands, animals and financial sustainability of the organisation

POTENTIAL OPPORTUNITIES

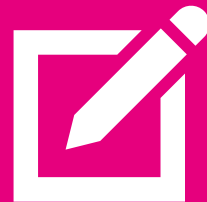
- ▶ **Reduction** in unnecessary use of resources and generation of waste – cost savings
- ▶ **Use** of parklands (nature based solutions – greening) for cooling and reducing temperatures
- ▶ **Limiting** Park residents in fuel poverty
- ▶ **Job creation**
- ▶ **Attractive** investment opportunity – reduced risk, asset protection
- ▶ **Benefits** to health, well being, productivity from action
- ▶ **Enhanced** space for people and nature
- ▶ **Resilient** global development corporation/ Great Estate in the face of climate impacts

OUR CLIMATE VISION, AIMS AND COMMITMENTS

OUR VISION

London Legacy Development Corporation activities are aligned to a 1.5°C future, showing leadership and responsibility whilst remaining competitive.

OUR AIMS



To achieve net zero carbon



To improve climate resilience and adaptation



To foster a just transition to an inclusive economy

OUR COMMITMENTS

- ▶ To deliver 1.5°C aligned new developments
- ▶ To decarbonise our existing assets and activities
- ▶ To maximise onsite generation and procuring renewable energy
- ▶ To decarbonise the district heating network
- ▶ To offset residual emissions and be accountable

- ▶ To better understand the risks and opportunities posed by climate change
- ▶ To mitigate and adapt to climate change
- ▶ To reduce the financial impact of climate change

- ▶ To support the realisation of local benefits from the transition to a 1.5°C aligned future

OUR PRINCIPLES

Accountable

Transparent

Practical

Collaborative

Responsible

Responsive

This strategy looks to demonstrate how we will deliver our vision of LLDC's activities being aligned to a 1.5°C future, showing leadership and responsibility externally whilst being competitive and an attractive organisation to do business with. The strategy seeks to balance best practice ambitions with a pragmatic approach rooted in delivery – making difficult decisions as required.

In delivering this strategy our vision is that throughout LLDC's activities we will deliver net zero carbon buildings built for the future; improve our existing estate to ensure it can withstand immediate and future climate risks. A resilient and thriving Park through nature-based solutions plays its role in reducing locally the effects of climate change and is a safe, pleasant environment for all, with walking and cycling at its heart. Providing local job opportunities in a range of sectors, increasing local energy security and promoting new and emerging sectors to flourish contributing to an inclusive local economy.

We will do this through our aims to:

- Achieve net zero carbon
- Improve climate resilience and adaptation
- Foster a just transition to an inclusive economy

The aims will underpin all our activities across LLDC and key commitments are structured against the aims. In combination, these aims support delivery of our ambition of a 1.5°C aligned organisation.

Aim 1: To achieve net zero carbon³

LLDC is committed to **net zero carbon in 2030** for Scopes 1 and 2.

LLDC is committed to **net zero carbon in 2038** for Scope 3.

Our approach to achieving net zero carbon has five objectives:

- 1. To deliver 1.5°C aligned new developments**, ensuring they are fit for the future.
- 2. To decarbonise our existing assets and activities**, minimising energy demand and embodied carbon – working in partnership with residents and tenants.
- 3. To maximise onsite generation and procure renewable energy**, initially with robust Renewable Energy Guarantees of Origin (REGOs) and considering potential contribution from additional renewable sources and market mechanisms.
- 4. To decarbonise the District Heating Network** as joint employer for the network's concession, working in partnership with the operator.
- 5. To offset residual emissions and be accountable** for residual emissions through high quality offsets.

³ NZC means that carbon emissions from LLDC's operation are zero – with any residual emissions having been effectively offset.

Aim 2: To improve climate resilience and adaptation

LLDC is committed to ensuring its assets are resilient to climate change.

Our climate is changing and across our activities we are already experiencing the impacts of these changes. We need to be resilient to these changes, consider previous experience to prepare for extreme weather events, deal with climate impacts as they are happening. We also need to adapt, plan and invest for future climate impacts using short, medium and long-term climate projections and scenarios.

Our commitment to improving climate resilience and adaptation includes:

- 1. To better understand the risks and opportunities posed by climate change** on our estate, assets and neighbourhoods and people.
- 2. To mitigate and adapt to climate change** on our estate and neighbourhoods – and their contribution to the climate resilience of east London.

