Building the Green Economy

Action Plan

LONDON COUNCILS

London Borough of Hounslow

Building the Green Economy

ACTION PLAN

Double the size of the Green Economy by 2030 to ensure opportunities for all

DOUBLE THE SIZE OF THE GREEN ECONOMY BY 2030 TO ENSURE OPPORTUNITIES FOR ALL

CONTENT

INTRODUCTION

The Green Recovery Board chaired by The Mayor of London and London Councils have set out a goal to double the size of London's Green Economy by 2030 to the equivalent to £100 billion.

London's Green Economy is currently valued at £48 billion and accounts for approximately 5% of all employment. Local government will have to enable the change to ensure the target is reached and ensure a just transition towards a Green Economy.

To kickstart the transition, the Mayor of London has committed £10 million to the Green New Deal. The pillars of the green economy from the Mayors funding will include: decarbonising the built environment, green transport, public realm and green foundations, which includes business support and green skills development. Specifically, the funding aims to create 1,000 new green jobs, to address inequalities deepened by the pandemic and accelerate the aim of doubling the size of the green economy in London. This funding alone will be insufficient to deliver the transition needed for London to meet its ambitious targets.

This Action Plan outlines initial steps for London's Local Authorities to accelerate just transition over the next two years and the remaining challenges to achieving the transformation programme. Led by London Borough of Hounslow it is a collaborative piece of work drawing on expertise from other boroughs, London Councils, Greater London Authority and commissioned research. It is one of seven borough lead programmes.

Cllr Katherine Dunne

Cabinet Member for Communities and Climate Emergency
London Borough of Hounslow

FOREWORD

Our world is changing around us.

The effects of climate change are very real and are happening more rapidly than many people would have anticipated.

Together, we stand at a crossroads.

In one direction leads a path of continued uncertainty about our future in the face of now inevitable change.

The other is a path along which we rise to the challenge we collectively face, use the full force of our wit and ingenuity to carve a brighter future for ourselves and for generations to come.

This is not a time for despondency, it is a time of great optimism. This is not our two minutes to midnight, it is our alarm call. It's time to go to work.

And it's already happening.

In 2019, like many other local authorities across the country, Hounslow declared a climate emergency. We have set an ambitious target of becoming a net-zero carbon council by 2030.

We are working towards this by scrutinising everything we do - refocusing everything through the lens of carbon reduction.

We are embracing new technology - retrofitting our buildings, homes and schools.

We are encouraging active and sustainable transport and creating neighbourhoods where our communities can access the services they need without having to get into the car.

Crucially, we are working with our partners within the business community to encourage the very best in green innovation.

While there is still much to do, we have made a good start.

We are committed to working in partnership with our communities. If we are to rise to the challenge we face then everyone has a part to play.

Crucial to our success is our interaction with young people in our borough. Our children and young people have shown they care passionately about the environment. Their voices have been amongst the loudest when it comes to calling for action on climate change.

We are working with the borough's schools to develop and deliver our Climate Emergency Action Plan and prepare our young people for the future.

When the opportunity came for Hounslow to lead on the Building the Green Economy Action Plan for London, we seized it.

London is already leading the way when it comes to climate action. The city has a low carbon goods and services sector that is worth more than £40bn and is continuing to grow.

Encouraging and stimulating the city's green economy is key to our success. We need to make it as easy as possible for our business partners in all sectors to adapt their operations for a low carbon future.

We need to create an environment in which green entrepreneurship can thrive and one where our young people can gain the skills they need to take full advantage of the new opportunities that will lie ahead.

