



# The Restorative Neighbourhood

Carbon positive, high quality living

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# Restorative development and low carbon growth

Across the rapidly urbanising world the challenge for cities is to provide high quality, low carbon, and economically resilient communities.

The Greater London Authority is committed to reducing London's carbon footprint by 80% before 2050, from 1990 levels, whilst maintaining growth. Upgrading London's existing buildings to meet these commitments is important but difficult.

It is incumbent on new development, particularly in Opportunity Areas, to make a major contribution to London's carbon commitments.

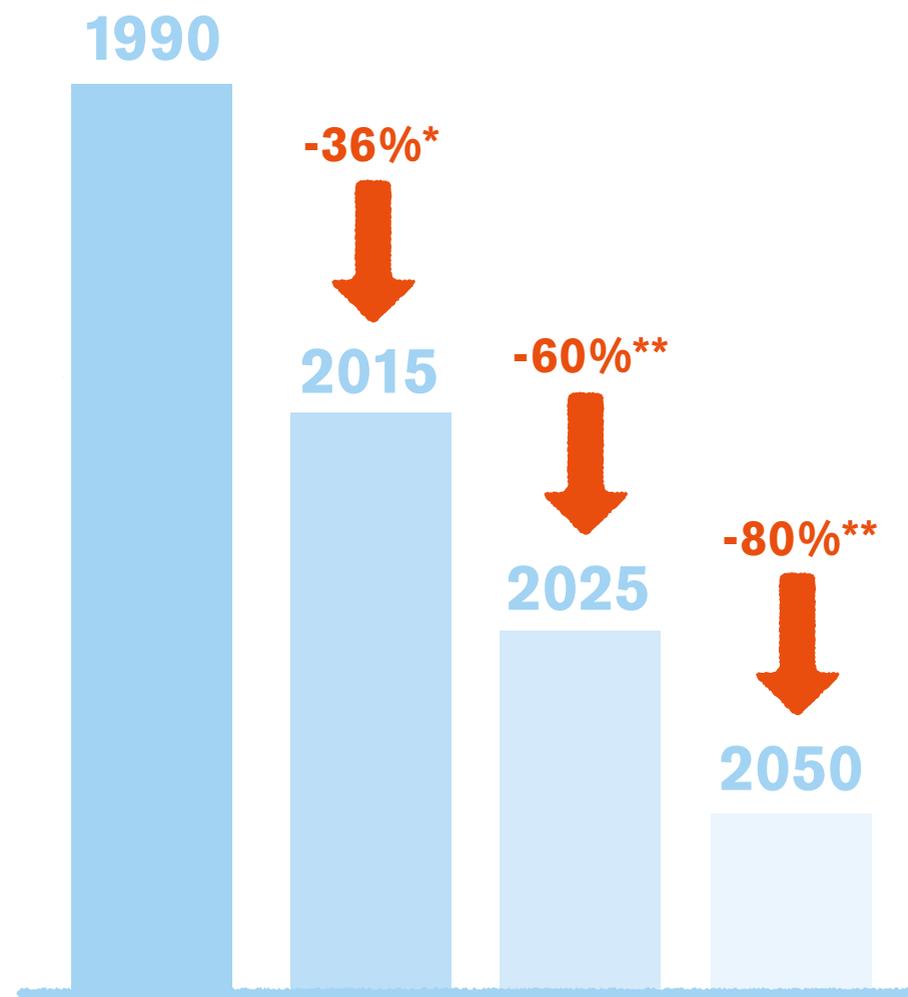
Areas like Old Oak and Park Royal must be planned, designed and delivered to be net zero carbon or even carbon positive.

Delivering zero carbon high quality neighbourhoods goes beyond sustainability and is about restorative regeneration.

The following pages set out a framework for how we could achieve this at Old Oak and Park Royal.

\* Based on the fifth carbon budget, November 2015

\*\* Carbon reduction commitment, The Climate Change Act, 2008



# OOPR The Restorative Neighbourhood

Old Oak and Park Royal Opportunity Area (OOPR) will undergo major regeneration. It will provide new residential, retail, work and leisure space around the most important new public transport interchange in London.

The GLA is committed to reduce carbon emissions in London by 80% by 2050. Major new regeneration projects will have to exceed this target and be net zero carbon or carbon positive, as it is much easier to reduce emissions on large renovation projects than through retrofit of buildings.