- 3. To reduce the financial impact of climate change** and optimise any financial opportunities arising from climate change and/ or climate change adaptation.

Aim 3: To foster a just transition to an inclusive economy

The impacts of climate change are not felt equally across society. We need to ensure our emergency response supports a just, equitable transition to a 1.5°C future.

Our approach to fostering a just transition to an inclusive economy has a central objective:

- **To support the realisation of local benefits** from the transition to a 1.5°C aligned future.

These bullets are headline commitments and targets. Further details on the actions and targets supporting the delivery of the aims can be found in the Climate Action Strategy Delivery Plan, an appendix to this document.

A series of principles inform our approach to delivering our aims and commitments :

- **Accountable** – We acknowledge the climate-related impacts of our activities.
- **Transparent** – We are transparent in this strategy and we will be open in our annual reporting.
- **Practical** – We will balance long term actions with immediate practical steps that can be taken now.
- **Collaborative** – We will work closely with our partners, stakeholders and supply chains to collectively reduce emissions.
- **Responsible** – We will take responsibility to deliver neighbourhoods that are fit for the future and positively contribute to the area.
- **Responsive** – We will have a strategy and roadmap which can adapt and flex to deal with new evidence.

GOVERNANCE, TRANSPARENCY AND ACCOUNTABILITY

Governance

Since LLDC's formation, environmental sustainability has been a priority theme for the corporation. LLDC's Climate Action Strategy has evolved from our original sustainability objectives, in response to increased awareness of the priority of the climate emergency.

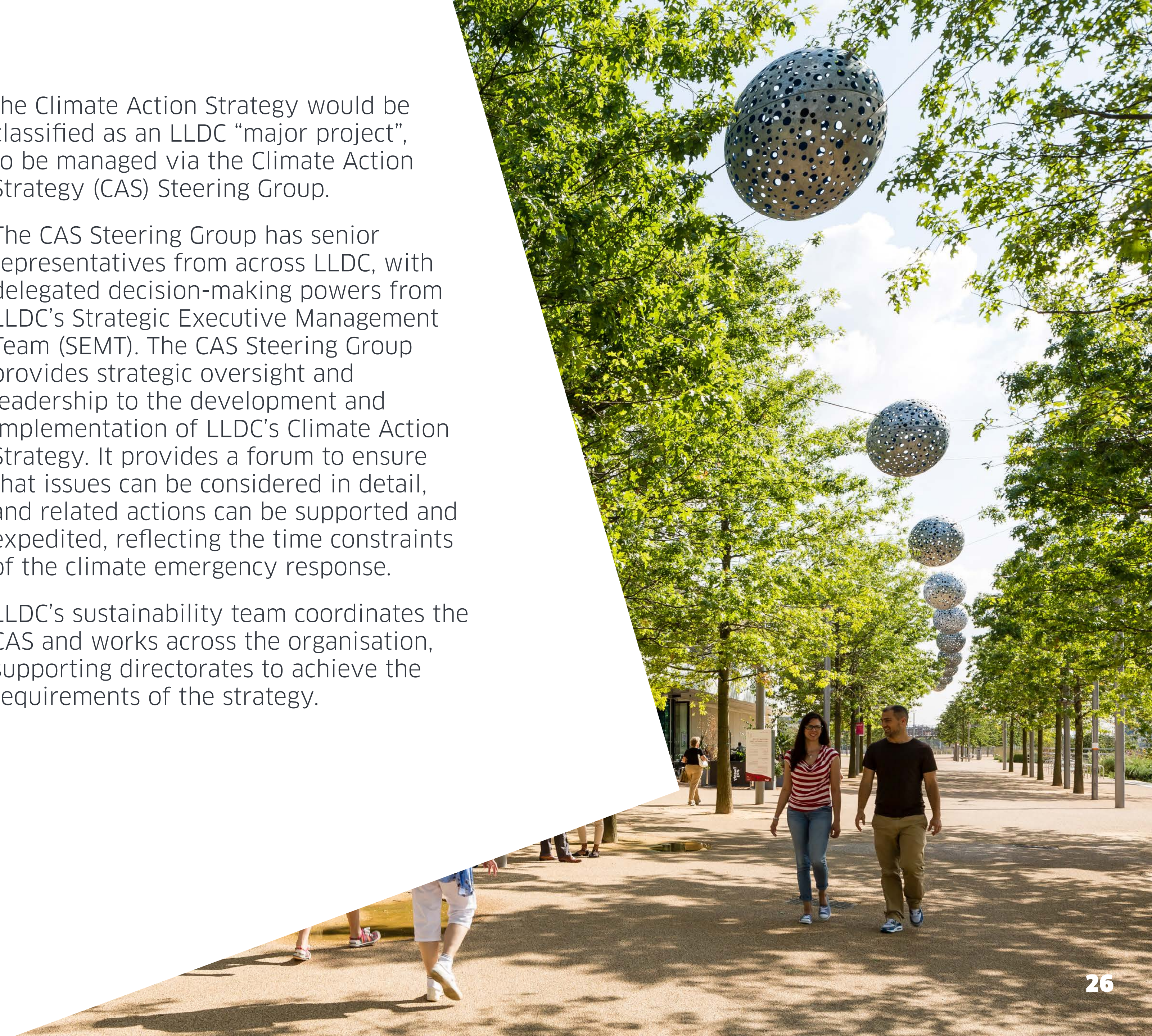
The strategy defines our climate emergency response with clear targets and actions for the future. There remains significant scope for development of the strategy, including improving data capture; mainstreaming the climate budget process; and introducing the cost of carbon to corporate decision-making. We also need to ensure effective definition and resourcing of related roles and responsibilities – and foster collaboration with our commercial partners; local stakeholders; and industry peers.

