YOUR PARK, OUR PLANET

London Legacy Development Corporation
Environmental Sustainability Report 2014/15

CONTENTS

CEO STATEMENT	3
INTRODUCTION	4
OUR PARTNERS	5
HIGHLIGHTS OF THE YEAR	6
OUR SUSTAINABILITY FRAMEWORK	8
ENERGY	9
WATER	13
WASTE	16
MATERIALS	19
BIODIVERSITY	22
TRANSPORT	25
LIFESTYLES	28
2015/16 LOOK AHEAD	31
YOUR PARK, OUR PERFORMANCE	32
GLOSSARY OF TECHNICAL TERMS	39

CEO STATEMENT

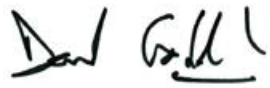
Welcome to our second environmental sustainability report. This year's report is published as the global community gears up for COP21, the United Nations Conference on Climate Change, which takes place in Paris at the end of 2015.

In a year in which environmental policy is high on the world's agenda, the London Legacy Development Corporation (LLDC) remains a leading example of how to create sustainable places.

Since we last reported, we have upheld our commitment to building zero-carbon homes. Together with our developer partners, we are continuing to lead the way in creating homes and neighbourhoods that do not contribute to climate change, cost less to run, and have a positive impact on society.

Once again, our achievements over the year have given us a lot to be proud of. As well as building the first of our new neighbourhoods, we also published our Local Plan, which further embeds our target for zero-carbon development by 2016.

There is much we can look forward to. Among many exciting new developments on the horizon, we will soon be creating a world-class culture and university district in the south of the Park. This will give us a fantastic opportunity to engage residents, workers and visitors with their environment, and demonstrate how our built environment is helping us respond to the global challenges that affect us all.



David Goldstone CBE, Chief Executive

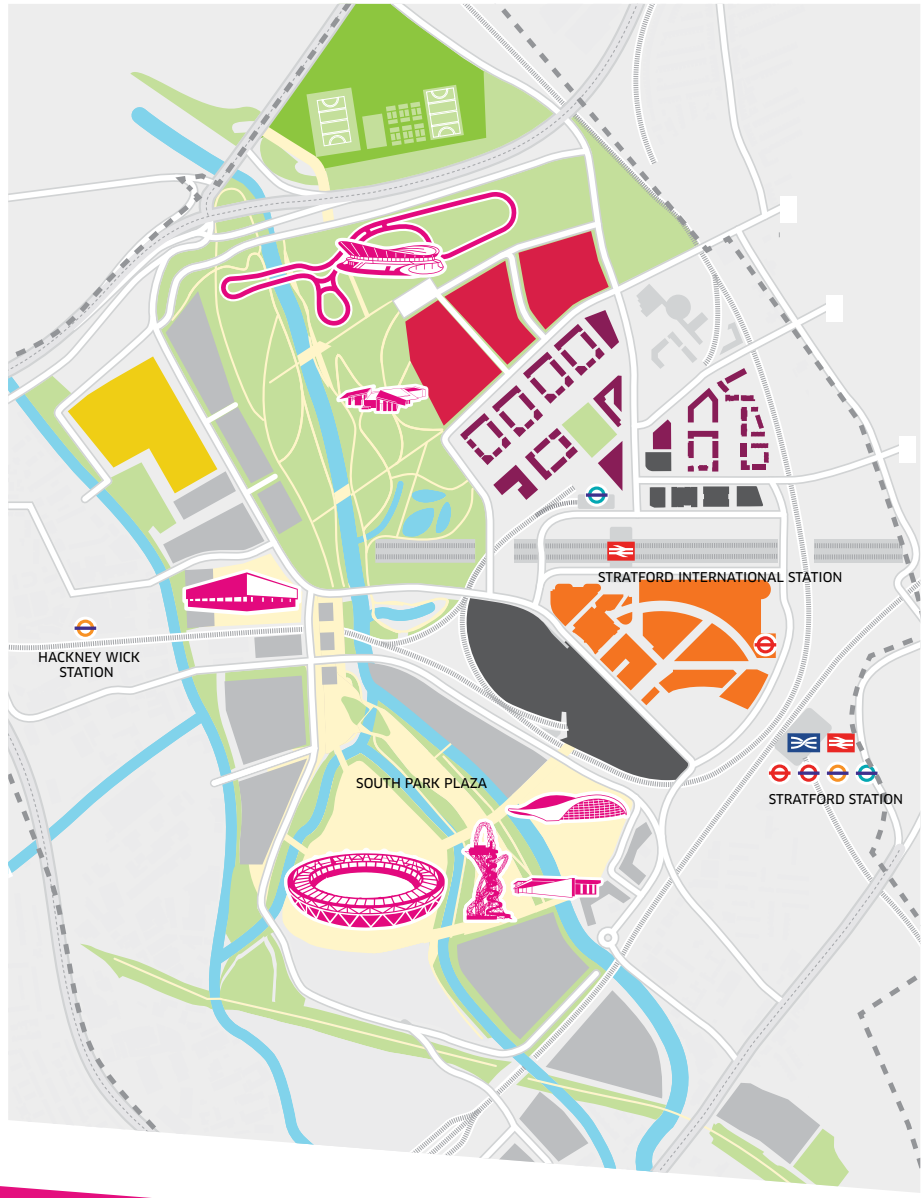
INTRODUCTION

This is the LLDC's second annual environmental sustainability report. It covers the first full year of opening of the Park and its venues, with the exception of the Stadium, which we are making ready for use in the 2015 Diamond League Athletics, National Paralympic Day and the Rugby World Cup.

This year, we have been able to see how our venues perform in full operation over their first season. As the newly installed landscapes across the Park start to mature, we are beginning to see them welcome an exciting range of wildlife.

When we last reported, we had just entered the design phase for the first of our new neighbourhoods, Chobham Manor. After almost a full year of construction, the first homes are beginning to take shape. These will be ready for occupation in Autumn 2015.

With our new developer partners, Balfour Beatty and Places for People, we are beginning to plan the next of our new neighbourhoods, Eastwick and Sweetwater. We have also launched an ambitious design and delivery programme for our new culture and university district, Olympicopolis.



Key to map

- East Village
- The International Quarter
- Westfield Stratford
- Chobham Manor
- Lee Valley
- Future Park Development
- Non Park Development
- Venues
- Parkland
- Urban Parkland
- Waterways
- Here East
- Roads
- Rail
- LPA Boundary

Who we are

Formed in April 2012, the London Legacy Development Corporation's purpose is to use the opportunity of the London 2012 Games to change the lives of people in east London and drive growth and investment in London and the UK, by developing an inspiring and innovative place that people want to live, work and visit.

We have many different roles at the LLDC, and our responsibility stretches beyond the boundaries of the Park itself.

> **We are a land owner and developer**

> **We are a Local Planning Authority**

> **We are a manager of the parklands and venues**

> **We host and programme large and small events on the Park**

> **We are an employer**

OUR PARTNERS

We would not be able to achieve our vision for the Park and its surrounds without our partners:

Our growth borough partners

- **The London Boroughs of Hackney, Newham, Tower Hamlets and Waltham Forest,** who are also represented on our Board

Park and venue management partners

- **Lee Valley Regional Park Authority** who own and manage the parklands and venues north of Chobham Manor, including the Velodrome and Lee Valley Hockey and Tennis Centre
- **Greenwich Leisure Limited**, who operate the London Aquatics Centre and Copper Box Arena on our behalf

Developer partners

- **Here East**, who are developing the new media and technology hub in the west of our Park
- **E20 Stadium LLP,** who own the Stadium
- **Chobham Manor LLP**, a joint venture between London & Quadrant and Taylor Wimpey who are developing the site
- **Eastwick and Sweetwater Projects**, a partnership between Balfour Beatty and Places for People who are developing the two new neighbourhoods

Utilities partners

- **Cofely** who are the operators of our District Energy Network
- **Thames Water,** who are the operators of the Old Ford Plant
- **Canal & Rivers Trust**, who own the waterways that run through our Park

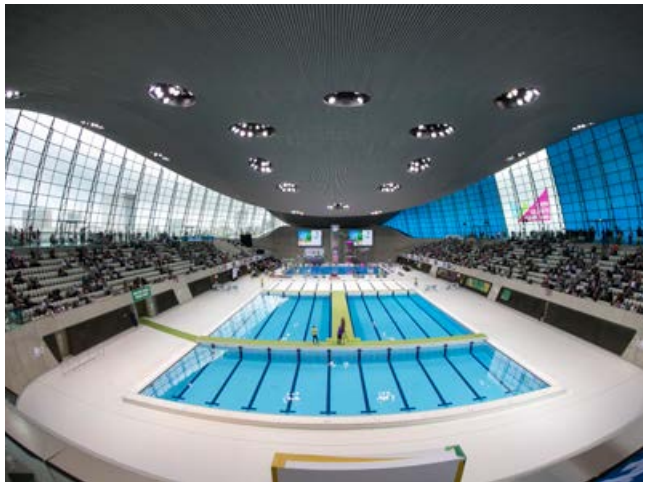
Olympicopolis

- **Foundation for FutureLondon** has been created to help realise the potential of Olympicopolis, the culture and university district coming to the Park. A number of world-class institutions have already made plans to set up a permanent presence here, including:
  - **Sadler's Wells**
  - **UAL's London College of Fashion**
  - **UCL**
  - **V&A**

HIGHLIGHTS OVER THE YEAR

April 2014

- The FINA NVC diving World Series held at the London Aquatics Centre



August 2014

- August is our dedicated Active People, Active Park month
- Picnic in the Park
- We start Park boat tours on the waterways
- We finish fourth in the London Cycle Challenge in our size category
- National Paralympic Day

October 2014

- Year of the Bus sculpture trail unveiled in the Park

July 2014

- The Tour de France passes through the Park
- Bees arrive in the Park
- The Great British Carnival takes place in the Park
- LLDC awarded Green Flag Status

September 2014

- Invictus Games held in the Park and in the venues
- Design competition for Olympicopolis opens

HIGHLIGHTS OVER THE YEAR

December 2014
- Hub 67 opens

February 2015
- Vinci announced as new operator for the Stadium

March 2015
- Balfour Beatty and Places for People confirmed as our developer partners for our new 1,500 home neighbourhood at Eastwick and Sweetwater
- Foundation for Future London created to help deliver the Olympicopolis vision

FOUNDATION FOR FUTURELONDON
The Olympicopolis charity

November 2014
- Freeusable website launched
- First Stadium roof panel lifted into place

January 2015
- Canal Park opens

OUR SUSTAINABILITY FRAMEWORK

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

ENERGY

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

WATER

Reduce water demand, tackle local flooding and reduce watercourse pollution

WASTE

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

MATERIALS

Use locally sourced, low environmental impact and socially responsible materials

BIODIVERSITY

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

TRANSPORT

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

LIFESTYLES

Inspire healthy, inclusive and sustainable lifestyles

We've monitored our progress against these targets by looking at four key areas of work:

New Construction

New buildings we have designed and developed since the Olympic and Paralympic Games

Venues and Parklands

The maintenance and operation of the Park

Events

Events that take place across the parklands and in the LLDC venues

Corporate

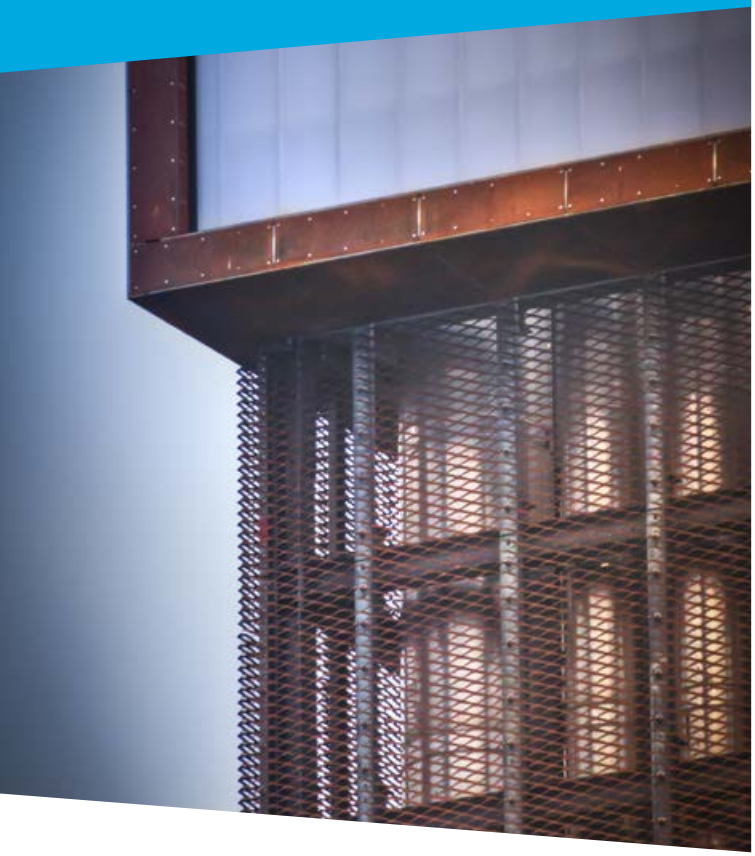
Our office and staff activities

ENERGY

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

KEY ACHIEVEMENTS

- **First spades in the ground for Chobham Manor zero carbon homes**
- **Target for zero carbon development by 2016 is embedded within the LLDC Local Plan**
- **Energy baselines established for the venues**



What we've been doing

New Construction

In July 2014 we started work on Chobham Manor, the first of our new neighbourhoods. The development will welcome its first residents in autumn 2015.

