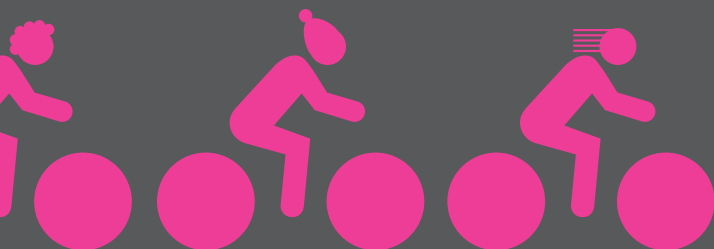




YOUR  
SUSTAINABILITY  
GUIDE TO



# QUEEN ELIZABETH OLYMPIC PARK 2030



**LONDON** **LEGACY**  
DEVELOPMENT  
CORPORATION

A PIONEERING MODEL OF URBAN REGENERATION:  
SUSTAINABLE INFRASTRUCTURE  
FOR SUSTAINABLE LIFESTYLES.







# HOW TO USE THIS GUIDE

**This guide explores how the Park, venues and events have been developed to respond to and tackle the significant environmental challenges of our time: a changing climate, the loss of biodiversity and the overconsumption of vital resources. The Queen Elizabeth Olympic Park in east London has a fantastic opportunity to lead the way in sustainable living for its neighbours across London and beyond.**

However, sustainability in the Park goes beyond the environment. It is also a story of social equality and employment, and of economic growth and prosperity. These wider social, economic and environmental purposes make up the London Legacy Development Corporation's overarching environmental themes [see p.48]. They define its contribution to the shared objective of convergence, ensuring that legacy benefits stretch beyond the Park borders into the surrounding communities. They also influence the Development Corporation's entire work programme, from internal operations, to planning legacy communities, to defining operating arrangements for venues.

The environmental themes focus on seven key areas. As you explore this guide, these are represented using the icons below.

## ENVIRONMENTAL THEMES



ENERGY CONSERVATION  
& CARBON REDUCTION



WASTE  
MANAGEMENT



WATER MANAGEMENT  
& CONSERVATION

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BIODIVERSITY



FACILITATING  
SUSTAINABLE LIFESTYLES



TRANSPORT  
& CONNECTIVITY



MATERIALS  
SELECTION





# GETTING STARTED

# DESTINATION

## QUEEN ELIZABETH OLYMPIC PARK, 2030





**The Development Corporation's vision for a sustainable Park is exciting, ambitious and already happening. Start your discovery of our environmental sustainability objectives here.**

It's the year 2030. Welcome to Queen Elizabeth Olympic Park.

Arrive by bike, dock at a secure parking station and begin your exploration on foot.

Stroll along the canal paths and watch children kayaking, water taxis returning locals from the city and fishermen sitting on the shaded banks.

Take in the view of London's iconic skyline from the panoramic heights of the ArcelorMittal Orbit's viewing platform. Admire the sweep of the Velodrome's curving timber roof across the park, and look down at crowds parking their bikes and hopping off buses as they arrive for a concert at the Stadium.

Explore the community gardens, walk along the wetlands, or wander among the new homes, capped with green roofs, solar panels, and clever ways to catch rainwater. Discover the buildings – as smart as they are stylish – built from sustainable materials, and designed to use energy and water sparingly.

---

**OR JUST RELAX IN THE PARK  
WITH A PICNIC, LISTEN IN TO AN  
OPEN-MIKE SESSION AND WATCH  
THE VIBRANT COMMUNITY  
THAT LIVES THERE GO BY.**

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# PROMOTING SUSTAINABLE LIVING

When the London 2012 Games bid team promised a sustainable Games in 2005, they recognised the opportunity to use the power of the world's greatest sporting event to drive a legacy of positive change. This laid the foundation for sustainable lifestyles.

The Development Corporation will build on this vision to realise a thriving new district based on three key themes: **People, Places and Performance.**

**People** enabled to live sustainable, low carbon, resource efficient and healthy lives.

Following the Games, the Development Corporation will use the regeneration of the Park to inspire and enable sustainable lifestyles for residents, employees and visitors. We will help make this kind of lifestyle desirable and, together with Park events and projects, help spread sustainable living to the Park's surrounding communities.

**Places** that sustain parkland, waterways and walkable neighbourhoods, preparing for a changing climate.

We will continue to populate the Park with biodiverse green spaces, clean, usable rivers and canals, and a network of walking and cycle paths. You will find sustainably designed homes in five neighbourhoods framing the parklands, venues that host events in high-performance buildings and extensive recycling initiatives.

**Performance** based on sustainable procurement and long-term environmental management.

In the lead up to and staging of the Games, the Olympic Park has inspired new standards for venue construction and across the catering and hospitality sectors.

The Development Corporation will continue to inspire new standards; in construction (mostly residential developments), in the events sector and in its operation of venues and parklands. The Development Corporation will also develop a program to foster sustainable lifestyles, helping to improve knowledge and understanding of embodied carbon and material choices.

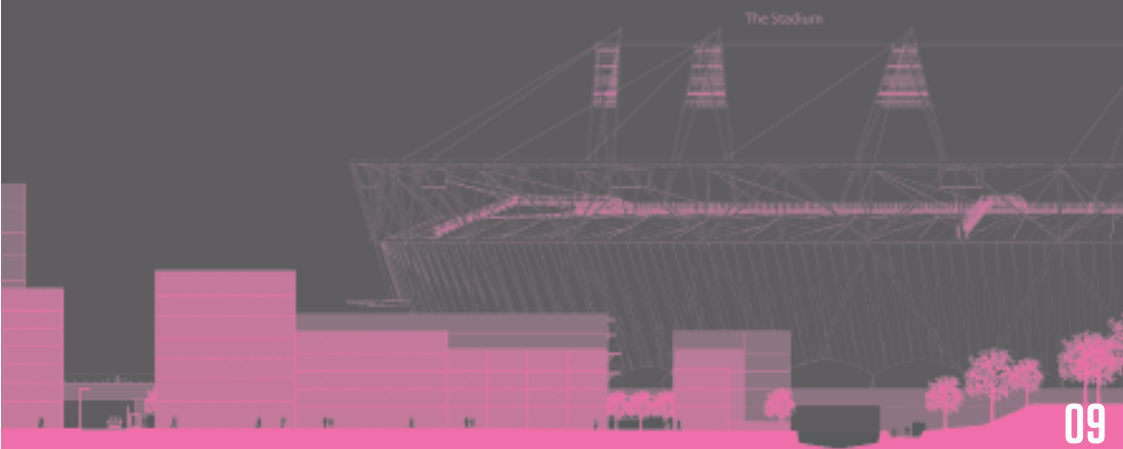
Together these three aims will provide a catalyst for sustainable ways of living that protect the environment, boost the economy and enhance a vibrant, diverse community. In doing so, the Development Corporation aspires to be a leader in delivering sustainability at an unprecedented scale in the UK.

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“WE AIM TO CREATE A PIONEERING  
MODEL OF URBAN REGENERATION:  
SUSTAINABLE INFRASTRUCTURE  
FOR SUSTAINABLE LIFESTYLES.”

ANDREW ALTMAN,  
CHIEF EXECUTIVE,  
THE DEVELOPMENT CORPORATION, 2012

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GETTING STARTED



SUSTAINABILITY  
IN ACTION:  
**TOP 10**







## 1. LIVE IN A LIFETIME HOME

get a good night's rest in one of these low energy, low water homes. Built from low-impact non-toxic materials, they will adapt to their residents' needs over a lifetime.



## 2. TAKE A STADIUM TOUR

arrive by public transport and see the Stadium champion sustainability in the way it was built (with minimum waste and careful materials selection), and in the way it operates (with low energy, low water use and low running costs).



## 3. CHECK OUT THE ENERGY CENTRE

discover the innovative infrastructure that provides low-carbon heat and cooling to venues, commercial spaces, and neighbourhoods in and beyond the Park.



## 4. ROAM LONDON'S NEWEST NEIGHBOURHOODS

admire the 21st century interpretation of London's terraces and mews, stop at the local library for information and cross the canal on a new pedestrian bridge for a walking tour of east London's attractions.



## 5. VISIT THE NORTH PARK

enjoy the bio-diverse wetlands along the River Lea, kick a ball in the central lawn, or go to the playground – all within a magnificent, ecologically rich river valley landscape.



## 6. ENJOY THE SOUTH PLAZA

visit a farmers' market, run a 10km, do a public Tai Chi class, or attend an outdoor concert. You can pick from a calendar of over 2000 events, each one run to achieve ambitious environmental targets.



## 7. TAKE A WATER TAXI

arrive by water to the Canal Park along the Lee Navigation, part of the site's 6.5 km of revitalised waterways. Continue north to explore the wider Lee Valley, or venture south to the Thames.



## 8. GET ON YOUR BIKE

get to work or explore the Park by bike, foot or boat or, if you're coming from further afield, arrive by bus, train, underground or DLR.