At an early stage of developing this strategy, LLDC defined its governance for climate action. The climate emergency is registered as a key corporate risk, and this is reflected in LLDC's related governance. In 2023 it was agreed that

the Climate Action Strategy would be classified as an LLDC “major project”, to be managed via the Climate Action Strategy (CAS) Steering Group.

The CAS Steering Group has senior representatives from across LLDC, with delegated decision-making powers from LLDC's Strategic Executive Management Team (SEMT). The CAS Steering Group provides strategic oversight and leadership to the development and implementation of LLDC's Climate Action Strategy. It provides a forum to ensure that issues can be considered in detail, and related actions can be supported and expedited, reflecting the time constraints of the climate emergency response.

LLDC's sustainability team coordinates the CAS and works across the organisation, supporting directorates to achieve the requirements of the strategy.



LLDC's Board receives regular updates on climate action (at Board meetings and every Chief Executive's Report has a CAS update). In addition a board member will act as champion for the strategy providing support to the CAS Steering Group

Responsible

The effective delivery of the Climate Action Strategy depends on contribution from all areas of LLDC.

Key priority areas are assigned to specific functions (related to their operational control of carbon emissions). To support the strategy's adoption within the LLDC culture we have identified the following key areas of focus:

- **Clear vision and strategy for LLDC** – Clear communication internally of our Climate Action Strategy.
- **Staff responsibility and training** – Ensure staff understand their role in achieving the targets and specific roles have related objectives. Ensure colleagues have access to training

to ensure they have the required knowledge and understanding.

- **Support for personal action** – Provide a platform for sharing information regarding actions staff can personally take.
- **Embedding the strategy into our processes and systems** – Requirements clearly incorporated into our processes and decision making so it becomes business-as-usual.
- **Measuring and monitoring our environmental impact** – Driving action though staff understanding how their work translates into progress to our target.

Climate budget

LLDC produces an annual climate budget which is part of our budgeting process with the GLA and is scrutinised by the London Assembly Performance and Budget Committee. LLDC's climate budget can be found in the appendix. In line with guidance from C40 Cities⁴ the climate budget is a tool used internally to

integrate our targets from this strategy into our budgeting process. It also assigns responsibility for implementation, monitoring and reporting across LLDC to budget holders.

Data, transparency and accountability

Data

To develop the strategy, a baselining exercise was undertaken – a “snapshot” of emissions for a baseline year (Financial year 2022/23). To measure, monitor and act on energy use and carbon emissions to deliver against our pathway – we need to embed collecting this data into LLDC's existing reporting systems as business-as-usual.

For our scope 1 and 2 data we are working to improve our ease of access to data and its granularity (the detail of the data coverage). The better the granularity, the more useful the data analysis can be.