Chobham Manor was designed to meet the highest levels of environmental performance, and we have been working with our developer partners Chobham Manor LLP to make sure the development achieves these standards in practice. As part of this process, Chobham Manor LLP designers created detailed plans setting out exactly how each wall in the building should be joined together to avoid thermal bridging. This reduces the potential for heat loss throughout the building, thereby improving each home's energy efficiency.

Of the 250 homes being built in the first phase, 10 will achieve zero carbon standards. This means that the renewable energy they generate, combined with the renewable energy provided by the Park's energy network, will be enough to meet each home's entire energy needs.

This year, we also welcomed Balfour Beatty and Places for People as our developer partners for our new 1,500 home neighbourhood at Eastwick and Sweetwater. Design for this new neighbourhood is now underway, and our plan is that all homes provided here will be built to very high environmental performance standards.

Venues and Parklands

Over the past year we have been monitoring our venues' energy consumption to set baselines for improvement. By doing this over the course of a year we have been able to take into account how energy use changes from season to season.

Zero Carbon - Why it matters

It's well known that human activity is changing our climate. Global temperatures are increasing, and associated patterns of rainfall, drought and flooding are also changing. The greatest contributing factor to this is the increase in concentration of greenhouse gases in our atmosphere, notably carbon dioxide.

Climate change is the one of the biggest environmental challenges our planet faces. For this reason, we are committed to reducing the carbon dioxide emissions associated with all of our activities. This means ensuring that the new neighbourhoods we build and the places and events we manage emit as little carbon dioxide as possible.

We do this by:

1. Encouraging very high levels of energy efficiency in everything we do
2. Providing our new neighbourhoods with very low carbon heat and cooling (see our sustainable energy case study)
3. Increasing renewable energy production

ENERGY

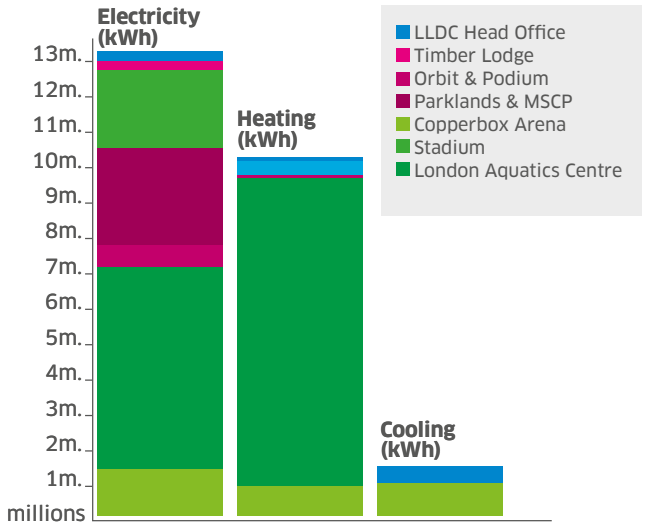
We will use these baselines to help us further improve our energy efficiency and reduce our carbon emissions. This will be challenging, as there are already many things that we are doing within the Park to minimise our operational emissions, such as using solar powered lights, and electrically charged maintenance buggies.

Events

The south Park opened to the public on 5 April 2014 for the first time since the London 2012 Olympic and Paralympic Games. Along with our world-class sporting venues, the area now hosts regular events, including events that raise awareness of environmental issues [see our case study on Earth Hour].

To reduce energy consumption, we have installed electrical outlets in the south Park so that events can be run off the grid rather than generators.

Energy Use 2014/15



Earth Hour

Earth Hour started in 2007 as a lights' off event to raise awareness about climate change and is held towards the end of March. Today, more than 162 countries worldwide have switch-off hour every year.

We supported Earth Hour this year by:

- Switching off non-essential lighting on the ArcelorMital Orbit
- Switching off the RUN artwork in front of the Copper Box Arena
- Switching off lighting near the London Aquatics Centre
- Switching off non-essential parkland lighting

On the same night, we hosted Playful is the Night, a family-friendly night-time picnic organised by Light Follows Behaviour.

The event helped to raise awareness about climate change, the actions we can take to address it, and sustainable forms of energy.

As part of this event, each picnic group was given an LED lantern to decorate. Each of these was twinned with a light provided to a family without electricity in the developing world.

"Six of us attended Playful is the Night yesterday and had the most wonderful evening. We had three children who danced, laughed, and who were delighted with their lanterns. The oldest of them has now become genuinely excited and interested in Earth Hour and thinking about saving energy at home and in London."

ENERGY

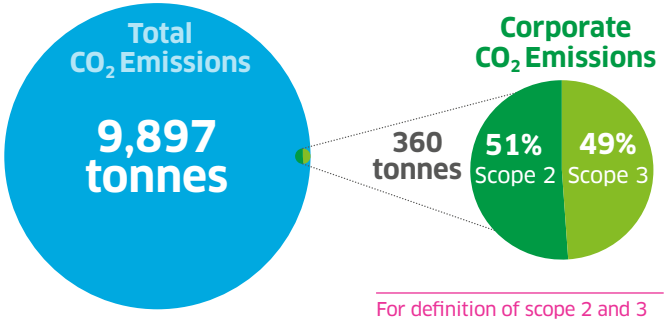
Corporate

This is our second year of reporting our corporate greenhouse gas (GHG) emissions. In line with the Greenhouse Gas Protocol these are divided into scopes of direct and indirect emissions. Last year, we were not able to include emissions associated with business travel as we did not have this data available. We have been able to include these emissions in our footprint this year and have found that business travel accounted for 111 tonnes of carbon this year.

As a result, our corporate carbon footprint (relating to the emissions that are associated with our head office) has increased from 301 tonnes last year to 360 tonnes this year. If we were to exclude business travel from this year's carbon footprint, our overall footprint would be lower than it was last year.

We have also been monitoring our energy use (electricity, heating and cooling) across the venues and parklands as well as our offices this year in order to establish an energy and carbon baseline for future years. By far the largest consumer of electricity and heating on the Park is the London Aquatics Centre and we will be working over the coming year to bring this energy usage down.

LLDC GHG Emissions 2014/15 (tonnes of CO_2)



For definition of scope 2 and 3 see GHG glossary item

Sustainable Energy in the Park

The Park's heating and cooling system is one of the largest energy networks in the UK. It incorporates 18km of pipes and wires and serves all of the Olympic venues, as well as East Village and Westfield Stratford City. The size of the network will increase as we connect new developments outside the Park's boundary.

Last year was the first full year that the energy system was operational. During the year we connected the first homes in the East Village to the network, and 3,000 new customers began receiving energy from the system.

The network is powered by two energy centres: one in King's Yard, in the west of the Park, and one near Westfield Stratford City. These centres use combined heat and power (CHP) engines and chillers that provide energy-efficient, affordable heating and cooling to buildings around the Park. The King's Yard centre also has a biomass boiler, fuelled by woodchip sourced from no more than 100 miles away. These sustainable features contribute to our overall target of zero carbon.

Designed for the future

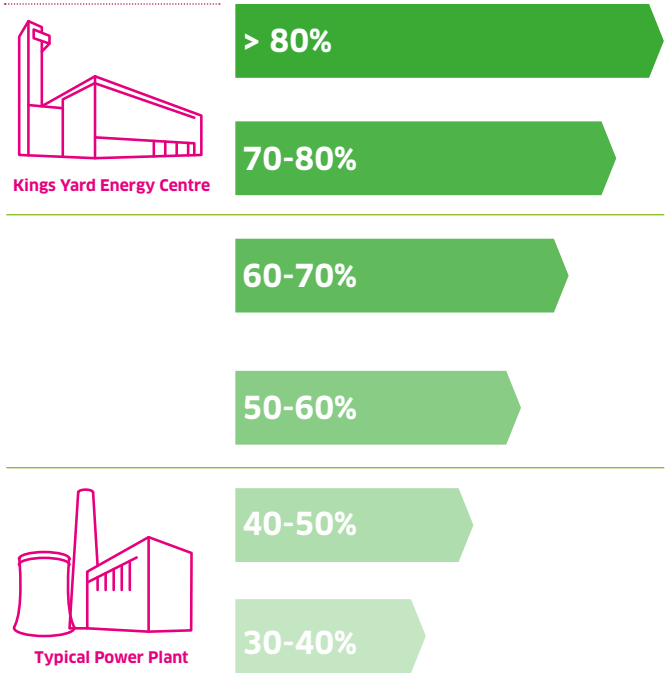
The energy centres have been designed with the future in mind. They currently provide 46.5 megawatts of heating and 16 megawatts of cooling, which is more than the customers connected to the network need. However, both centres have space for more boilers and CHP engines, to meet energy demand as we add more developments to the Park and connect more customers in the future.

The centres' CHP engines have been designed to use both natural gas and gas that has been blended with biogas, which has a lower carbon content. This means that the centres will be able to use more biogas as and when it becomes more readily available in future.

ENERGY

The Kings Yard Energy Centre can reach efficiency ratings in excess of 80%

Efficiency Benefits of Combined Heat and Power:



Biomass Heating

The King's Yard energy centre has a biomass boiler designed to use woodchip. All the woodchip we use comes from less than 100 miles of the Kings Yard Energy Centre, and is supplied from sustainable sources such as woodland managed by the Forestry Commission. One 25 tonne truck-load of woodchip is delivered to site every day.

The biomass boiler meets the base heating and hot water demand of the venues in the Park. As the system receives the Government's Renewable Heat Incentive, it is the most cost-effective way to generate energy for the Park.

Moving forward

We have made good progress in planning our approach to offsetting our carbon emissions. Next year we will publish our Carbon Offset Supplementary Planning Guidance. This supports the zero carbon policy that we have set out in our Local Plan.