## 9. ENJOY THE FOOD

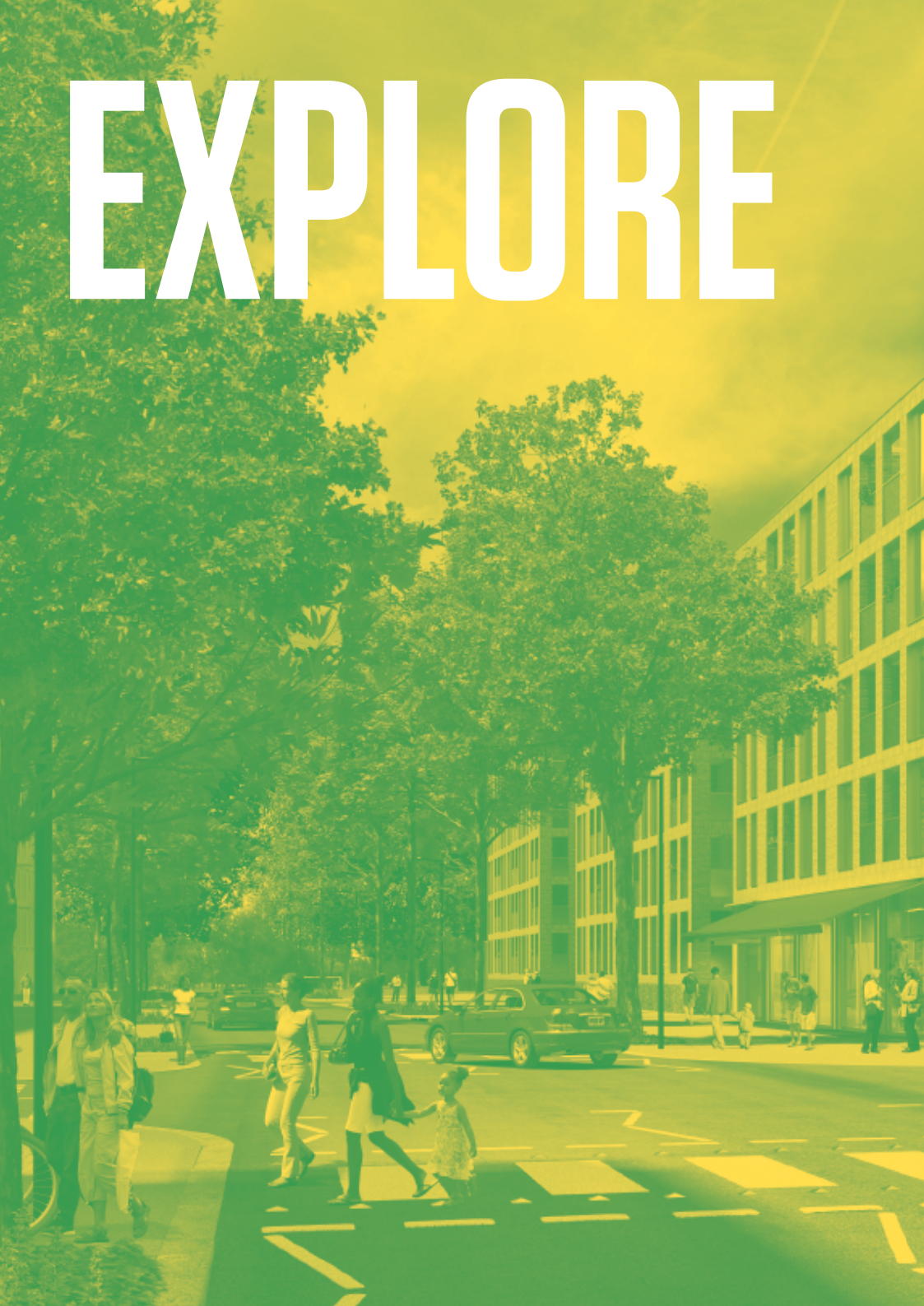
stop at any of the cafés and restaurants in the Park for menus featuring local, organic and seasonal produce. Residents can also grow their own food in attractive and secure allotments and community gardens.



## 10. LOG ON

use site wide Wi-Fi coverage to work from home, access real time travel information or look at the latest event schedule – all at download speeds ten times faster than average.

# EXPLORE



Get a flavour of what the Park  
has in store for you by exploring  
where to live, what to do and  
how to get from place to place.



EXPLORE

# HOW TO GET AROUND





## TRANSPORT LINKS

Most people will get around the Park by walking and cycling, and you'll find the neighbourhoods easy to navigate. Of course, the public transport system will also be superb.



EXPLORE



# HOW TO GET AROUND



## CHARGED UP

Coming by electric car or thinking about hiring one? You'll find plenty of charging points around the Park, as well as incentives to make the move to electric vehicles.



## WIDER CONNECTIONS

The London Underground, DLR, Crossrail and International Rail all converge in the Park. Stratford International to Kings Cross is just seven minutes by train, and no major London terminal is more than a 35-minute ride away.





## WALKING AND WHEELING

Approaching from Hackney, Tower Hamlets, Waltham Forest or Newham you will find that the Park is a foot and cycle-friendly neighbourhood. Grab a bike from one of the docking stations and get exploring!



## ON THE MOVE

A sustainable freight strategy continues to keep the impact of moving materials to and from the Park to a minimum. During the Park's construction, a temporary wharf on the City Mills River allowed materials to travel by barge.



## THIS IS YOUR STOP

Every home is within 350m of a bus stop. Real-time travel information and demand management systems make public transport a better option than private vehicles.

IF YOU'RE TRAVELLING FROM FURTHER AFIELD, YOU'LL BE PLEASANTLY SURPRISED BY HOW WELL-CONNECTED THE PARK IS – YOU CAN EASILY GET TO THE AREA BY BUS, TUBE, TRAIN, DLR OR USING CYCLE ROUTES.

EXPLORE

Residents will not have to travel by car for their daily needs – schools, playgrounds, shops, restaurants and health centres are within walking and cycling distance.

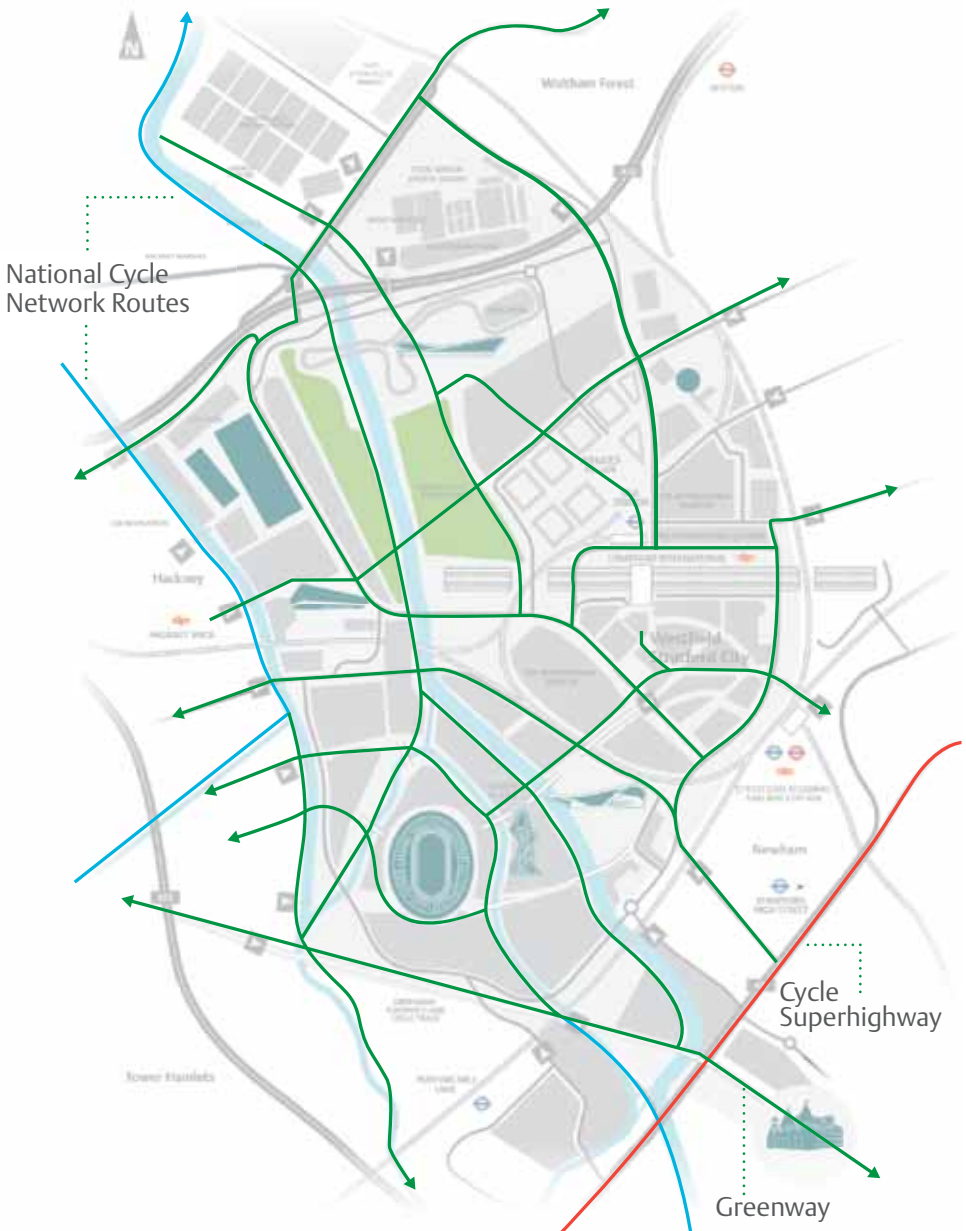
Our Travel Plan improves public transport usage, road safety, and health and wellbeing, while also reducing private car usage and inappropriate car parking.

Sustainable transport technologies and the use of alternative fuels help to improve air quality.