For our scope 3 emissions we currently rely heavily on converting expenditure data into emissions data. Establishing

⁴ https://www.c40knowledgehub.org/s/topic/OTO1Q000000x2DNWAY/climate-budgets?language=en_US

more accurate scope 3 data will require an ongoing process of working with colleagues; suppliers; residents and tenants to collect, monitor and interpret the data.

Transparency

LLDC commits to report against the delivery of its Climate Action Strategy as part of LLDC's existing (quarterly corporate performance) reporting requirements to ensure that we are transparent in our progress to net zero carbon and are held to account. These reports will provide an update against the actions within the strategy and delivery of the pathway.

LLDC is committed (as a functional body of the Mayor of London) to report quarterly on Climate Budget progress to the GLA.

An annual report will summarise progress against the Climate Action Strategy's delivery plan.

Accountability

As a functional body to the Mayor of London, LLDC is scrutinised on its performance by the London Assembly.

As the strategy develops, the value of third-party verification of our reporting may be considered, providing additional robustness and transparency.

Collaborative

Achieving our climate action ambitions will require collaboration and collective action. LLDC is considering how best to foster discussion among a group of tenants; partners; and stakeholders to work together to share knowledge, innovate, and deliver real change on (and around) Queen Elizabeth Olympic Park.

Solutions to the climate emergency will require collaboration between academics, industry, local government, landowners for example and SHiFT⁵ and its growing ecosystem provides access to a range of potential solutions and opportunities.

LLDC is involved with a range of industry bodies focussed on delivering environmental change in the built environment. We will continue to work closely with these bodies sitting on working groups; contributing our learnings; and thought leadership. The aim is to contribute to (and benefit from) industry best practice and developing approaches to delivering net zero carbon and improved resilience.

⁵ <https://shiftlondon.co.uk/>

APPENDIX 1: DELIVERY PLAN

AIM	COMMITMENT	DELIVERY STRATEGY	REPORTING METRICS
To achieve net zero carbon	To deliver 1.5°C aligned new developments	1. Ongoing implementation of our Preparing for a 1.5°C Future: Framework and Guidance for new buildings across all our projects 2. Implementation of resilience measures including maximising delivery of green infrastructure and minimising embodied carbon 3. Continue to review and align with best practice guidance and standards	Space heating demand kWh/m2.yr Upfront embodied carbon kgCO ₂ e/m2 Energy Use Intensity kWh/m2.yr Electricity generation kWh/m2fp Water m3/person/day Years to positive Annual review of best practice and industry guidance
	To decarbonise our existing assets	1. Improve data quality on energy, water and waste performance of our directly managed assets 2. Invest in our controlled estate to achieve year on year energy intensity reduction targets to 2030 (Scopes 1&2) including strategy for eliminating fossil fuel use across our controlled estate 3. Whole life carbon assessments undertaken for life cycle works 4. Investigate the feasibility of eliminating fossil fuel use across estate 5. Exploit opportunities for digital infrastructure and technology advancements to enable data acquisition and analysis, as well as proactive maintenance and management of the estate and assets 6. Tenanted assets- engagement with tenants to develop joint net zero pathways in support of net zero carbon 2038 target	Operational energy: kWhe/m2 (NLA)/yr (intensity) and/or kWhe/yr (absoute) Operational water: m3/m2 (NLA), m3/ person/day and m3 (absolute) Operational waste: % and tonnes Embodied carbon: kgCO ₂ /m2
	To maximise onsite generation and procure renewable energy	1. Maximise opportunities for on-site renewable generation and storage across the estate and existing assets 2. Ensure all LLDC procured supplies are REGO or RGGO backed energy sources in line with industry best practice criteria 3. Explore alternative off-site procurement routes such as PPAs that demonstrate credible additionality	Total energy produced: MWh Proportion of building demand: % % LLDC supplies REGO or RGGO
	To decarbonise the district heating network	1. Implementation of decarbonisation roadmap 2. Delivery of individual decarbonisation projects 3. External funding secured	Total low carbon heat installed: MWh Funding secured: £
	To offset residual emissions and be accountable	1. Production of annual climate budget 2. Investigate use of internal carbon price for investment decisions 3. Develop offsetting strategy for corporate residual emissions 4. Formal third-party verification assurance of progress 5. Engagement with key suppliers to understand their net zero carbon targets 6. Review our activities, milestones and targets	Price per tonne CO ₂ Total emissions offset (tCO ₂ e) Independent assurance report % of supplies with net zero carbon targets