We will continue to take forward positive discussions with local stakeholders, including LB Hackney, LB Tower Hamlets, GLA and Cofely, about aligning funding streams to support local environmental programmes. The ideas we are discussing include:

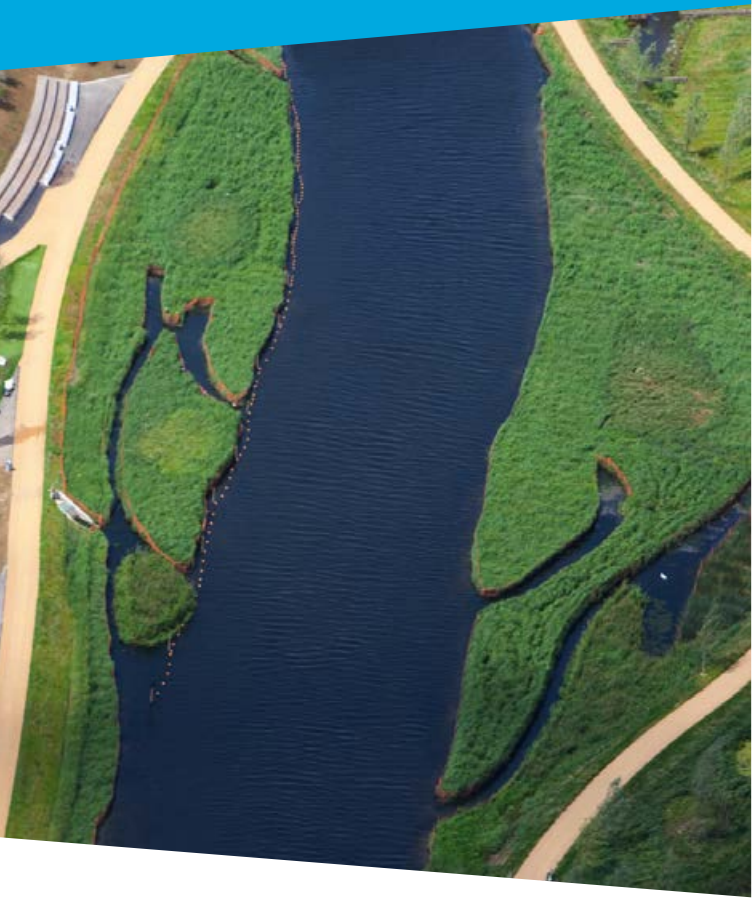
- Community ownership models for renewable energy installation
- Giving local residents the opportunity to learn green skills
- Monitoring the impact of our environmental engagement programmes with local residents, using smart city approaches

WATER

Reduce water demand through efficiency, reuse, and innovative technology. We are also committed to tackling local flooding and reducing watercourse pollution through sensitive urban design and landscaping

KEY ACHIEVEMENTS

- **Opening the waterways for boat tours**
- **Publishing our Waterways Strategy**
- **Sourced 47% of our parkland water use from non-potable sources**



What we've been doing

New Construction

By using water-saving features and replacing potable with non-potable water where possible, our new Chobham Manor development has been designed to be highly water-efficient. The projected water use in each home is only 90 litres of water per person per day. In the 25 exemplar homes, water use should be 80 litres per person per day. The actual water use will depend on the behaviours and habits of the occupants, which is why engaging users with water saving and providing meters to help households monitor their water use is so important.

The Old Ford waste water recycling plant has allowed Thames Water to test the feasibility of introducing more de-centralised non-potable water reuse in London. It also serves as a demonstration site for the EU reuse project DEMOWARE.

Venues and Parklands

The Park's venues are fitted with water-efficient fixtures and fittings, and use non-potable water from the Old Ford treatment plant (see case study) for toilet flushing. We also use water from Old Ford for irrigation. This year we have connected the new Stadium toilets to the non-potable water network.

Events

Through our Sustainable Events Guide, we encourage all events organisers to provide water bottle filling stations and fountains. We contine to monitor events to ensure these are provided.

Corporate

Currently our landlord does not meter our offices separately, so it's not possible to measure our office water use. We are looking into ways of doing this.

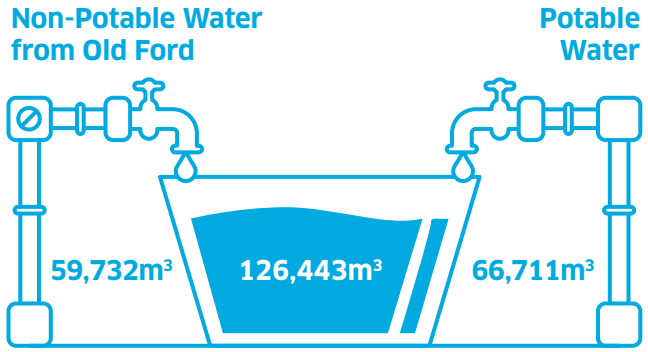
Flooding in the Park

The Park sits within the Lower Lee Valley, which is enclosed by a network of waterways that flow from Hertfordshire and into the River Thames. Managing flood risk within this area is vital to protect Park users and to make sure that the development around the Park is resilient to flooding and rainfall.

The north of the Park is shaped like a bowl, with natural flood management and drainage features such as swales and reed beds. This design helps the north of the Park handle increased water levels and reduces the risk of flood damage to the rest of the Park. As a result of these features, we have calculated that there are 5,000 homes at less risk of flooding within the area than would have been the case without these flood management measures.

WATER

Potable and Non-potable Water Usage, April to January 2014



Opening up the Waterways

It's been a great year on the waterways around the Park. Lee and Stort Boats Co Ltd launched their boat tour service in August 2014 and have been running public tours every week. More than 20,000 people have taken a tour since the launch.

Waterways need to be constantly monitored and controlled to prevent flooding and keep the them usable. This is especially important for the Park, as the River Lea has a natural high tide. Lee and Stort regularly work with the Canal and River Trust to examine how the water levels can be better controlled. Currently, this is done by a dedicated lock keeper based at Three Mills Lock on the Prescott Channel.

Protecting the habitat and wildlife around the Park has been an important consideration in the design of the waterways. Last year a coot was found nesting on one of the boats. To protect the coot and its nest, the boat remained out of action for the whole incubation period of 10 weeks. The coot has since become a bit of a celebrity in the Park.

"We've seen kingfishers, cormorants...the waterways are a buzz of activity, especially in the spring months"
– Mark Sillitoe, Lee and Stort Boats Co Ltd

WATER

Old Ford Water Recycling Plant

With rising population and climate change putting increasing pressure on London's water supply in the coming decades, it's vital to explore sustainable sources of water. Much of the water the Park uses is sourced from The Old Ford Water Recycling Plant, the UK's largest community wastewater recycling scheme.

Operated by Thames Water and located next to the Park, the Old Ford Water Recycling Plant treats wastewater from the northern outfall sewer, which is the main sewer collecting crude wastewater from north London. Once treated, the water feeds into a non-potable network that connects to the Park for toilet flushing and irrigation.

Non-potable water in the Park

All but one of the permanent venues on the Park use non-potable water from the Old Ford Plant to flush toilets. The non-potable water distribution network does not service the London Aquatics Centre because it has its own abundant non-potable water supply (reclaimed from the filter backwash process).

Water quality

Because the Old Ford Plant uses a pioneering treatment approach, Thames Water monitors the quality of the water closely to make sure it is safe for Park users. The process includes:

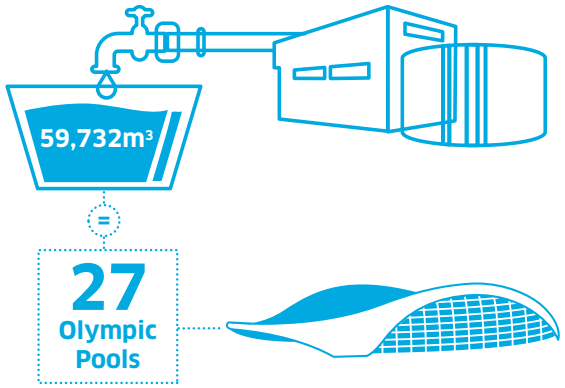
1. Settling out most of the solids in the waste water in the settling tank
2. Removing any remaining solids within the waste water (such as human hair) through a filtering process
3. Removing any harmful bacteria or remaining dirt from the water using a bio-membrane filter
4. Removing any remaining colour or odour from the water through the use of carbon and other filters

The result is water that to the human eye (and nose) is identical to drinking water. To date, the water produced has met all of the required quality standards.

Achieving a more stable water demand

Because 80% of the water we source from the Old Ford Plant is used for irrigation, our demand for non-potable water is much greater during the drier months. This creates a challenge for the plant in winter, when demand is at its lowest. We are working closely with Thames Water to understand how we can achieve a more stable water demand, which would allow the plant to run efficiently all year round.

Water supplied to the Park from the Old Ford Plant between April 2014 and January 2015



Moving forward

Now we have opened up the waterways, we need to make sure they are managed and looked after to protect the Park's biodiversity. We have plans to control rowing sessions on the river more carefully – for example, by introducing rowing lanes and ticketing for kayaks. We also plan to install signage next to river habitats to give information about wildlife and prevent the risk of harm.

In future, we want to explore opportunities to reduce the energy required for the Old Ford treatment plant to supply non-potable water safely throughout the Park.

WASTE

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

KEY ACHIEVEMENTS

- 99% diversion of construction waste diverted from landfill (excluding hazardous waste)
- 99% parkland and venue waste diverted from landfill – an improvement of 6% on last year

What we've been doing

New Construction

Over the course of the year, the Stadium, Canal Park and Chobham Manor have all been under construction. Out of the waste produced by our construction activity, less than 1% of construction, demolition and excavation waste was directly sent to landfill (this is excluding hazardous material, which is not safe to reuse).

All the new homes in Chobham Manor have adequate internal and external storage space for recyclable household waste. We are also promoting the use of on-site compost facilities to reduce the amount of household waste sent to landfill.

Managing construction waste

The amount of construction waste generated by LLDC development far outweighs the total amount of waste produced by the Park's operation, management and corporate offices. Our developer partners therefore work hard to ensure that potential waste is reused and recycled whenever possible.

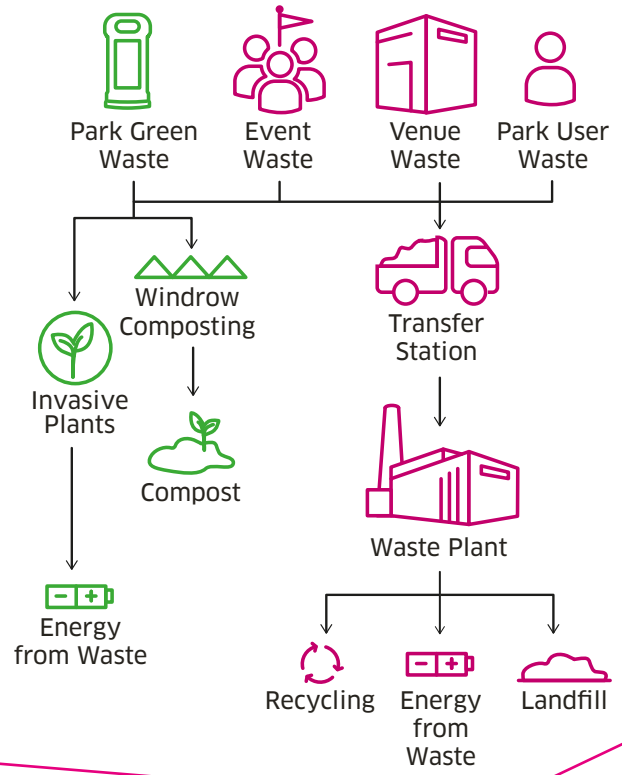
They do this by:

1. Planning ahead, using only the materials that they need
2. Using modern construction methods, reducing the generation of offcuts and surplus material on site where possible
3. Negotiating take back schemes with suppliers to ensure that delivery crates are reused where possible
4. Carefully segregating waste onsite to maximise the chances that it can be reused
5. Participating in the LLDC Environmental Forum, and talking to each other about the opportunities to reuse waste from one site on another
6. Requiring their waste disposal contractors to send any remaining, non-hazardous waste for recycling or energy from waste

The Parkland Waste Journey

Managing waste sustainably, legally, efficiently and cost-effectively is a complex challenge. It's also a top priority for us. Our key objective this year was zero parkland waste direct to landfill. To achieve this we provided recycling facilities for all waste across the Park. We continue to strive to make sure that we reuse and recycle as much as possible, so that no natural resources go to waste, and we do not contribute to environmental pollution.