**Our aim is to create a Restorative Neighbourhood that is net carbon positive. This means:**

Restoring the natural environment, public parks and squares, streets and canals so that they contribute to high quality lively public spaces that are simultaneously rich in biodiversity.

Restoring existing buildings and designing new developments that are resource efficient and provide affordable living in London.

Creating shared infrastructure that delivers low carbon energy, reductions in potable water use and waste infrastructure that supports a circular economy.

Restoring public transport to create attractive, safe, clean and quiet cycling and walking routes linked to a smart and reliable public transport network.

Restoring industrial heritage and supporting growth of existing and new businesses. This is underpinned by adoption of clean and green technologies, resource efficiency, growth of the circular and sharing economy and innovation in areas like adaptive manufacturing.

Investing in existing and new schools, health facilities, social hubs and other public buildings.

Providing fast broadband so that the neighbourhood is digitally enabled. Data will be used to support more inclusive, community focused development and responsive governance and management.

Creating dense urban development that is at or above the upper limit of the London Density Matrix.

Creating mixed use development that promotes live/work lifestyles, reduces dependency on commuting and creates vibrant public space.

The regeneration will be designed to ensure the existing community thrives alongside the emergence of new communities.

**The ambition is to create the best neighbourhood in London.** This will only be achieved if there is consensus among developers around the vision and goals.

# Framework

An inclusive and holistic framework is required to design, finance, deliver and operate The Restorative Neighbourhood.

We have developed a framework that takes an integrated approach to neighbourhood development, and comprises the following eight themes:

1. resource consumption
2. environmental quality
3. high quality adaptable buildings and infrastructure
4. diverse and engaged communities
5. sustainable transport
6. work space, skills and employment
7. long term resilience
8. governance

This framework can be used to bring together development partners and the local community to build a shared vision and objectives, and to facilitate the move towards a fully Restorative City at Old Oak and Park Royal.

The following pages describe how each theme contributes to low carbon place making whilst also ensuring Old Oak and Park Royal becomes a healthy, vibrant and resilient neighbourhood.



# 1. Resources

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The Restorative Neighbourhood is one that generates more energy than it uses. The energy and resources that are used are predominantly from renewable and sustainably harvested sources.

Where possible energy is generated and distributed locally.

Local community groups are offered a stake in a local energy company. Water, waste and materials are used efficiently and where possible reused to reduce the overall environmental footprint of the development.

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New governance, delivery and financial mechanisms are required to create low carbon communities.