AIM	COMMITMENT	DELIVERY STRATEGY	REPORTING METRICS
To improve climate resilience	To better understand the risks and opportunities posed by climate change	1. Undertake a comprehensive climate risk assessment of our assets 2. Include climate change in the risk profiles of our assets	Climate risk assessment
	To mitigate and adapt to climate change	1. Maximise delivery of green infrastructure including opportunities for nature based solutions and rewilding 2. Maximise use of nature based SuDS to manage and utilise stormwater run off and to reduce the impact of flooding 3. Implementation of management regimes to mitigate against climate change 4. Delivery of walking and cycling projects 5. Collaboration with Universities on research and opportunities for real time monitoring	Hectares of habitat Biodiversity Net Gain BAP monitoring Metres of SuDS Metres of walking and cycling routes Research undertaken
	To reduce the financial impact of climate change	1. Embed climate risk considerations into business cases and financial implications 2. Climate risk embedded within the Audit and Risk Committee 3. Recognition of the financial impact of climate risk and benefits of adaptation	Annual climate risk reporting
To foster a just transition to an inclusive economy	To support the realisation of local benefits from the transition to a 1.5°C aligned future	1. Work in partnership with local stakeholders to collectively address local challenges 2. Work in partnership to support delivery of local projects 3. Share knowledge and learning with local stakeholders	No. engaged Projects/activities involved with

APPENDIX 2: CLIMATE BUDGET

As at November 2023 and latest figures can be found **[HERE](#)**

ID	Climate Action Area	Climate Action	Description	Co-benefits	Milestones for 2024/2025	Total expenditure 2023/24 £000	Total expenditure 2024/25 £000	Total expenditure 2025/26 £000
A1	Estate	Climate Action Strategy	Consultancy fees in relation to the development of LLDC's Climate Action Strategy. Includes various net zero/climate resilience guidance documents, feasibility studies and stakeholder engagement.	Improved strategy to inform climate climate mitigation and adaptation measures. Broader stakeholder base involved in climate related activities.	Confirm funding/ budget. Q1 draft brief and procure consultancy service in Q2.	0	40	-
A2	Estate	Estate carbon monitoring and reporting.	Existing carbon monitoring and reporting platform that supports the planning of LLDC carbon interventions.	Better prepared to plan and implement climate mitigation interventions.	n/a rolling contract to March 2025.	11	11	0
A3	Buildings	Building renovation	Repurpose the Old Ford site and building to provide a new permanent home for the currently temporary locations of the Park Depot and Park Headquarters, responsible for the ongoing management of Queen Elizabeth Olympic Park.	Net zero commercial building renovation demonstrator.	Submit planning application Q1.	0	50	100
A4	Buildings	LED lighting installation	Replace halogen back of house lighting at London Stadium with LED lighting.	Reduces business risk to price increases to utility costs.	Draft procurement strategy Q1.	0	100	400
A5	Buildings	Energy Efficiency	Automate kiosk and TV controls at London Stadium	Reduces business risk to price increases to utility costs.	Complete procurement Q1.	0	100	TBC
A6	Buildings	Water efficiency	Water audit report and recommendations to identify water efficiency opportunities at London Stadium	Reduced demand on local water sources/ supply	Complete water audit and report Q1, Develop water efficiency improvement action plan and business case for funding.	0	0	0
A7	Estate	Climate strategy, monitoring and reporting	New environmental reporting platform that supports monitoring and planning climate interventions	Improve resilience to climate risk	Complete specification of reporting platform Q1.	0	0	0