The Waste Journey

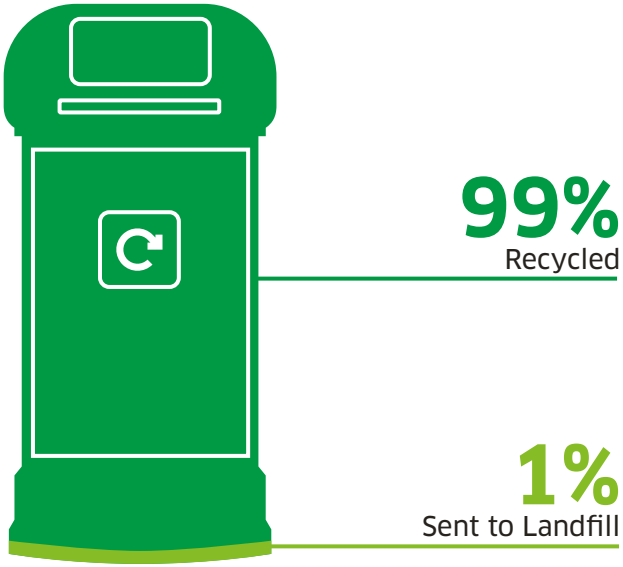


WASTE

Venues and Parklands

Between April 2014 and March 2015, 99% of waste from our parklands, venues and events was recycled or reused as compost. We are still working towards meeting the target of zero non-hazardous waste directly to landfill by 2030. To help us achieve this target, we have installed recycling facilities in all public areas and venues. We have also installed signage throughout the Park and its venues to encourage recycling and composting. We are exploring ways to use technology to improve recycling next year.

Total Parkland Waste Recycled April 2014 to March 2015



Canal Park Transformation

Opened in December 2014, Canal Park is an urban landscape designed for the many cyclists and pedestrians that use the tow path. It's a key area of the Park that helps to activate the waterfront, as well as providing connections into the Park from the east.

In keeping with the industrial heritage of the surrounding area, this section of the Park features large concrete blocks and posts to create informal seating areas. The designers of Canal Park saw it as a great opportunity to reuse concrete – a material that is often not reused, for aesthetic and design reasons.

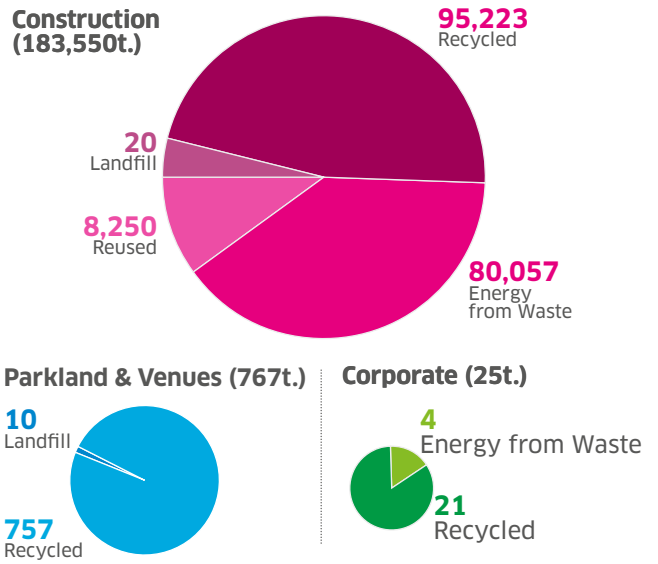
WASTE

Events

We are continuing to work with event organisers to develop best practices for reducing waste. Last year we created our Guide for Sustainable Events, which we now give to all event organisers. This includes clear guidelines for reducing waste.

For events held in our venues we are continuing to work towards zero waste direct to landfill. Organisers of regular events (such as London Lions) and small events (such as community meetings) held at the Timber Lodge café, Podium, Copper Box Arena and London Aquatics Centre use our waste contractor, who is achieving 99% of waste diverted from landfill. Other event organisers use their own waste contractors. We are continuing to work with these organisers to get a better understanding of their waste journey, and we hope to be able to monitor this to the same standard soon.

Total Waste by Destination from April 2014 to March 2015 (tonnes)

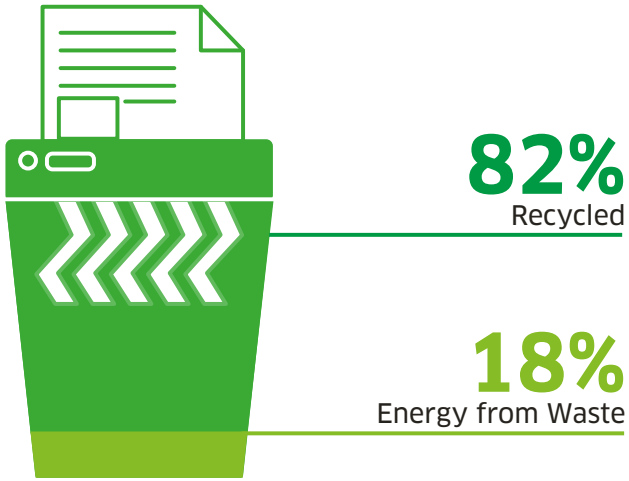


Corporate

We are committed to reducing our own waste at our offices at 1 Stratford Place. We are constantly exploring ways to improve our office recycling and reuse rates.

We continue to raise awareness of the importance of reducing waste in our offices. Over the year we ran a number of education programmes for visitors, workers, and residents about reduction and management of waste. This year we also began work on our Environmental Engagement Strategy, which will set out ways to engage residents, visitors and workers in waste reduction.

Corporate Waste by Destination April 2014 to March 2015



Moving forward

Research shows that London could save up to £5 billion over the period 2015 to 2050 by reusing, repurposing and recycling potential waste material instead of throwing them away. This financial benefit is in addition to the environmental benefits of reducing waste.

We want to support this transition from a disposable economy to a circular economy. We will do this by continuing to explore sharing economy and closed-loop initiatives that enable materials to be reused and repurposed. We will also be working with our developer partners to encourage residents and visitors to get involved.

In 2014/15, 82% of waste generated was recycled from our offices at 1 Stratford Place with the rest sent to an energy from waste facility

MATERIALS

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

KEY ACHIEVEMENTS

- **Launched our website Freeusable, making it easy to find future uses for materials from our developments**
- **Provided 38 community groups, 16 of which are local with materials for reuse from the Park**
- **Two cafes and four food kiosks in the Park signed up to the Healthier Catering Commitment**

What we've been doing

New Construction

As the buildings we construct become more energy efficient, the amount of embodied energy contained within the materials and products used to construct the buildings becomes a larger part of their overall carbon footprint. We are working to monitor the embodied carbon within our development and to reduce this.

As an ongoing target, 100% of timber and products used on the Park must be from legal and sustainable sources. All our contractors have processes in place to ensure this and are audited regularly.

In 2015 we were able to reuse a number of panels from the Paralympic Truce Wall that was built in the athlete's village during the Paralympic Games. The Perspex panels were cut to form bricks, and these were incorporated in the columns of the pavilion at Mandeville Place.

Venues and Parklands

We continue to work with our venue operators to promote the use of recyclable and biodegradable materials for packaging. The Timber Lodge café, Podium and the kiosks all use compostable materials in their food packaging and cutlery.

We also continue to recognise the importance of healthy eating. The Timber Lodge café, Podium and kiosks have all implemented the Mayor's Food Legacy Pledge and the Healthier Catering Commitment. The Timber Lodge café uses Fairtrade, organic coffee from Mozzo, another social enterprise, and buys organic meat from London-based Billfields & co. The cafés minimise food waste by offering different portion sizes for different appetites.

Living Walls

In 2014, we completed an arts project called Living Walls. Stretching over two kilometres of the Park's hoardings, this ambitious project features 40 new artworks created specifically for the Park. One of these is Up-hoardings, created by local artist Mark McClure.

Sustainability, re-cycling and up-cycling are a growing movement in our modern world, and are celebrated in this artwork, which reclaims the term 'hoarding'.

The 200-metre long abstract mosaics were made from recycled wood from the Park and surrounding area, and features 10 key sculptural pieces. One of our contractors ISG donated offcuts from the construction of the South Park Hub to Mark, and he has incorporated them into the piece. You can view this artwork on the western edge of the Park along Canal Park.

MATERIALS

Events

We continue to encourage events organisers to design and build their structures for reuse. Many of the events hosted in 2014 and 2015 used hired items which were returned for re-use after the event. This includes items such as stages and lighting rigs.

We have reduced the volume of our office-based printing by 30% compared to last year

Corporate

One of the largest material impacts from our offices is printing. We have been gathering data about printing at the Stratford Place office, and in 2014 we were also able to include usage information from the printers at the Stadium site office. The figures show that we printed 30% less pages in 2014/15 compared to 2013/14, a saving of nearly a million pages.

While our overall printing went down, the amount of pages printed in colour increased by 17% from last year (although we still printed fewer pages in colour than in black and white during the year). Colour printing requires more resources and is more expensive than black and white printing. We have put up signs next to the printers to remind our staff that they can select to print in black and white on the printer console.

We aim to continue to decrease the amount we print and the proportion of colour pages printed.

Hub 67, Hackney Wick

Hub 67 is our temporary community centre in Hackney Wick, the neighbourhood toward the west of the Park. The hub is run by the community and acts as a recreational space for locals. It hosts courses and activities ranging from IT skills to street dance. More than 200 local people attended the launch event, and the Hub has been used every day since.

The building has a temporary and recycled aesthetic that reflects its short-term existence and blends in with the DIY feel of the area. The skeleton of the building is made from nine cabins upcycled from the 2012 Olympic and Paralympic games. It also makes use of a large amount of decking and timber removed from the Park following the Games.

The mosaic façade of the building is made from fencing that once surrounded the Park, as well as cladding panels from the Olympic warm-up centre. Using such large quantities of second-hand materials in the building meant that the designers had to find creative ways of incorporating what was available.

Hub 67 was shortlisted for the temporary and Mayor's prize categories in the New London Awards 2015.

MATERIALS

The launch of Freeusable.co.uk

To prepare the Park for opening, we had to remove a wide range of fixtures, fittings and materials from the Olympic venues and the public realm. We found new uses for many of these items in the Park or in the remaining venues. For example, we reused some of the seating from the original Basketball Arena within the Lee Valley Tennis and Hockey Centre. However, not all items could be reused onsite.

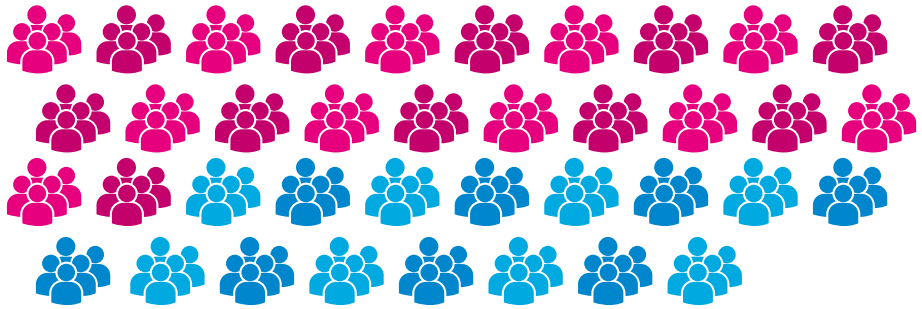
To find a new home for these items, we launched the website Freeusable in 2014. The site gives community groups across the country a way of requesting items that they would like to use for projects with community benefit. Groups requesting items needed to show how their reuse would benefit their local community.

Lessons Learned

Some items proved to be particularly difficult to find a new use for – for example, concrete and electrical items. In trying to find uses for these items, we learned some important lessons:

1. Where we did not have information about the strength or efficiency characteristics of items such as concrete blocks, the reuse potential of those items became limited.
2. The manner in which items are attached and then removed from their initial use will determine how reusable they are at the end of their life.
3. Some items – such as the former High Street cabins – are harder to transport than others. This made it more difficult to find groups able to reuse them.
4. A lot of our items need to be kept in storage before a potential reuse can be found. Storage space in the Park is limited.

Number of community groups that have received material from Queen Elizabeth Olympic Park in 2014/15



38
community groups have been helped across the country, including

16
groups within the London growth boroughs(Hackney, Tower Hamlets, Newham, Waltham Forest, Greenwich, Barking and Dagenham.)

Moving forward

We will be implementing level 2 BIM as a starting point with our designers and contractors working on Olympicopolis, our culture and university district. This should enable the tracking of materials and their properties throughout their lifecycle, enabling easier reuse or repurposing when they come to the end of their life.