## Principles

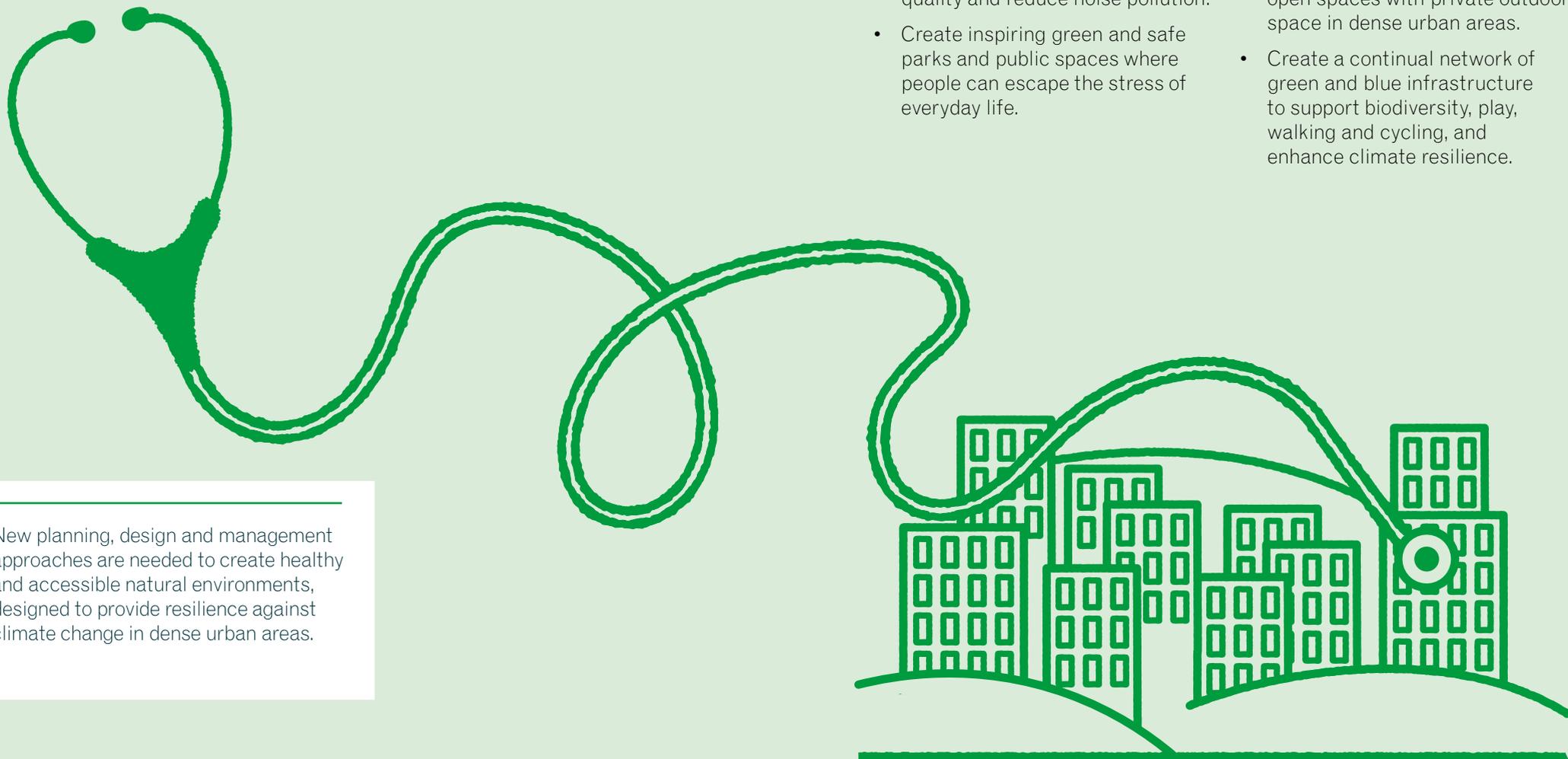
- Minimise energy demand while ensuring the community's needs are met over the long term.
- Generate low and zero carbon heat and power locally.
- Provide opportunities for the community to have a stake in local low carbon energy generation.
- Employ smart technology to help balance energy generation and demand.
- Transform waste into valuable resources and support businesses that can use waste to create new products and services.
- Reduce water demand and invest in harvesting and reuse of waste water and sewage.
- Provide opportunities to grow and sell food within the community.



## 2. Environment

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The Restorative Neighbourhood is a healthy, green and inspiring place to be. It protects and enhances the natural environment and ecological systems.



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New planning, design and management approaches are needed to create healthy and accessible natural environments, designed to provide resilience against climate change in dense urban areas.

### Principles

- Create a neighbourhood that is teeming with nature, is full of birdsong, and has natural open water clean enough for swimming.
- Design and manage the neighbourhood to enhance air quality and reduce noise pollution.
- Create inspiring green and safe parks and public spaces where people can escape the stress of everyday life.
- Work with landform and ecology to create comfortable microclimates, reduce flood risk and prevent overheating of buildings.
- Balance the provision of public open spaces with private outdoor space in dense urban areas.
- Create a continual network of green and blue infrastructure to support biodiversity, play, walking and cycling, and enhance climate resilience.

# 3. Placemaking

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The Restorative Neighbourhood has a strong sense of identity; it is rich in culture and has great public spaces and buildings that support diverse communities.

## Principles

- Create a neighbourhood that has a distinctive sense of place and identity.
- Create vibrant, open and welcoming public spaces.
- Create a neighbourhood that successfully combines living, work and play.
- Ensure the neighbourhood is accessible and affordable for all.
- Create a high density neighbourhood that is human in scale.
- Ensure the existing community benefits from the regeneration and is supported during the construction phase.
- Invest in the long term management and maintenance of the public realm.
- Create temporary uses for spaces that will be developed in future and create a buzz in the neighbourhood even whilst it is being constructed.