A8	Infrastructure	Pool Street Connectivity Project	Redesign of the highways to introduce dedicated cycle lanes, wider pavements and landscaping	Improved air quality, increase uptake of active travel, improve health and wellbeing.		1,524	1,383	133
A9	Infrastructure	Marshgate Lane Greenway Links Connectivity Project	Redesign of public footways to provide accessible pedestrian and cycle ramps to Greenway	Improved air quality, increase uptake of active travel, improve health and wellbeing.	Complete RIBA Stage 2, 3 design. Transfer delivery responsibility to LB Newham. Undertake engagement and design of lighting, artwork and wayfinding.	20,000	319,000	0
A10	Infrastructure	Carpenters Road West Walking and Cycling Project	Redesign of the highways to introduce dedicated cycle lanes	Improved air quality, increase uptake of active travel, improve health and wellbeing.	Complete RIBA Stage 2, procure RIBA Stage 3 design.	150	56	0
A11	Infrastructure	Marshgate Lane Schools Link Walking and Cycling Project (Tower Hamlets)	Redesign of the highways to introduce dedicated cycle lanes	Improved air quality, increase uptake of active travel, improve health and wellbeing.		39	590	0
A12	Infrastructure	Copper St Crossing	Redesign of the highways to improve walking, wheeling and cycle infrastructure, delivery 2024.	Improved air quality, increase uptake of active travel, improve health and wellbeing.		30	100	0
A13	Infrastructure	Here East Cycle Lane reinstatement - Walking and Cycling projects	Design services to ensure up-to-date reinstatement of infrastructure, delivery 2023.	Improved air quality, increase uptake of active travel, improve health and wellbeing.		0	tbc	tbc
A14	Infrastructure	Pudding Mill Lane/Bridgewater Greenway Connection	Introduction of improved walking connection to the Greenway from Bridgewater, towards Pudding Mill Lane	Improved air quality, increase uptake of active travel, improve health and wellbeing.	Procure and appoint design team to consider options (Q1)	0	100	1,000
Buildings	Renewable energy – solar panels	Stadium Roof Solar PV project	Installation of solar panels on London Stadium roof.	Education and behaviour change opportunity amongst employees and operations team.	Procurement completion & contracts signed Q1. Agree schedule of works Q1. Works completion Q3	–	4,200	Capital

B1	Buildings	Renewable Energy	Fabric wrap solar trial panel at London Stadium. Proposed trial installation to replace fabric membrane on sections of the outer upper surfaces below the roof line with solar panels.	Staff and community education and behaviour change opportunity	Opportunity identified and discussed with industry specialist. No detailed cost or performance figures have been provided. The project involves testing a solar panel system on an area of the stadium façade (20% approx of the total identified area) to then establish its performance benefits across a wider area. Detailed cost and emissions estimate required.	8	8	8
B2	Estate	Energy Efficiency	LED growlights for pitch area at London Stadium. Replacement of existing lighting with higher efficiency lighting that creates special growing conditions for the football pitch to meet Premier League standard. Current lighting is a significant contributor to London Stadiums energy consumption and carbon emissions.	Staff and community education and behaviour change opportunity	Identified in stadium lifecycle plan from 2027, when current growlight units will be at their end of life. Bringing this project forward would lead to carbon savings at an earlier date.	0		0
B3	Buildings	Water efficiency	Water efficiency project at London Stadium. Measures to be implemented following water audit and report described in table A (A6).	Reduced pressure and demand on local water sources. Reduce scope 3 emissions associated with water usage. Reduce energy related water usage on site.	Significant water usage on the site due to the need for extensive pith irrigation for maintenance and visitor usage (circa 60,000+ on event days)	TBC	TBC	TBC

B4	Buildings	Energy efficient heating	Capturing and supplying waste heat into heat networks.	Contributes to innovation and knowledge development in heat network energy performance improvements	Plans to begin feasibility work into recovering exhaust heat from the A/C plants and distributing the reclaimed heat into the District Heating Network (DHN) to improve energy and carbon performance.	TBC	TBC	TBC
B5	Infrastructure	Renewable Energy	Purchase of renewable energy through a power purchase agreement.	Opportunities for education, employment and skills development	Process of agreeing PPA in collaboration with GLA Functional Bodies underway. Awaiting further information and next steps.	0	0	0
B6	Buildings	Heating Energy Efficiency	Heat pump considerations at London Stadium.	Skills/ training opportunities in heat pump technology	Early stage consideration by senior engineer to be explored and developed as a part of the climate budget process.	TBC	TBC	TBC
B7	Buildings	Heating Energy Efficiency	Heat recovery from chillers at London Stadium.	Early stage consideration by senior engineer	Project Initiation stage	TBC	TBC	TBC
B8	Buildings, Public Realm and Infrastructure	Canal Park Play	Creation of play space and planting improvements to Canal Park at Monier Rd	Provides play space for local children	Project is in beginning phases, funding application to be submitted for December 2023, hope to have funding for 2024.	Enabler	Enabler	Enabler