BIODIVERSITY

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

KEY ACHIEVEMENTS

- **The Park achieved Green Flag status in July 2014, a year earlier than scheduled!**
- **Introduced bees to the Park, which have produced 60 jars of honey**
- **Sightings of endangered invertebrate species including:**
  - **Brachinus sclopeta (the streaked bombardier beetle)**
  - **Bembecia ichneumoniformis (a rare moth)**

What we've been doing

New Construction

Creating the right conditions for a wide variety of wildlife benefits not only the environment, but also our visitors and residents. Plants help to improve air quality, provide shade for people on hot days, and mitigate the urban heat-island effect. Trees can also provide shelter from the wind. For all these reasons we have considered biodiversity as an integral part of the design and construction of all of our new development.

This year is the first that we have reported against our new biodiversity action plan (BAP). This plan provides the blueprint that our developer partners must follow in order to provide an attractive range of habitats for our key target species. For example, in the case of bats, we can achieve this by maintaining corridors such as treelines, hedgerows and waterways for foraging, commuting and feeding opportunities.

Venues and Parklands

We have provided 102 hectares of Publicly Accessible Open Space, and we will continue to safeguard this as Metropolitan Open Land through ongoing and future developments in the LLDC Local Plan. We have already provided 45 hectares of BAP habitat, and we must now cultivate it to ensure that it meets the needs of both its human and non-human inhabitants.

One of our targets is for our Park to be designated a Site for Metropolitan Importance for Nature Conservation by 2024. We have made good progress towards this target, as a number of our key BAP species seen such as the Soprano Pipistrelle bat and Kingfisher have already been sighted.

Protecting newly established and sensitive habitats has been a challenge within a Park that is constantly changing. In order to do this, we have adopted careful approaches to managing new habitat.

Our Volunteers

We had 17 volunteer conservation days on the Park this year. Activities included building bird and bat boxes and planting spring bulbs in the south of the Park. In October 2014 we held our 'Big Bulb Plant', which involved almost 30 volunteers planting 6,000 bulbs between them.

Marta Surowka one of our committed Conservation Volunteers, told us what she enjoys about volunteering on the Park:

"The spring bulb planting day was very hard work, but it was a sunny day with plenty of people. What I enjoyed most was seeing our crocuses on a hill much later. They looked fantastic on the green grass. It just makes me so happy to be able to see and enjoy the effects of this huge organisational effort."

BIODIVERSITY

For example, when Canal Park opened to the public in December 2014, we decided to open the area while continuing to fence off the planted sections to allow the plants the time and protection they needed to establish.

Three hives produced 60 jars of honey this year

Events

The Park had a full calendar of events throughout the year, with a number of large events taking place in the summer of 2014, such as the Invictus Games. We protected key species and habitats by ensuring that these events are held in less environmentally sensitive areas of the Park such as Hopkins Field and the South Lawn. After all events, our Park managers work hard to ensure that any restoration work is undertaken, such as reseeding.

"Kingfishers have been spotted on the River Lee. They are a rare spot, but good news that they are here"

– Catherine Norris, Park Ecologist

The Park Bees

Honeybees and other pollinating insects are vital for keeping our ecosystems and natural environment healthy, but their numbers have been declining in recent years. This is why providing habitat for bees across the Park is so important. We have a great variety of wildflowers to attract pollinating insects, including knapweed, scabious, meadow cranesbill, restharrow and purple loosestrife.

Last year we installed three beehives on the Park, which produced 60 jars of honey. We plan to place three more hives in the park later this year, with the hope of lots more honey to come.

We are proud to have achieved Green Flag status a year earlier than targeted. With the help of our Park keepers, we are now working to make sure that this status is maintained through constant upkeep and management

Corporate

A number of staff environmental awareness days were organised over the summer, and many members of staff volunteered with the conservation team throughout the year. To raise awareness of World Environment Day, we visited the Thames Barrier to learn more about how it protects Londoners from tidal surges, changes in sea level and storms.

Our parkland team works hard throughout the year to offer conservation workshops covering topics such as weeding and invasive species removal. Similar biodiversity survey sessions have included pond dipping and bug hunting.

We have devised a series of educational events for local schools to engage children with biodiversity and teach the importance of protecting the natural environment. Due to the lack of green space in London, schoolchildren often have limited opportunity to connect with the natural environment and the Park provides a wonderful setting in which to explore and learn. In January 2015, local schoolchildren helped to construct two insect hotels in the Great British Garden.

BIODIVERSITY

Habitats for Biodiversity

One of our main ambitions for the Park has always been to attract native wildlife. We do this through a carefully planned planting regime, selecting native trees in order to provide the habitat that our native animals need to survive.

One species native to the Lee Valley is the black poplar: a tree that supports many forms of insect life, as well as providing a useful construction material. It is also the most endangered native timber tree in Britain. During the construction of the Park, we took black poplar cuttings and cultivated them in our nursery, reintroducing them once construction was complete. Today you can see these trees along the waterways in the north of the Park.

Oak is another of the Park's key species of tree. The caterpillars and insects that depend on oak trees are in turn a food source for many British birds, and in autumn the leaves form a rich mould that supports invertebrates such as the stag beetle. By planting species such as oak in the Park, we can create sustainable ecosystems that support many forms of native wildlife.

Invasive Species

A constant challenge for the Park is the presence of invasive species, mainly because the river corridor is so successful in transporting seeds. We remove Himalayan balsam (seen below) by hand, but Giant Hogweed and Japanese Knotweed need targeted treatment to prevent spread. Control of these species is important because these plants have no natural predators away from their native environments. As a result they will out-compete native plants, reducing biodiversity. Giant Hogweed (seen below on the right) is also a danger to human health as it has toxic sap that can cause skin burns.

We were licensed to record invasive fauna in the rivers last year, and caught signal crayfish, Turkish crayfish and Chinese mitten crab, although only in small numbers. We are also monitoring for mink, although only one has ever been caught on site.

Moving forward

With the master planning of our new culture and university district, Olympicopolis set to begin in 2015, we'll be looking at ways to integrate biodiversity and maintain and enhance the green and blue corridors through the Park.

We'll also be working to engage visitors with the biodiversity of the Park and look at ways in which they can get involved with the monitoring work and report sightings of any animals in the Park.

TRANSPORT

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

KEY ACHIEVEMENTS

- **97% of staff travel to work by sustainable modes**
- **Planning consent has been granted for improvements to Hackney Wick station**

What we've been doing

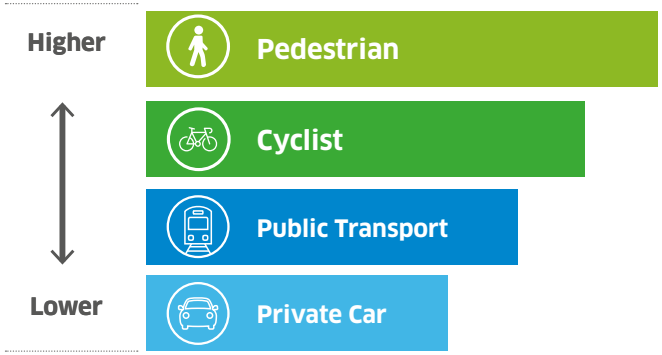
New Construction

Published this year, our Local Plan sets the direction of future growth in the area, covering issues like housing and transport. The plan also sets out our order of priority for transport provision, with pedestrians at the top and private cars at the bottom of the priority scale. We have strategies to ensure that future neighbourhoods are designed to be walkable and cycle-friendly, with good provision for cycles in homes, offices and venues.

We will encourage the use of electric cars in all our new developments. Electrical charging points will be available to all household on-plot parking spaces at Chobham Manor.

Part of our remit is to improve transport provisions in our planning boundary. Our plans for upgrading Hackney Wick Overground station have been taking shape over the past year, and these were approved in September 2014. The improvements will see the station entrance moved to ground level and the creation of a new north-south pedestrian route to link Wallis Road and White Post Lane.

Transport Priorities



Park Cycle Hire Scheme

Transport for London's Cycle Hire scheme is the second largest in Europe and in November 2014, the Mayor of London announced that it would be expanded eastwards into Queen Elizabeth Olympic Park. Eight new docking stations will appear in key locations around the Park, such as the ArcelorMittal Orbit and the London Aquatics Centre.

We have wanted to bring the cycle hire scheme to the Park since it opened, and had taken several steps to ensure its arrival. We safeguarded areas in the Park that are suitable locations for docking stations. Through our role as the local planning authority, we require new developments in our area to do the same, where appropriate.

Because links to the existing hire area is important to the scheme's success, three docking stations will be installed around Hackney Wick station to the west of the Park.

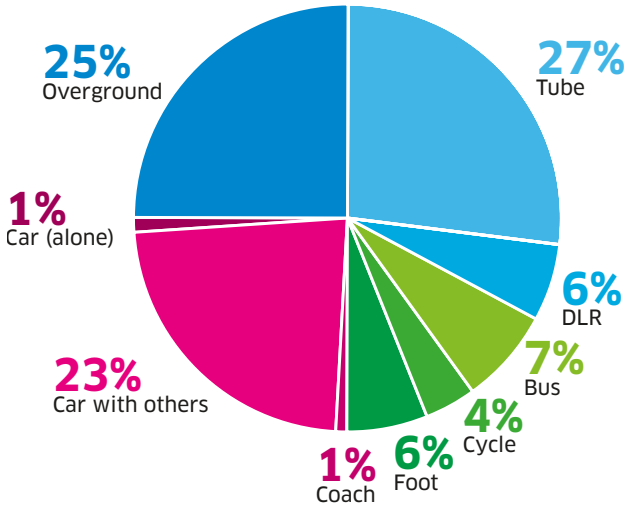
TRANSPORT

Venues and Parklands

We surveyed more than 600 people in April, August and October 2014 to see how they had arrived at the Park. Only 1% of visitors travelled to the Park in a car by themselves. 76% had arrived by either public transport, cycling or by walking.

99% of visitors had arrived by public transport or in a car with others. 76% arriving solely by public transport, cycle or by walking

2014 Park Travel Survey



Events

We recommend that events organisers survey how their attendees arrived at their event. However, as there are many organisers who hold events on the Park we have had limited success in gathering this information.

Data from the Great British Carnival event indicates that 5% of visitors arrived in a car by themselves. This is a small sample size and we are looking at how we can get more accurate data around this. We also encourage event organisers to provide information with tickets on sustainable transport options to the Park.

Corporate

In July 2014 we signed up for the London Cycle Challenge. This took place in August and we finished an impressive fourth in our size category, with 17% of staff taking part in the challenge.

17% of LLDC staff participated in the London Cycle Challenge. 22 staff logged a cycle ride and 2,773 miles were cycled over the three-week period

TRANSPORT

Journeys to Work

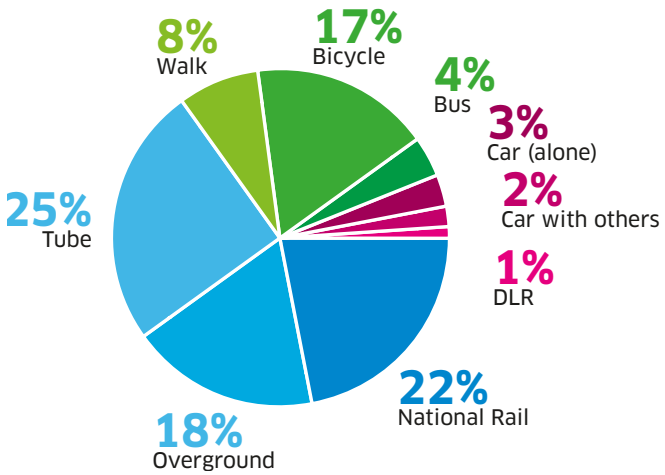
We encourage our staff to use public transport, car sharing, cycling and walking when traveling to, from and for work. We spoke to some of our colleagues about their journeys and what they enjoy about them;

- Afifa Kajjbu, who works at 1 Stratford Place, is lucky enough to be able to walk to work in 15 minutes.
- Rowan Longhurst is based in Park HQ and either walks, cycles or runs to work.
- Paul Dever (pictured on the right) works at 1 Stratford Place and also cycles to work. The flexibility is the part he likes most about his chosen mode of transport.
- Anna Godsiff works from both offices and organises arts and cultural events in the Park. She is a frequent user of our office pool bikes, which she says help her make the most of her time.