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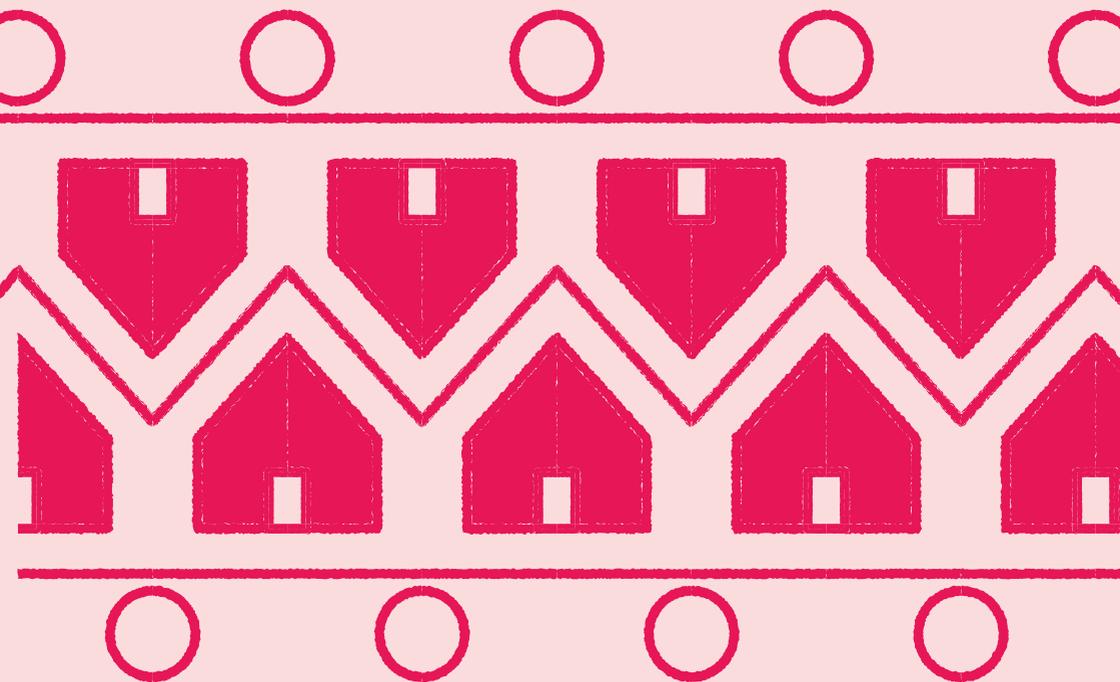
New planning, design and management approaches are needed to create healthy and accessible natural environments, designed to provide resilience against climate change in a dense urban areas.



# 4. Communities

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The Restorative Neighbourhood is one that supports diverse communities, engenders a sense of belonging and offers its residents a high quality of life whilst supporting people to live low carbon lifestyles.



## Principles

- Generate a shared vision with developers, stakeholders, community providers and residents.
- Support diverse communities and different interests.
- Engage and listen to the community and inspire a sense of belonging and commitment to the area.
- Provide opportunities for the different communities who have a stake in the area to help shape the development.
- Explore ways to give communities a stake in local provision of low and zero carbon decentralised energy infrastructure.
- Work with Local Authorities and the private sector to ensure provision of social services and infrastructure to meet the needs of the community over the long term.
- Create neighbourhoods that cater for people of different ages and with different needs.
- Support a digitally enabled sharing economy that promotes social cohesion.
- Ensure the most vulnerable in the community are properly supported.

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Engage communities in creating vibrant, diverse and inclusive neighbourhoods.

# 5. Connectivity

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The Restorative Neighbourhood is one where walking, cycling and public transport are the transport systems of choice because they are more reliable, more comfortable and cheaper than private transport.