There are electric charging points in the car park, as well as on street parking bays across the Park.

# CYCLE ROUTES

EXPLORE







## CYCLE HIRE

It's easy and affordable to hire a bicycle from the local businesses in the Park.

## KEY NEW PATHS

Key new paths through Queen Elizabeth Olympic Park are designed either as commuter links, recreational routes or a combination of the two.

## NATIONAL CYCLE NETWORK ROUTES

By linking to existing national cycle routes, the attractiveness of cycling to the Park from further afield is increased.

## LEE VALLEY VELOPARK

The Park is home to a world class cycling hub with BMX and road cycle tracks, and a velodrome.

# THE PARK IS EXTREMELY CYCLE-FRIENDLY, WITH WIDE CYCLE PATHS AND PLENTY OF BIKE PARKING FACILITIES

Cycle routes link the Park to its surrounding communities and reach further into central London. Many routes follow the beautiful waterways.

London has many cycle schemes, including the TfL Cycle Hire Scheme, initiatives to improve cycle safety and training, better cycle parking and cycle superhighways

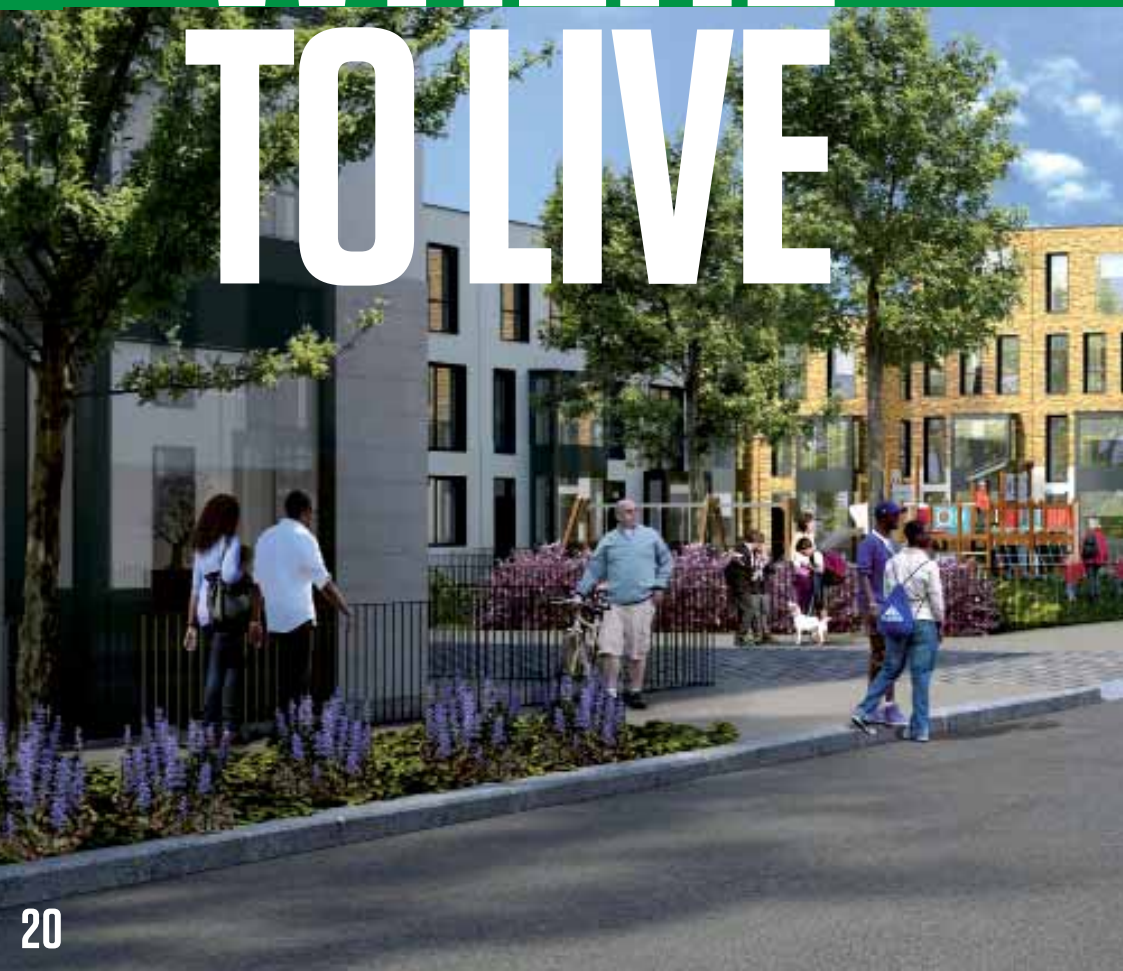
Reduced car use contrubites to improved air quality.

## LONDON CYCLE ROUTES



EXPLORE

# WHERE TO LIVE



## NEW DEVELOPMENT AREAS

Enjoy spacious, durable and well-designed buildings that are set on safe, vibrant streets amongst active green spaces in neighbourhoods designed to optimise walking and cycling with facilities for daily needs provided locally.



EXPLORE



# LOCAL NEIGHBOURHOOD



## ROOFS THAT HARVEST

Green roofs keep things cool, build resilience against flooding and create more open space. PVs provide electricity.



## SAFE AND OPEN

Streets and public realm are designed to favour pedestrians and cyclists.



## BYE BYE BOILERS

Homes are connected to the low carbon distribution heating system providing affordable heat to residents.



## LIFETIME LOW CARBON

Materials have low embodied carbon.



## FULLY CHARGED

Electric charging points for cars are provided.



## PINT OF MILK

Local shops and community facilities are located nearby to ensure daily needs are met.

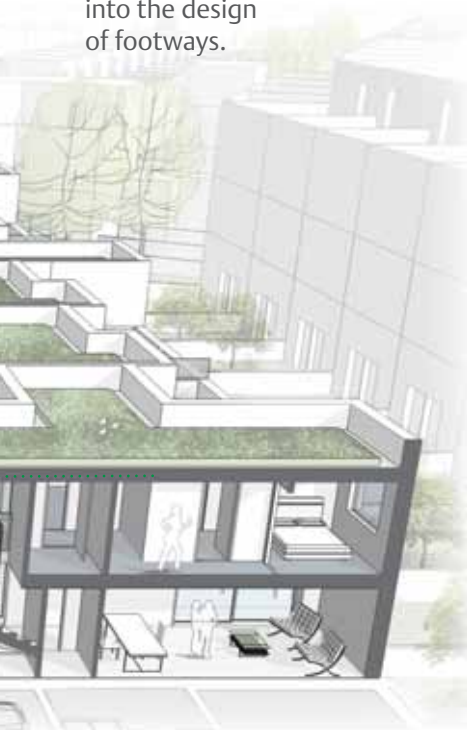


# OOD



## KEEPING DRY

Sustainable urban drainage is incorporated into the design of footways.



## TRAVELLING LIGHT

Walking, cycling and public transport are the primary ways to get around. Compact streets encourage slow moving local traffic.

# SAFE, OPEN NEIGHBOURHOODS WITH LOW-CARBON, ACCESSIBLE HOMES AND PLENTY OF GREEN SPACE FOR COMMUNITY ACTIVITIES.

EXPLORE

All homes in these neighbourhoods meet the Government's 2016 Zero Carbon definition.

All homes are designed to a minimum Code for Sustainable Homes Level 4 but achieve credits that exceed its requirements.

100% are lifetime homes and 10% are wheelchair accessible.

35% of the housing across the Queen Elizabeth Olympic Park is affordable.

All building materials are chosen after lifecycle assessments, therefore reducing embodied carbon.

Residents can grow food in their gardens, on balconies or in allotments.

Neighbourhoods have local shops and community facilities for both new and existing communities.

# INSIDE A HOME



## EFFICIENT APPLIANCES

Highly efficient appliances help to reduce energy usage.



## LOOK SMART

Smart meters are standard to help you monitor and control your energy use, and allow you to fit smart appliances.



## WASTE NOT

Indoor and outdoor space is provided to store waste and recycling, and to encourage composting of organic waste.





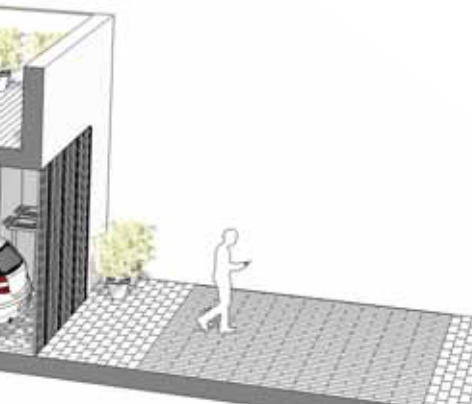
## USING EVERY DROP

Roofs and gardens are irrigated by water from rainwater harvesting. Low flow showers in the bathroom help you have a great shower using less water.



## COOL COLOURS

The light colours of the buildings reflect the sun's rays and keep your home cooler. The whole-of-life impact of materials selection is always considered.



DESIGNED TO OPTIMISE NATURAL LIGHT  
AND VENTILATION, AND INSULATED TO  
HOLD IN WARMTH, THESE HOMES ARE  
AS COSY AND COMFORTABLE AS THEY  
ARE ENVIRONMENTALLY FRIENDLY.

EXPLORE

Homes are designed and oriented as much as possible to optimise access to sunlight and daylight. In many cases, this means homes have a double aspect.

All our homes will enable low-water use (averaging 105 litres per day per person, compared to a London average of 144 litres per day) and might be able to use non-potable water.