We have shower and changing facilities in our offices to encourage bike commutes. We also make sure that our developments include cycle facilities to make it easier for staff to travel to work by bike.

"The walk along the canal through Victoria Park is a peaceful route, with plenty of wildlife and colourful boats to spot"
– Rowan Longhurst, Park HQ

2014/15 Staff Travel Survey



Moving forward

Making routes attractive and safe is a top priority for us over the next year. There are many opportunities to increase walking and cycling, reducing pressure on both roads and public transport through high quality, secure routes and facilities.

As well as making improvements to Hackney Wick station, we are working with London Underground to open a new western entrance to Stratford station. This will improve transport links for the existing Carpenters estate and University College London's new campus, which will built on the south of the Park.

LIFESTYLES

Our vision is to inspire and support healthy, inclusive and sustainable lifestyles

KEY ACHIEVEMENTS

- **Delivered 87,000 Active People, Active Park and Motivate East sessions to 49,000 unique participants**
- **17,300 hours of volunteer time in the Park**

What we've been doing

New Construction

We are putting together an engagement strategy for all LLDC-led developments that will encourage residents and visitors to lead sustainable lifestyles through incentives such as car shares. Through this strategy, we aim to reduce operational emissions by 15% over five years.

The homes at Chobham Manor will have combined smart meters to measure and display energy and water use. Residents will have a guide on how to use the smart meters and to help them understand and reduce their energy and water consumption.

Construction activities can sometimes have unwanted impacts for nearby residents, such as dust and noise. We follow a Code of Construction Practice (CoCP) that sets guidelines for the level of dust and noise we can produce, and we monitor our construction projects regularly to make sure we don't breach these levels.

To lessen the noise disturbance created by building the foundation columns for Chobham Manor, we trialled an eight-foot high acoustic screen on site. Unfortunately we found that the screen had only a minimal effect on noise, and it was impractical to move as the foundation works happen over a large area of the site.

The solution was to model the noise generated by putting in the foundation columns and to restrict the works to a certain number of columns per day in locations with the biggest noise impact upon residents. As a result disruptive noise levels were kept to an absolute minimum.

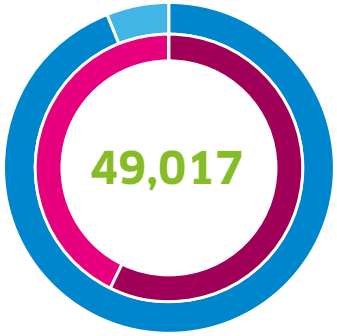
Active People, Active Park

The Active People, Active Park (APAP) programme takes sport across the Park and into the local community to encourage local people to become more physically active.

Since May 2013, we have been working with our partners in the surrounding boroughs to provide sports sessions for schools, leisure centres and youth clubs. At the Festival of Sport in June 2014, thousands of people tried out more than thirty different sports and physical activity challenges, from wrestling to hula-hooping.

LIFESTYLES

Numbers of people who took part in sessions in 2014/15



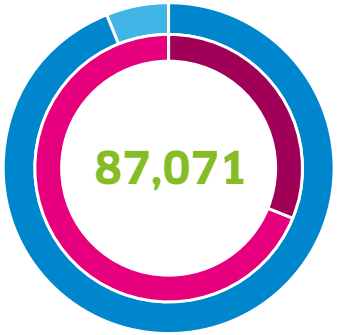
32,991
APAP Non-Disabled

2,106
APAP Disabled

8,000
Motivate East Non-Disabled

5,920
Motivate East Disabled

Numbers of sessions delivered in 2014/15



54,777
APAP Non-Disabled

3,496
APAP Disabled

9,034
Motivate East Non-Disabled

19,764
Motivate East Disabled

Motivate East

Following the most successful Paralympic Games ever, we have continued to deliver our Paralympic legacy programme. Motivate East is a project that brings sport and physical activity opportunities to people with disabilities. Activities so far have included:

- The Para-Legacy Agent Programme. Run by the Bromley by Bow Centre, this volunteering programme gives local people (many of which are disabled) the accredited training and support they need to introduce disabled people to sport and physical activity.
- Free opportunities to people to participate in exercise and physical activity ranging from Archery and Athletics to Tennis and Thai-Chi.
- An equipment loan scheme that allows groups to transform any open space into a platform for sporting and physical exercise activities.
- Training and support for local coaches and community organisations.

Our Parks

Launched in March 2014, Our Parks is a new initiative bringing free group exercise classes led by qualified instructors to parks across east London, with the support of local boroughs. As well as being a great way to get fit, Our Parks also gives local people a chance to meet their neighbours. Queen Elizabeth Olympic Park is a perfect place for exercise, with plenty of green and open spaces accessible to the public 24/7.

East Village resident Kelly-Ann says:
"I moved into East Village in January and until the summer I hadn't met any of my neighbours. Since Our Parks began I spend time with my neighbours every week. This is a completely new community so we need something like Our Parks to bring us together."

LIFESTYLES

Venues and Parklands

We are always encouraging people to use the Park for sport, wellbeing, leisure activities, social gatherings and cultural events. Since opening, more than 49,000 people have got involved with some sort of activity.

In August 2014, as part of the Active People, Active Park programme, a number of activities were organised including the FRE Flyers-Mini Tennis programme. This took place in the afternoons and early evenings, to help families get active together.

Events

We want to make sure that our events are considered 'best practice' in terms of sustainability. With this in mind we are continuing to look into opportunities to work with with the events industry and non-governmental organisations to share knowledge and integrate sustainability into the sector.

Our Picnic in the Park event in August 2014 gave families a chance to come together and share tips on healthy eating and active lifestyles, with cookery demonstrations and free sports sessions running throughout the day. The event also helped raise awareness that the Park is a public space to be enjoyed by everyone. Cohesion between the Park and the existing communities in the area is a very important factor in delivering an integrated new area of east London.

Corporate

Throughout 2014/15 we have promoted educational initiatives and research programmes to enable sustainable behaviour to become the norm in and around the Park. We have also provided environmental awareness training for our staff and contractors. All our staff are provided with information about sustainable office practice on their induction as new starters.

Legacy Youth Panel

The Legacy Youth Panel continues to have a significant impact on the development of the Park and the surrounding area, including the groundbreaking designs of the Timber Lodge café and The Podium. Each year we recruit 30 new members aged between 14 and 18 from Hackney, Newham, Tower Hamlets and Waltham Forest to add to our panel – to date we have had over 150 members.

In 2014, Stratford Picture House screened a film celebrating the work of the young people who helped realise the legacy of the Games. This film is now on our website.

Moving forward

The Motivate East project is being used as an exemplar project by Sport England and discussions are being held about extending the project beyond 2016.

After the success of Picnic in the Park, we'll be joining up with the Eden Project's national Big Lunch event to make it even bigger next year.

As part of our work to activate the Park for the oncoming communities and to promote sustainable lifestyles, we'll be opening the Mobile Garden City at Chobham Manor. This is a temporary portable community garden that will include a tool library and anaerobic digester.

2015/16 LOOK AHEAD

Olympicopolis

The year ahead will see the first plans for east London's new culture and university district emerge, as we take a step closer to building Olympicopolis in the south of the Park. The site will include new spaces for the Victoria and Albert Museum, Sadler's Wells, the University of the Arts London, University College London and potentially the Smithsonian Institution.

Our designs for these buildings will make the most of the sustainability expertise among our partners. We plan to use the latest technologies and approaches to design healthy, adaptable, engaging and environmentally positive places for people to live, visit and work in.

New residents

The first residents of Chobham Manor will be moving into the Park during the autumn of 2015. Although the Chobham Manor neighbourhood will not be fully complete for some years, our first residents will be able to exercise their green fingers at Chobham Mobile Garden. This completely mobile vegetable garden will be located on the corner of the future Chobham Manor neighbourhood, where residents can learn new gardening skills and make use of shared tools.

Stadium

The Stadium will be gearing up towards its permanent opening in 2016 as a multi-use sports venue, with a series of high-profile test events throughout the summer and autumn of 2015.

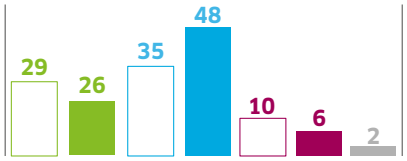
Smart, sustainable district

Building on the Park's first full year of operation, the LLDC will be working with partners to identify opportunities to increase resource efficiency, improve the resilience of the Park-wide energy network and trial innovative approaches to engaging with communities and improving visitor and resident experience within the Park.

YOUR PARK, OUR PERFORMANCE

ENERGY

Progress againts:
- 74 targets 2013/14
- 82 targets 2014/15



Achieved
On-track
Not yet achieved
Target removed

	Targets	Progress	Notes
New Construction	Require a minimum achievement of Code for Sustainable Homes Level 4 for all new homes on LLDC-led development under current standards.	○ ●	All homes built at Chobham Manor will achieve Code for Sustainable Homes Level 4 and this standard is currently adopted for all future LLDC-led development.
	Achieve Zero Carbon Homes on LLDC-led development before 2016.	○ ●	The first residential phase of Chobham Manor (250 homes) will include ten zero carbon homes; with 25 exemplar homes overall (out of 850 homes).
	Require a 65% reduction in emissions over Building Regulations 2010 through fabric improvements and on-site features on LLDC-led development.	○ ●	Chobham Manor has achieved 63% onsite reduction in emissions and we will work with our developer partners to achieve this. To reflect changes to building regulations, this target will be amended to 'Require a 60% reduction in emissions over Building Regulations 2013 through fabric improvements and on-site features on LLDC-led development' next year.
	Permit up to 35% of emissions mitigation through allowable solutions in surrounding communities as part of the Development Corporation's regeneration remit on LLDC-led development.	○ ●	LLDC has published its intent to include a carbon offset scheme within its Local Plan. To reflect changes to building regulations, this target will be amended to 'Permit up to 40% reduction in emissions over Building Regulations 2013 through allowable solutions as part of the Development Corporation's regeneration remit on LLDC-led development' next year.
	40% reduction in emissions over Building Regulations 2010 for non-residential buildings on LLDC-led developments; Zero Carbon standard for non-residential buildings when required by government.	○ ●	We are aiming to achieve this target for the non-residential buildings contained with Olympicopolis. To reflect changes to building regulations, this target will be amended to '35% reduction in emissions over Building Regulations 2013 for non-residential buildings on LLDC-led developments; zero carbon standard for non-residential buildings when required by government' next year.
	15% reduction in emissions by 2020 from in-use energy through engagement with occupants of LLDC led developments and the promotion of energy efficient home appliances.	○ ●	We are developing a carbon reduction strategy and environmental engagement strategy. The first residents of Chobham Manor will move into the Park in Autumn 2015.
	Support the extension of the district heating network beyond the Park following connection to the Stratford Halo/Genesis development.	○ ●	Support for this objective has been included in the LLDC Local Plan.
	Explore provisions to mitigate fuel poverty.	○ ●	The new homes at Chobham Manor have been designed to be highly energy efficient. We have been working with our developer partners on Chobham and Eastwick and Sweetwater to design new homes to the challenging Fabric Energy Efficiency Standard.
Venues & Parklands	25% reduction in operational emissions intensity in LLDC owned venues and parklands by 2020.	○ ●	We have now established the baseline for the venues in terms of energy consumption. We will now be working to reduce carbon intensity.
	Provide low carbon site lighting and use energy efficient park maintenance equipment.	○ ●	We installed solar and wind powered lighting, electric maintenance buggies and boats, and venue operator installed self-powered cardiovascular machines in the Copper Box Arena public gym.
Events	Work towards delivering low or zero carbon events in the Park.	○ ●	The 'Simple Sustainability Guide to reducing the impact of events' is given as a set of guidelines to follow to all event organisers.
Corporate	25% reduction in corporate emissions intensity by 2020.	○ ●	A baseline for our corporate greenhouse gas emissions has been established. Based on our calculations our corporate emissions intensity per employer for the reporting year is 2.9tonnes C02. Based on our floorspace at 1947m^2, our energy usage is 328 kWh per square metre.