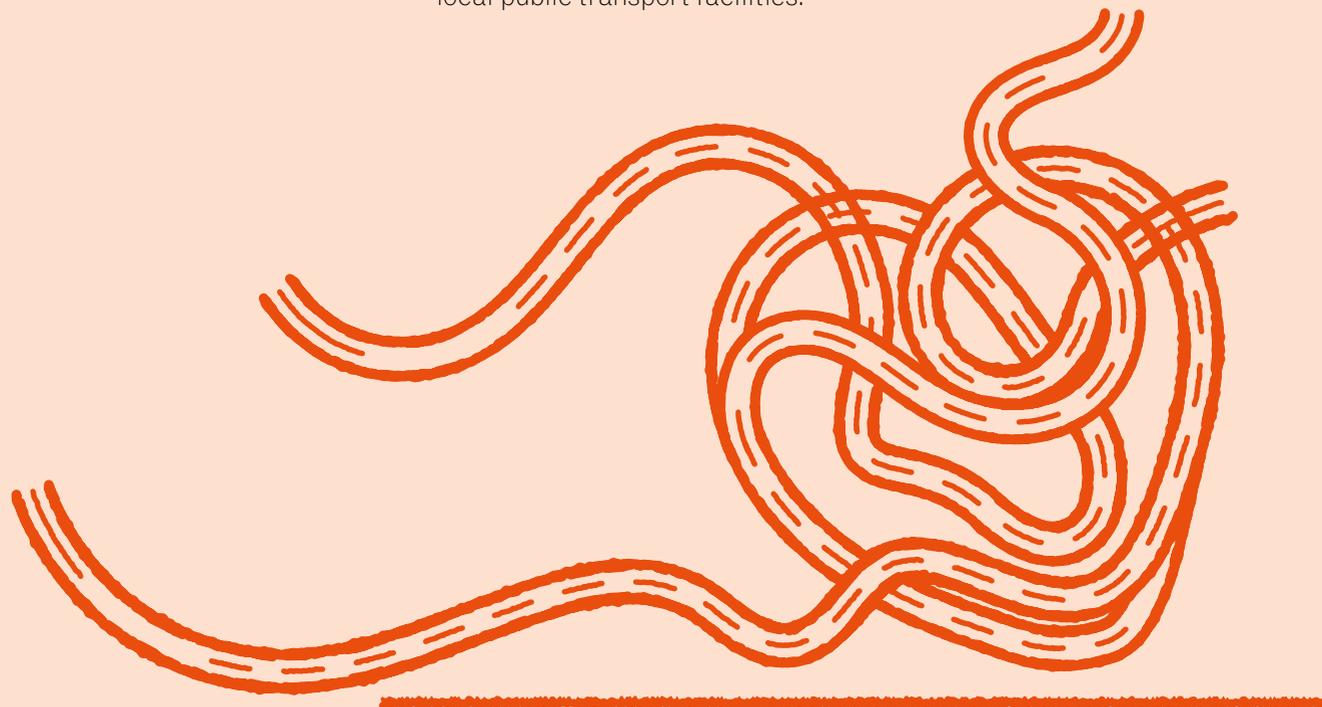
Fast broadband and smart technology allows people to travel less but communicate more. It enhances accessibility and more efficient use of assets.

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Connectivity is the cornerstone of a high quality low carbon neighbourhood. Great places have great public transport connections.

## Principles

- Old Oak and Park Royal are among the best served locations from a public transport perspective in London.
- The area is served by excellent links to the rest of the country and international transport hubs like St Pancras and Heathrow.
- The new HS2 and Crossrail interchange are designed to be the gateway and civic centre of the community.
- The whole area has outstanding cycling and walking routes and local public transport facilities.
- Smart technology is developed to support public transport use.
- Smart technology is used to support the efficient use of transport infrastructure.
- A combination of fast IT connections and great public transport puts Old Oak and Park Royal at the centre of the global economy.
- Smart and clean logistics support low impact movement of goods and materials.