By 2020, home recycling and composting should be 60% (compared to a London average today of 32%). By 2025, no municipal waste should go directly to landfill.

All homes will be equipped with smart meters to allow residents to monitor their resource consumption.

Residents will be supported to continually reduce their energy usage.

EXPLORE

# WHAT TO SEE & DO





# EXPLORE



# WHAT TO SEE & DO

EXPLORE



## THE GREAT OUTDOORS

The Park has over 100 hectares of metropolitan open land, 45 hectares of biodiverse parkland and 6.5 km of waterways – a fantastic leisure amenity.

HACKNEY  
MARSHES

QUEEN  
ELIZABETH  
OLYMPIC  
PARK

VICTORIA  
PARK

GREENWAY

THREE MILLS  
GREEN



## ENERGISE

The Energy Centre's visitor centre shows the efficiency of heating and cooling in the Park, and gives advice on reducing personal energy use and carbon emissions.



## GET HEALTHY

Swim in the pool, kick a ball, cycle around the Park, play basketball in the Arena or volunteer to be a sports coach.



## THE BIG SIX

See the Stadium, Aquatics Centre, Lee Valley VeloPark, Multi-Use Arena, Lee Valley Tennis and Hockey Centres, and the ArcelorMittal Orbit – six permanent venues and attractions that embody our sustainability journey.



## THE MAIN EVENTS

International sporting events, outdoor food markets, music performances, community festivals – make sure to check out the Park's packed calendar.

WHY NOT TAKE A PARK TOUR? FROM THE VELOPARK TO THE ENERGY CENTRE, YOU'LL LEARN HOW DESIGN, CONSTRUCTION AND OPERATION ARE CRITICAL IN THE CREATION OF SUSTAINABLE NEIGHBOURHOODS.

EXPLORE

The Park has rejuvenated the ecosystem of the lower Lea Valley. Everyone benefits from improved air quality and biodiversity.

All neighbourhoods, homes and open spaces are designed to be climate resilient with, for example, plenty of natural shade and green roofs.

The Development Corporation is aiming to achieve ISO 20121 for events in 2012 – a third party certified sustainability management system standard inspired and used by the London 2012 Games.

# SUSTAINABLE EVENT



## WELL CONNECTED

Arrive at the event by bike, bus, tube or on foot.



## PAPERLESS TICKET

No need to print, just download your ticket onto your phone.



## RECYCLE IT

Promotion of zero waste to landfill from events.







## SUPER FOOD

Sample the variety of foods on offer including seasonal, local and worldwide cuisines in our restaurants or at the food market.



## SMART SOUVENIRS


We will encourage merchandise from sustainable sources and we are working with suppliers to ensure their supply chains meet our requirements.



THE PARK'S EVENTS MAKE IT A  
COMPELLING DESTINATION FOR A  
WIDE RANGE OF LOCAL, REGIONAL  
AND INTERNATIONAL VISITORS.



# HISTORY



Watch the Park come to life as we trace its journey from the year of its conception, through the Games themselves to the final three stages of its legacy – mobilisation, transformation and regeneration.

# LOOKING BACK

In the early 2000s, the London 2012 Games were still a decade away and the Park was a very different place. What is now the beautiful Aquatics Centre was a breakers yard and a mountain of broken fridges.

Today's parkland was wasteland. Part of the site was a dumping ground for industrial and domestic waste and much of the land was polluted with contaminants such as oil, tar, arsenic and lead. Fifty-two high-voltage pylons marched across the site and dominated the landscape.

The waterways in and around the future Queen Elizabeth Olympic Park were neglected. Water quality was poor, river walls were in bad condition and many contained abandoned shopping trolleys and car tyres. Potential wildlife habitats were suffocated by invasive plant species such as Japanese Knotweed and Floating Pennywort.

The area experienced the highest concentration of socio-economic disadvantage in the UK and locals experienced a much lower quality of life than the average Londoner.

HISTORY

## BEFORE





Since the successful bid for the London 2012 Games, two decades of continual improvement has transformed one of London's most deprived areas into its most vibrant and sustainable.

The following pages set out the broad phases of the Development Corporation's implementation plan for this huge regeneration project.

AFTER



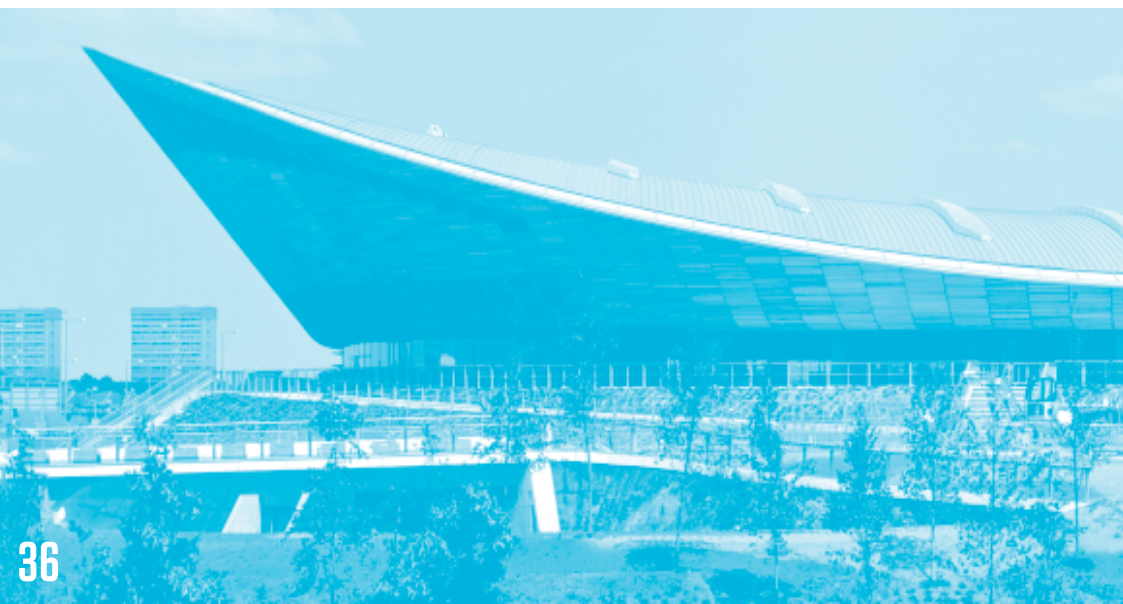
# INHERITANCE

Sustainability has been built into the Games from day one, and this is reflected in all the infrastructure and relationships that are being passed on to the Development Corporation from the Olympic Delivery Authority (ODA) and the London Organising Committee of the Olympic and Paralympic Games (LOCOG).

By working with these organisations, we have justified significant infrastructural investment (such as the Energy Centre) based on our ability to extend its benefits beyond Games time, and beyond Park boundaries. We are committed to building on the pioneering sustainability achievements we inherit.

## A SUSTAINABLE BUILT ENVIRONMENT

- A suite of world class energy and resource efficient sporting venues.
- The Energy Centre and district heating network.
- Commercial space in the Press and Broadcast Centres, with solar panels on the Press Centre roof and car park.



## SUSTAINABLE SYSTEMS AND TECHNICAL SOLUTIONS

- Separate potable and non potable water networks.
- An experimental waste water treatment plant.
- A high speed telecommunications network.

## PARKS AND WATERWAYS

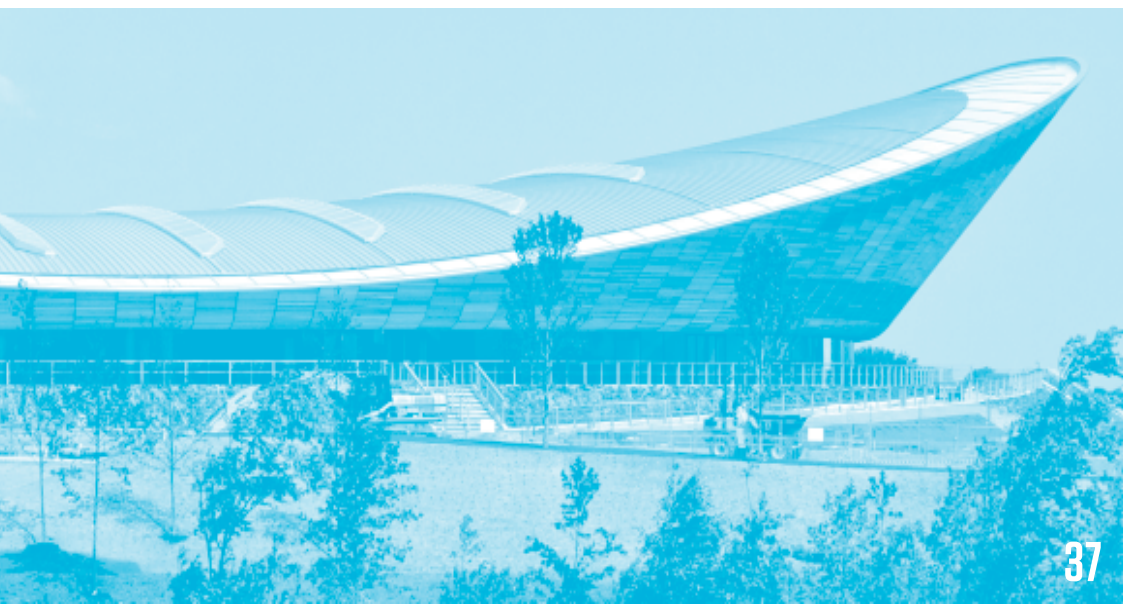
- Parkland and open space.
- Biodiverse habitat within the new parkland.
- Natural solutions to reduce and manage flood risk.
- Remediated and restored brownfield land.
- 3 km of restored waterways.