C1	Energy Efficiency and Renewable Energy	Distribution of LLDC Carbon Offset Fund (CoF)	Grant allocation of LLDC Carbon Offfset Fund to fund various energy efficiency and renewable enegy projects across East London.	Various social, economic benefits including reducing bills, community engagement in climate related matters, improving thermal comfort.	Complete distribution of 2023/2024 CoF. Dec 2024. Close out LLDC contribution to 2024/2025 Carbon Offset Fund allocation. Dec 2024	1,486	-	-
C2	Emissions reduction and Climate Resillience	Climate action start up accellerator programme	Supporting business, communities and organisations to respond to and scale climate emergency solutions through the SHIFT innovation programme. Various projects.	Supporting scaling of solutions aimed at: Reducing risk from flooding and drought, Reducing air pollution, Safeguarding biodiversity, reducing urban heat island effect, minimising waste.	"- First cohort kicks off Q1 - Funding disseminated to cohort 1 Q1 - Second challenge shared Q2"	730	-	-
C3	Buildings	Energy Efficiency	Post Occupancy Evaluation study and engagement with residential tenants and properties developed by LLDC. Considers issues such as overheating, transport, energy usage.	Improved understanding of design an planning of the built environment. Improved engagement with residents in climate related matters.	Complete fo-cus group p1-Q2 2023/2023. Complete Focus groups P2 Q3 2023/2024.	49	-	-
C4	Transport	Stratford Station redevelopment	Consultancy fees in relation to the design and planning of Stratford Station redevelopment project.	Improved connectivity across the stratford and wider area. Improved quality of public realm in the area.	Completion of design and appraisal work. Q3 Completion and submission of business case for approval. Q4	1,000	-	-
C5	Buildings (New development)	"Design and build of LLDC funded development improvement beyond Building Regs?"	Consultancy fees associated with the design of sustainability aspects of the planned development at Stratord Waterfront residential.	Supply of social housing, reduction in fuel bills for residents, reduced risk of fuel poverty.	Planning permission Reserved Matters determined Q2. Completion of RIBA Design stage 3 - Q4	65	TBC	TBC
C6	Energy Efficiency (Heating)	District Energy Network decarbonisation	Feasibility and capital investment into the decarbonisation of the Queen Elizabeth Olympic Park District Energy Network.	TBC	TBC	TBC	TBC	TBC

GLOSSARY

Climate resilience is the ability to anticipate, prepare for and respond to hazardous events, trends or disturbances related to climate.

GHGs means greenhouse gases – the emissions responsible for global warming. These include methane, nitrous oxide and fluorinated gases amongst others.

ktCO₂ is the unit of measurement for GHG emissions. It standardises greenhouse gases into units of kilo-tonnes of carbon dioxide equivalent (ktCO₂e).

Natural capital refers to the stock of natural resources, which includes geology, soils, air, water and all living organisms.

Net zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period (Science Based Targets initiative (SBTi) and CDP, Towards a science-based approach to climate neutrality in the corporate sector, September 2019).

Science-based / Paris-aligned/ 1.5°C aligned

(Science-Based Target Setting Manual, April 2020) GHG emissions reduction targets are considered “science-based” if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement (2015) – to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

Scopes 1, 2 and 3 for an organisation:

(Defra Environmental Reporting Guidelines and the Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard, revised edition)

Scope 1 (direct) means emissions from activities owned or controlled by your organisation that release emissions into the atmosphere. They are direct emissions. Examples of scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, vehicles, emissions from chemical production in owned or controlled process equipment.

Scope 2 (energy indirect) means emissions released into the atmosphere associated with your consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of your organisation’s activities, but which occur at sources you do not own or control.

Scope 3 (other indirect) means emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as scope 2 emissions. Examples of scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal which is not owned or controlled, or purchased materials.

REFERENCES

Links to LLDC's documents referenced within this strategy:

- [Preparing for a 1.5°C future: Guidance and framework new buildings](#)
- [Green Infrastructure Guide](#)
- [Park Design Guide](#)
- [Biodiversity Action Plan](#)
- [Net Zero Mobility Action Plan](#)



LONDON LEGACY
DEVELOPMENT
CORPORATION