## 6. Governance

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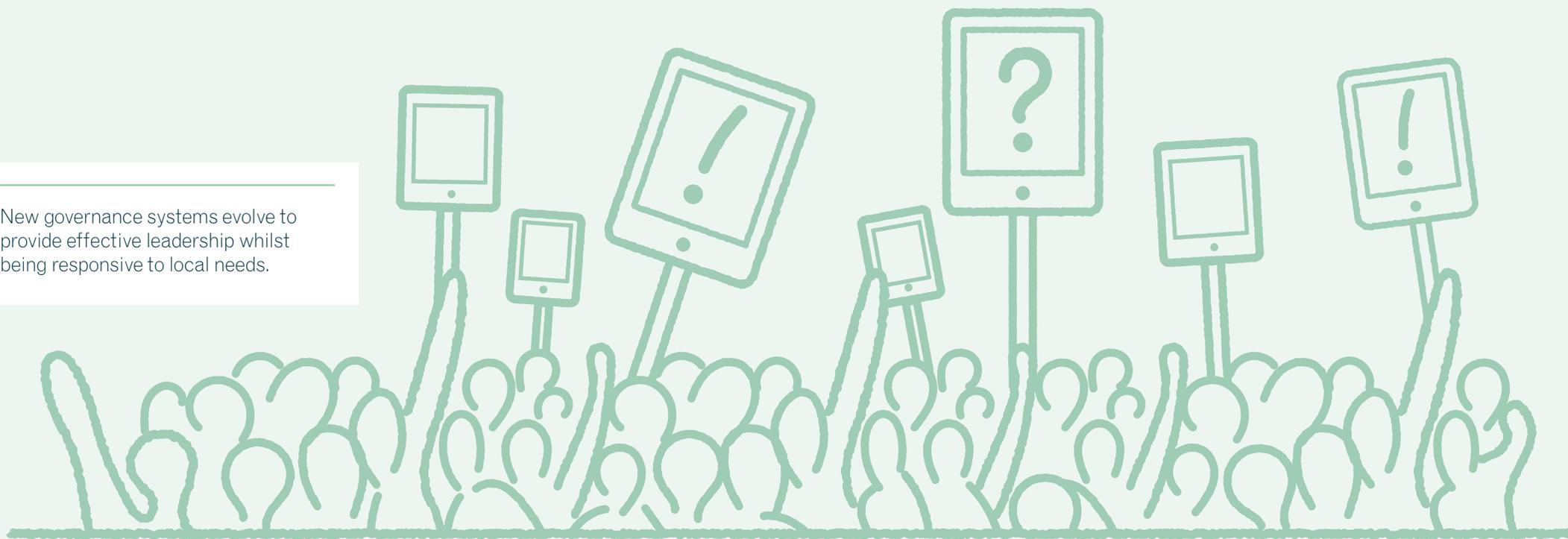
The Restorative Neighbourhood has governance systems and policies that support high quality low carbon living. Leaders engage citizens in planning, design and management of cities that are economically vibrant, resource efficient and focused on well-being alongside wealth creation. There is clear vision and strong engagement.

### Principles

- City leaders engage citizens in planning for the long term around a shared vision of a healthy, wealthy and inclusive society that treads lightly on the environment.
- The public sector works closely with private enterprise and non-government organisations to deliver public goods.
- The public sector involve local communities and private companies as well as social enterprises to manage and maintain public services and facilities.
- Local leaders work with the GLA and central government to create a restorative vibrant neighbourhood.
- Local leaders use smart technology to better communicate and engage with the diverse local community.

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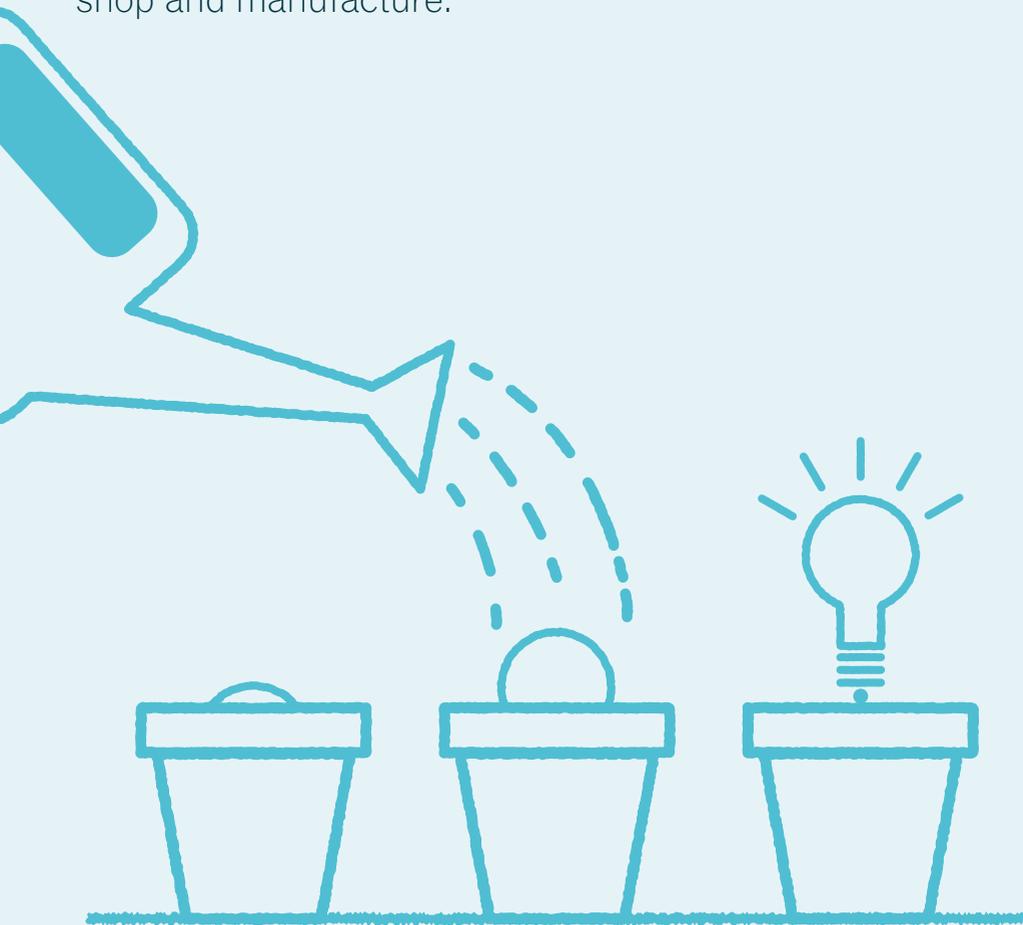
New governance systems evolve to provide effective leadership whilst being responsive to local needs.