## CONNECTIONS WITHIN AND OUTSIDE THE PARK

- A network of cycling, pedestrian and water routes.
- A plan for 30 bridges and underpasses delivered in the run up to and after the London 2012 Games.

## NEW BENCHMARKS FOR INDUSTRY

- A changing mindset within the construction and service industries, with a greater focus on sustainability.



# MOBILISATION

2009–  
2012

**The mobilisation phase of the Development Corporation will deliver a vision that's inspirational and realistic. We need it to help drive and eventually deliver our long-term sustainability aspirations.**

Our priorities for this phase are:

**Consolidating our inheritance** from the ODA and LOCOG. We'll push ahead with plans:

- to extend the CCHP network across and beyond the Park.
- to make full use of the non-potable water system, integrated with a successful Thames Water blackwater treatment plant or treated greywater.
- to develop a zero waste strategy for the Park.

**Identifying and building relationships** only with partners that can help us deliver our sustainability vision. We're strengthening our relationship with our neighbours, including the Lee Valley Regional Park Authority who own the land on which the Lee Valley VeloPark and the Lee Valley Tennis and Hockey Centres sit. We also have operators committed to delivering our sustainability targets for the Aquatics Centre, the Multi-Use Arena, and the ArcelorMittal Orbit.

**Design and planning** that fulfil sustainability commitments: public spaces that make low-carbon lifestyles possible and can cope with a changing climate. Following intensive design work we recently submitted our Legacy Communities Scheme planning application.

**Learning lessons** not only from the experience of ODA and LOCOG, but also from successful London neighbourhoods and sustainability initiatives and innovations from further afield.

**Ensuring policies and guidance** are in place so we have the processes to help deliver our vision.





# THE OLYMPIC AND PARALYMPIC GAMES

London 2012's aspiration to be a truly sustainable Games will showcase our sustainability vision to a global audience during Games time. We're working closely with the ODA and LOCOG to ensure that the sustainability story continues smoothly from the big event into the legacy years.

# TRANSFORMATION

2012–  
2015

The transformation phase starts when the Development Corporation takes complete ownership of the Park in November 2012. These years will see the area change from a huge event arena to 'London's newest destination'.

Our priorities for this phase are:

**Reaching beyond the Park** – we'll help the Park's communities, both old and new, become more connected to their neighbourhoods and the facilities available to them. We'll do this through the creation of a shared stewardship scheme and wider behaviour change projects, including supporting retrofit programmes to ensure that the benefits of sustainable lifestyles spread beyond the Park's boundaries.

**The Park reopens** – by 2014, the Park will have doubled in size, completing the Lea Valley corridor and fulfilling its place within the East London Green Grid. The allotments will be back and our management plan for the Park will be underway. New and renovated bridges and underpasses to the surrounding area will be in place and residents, visitors, workers and neighbouring communities will be able to reach the Park via new bus routes and an extended Cycle Hire scheme.

**Pushing sustainability standards** – by 2014, all venues will reopen to BREEAM Excellent standard and venues will be monitored event by event against a set of sustainability standards. We will keep our responsibility to maintain and improve the venues, and produce guidance for events producers to ensure it's possible to deliver low fossil-fuel energy events with zero waste to landfill.

**Capturing attention post-Games** – by 2014, an irresistible events schedule will be supported by a visitor centre and landscaped south plaza. It is expected that this will help attract 9.3 million annual visits.



# REGENERATION

A blue-tinted photograph of three people in a kitchen. They are wearing white aprons with 'PIC' and '31' printed on them, and checkered hats. They are standing behind a counter with large metal trays of food. The person on the right is holding a white bowl. The person in the middle is using a spoon. The person on the left is also using a spoon. The background is slightly blurred.

2015–  
2030

HISTORY

**The regeneration phase starts in 2015 and will see the Park grow from a destination to a pioneering neighbourhood that is a catalyst for sustainable living.**

Our priorities for this phase are:

**Building neighbourhoods** by taking the Park from a fledgling district to a thriving and sustainable community. We're planning up to 8,000 sustainably designed homes, three schools, nine nurseries, seven community spaces and three health centres. Chobham Manor will be the first neighbourhood, with residents moving in from 2015.

**Events programming** for a packed schedule that operates at the highest level of environmental performance; we're planning for zero fossil fuel energy for both indoor and outdoor events, zero waste to landfill and maximum use of non-potable water.

**Innovation and new technologies** will be encouraged across the Park in a range of sectors.

**Park operations** will be in full swing by 2015. Year on year, venues will continually improve their environmental performance. Recycling will be embedded and our management techniques will be helping biodiversity in the Park to thrive.

**Facilitating sustainable behaviours** through progressive educational campaigns that help make sustainable behaviours so easy and desirable they become normal.

**Monitoring and reporting** to build on progress and share learning. By 2030, we should have unparalleled amounts of data that address tricky issues like embodied carbon and behaviour change.





London Borough of  
am  
R You

UNITY  
OK

RECEPTION



STRATFORD

This section will take you through exactly how the Development Corporation can deliver its environmental sustainability vision, from the Development Corporation's definition and role to its sustainability commitments and partners.

# DIRECTORY



# SUSTAINABILITY FRAMEWORK

DIRECTORY



This framework outlines how the Development Corporation will deliver its vision of a pioneering model of sustainable living:

1. The **aims**, Place, People and Performance, set out the pillars of the Development Corporation's approach to achieving our vision.
2. The **objectives** describe the required actions the Development Corporation must take to achieve its objectives.
3. The **environmental themes** are the specific areas in which the Development Corporation is taking action.

# SUSTAINABILITY FRAMEWORK

## PEOPLE

### VISION

A PIONEERING MODEL OF URBAN REGENERATION:  
SUSTAINABLE INFRASTRUCTURE FOR  
SUSTAINABLE LIFESTYLES

### AIMS

People enabled to live sustainable, low carbon, resource efficient and healthy lifestyles.

### OBJECTIVES

- Develop infrastructure that enables sustainable lifestyles
- Contribute to knowledge-sharing and educational programmes that engage people on sustainable living

## ENVIRONMENTAL THEMES



ENERGY CONSERVATION  
& CARBON REDUCTION



WASTE  
MANAGEMENT



WATER MANAGEMENT  
& CONSERVATION



To see what the Development Corporation has committed to in its environmental themes, please read ‘Sustainability commitments’.

# PLACES

# PERFORMANCE

Places that sustain parkland, waterways and walkable neighbourhoods, preparing for a changing climate.

Performance based on sustainable procurement and long-term environmental management.

- Build sustainable neighbourhoods and communities
- Create biodiverse parks and waterways
- Manage parks and waterways for the benefit of wildlife and people
- Ensure the Park works to limit and adapt to climate change

- Work with partners to ensure that all contracts seek to minimise environmental impacts
- Ensure continual improvement in environmental performance across our operations
- Monitor and report on progress



BIODIVERSITY



FACILITATING  
SUSTAINABLE LIFESTYLES



TRANSPORT  
& CONNECTIVITY



MATERIALS  
SELECTION



# SUSTAINABILITY COMMITMENTS



By identifying and taking action on the environmental themes listed in the Sustainability Framework, the Development Corporation will deliver the overarching sustainability aspirations of the Park.

This section of the policy lays out the Development Corporation's seven environmental themes and describes how we are tackling them through a combination of aspirational and mandatory targets.

# SUSTAINABILITY COMMITMENTS

These commitments will inform our work with operators and guide our negotiations with developers. We will establish review mechanisms to make sure the targets are updated when they have been met and to address any challenges in meeting them. Progress against our commitments will be monitored by our sustainability working group.

For each environmental theme, we have set targets alongside the Development Corporation's four workstreams:

- **New construction** – all new building work.
- **Venues and parklands** – the venues and green spaces in the Park.
- **Events** – local, national and international events in the Park.
- **Corporate** – our corporate activities, performance of our office and staff, and focus on achieving standards BS8901 and ISO20121 for event management.



# WATER MANAGEMENT & CONSERVATION

**We commit to minimise overall water demand and increase efficiency through best practice, innovative technology, sensitive urban design and landscaping, and by tackling local flooding and water course pollution.**

## NEW CONSTRUCTION

- Potable water use of no more than 105 litres per day per person in homes through reducing demand and use of low flow fittings and appliances.
- Rainwater harvesting and greywater treatment in new developments.
- Initiate studies to optimise the use of the Thames Water Blackwater Treatment Plant and non-potable water network for irrigation and toilet flushing.

## VENUES & PARKLANDS

- Maintain and improve the current 40% reduction in potable water use in the venues.
- Irrigate parklands through rainwater harvesting and with treated blackwater via the non-potable water system.
- Develop a strategy with British Waterways to explore opportunities for leisure, transport, tourism and education.

## EVENTS

- All Development Corporation indoor events to limit use of bottled water.
- Work with external event companies to reduce water usage.

## CORPORATE

- Monitor performance, publish data to set benchmarks, and report on sustainability targets.