YOUR PARK, OUR PERFORMANCE

WATER

Achieved
On-track
Not yet achieved
Target removed

13/14 14/15

	Targets	Progress	Notes
New Construction	Potable water use of no more than 105 litres per day per person in homes on LLDC led developments through reducing demand and use of low flow fittings and appliances.	○ ●	Chobham Manor is designed to deliver 90 litres of water per person per day with exemplar homes achieving 80 litres per person per day. Eastwick and Sweetwater will also meet these design standards, which have been included within the LLDC Local Plan.
	Rainwater harvesting and greywater treatment to be incorporated in new LLDC led developments.	○ ●	Chobham Manor exemplar homes will incorporate grey water recycling.
	Initiate studies to optimise the use of the Old Ford Water Recycling Plant and non-potable water network for irrigation and toilet flushing.	○ ●	A number of studies have been undertake working collaboratively with Thames Water. In 2014 we submitted a Horizon 2020 bid and we continue to explore how we can connect future developments to the non-potable network.
Venues & Parklands	Protect and improve on the 40% reduction in potable water use designed into the venues.	○ ●	All water saving measures installed by the ODA have been protected and in the case of the Stadium, additional water savings me asures have been installed this year, with new toilets being connected to the non-potable network.
	Irrigate parklands through rainwater harvesting and greywater.	○ ●	100% of our parklands are irrigated through the non-potable water network.
	Develop a strategy with Canal & River Trust to enhance and protect the Park's blue ribbon network.	○ ●	The LLDC and CRT have now published the Olympic Legacy Waterways Framework setting out a joint vision for living waterways that transform places and enrich lives.
Events	All LLDC events to limit use of bottled water by encouraging the provision of alternative water supplies.	○ ●	All our venue operates and external events companies are encouraged to offer water bottle filling stations and water fountains at events.
	Work with external event companies to reduce potable water usage in the operation of their events.	○ ●	We worked with our venue operators to limit the amount of potable water used at events. This is encouraged through the Sustainable Events Guide and we continue to monitor this usage.
Corporate	Measure water intensity against DEFRA benchmark.	●	We have been unable to gather water data for our office consumption as our offices are not metered separately. We continue to investigate a mechanism to do this.

YOUR PARK, OUR PERFORMANCE

WASTE

Achieved
On-track
Not yet achieved
Target removed

13/14 14/15

	Targets	Progress	Notes
New Construction	Maximum 5% of construction, demolition and excavation waste directly sent to landfill (excluding hazardous material).	○ ●	Over the course of the year, the Stadium, Canal Park and Chobham Manor have all been under construction. Out of the waste produced by our construction activity, less than 1% of construction, demolition and excavation waste was directly sent to landfill (this is excluding hazardous material, which it is not safe to reuse).
	Zero municipal waste directly sent to landfill by 2025. Interim target of 30% maximum municipal waste directly to landfill by 2020.	○ ●	Working with our developer partners, we have integrated design features into our new developments to help make recycling and reuse as convenient as we can. Once this waste leaves the new neighbourhoods however, the amount that is recycled will depend on the waste contracts put in place by the Local Waste Authorities.
	Ensure all new buildings have adequate internal and external storage space for recyclable household waste.	○ ●	These requirements have all been demonstrated through detailed design for Chobham Manor and are integrated into requirements for forthcoming LLDC led developments.
	Promote on-site compost facilities to reduce the amount of household waste sent to landfill.	○ ●	These requirements have all been demonstrated through detailed design for Chobham Manor and are integrated into requirements for forthcoming LLDC led development.
	Monitor and report on construction waste using the Waste and Resources action Programme's (WRAP) Online Reporting Tool.	○ ●	This target has been removed this year as our developers now use a range of tools that satisfy our waste reporting requirements.
Venues & Parklands	Recycle or compost 70% of venues and parklands waste by 2015.	○ ●	99% of our parkland waste was recycled.
	Zero parklands waste direct to landfill by 2030.	○ ●	99% of our parkland waste was diverted from landfill. This is an improvement of 6% from last year.
	100% provision of recycling facilities in public areas.	○ ●	There are recycling facilities across the parklands and venues.
	Signs and information across the Park will support recycling and composting.	○ ●	All venues now have signs that promote waste streaming to improve material recovery rates. Next year we are exploring how we can use technology to support this.
Events	Develop best practices to reduce waste production and require event operator to comply with guidelines.	○ ●	Our Simple Sustainability Guide to reducing the impact of events' is given to all events organisers.
	Zero events waste direct to landfill by 2020. For events held in venues, work towards the target immediately.	○ ●	Regular events (such as London Lions) and small events (such as community meetings) held within the Timberlodge café, Podium, Copperbox and Aquatics centre use our waste contractor who is achieving 3% of waste diversion from landfill. There is more work to do with events organisers that do not use our regular waste contractors and this year we are looking to gather and analyse this data.
Corporate	Deliver education programmes for visitors, workers, and residents about reduction and management of waste.	○ ●	This year we began work on our Environmental Engagement Strategy which will set out ways to engage residents, visitors, workers and residents to reduce waste.
	Explore ways to improve our office recycling and reuse rates.	●	This year we have explored the opportunity to better the recycling of take-away coffee cups, this remains under investigation.

YOUR PARK, OUR PERFORMANCE

MATERIALS

Achieved
On-track
Not yet achieved
Target removed

13/14 14/15

	Targets	Progress	Notes
New Construction	15% reduction in embodied carbon in new construction, as compared to industry baseline (to be monitored and published).	○ ●	We are working with partners to establish industry baselines in order to facilitate embodied carbon assessments.
	At least 25% recycled content of aggregate within new buildings and infrastructure (by weight).	○ ●	We are working with our development partners to meet this target.
	At least 20% of construction materials to be from a reused or recycled source (by value).	○ ●	Hub 67 was built using recycled materials from the 2012 Olympic and Paralympic Games and we are continuing to work with our partners to achieve this target.
	100% of timber and timber products from legal and sustainable sources.	○ ●	We have achieved this target. All our contractors have processes in place to ensure this and are audited regularly.
	No use of HFCs where acceptable alternatives exist.	○ ●	No use of HFCs approved this year.
Venues & Parklands	100% of timber and timber products from legal and sustainable sources.	○ ●	All our contractors have processes in place to ensure this and are audited regularly.
	Use of recyclable and biodegradable materials for packaging, particularly for food.	○ ●	We are using compostable packaging and cutlery at the Timber Lodge, the Podium and Kiosks.
Events	Temporary structures for events must be designed and built for reuse.	○ ●	We encourage events organisers to design and build their structures for reuse. Many stages, lighting rigs and other items are hired and therefore reused.
Corporate	Collaborate with universities, NGOs and other research bodies to identify low-impact building materials and products.	○ ●	We are working closely with a number of universities this year to identify environmentally positive materials, particularly in the area of energy generation for use in retrofitting and construction of new buildings.
	Require all suppliers of goods and services to help deliver LLDC sustainability priorities within their contracts.	○ ●	We are working to deliver sustainability priorities across the areas identified within our sustainability policy through our procurement approach, which now covers procurement undertaken by the LLDC directly, and also through GLA shared services.

YOUR PARK, OUR PERFORMANCE

BIODIVERSITY

Achieved
On-track
Not yet achieved
Target removed

13/14 14/15

	Targets	Progress	Notes
New Construction	Public areas to contribute to Biodiversity Action Plan and link to existing natural corridors.	○ ●	We are on track to achieve this target. The results of the 2014 Biodiversity Action Plan (BAP) shows that the Park is providing a functional landscape for biodiversity.
	Incorporate Sustainable Urban Drainage Systems (SUDS) in streets and the public realm where feasible enabling species-rich planting and local irrigation potential.	○ ●	SUDs have been integrated into the design of Chobham Manor and will also be incorporated in future developments. We have integrated consideration of SUDs into the requirements for our Local Plan.
	Design buildings and public space to reduce the urban heat island effect.	○ ●	These requirements have been integrated into the design of Chobham Manor and will also be incorporated in future development.
Venues & Parklands	Provide 102 hectares of publicly accessible open space, capable of being designated as Metropolitan Open Land.	○ ●	We have provided 102 hectares of Publicly Accessible Open Space and will continue to safeguard this through ongoing development. This area has been safeguarded as Metropolitan Open Land in our Local Plan.
	Provide 45 hectares of Biodiversity Action Plan habitat and links with existing corridors.	○ ●	45 hectares of Biodiversity Action Plan habitat have been provided. This will be safeguarded throughout the ongoing development of the Park.
	Achieve designation as a Site for Metropolitan Importance for Nature Conservation by 2024.	●	Good progress has been made towards this, with almost all target BAP species having been spotted.
	Achieve green flag status by 2015.	●	Green flag status was achieved in July 2014. This target will now be amended to 'maintain green flag status'.
	Aim to enhance the ecological value of the Park and ensure the land and its natural resources are protected forever.	○ ●	LLDC is tracking the ecological value of the Park through its BAP monitoring. Good progress has been made to protecting the Park as a natural resource in achieving Metropolitan Open Land designation.
	Landscaping designs that avoid chemical control of weeds, pests and diseases.	○ ●	Landscape designs have aimed to promote biodiverse habitats and management practices are in place to minimise the requirement for the use of chemical controls onsite. Alteration to the target for next year: Management practices that reduce the use of chemical controls for weeds, pests and diseases.
	No peat or peat-based products to be used on site.	●	Our park managers do not use peat-based products on the parklands.
	Maintain parkland access while ensuring the protection and improvement of habitats.	○ ●	Canal Park opened in 2015 to allow pedestrian and cycle access but to ensure planted areas can mature these areas were fenced off to protect them.
Events	Assist the attendees in an appreciation of the Park's biodiversity.	○ ●	There are a series of small events, such as a biodiversity trail and a giant story telling snail, planned for this Summer that will help to promote awareness of biodiversity on the Park.
	Respect and protect open space through attention to event location, pedestrian circulation and sight lines.	○ ●	All our events are held in environmentally un-sensitive areas with temporary paths deployed in high pedestrian movement areas.
Corporate	Encourage staff to take part in biodiversity awareness activities.	●	Opportunities to promote biodiversity awareness will be available to staff over the Summer 2015.
	Provide opportunities for local people to get involved in nature conservation work and biodiversity-related activities.	○ ●	We have produced biodiversity trail maps for schools to use on visits to the Park.

YOUR PARK, OUR PERFORMANCE

TRANSPORT

Achieved
On-track
Not yet achieved
Target removed

13/14 14/15

	Targets	Progress	Notes
New Construction	Design walkable and cycle-friendly neighbourhoods with safe streets and paths, and secure cycle parking in homes, offices, and venues.	○ ●	These principles have informed both LLDC led development and have also been integrated into the LLDC Publication local plan.
	No home to be more than 350m away from a bus stop on LLDC led development.	○ ●	Agreements have been made with TfL for the provision of bus stops no more than 300m from every home.
	20% of car parking spaces to have access to electric charging facilities.	○ ●	We will provide electrical charging points to all household on-plot parking spaces at Chobham Manor. This requirement is also embedded within the LLDC Publication local plan.
	Support demand management techniques to discourage private transport and encourage public transport, car-sharing, car-clubs, cycling, and walking.	○ ●	These requirements form part of our development travel plans and will form part of the engagement strategy for LLDC led developments.
	Ensure provision of shower and changing facilities in offices to support commutes by cycle.	○ ●	These requirements form part of the LLDC Publication Local Plan.
	Parking ratios to be London Plan Standard or less.	○ ●	These requirements form part of the LLDC Publication Local Plan.
Venues & Parklands	Ensure that 95% of visitors to venues and attractions arrive by public transport, cycle or foot.	○ ●	We surveyed over 600 people in April, August and October 2014 to see how they had arrived at the Park. We found that 99% of visitors had arrived by public transport or in a car with others. The portion of visitors arriving solely by public transport, cycle or by walking was 76%.
	Facilitate a cycle hire scheme within the Park.	○ ●	Land has been safeguarded for this purpose in LLDC developments, discussions are ongoing with TfL. The Mayor announced that the London Cycle Hire scheme would be coming to the Park in November 2014.
Events	Ensure that 95% of visitors to events arrive by public transport, cycle or foot.	○ ●	The LLDC recommends that events organisers survey how their attendees arrived at their event but has had limited success in gathering this data. Information from the Great British Carnival indicates that 5% of visitors arrived in a 'car by themselves'. This is a small sample size and we are looking at how we can get more accurate information on this.
	Information provided with tickets on sustainable transport options to the Park.	○ ●	It is a requirement for event organisers to provide information on using public transport with tickets.
Corporate	Maintain our Travel Plan Framework for all new developments and initiatives within the Park.	○ ●	We maintain the Travel Plan Framework which encourages sustainable travel for new and existing developments. It sets out transport impacts, establishes targets and identifies a package of measures to encourage sustainable travel.
	Encourage sustainable transport modes for staff commuting and work-based travel.	●	97% of LLDC staff travelled to work via a sustainable mode of transport in 2014/15. LLDC took park in the London Cycle Challenge 2014, finishing 4th in our size category.