# 7. Economy

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The Restorative Neighbourhood supports a vibrant and resilient economy based on low carbon, resource efficient and clean technologies. In an era of rapid globalisation it is designed to cater for changes in the way we work, shop and manufacture.



## Principles

- Economic development supports a restorative low carbon healthy environment.
- Planning and development policies are designed to support the growth of a vibrant low carbon economy.
- Commercial development is designed to support clean and smart technology companies at different stages of development from start ups to global PLCs.
- Old Oak and Park Royal becomes a hub for industrial innovation in clean technology supported by a cluster of businesses.
- Non residential buildings are designed to be adaptable to economic and technological change.
- Planning and development is designed around an economic resilience strategy.

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Old Oak and Park Royal set new standards for commercial and industrial development designed to support low carbon high tech growth.

# 8. Resilience

The Restorative Neighbourhood is designed and managed to cope with local and global change in climate.

The impact of change on infrastructure, buildings the public realm, business and health are factored into the planning, design and operation of the neighbourhood.

## Principles

- A climate adaptation strategy is developed that guides development standards.
- Governance and management systems take a long term perspective.
- Buildings, public space and infrastructure are designed to be adaptable to social, global, technological, economic and environmental change over the next 100 years.
- Lessons from existing development are taken on board in designing the neighbourhood of the future.
- The Restorative Neighbourhood is designed so that it can be easily renewed and upgraded over time without generating waste and redundancy.



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The neighbourhood is designed to adapt to change. The impacts of a changing climate on buildings, the public realm, infrastructure and services are assessed and addressed. Old Oak and Park Royal are leaders in adopting resilient neighbourhood strategies.

# Delivering a Restorative Neighbourhood

To create a Restorative Neighbourhood, a clear process is required that establishes a shared vision and goals.

Developers and stakeholders must be key contributors to the vision. The vision must take the long view: What should the area look like and how should it operate in 100 years time, and how can we ensure that interventions made today contribute to that vision?

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## 1 Engage

**Work with the whole community and all key interest groups to develop a long term shared vision.**

Communicate widely with private and public sectors as well as the public and special interest groups; use the 8 themes to build agreement about long term development goals. Build environment of trust through transparency.

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## 2 Plan

**Translate vision and goals into strategy, standards and targets across the whole of the development area.**

The goals, strategies and targets should inform the Local Plan and associated planning policies and requirements.

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## 3 Governance and funding

**Turn the vision into commitments embedded in the project.**

Bring together through the OPDC a partnership of public, private and community stakeholders to oversee delivery.

Critical infrastructure like transport, streets, bridges, power and heat, water and sewage, and green space should be fully coordinated, shared and integrated into the plans, to enable the long term development of a restorative neighbourhood.

Identify new sources of funding to deliver shared infrastructure and ensure that the overall development is cohesive.

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## 4 Design

**Utilise good design and innovation opportunities to achieve the vision.**

Follow a rigorous design process that tests the best ways to achieve the vision, identifies opportunities for innovation and embeds the objectives into design solutions and information.

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## 5 Deliver

**Utilise innovative delivery methods to implement the vision.**

### Procurement

Choose a procurement method that best supports high-quality and innovation. Ensure the vision, objectives and requirements are embedded in Tender and Contract documentation.

### Monitor and Test

Adhere to quality control, inspection and commissioning procedures to ensure the project is delivered to the agreed commitments.

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