# ENERGY CONSERVATION & CARBON REDUCTION

**We commit to achieve zero carbon buildings in advance of government policy requirements and to aim for stringent reduction in emissions across all Development Corporation work streams.**

## NEW CONSTRUCTION

- Require a minimum achievement of Code for Sustainable Homes Level 4 for new homes under current standards. This target will be reviewed as standards evolve.
- In addition, achieve Zero Carbon Homes requirement before the standards apply; require a 65% reduction in emissions over Building Regulations 2010 through fabric improvements and on-site features.
- Permit up to 35% of emissions mitigation through allowable solutions in surrounding communities as part of the Development Corporation's regeneration remit. Allowable solutions will be developed in collaboration with Boroughs and local partners.
- 40% reduction in emissions over Building Regulations 2010 for non-residential buildings; Zero Carbon standard when defined.
- 15% reduction in emissions over 5 years in actual in-use energy use through engagement with occupants and the promotion of energy efficient home appliances.
- Support the extension of the district heating network outside the Park following connection to the Stratford Halo/Genesis development.
- Explore provisions to mitigate fuel poverty.

## VENUES & PARKLANDS

- 25% reduction in operational emissions intensity over five years in venues and parklands.
- Provide low carbon site lighting and use energy efficient park maintenance equipment.

## EVENTS

- Develop guidelines for and commit to delivering low or zero carbon events in the Park through, for example, renewable energy, paperless ticketing, local food sourcing, low-impact merchandise etc.
- Two-year monitoring and data gathering period after Park opening in 2014 to establish a benchmark for year-on-year improvement (% target to be set after two years).

## CORPORATE

- Achieve 25% reduction in corporate emissions intensity over five years (includes emissions from energy use in office premises as well as staff travel).
- Monitor performance, publish data to set benchmarks, and report on sustainability targets.





# MATERIALS SELECTION

**We commit to identify, source, and use local, environmentally and socially responsible materials.**

## NEW CONSTRUCTION

- 15% reduction in embodied carbon in new construction, as compared to industry baseline (to be monitored and published).
- 25% minimum recycled content of major materials (by value) within new buildings and infrastructure.
- 20% minimum, by value, of construction materials to be from a reused or recycled source.
- 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) with full chain custody.
- No use of HFCs where acceptable alternatives exist.

## VENUES & PARKLANDS

- Energy efficient lighting installed across the Park.
- 100% of timber from legal and sustainable sources.
- Use of recyclable and biodegradable materials for packaging, particularly for food.

## EVENTS

- Temporary structures for events must be designed and built for reuse.

## CORPORATE

- Collaborate with universities, NGOs and other research bodies to identify low impact building materials and products.
- Require all suppliers of goods and services to adhere to guidelines as part of the Development Corporation's Sustainable Procurement Policy.
- Monitor performance, publish data to set benchmarks, and report on sustainability targets.



# WASTE MANAGEMENT

**We commit to reduce waste production and increase waste stream recycling, ultimately sending zero waste to landfill.**

## NEW CONSTRUCTION

- Zero municipal waste directly to landfill by 2025.
- 95% reduction in construction, demolition and excavation waste sent to landfill from 2014.
- Monitor and report on construction waste using the Waste and Resources Action Programme's (WRAP) Online Reporting Tool.
- Ensure 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.

## VENUES & PARKLANDS

- Recycle or compost 70% of commercial waste by 2015.
- 100% provision of recycling facilities in public areas.
- Zero parklands waste to landfill by 2030.

## EVENTS

- Develop best practices to reduce waste production and require event operators to comply with guidelines.
- Zero events waste to landfill by 2020. For events held in venues, work towards the target immediately.

## CORPORATE

- Develop education programmes for visitors, workers, and residents about reduction and management of waste.
- Integrate sustainability requirements into supplier contracts and management rules.
- Monitor performance, publish data to set benchmarks, and report on sustainability targets.



# TRANSPORT & CONNECTIVITY

**We commit to facilitate the use of sustainable modes of transport to reduce emissions, and reduce the overall need for travel.**

## NEW CONSTRUCTION

- 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.
- 20% of car parking spaces to have access to electric charging facilities.
- Support demand management techniques to discourage private transport and encourage public transport, car-sharing, car-clubs, cycling, and walking.
- Ensure provision of shower and changing facilities in offices to support commutes by cycle.
- Facilitate a cycle hire scheme within the Park.
- Parking ratios to be London Plan Standard or less.

## VENUES & PARKLANDS

- Ensure that 95% of visitors to events and attractions arrive by public transport, cycle, or foot; limited provision of parking, other than blue badge, at venues.

## EVENTS

- Make public transport the prime choice for event patrons and commuters.
- Information provided with ticket on how to get to the Park.

## CORPORATE

- Develop and maintain a Travel Plan Framework that identifies objectives and sets targets for all new development and initiatives within the Park.
- Monitor performance, publish data to set benchmarks, and report on sustainability targets.





# BIODIVERSITY & OPEN SPACE

**We commit to provide a variety of usable open spaces and protect wildlife habitat across the Park.**

## NEW CONSTRUCTION

- Public realm integrated within neighbourhoods contributes to Biodiversity Action Plan (see Further Reading) and links with existing corridors.
- Incorporate Sustainable Urban Drainage Systems (SUDS) in streets and the public realm where possible, enabling species-rich planting and local irrigation potential.
- Design buildings and public space to reduce the urban heat island effect.

## VENUES & PARKLANDS

- Provide 102 hectares of metropolitan open space within the Park and its immediate vicinity.
- Provide 45 hectares of Biodiversity Action Plan habitat and links with existing corridors.
- Designs that avoid chemical control of weeds, pests and diseases.
- Maintain parkland access while ensuring the protection and improvement of habitats.
- Ensure the land and its natural resources are sustained in perpetuity.
- Aim to enhance the ecological value of the site.
- Enhance and protect the Park's blue ribbon network.

## EVENTS

- Assist the attendees in an appreciation of the Park's biodiversity by directing them to interpretive installations located in relation to diverse ecological settings.
- Respect and protect open space through attention to event location, pedestrian circulation and sight lines

## CORPORATE

- Encourage the public to use open space for sport, physical wellbeing, leisure activities, social gathering and cultural events.
- Monitor performance, publish data to set benchmarks, and report on sustainability targets.





# FACILITATE SUSTAINABLE LIFESTYLES

**We commit to build on the work of the London 2012 Games to inspire behaviour that reinforces health, wellbeing, and sustainability.**

## NEW CONSTRUCTION

- Develop an occupant engagement programme to achieve a 15% reduction in emissions over five years, with savings to be maintained each year.
- Through the Estate Management Strategy, develop incentives and programmes for residents to optimise sustainable lifestyles.
- 100% homes to have smart meters to collect 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 & PARKLANDS

- Signs and information across the Park will support recycling.
- Programmes developed to encourage local residents to take part in biodiversity surveys.
- Develop and adopt a food charter inspired by the Mayor's Food Policy.

## EVENTS

- Collaborate with the event industry and non-governmental organisations to share knowledge and integrate sustainability into the sector.

## CORPORATE

- Promote educational initiatives and research programs to enable sustainable behaviour to become the norm in and around the Park.
- Provide environmental awareness training for all staff and contractors.
- Deliver a visitor centre within the energy centre by 2014.
- Monitor performance, publish data to set benchmarks, and report on sustainability targets.





# ABOUT THE DEVELOPMENT CORPORATION

The London Legacy Development Corporation is the public sector, not-for-profit organisation set up to manage the ongoing regeneration and development of the future Queen Elizabeth Olympic Park and the areas immediately surrounding the Park. The Development Corporation continues the work of the Olympic Park Legacy Company (OPLC) but has a broader remit, greater powers and an expanded physical boundary.





# ABOUT THE DEVELOPMENT CORPORATION

DIRECTORY

## REMIT:

To promote and deliver physical, social, economic and environmental regeneration in the Olympic Park and surrounding area, in particular by maximising the legacy of the London 2012 Games, by securing high-quality sustainable development and investment, ensuring the long-term success of the facilities and assets within its direct control and supporting and promoting the aim of convergence. (Mayor of London 2011)

The following priority themes underpin the Development Corporation:

- **Promoting convergence and community participation**  
For the goal of convergence to be achieved, the Olympic Park legacy needs to be fully accessible for local people. This means ensuring the Park evolves with input from local residents, that economic opportunities are accessible to local people, businesses and social enterprises, and that sporting, cultural and leisure facilities and events in the Park can be used and enjoyed by local people at all income levels.
- **Championing equalities and inclusion**  
The Park lies in one of the most diverse areas of the UK. In addition to statutory duties, the Corporation will take this diversity into account in order to attract the best talent, understand how its decisions impact different communities and groups, and to create and manage its estate in a way that capitalises on, and is accessible by, these diverse communities.
- **Ensuring high quality design**  
Architectural, urban and landscape design will be essential elements for creating places that are engaging, safe, usable and beautiful, and which creates and maintains value over the long-term.
- **Ensuring environmental sustainability**  
Establishing clear standards for environmental performance, and making the most of natural and built assets to meet the challenges posed by climate change mitigation and adaptation.



# ABOUT THE DEVELOPMENT CORPORATION

## ROLES

Its wide remit means that the Development Corporation assumes many different roles:

- **Land owner and developer** – leases land to development partners so they can build new infrastructure and neighbourhoods.
- **Venue and attraction operator** – maintains and creates programmes for the Park's many venues and attractions.
- **Estate manager** – oversees the maintenance of parkland and amenities.
- **Events promoter** – ensures that events attract the right audience, from large-scale international sporting meets to local community events.
- **Travel plan manager** – monitors, facilitates and promotes the use of alternate and sustainable modes of transport.
- **Employer and procurer** – finds the right goods and services for the Park.
- **Planning and regeneration agency** – works to deliver socio-economic benefits to the wider region.