YOUR PARK, OUR PERFORMANCE

LIFESTYLES

Achieved
On-track
Not yet achieved
Target removed

13/14 14/15

	Targets	Progress	Notes
New Construction	Develop an occupant engagement programme to achieve a 15% reduction in emissions over five years, with savings to be maintained each year.	○ ●	An engagement strategy for LLDC led-developments is in development and it is hoped will be published later this year.
	Through the Estate Management Strategy, develop incentives and programmes for residents to optimise sustainable lifestyles.	○ ●	An engagement strategy for LLDC led-developments is in development and it is hoped will be published later this year.
	100% of homes to have smart meters to collect energy consumption data to make more efficient use of resources.	○ ●	Chobham Manor has sourced combined smart meters (energy, water). This will support energy efficiency, such as identifying unexpected peaks that could be associated with leaks or wastage, and with management of demand and supply of energy.
	Facilitate IT infrastructure including superfast broadband and Wi-Fi to support working from home and venues in and around the Park.	○ ●	Free Wi-Fi available was made available to the public across the Park on 31 March 2015. We have also been developing a Park app, which is now available in the i-store and Google Play store and which we will be developing further capabilities for.
Venues & Parklands	Encourage the public to use open space for sport, physical wellbeing, leisure activities, social gathering and cultural events.	○ ●	We delivered two successful programmes of events on the Park this year. Active People Active Park offered over 30 sports for people to try with over 58 thousand sessions delivered and over 35,000 people reached. Motivate East delivered over 28,000 sessions reaching over 13,000 people.
	Adopt and implement the Mayor's Food Legacy Pledge and the Healthier Catering Commitment.	○ ●	The Timber Lodge and Podium café, and the Kiosks implement both of these commitments. This includes reducing the level of saturated fat and salt in food sold, offering healthy alternatives and smaller portion sizes.
Events	Collaborate with the event industry and non-governmental organisations to share knowledge and integrate sustainability into the sector.	○ ●	The LLDC is exploring opportunities to do this.
Corporate	Deliver education programmes for visitors, workers, and residents about reduction and management of waste.	○ ●	This year we began work on our Environmental Engagement Strategy which will set out ways to engage residents, visitors, workers and residents to reduce waste.
	Promote educational initiatives and research programmes to enable sustainable behaviour to become the norm in and around the Park.	○ ●	This will be addressed through the LLDC Environmental Engagement Strategy and additional collaboration with academic institutions and partners.
	Provide appropriate environmental awareness training for LLDC directly employed staff and contractors.	○ ●	LLDC staff are provided with information about sustainable office practice on their induction as new starters, and all contractors are provided with Health, Safety and Environment briefings appropriate to the scope of their works.
	Deliver a visitor centre within the energy centre by 2014.	○ ●	This target has been met and will be removed for next year. The Visitors Centre at Kings Yard Energy Centre opened in 2014.

GLOSSARY OF TECHNICAL TERMS

Biodiversity Action Plan

A BAP is a plan to protect and restore biological systems, threatened species, and habitats, within a given region. The principal elements of a BAP typically include a list of key species or habitats; the conservation status of these species; and targets for conservation and restoration.

Priority species and habitats within a BAP are those that are identified as being the most threatened and requiring conservation action. Within the UK these priority lists have been used to draw up protective legislation.

Building Information Modelling (BIM)

Building Information Modelling (BIM) describes a joined up approach to sharing the information associated with building design (eg drawings, schedules of materials, locations of pipes and much more) between all of the different contractors involved in the design process (architects, building engineers, landscape architects, building managers) in one system of computer models rather than in documents and drawings that are held separately.

The benefits of BIM are that it enables people involved in design to locate the latest information available about their building design (wherever it may be held) and enables the visualisation of everyone's work in one place. This leads to better design and reduced inefficiency. In the UK, the Government Construction Strategy published in May 2011, states that the Government will require fully collaborative BIM as a minimum by 2016. This will represent a minimum requirement for Level 2 BIM on centrally procured public projects from April 2016.

Building Regulations

Building regulations contain the rules for building work in new and altered buildings to make them safe and accessible, and to limit waste and environmental damage.

Many of our targets are set against Part L of the Building Regulations. Part L covers the requirements related to the conservation of fuel and power, including insulation, window and door area, boiler efficiency, hot water storage, and lighting efficiency.

Our water use targets are set against the design standards outlined under Part G of the Building Regulations 2010, which require all new dwellings to achieve a water efficiency standard of 125 litres per person per day.

Code of Construction Practice (CoCP)

The LLDC Code of Construction Practice (CoCP) sets out a series of objectives and measures that contractors working on our development will adhere to and covers subjects such as noise and dust pollution, environmental protection and site working hours. The purpose of the code of construction practice is to help ensure that our new construction projects are carried out in an environmentally responsible fashion that reduces negative impacts on our surrounding communities.

Combined Heat and Power

There are lots of different ways to generate electricity and most of those processes also generate heat. Most of the time, this heat is released into the atmosphere and never used. In a Combined Heat and Power (CHP) plant, this 'waste' heat is captured and then used. On the Queen Elizabeth Olympic Park energy network, this 'waste' heat is used to heat up hot water, which then flows through radiators in buildings to warm them. This makes our network very efficient, as a comparison, up to two thirds of the overall energy consumed in conventional coal and gas plants is wasted in the atmosphere, often seen as a cloud of steam rising from cooling towers.

District Heating Network/ District Cooling Network

A district heat network transports heat to consumers through insulated pipes. The heat source is not contained inside the individual building (for example, through gas boilers or electric heaters); but rather distributes heat to many consumers on a larger community scale.

A District Cooling Network works on the same principles as a District Heating network, but instead of transporting heat, it transports cooling.

Embodied Carbon/ Embodied Energy

Embodied energy is the total energy associated with the materials and products used in construction projects. This includes all the energy associated with the extraction of raw materials; materials processing and manufacturing; transportation to the site; and construction as the finished building.

Embodied carbon is the expression of this embodied energy in terms of carbon dioxide emissions.

Energy from Waste (EfW)

Energy from waste involves taking everyday waste and turning it into a usable form of energy such as electricity, heat or transport fuels. This can be done in a variety of ways, of which incineration (burning) is the best known.

According to the waste hierarchy, waste should be prevented, reused, composted, or recycled before EfW is considered as an option. Therefore it is most commonly 'residual waste' that is used to produce energy – ie waste that is left over after all other avenues such as reuse and recycling have been exhausted.

The Fabric Energy Efficiency Standard

The Fabric Energy Efficiency Standard (EfW FEES) is a performance standard, setting minimum levels for overall fabric performance of a building. It also sets a maximum limit on the amount of energy that would normally be needed to maintain comfortable internal temperatures in a home. FEES is incorporated in the Code for Sustainable Homes.

GLOSSARY OF TECHNICAL TERMS

Green Flag Status	The Green Flag Awards are the benchmark for high environmental standards and levels of management within public parks and green spaces. Parks must re-apply to the scheme annually, and winning sites are eligible to fly a Green Flag in the park for a year.
Greenhouse Gas Emissions	Our corporate greenhouse gas (GHG) emissions have been calculated according to the GHG Protocol which classifies emissions into Direct and Indirect emissions as follows: Direct GHG emissions are from sources that are owned or controlled by the reporting entity (in this case the LLDC). Indirect GHG emissions are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity (for example the electricity we purchase and employee business travel). The GHG Protocol further categorises these direct and indirect emissions into three broad scopes: Scope 1: All direct GHG emissions. Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam. Scope 3: Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, outsourced activities, waste disposal, etc.
Grey Water/Black Water/Recycled Water	Greywater is wastewater from wash hand basins, showers and baths, which can be recycled for uses such as toilet flushing and landscape irrigation. Greywater often includes waste water from laundry, dishwashers and kitchen sinks. Blackwater is the waste water of toilets which contains human waste. Recycled water is any water that has been recovered from disposal and redirected back into use, most commonly after some processing - as above.
The Healthier Catering Commitment	The Healthier Catering Commitment for London is a scheme run by the London Boroughs with support from the Mayor of London that recognises businesses which demonstrate a commitment to reducing the level of saturated fat and salt in food sold, offer some healthy options (eg lower sugar drinks and snacks),and make smaller portions available on request.
Local Planning Authority	The Local Planning Authority is the organisation (usually a local authority or borough) that carries out planning functions such as setting out the development priorities for a given area in a Local Plan, approving or rejecting new developments and giving guidance to local developers. The LLDC is the Local Planning Authority for the Queen Elizabeth Olympic Park and its immediate surrounds.
Potable water/Non-Potable Water	Potable Water, also known as drinking water is water safe enough to drink and to use in food preparation. Most potable water will be treated, cleaned or filtered and will meet established drinking water. Non-potable water is water that is not of drinking water quality, but which may still be used for many other purposes, such as irrigation and toilet flushing.
Renewal Heat Incentive	The Renewable Heat Incentive is a Government environmental programme that provides financial incentives to businesses, households and communities to increase the generation of renewable heat. The RHI was introduced to help the United Kingdom (UK) meet European Union (EU) targets to reduce carbon emissions and improve energy security.
Site of Metropolitan Importance for Nature Conservation (SINCs)	Under this standard, the Greater London Authority and London borough councils recognise London's most important wildlife sites where the natural environment can be discovered within an urban setting. In total, over 1,400 SINCs have been identified in London, covering nearly 20% of the capital.
Smart Meter	A smart meter is a utility meter (such as for electricity, gas or water) that is capable of receiving and relaying back information to the utility provider and/or the consumer. This allows for real-time information on the time and amount of consumption. This can support energy efficiency, such as identifying unexpected peaks that could be associated with leaks or wastage, and with management of demand and supply for utility providers.
Thermal bridging	Thermal bridging describes a situation in a building where there is a direct connection between the inside and the outside through one of more elements that are more thermally conductive than the rest of the building; for example at the edge of windows and doors. As a result there is often a wasteful heat transfer, the inside temperature across this area will be different from other internal areas or surfaces which can lead to condensation.
Windrow Composting	Windrow Composting is the production of compost by piling organic matter or biodegradable waste, such as animal manure and crop residues, in long rows (windrows). This method is suited to producing large volumes of compost.
Zero Carbon Buildings	In 2007, the UK government introduced a policy for all new homes to be constructed to meet a zero carbon standard from 2016. Although this zero carbon standard will not be introduced in 2016, the LLDC will continue to apply the standard to its own development. This means all new homes must mitigate the carbon emissions produced on-site as a result of the regulated energy use. Regulated energy use includes space heating and cooling, hot water and fixed lighting, as outlined in Part L of the Building Regulations. Emissions resulting from cooking and 'plug-in' appliances such as computers and televisions are not addressed as part of this policy. In the first phase of Chobham Manor there are 10 exemplar zero carbon homes. There will be 25 exemplar homes in the development, once complete.