The Development Corporation's focus will shift between these roles over the different phases of the Park's life, from mobilisation, through transformation to regeneration (See the History section on p.32).

## GOVERNANCE FOR SUSTAINABILITY

To meet its sustainability aims, the Development Corporation has the following internal governance framework:

- Board of Directors
- Executive Management Board (EMB)
- Executive Management Team (EMT) Sustainability Working Group
- Sustainability Project Team
- Sustainability Management

To ensure effective management of sustainability the Development Corporation will be implementing ISO14001 and ISO20121 management standards. Sustainability is being incorporated into all delivery partner's and contractors' internal management systems. A Quality Review Panel will provide independent review of all key projects and planning applications and will have a specialist advisor on environmental sustainability represented on it.

## STAKEHOLDER ENGAGEMENT

During 2012 the Development Corporation will be putting in place two main streams of engaging with sustainability organisations. These are:

- Reactive programme – system to handle questions and enquiries relating to sustainability issues.
- Proactive programme – complementary mechanisms to facilitate dialogue and engagement with stakeholders to involve them in the delivery of a sustainable legacy and to share best practice.

The Development Corporation is committed to working with specialist organisations and individual experts to help develop technical guidance and strategies as required by the organisation. This ongoing dialogue with stakeholders will help ensure that the Development Corporation adequately responds to emerging issues as they develop.

## REPORTING

The Development Corporation measures itself against a range of hard, quantitative indicators, such as carbon emissions, modal shift, amount of open space and biodiversity. We also use 'soft' indicators to measure how our work is affecting peoples' lives and to tailor initiatives to facilitate behaviour change.

We will be producing an annual sustainability report to update stakeholders on how we are performing against our commitments.







# DEVELOPMENT CORPORATION PARTNERS

The Development Corporation will not be able to achieve its ambitious vision alone. In order to deliver sustainability as standard across the structures and operations of the Park, the Development Corporation is building close working relationships with a wide variety of partners, from government organisations to community groups.



# DEVELOPMENT CORPORATION PARTNERS

DIRECTORY

# 1. COMMERCIAL AND/OR DELIVERY PARTNERS

## Values and expectations:

- We will use procurement, specifications and soft market testing activities to encourage our commercial partners to minimise their environmental impact.
- We expect commercial partners to influence their supply chains and therefore have a knock-on effect on the wider industry.
- The Development Corporation, our commercial/delivery partners and the wider industry will share good practice
- We expect commercial partners to explore potential economies of scale when mitigating against impacts.

## Example partners:

Building contractors, event owners, hospitality companies

# 2. GOVERNMENT BODIES AND OFFICIAL ORGANISATIONS

## Values and expectations:

- We will work with these partners to align our policies and aspirations into their work.
- We will work with these partners to leverage environmental benefits of our work into the surrounding area.
- We will invite these partners to work with us to help fulfil the aspiration for London to be a sustainable global city.
- We will invite these partners to jointly engage with us and 2012 sponsors as appropriate.

## Example partners:

Host boroughs, LVRPA (Lee Valley Regional Park Authority), landowners, GLA (Greater London Authority)

# 3. COMMUNITY ORGANISATIONS

## Values:

- We will seek out and nurture strong new partnerships with local community organisations.

## Example partners:

Community groups, environmental organisations, non-governmental organisations (NGOs), charities



# REFERENCE







FEELING A BIT LOST? NEED SOME  
CLARIFICATION? LOOKING FOR MORE  
INFORMATION? WITH A MAP AND LINKS  
TO FURTHER READING, THIS FINAL  
SECTION OF THE POLICY DIRECTS YOU  
TO FURTHER READING AND RESOURCES.

Corporate Plan

Sport and Healthy Living Policy

Design Quality Policy

Inclusive Design Strategy

Equality and Inclusion Policy

Socio-economic Policy

Community Engagement Policy

The LCS Planning Application

Final drafts of these documents  
can be found on the  
Development Corporation's  
website

[www.londonlegacy.co.uk](http://www.londonlegacy.co.uk)

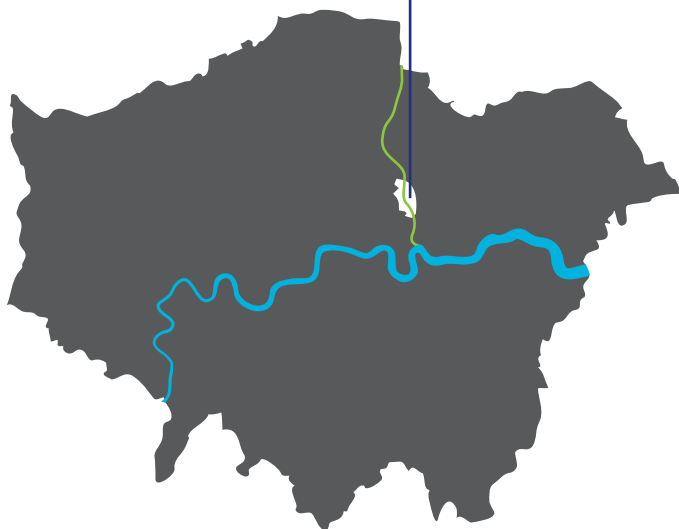
# FURTHER READING



# ABOVEGROUND MAP

The Queen Elizabeth Olympic Park is populated with an intricate network of paths, cycle routes, waterways and public transport connections. Key locations are clearly signposted and there is plenty of opportunity to have a sit down, lock up your bike or jump on a bus. The networks shown here will help you navigate the Park itself, as well as point you towards the various connections to nearby communities, the rest of London and beyond.

## QUEEN ELIZABETH OLYMPIC PARK









WALTHAM  
FOREST

STRATFORD  
INTERNATIONAL

HACKNEY





STRATFORD REGIONAL  
AND BUS STATION

NEWHAM

PUDDING  
MILL LANE

TOWER  
HAMLETS

HACKNEY  
WICK

Illustrative masterplan submitted  
for outline planning permission.

# BELOWGROUND MAP

Sustainable lifestyles are supported by sustainable infrastructure. The energy and water systems outlined here show how these schemes are crucial to the low-cost, low-impact lifestyles that the Park is known for.



## WATER SYSTEM

The non-potable water system, integrated with a successful Thames Water blackwater treatment or treated greywater plant, will enable low-water use across the Park and beyond – homes will average 105 litres per day per person.

## BLACKWATER TREATMENT PLANT

A state of the art facility, which takes sewage from the Great Northern Outfall Sewer and treats it for use irrigating the Park and toilet flushing in the venues.

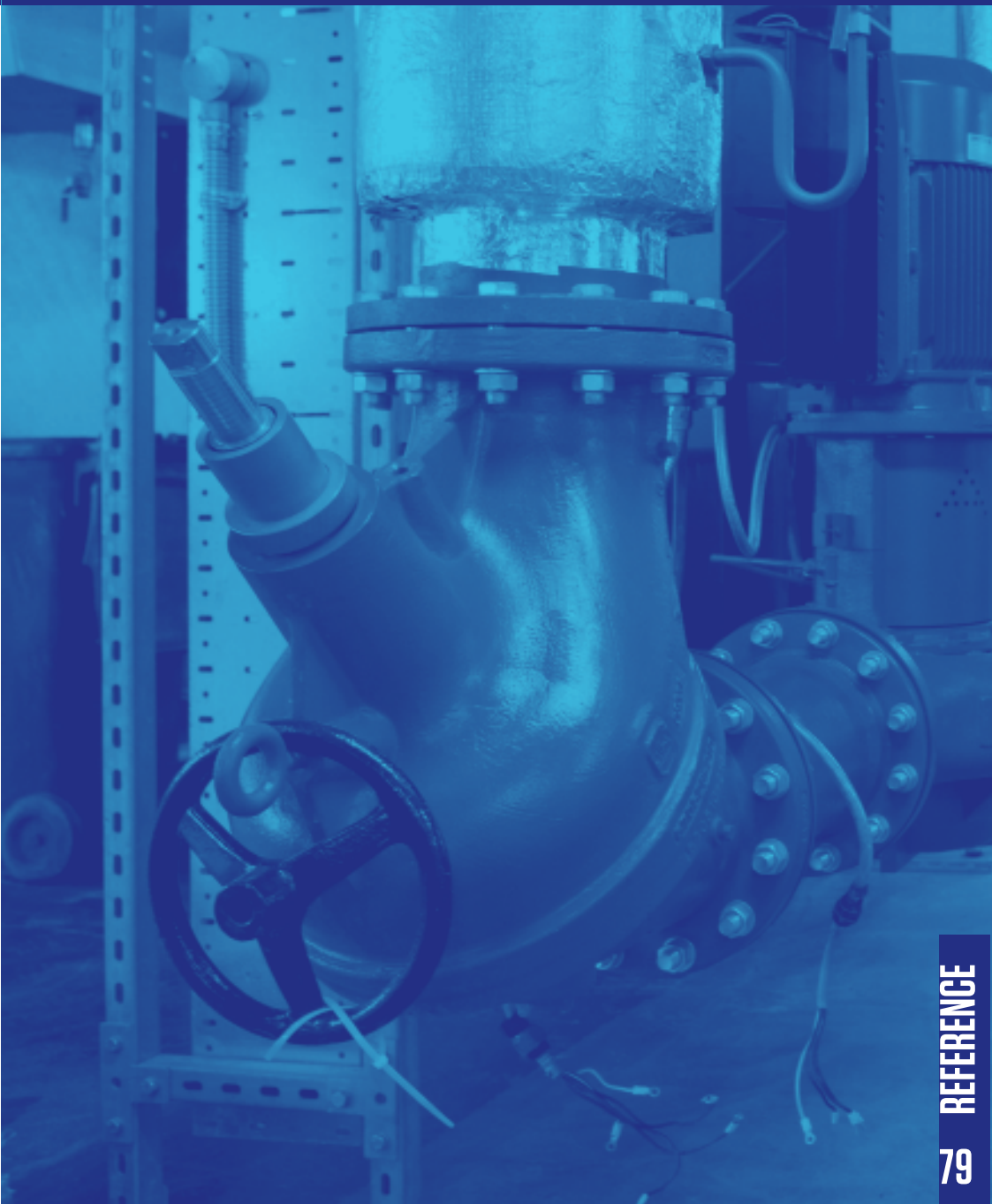


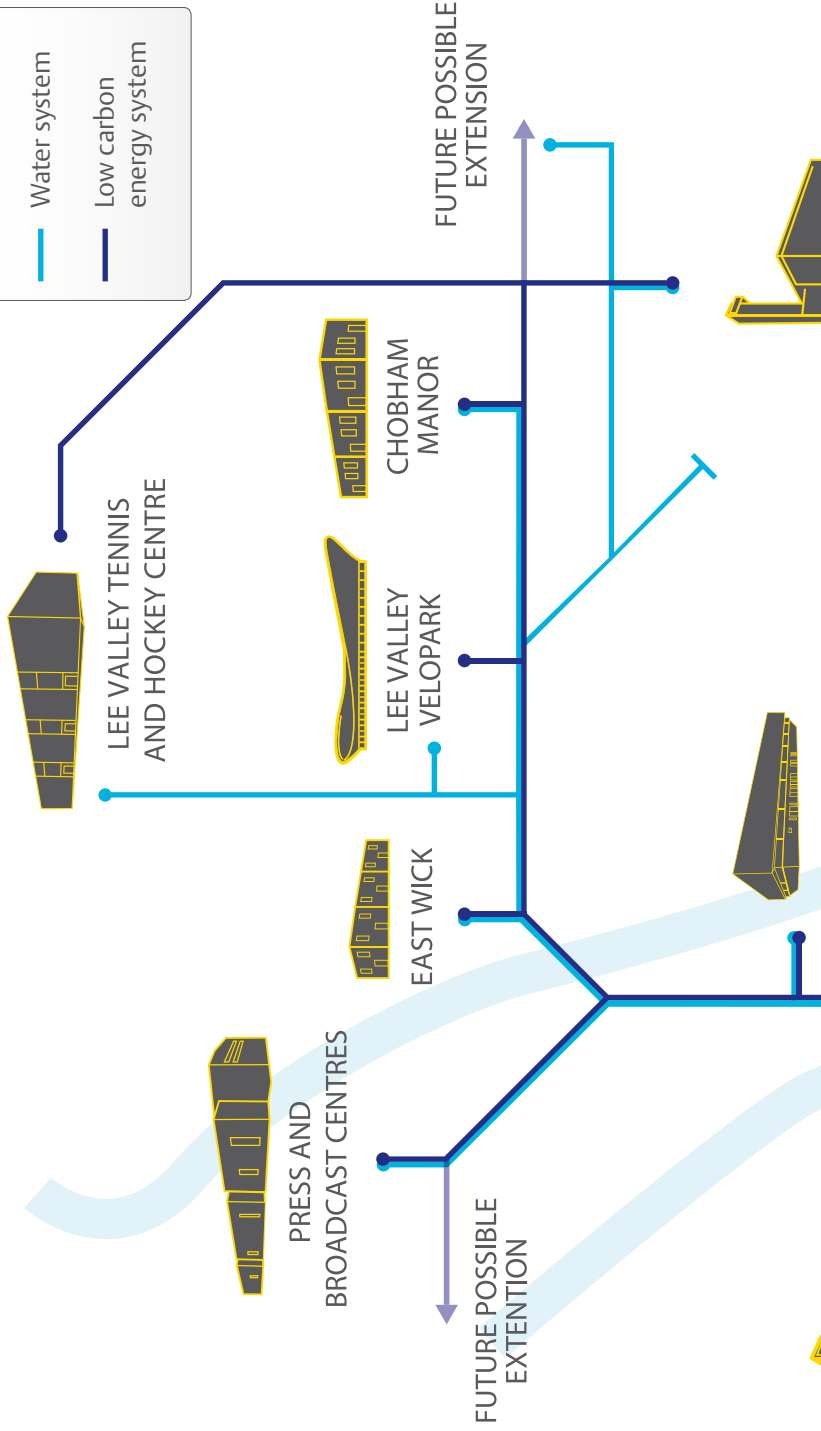
## LOW CARBON ENERGY SYSTEM

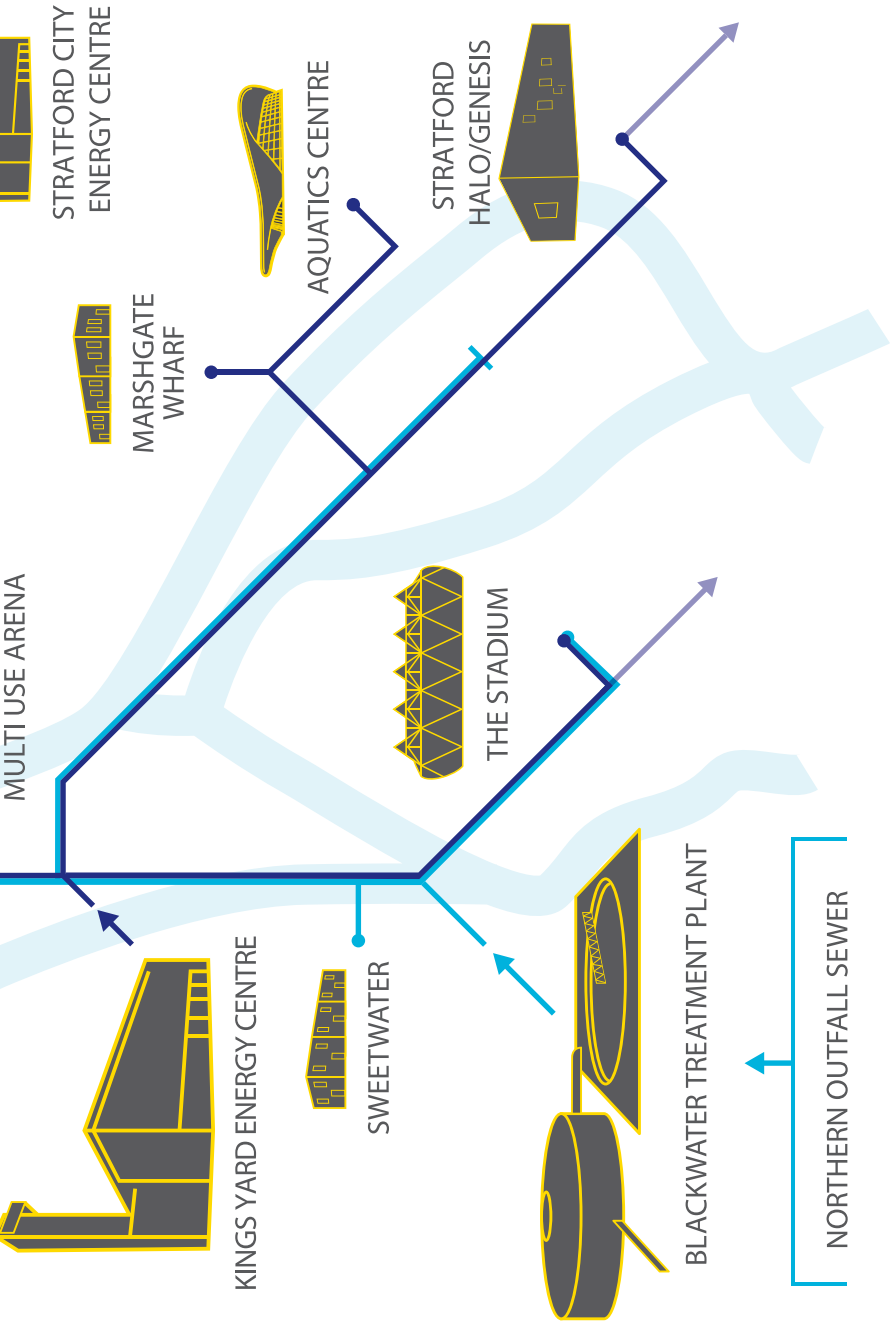
The Olympic Park Community Energy Scheme has been designed to serve the London 2012 Games and up to 11,000 homes, two million square feet of commercial space, retained venues, Stratford City and surrounding developments. There is capacity to expand the system even further, adding boilers and engines in a modular fashion.

## KING'S YARD ENERGY CENTRE

Provides low carbon heating and cooling across the Park to the venues and neighbourhoods. It has a biomass boiler that uses woodchip.







NORTHERN OUTFALL SEWER









The London Legacy Development Corporation is the public sector, not-for-profit organisation responsible for the long-term planning, development, management and maintenance of the Olympic Park and its facilities after the London 2012 Games.

[www.londonlegacy.co.uk](http://www.londonlegacy.co.uk)

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**LONDON** **LEGACY**  
**DEVELOPMENT**  
**CORPORATION**