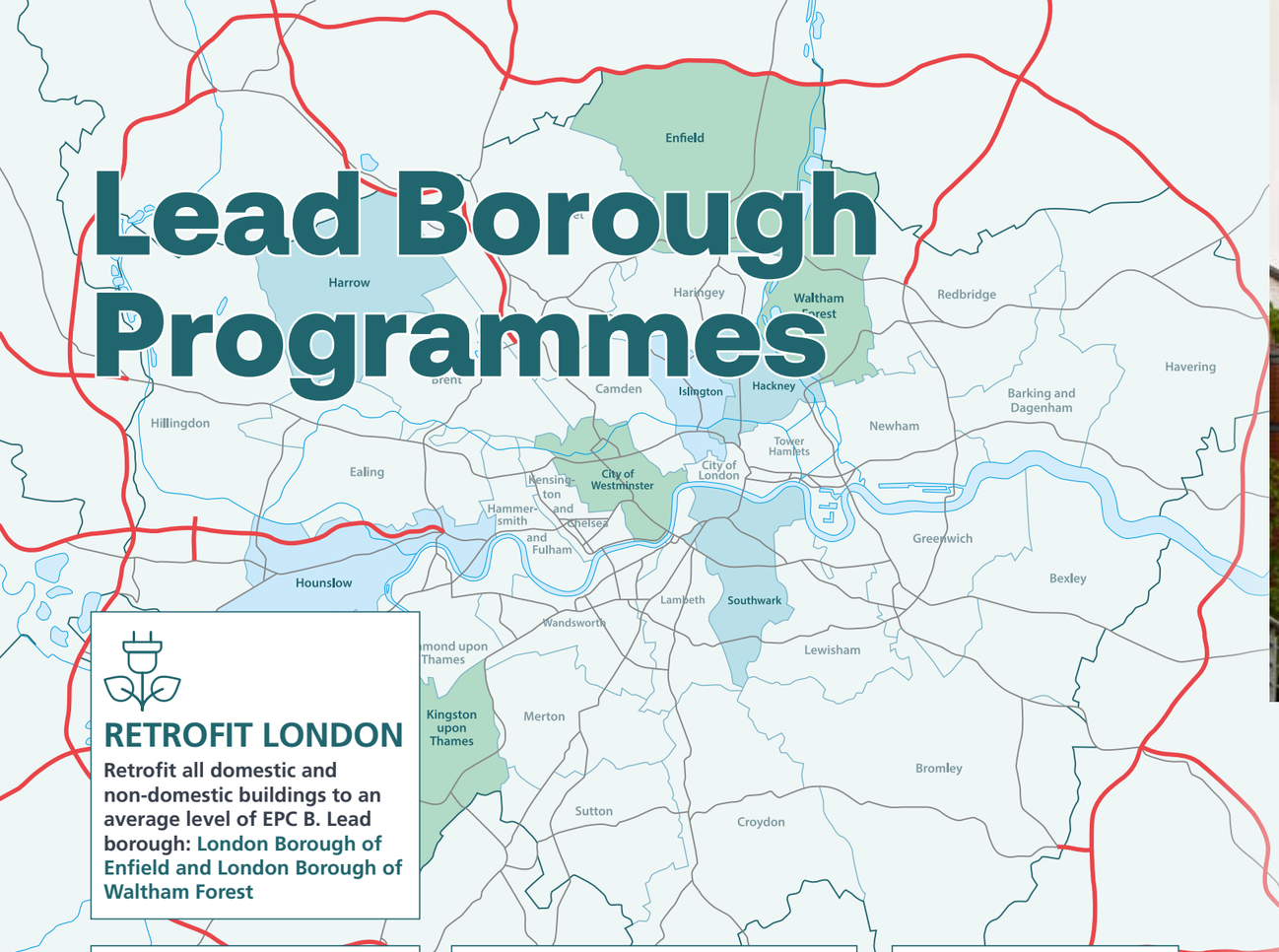
Above all, we need to lead by example.

This Building The Green Economy Action Plan provides us with the roadmap for the journey ahead.

It is our privilege to present it to you.

We look forward to working together to make its aspirations become reality and securing our city's green future.

Lead Borough Programmes



RETROFIT LONDON

Retrofit all domestic and non-domestic buildings to an average level of EPC B. Lead borough: London Borough of Enfield and London Borough of Waltham Forest

RENEWABLE POWER FOR LONDON

Secure 100% renewable energy for London's public sector now and in the future. Lead borough: London Borough of Islington

LOW CARBON TRANSPORT

Halve road journeys made by petrol and diesel via combined measures that can restrict polluting journeys and incentivise sustainable and active travel options. Lead borough: Royal Borough of Kingston and City of Westminster

LOW CARBON DEVELOPMENT

Secure low carbon buildings and infrastructure via borough planning. Lead borough: London Borough of Hackney

REDUCE CONSUMPTION EMISSIONS

Reduce consumption emissions by two thirds, focusing on food, clothing, electronics and aviation. Lead borough: London Borough of Harrow

BUILD THE GREEN ECONOMY

Develop London's low carbon sector and green our broader economy. Lead borough: London Borough of Hounslow

CREATING A RESILIENT AND GREEN LONDON

Ensuring London's resilience to heat, drought, flooding and other climate related impacts (through adaptations in the built environment). Lead borough: London Borough of Southwark

What is the Green Economy?

A key part of the Green Economy Workstream has been to develop and agree on a definition for the Green Economy. A Green Economy can be loosely defined as 'one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities'. In its simplest expression, a green economy can be thought of as one which is: 'low carbon, resource efficient and socially inclusive'.

The significant complexity associated with attempting to decide what comprises the emergent Green Economy means there is no straightforward and accepted definition. Understanding of the Green Economy will evolve over time and the ultimate objective is for a low carbon net zero green economy to become the de facto standard, thereby eliminating the need for a separate definition. To avoid attempting at this early stage to define the Green Economy in general terms that suit the perspectives of different stakeholders ranging from academia to business, we have focused on the desired outcomes.

For the purposes of alignment to the Green New Deal, a mission-based approach has been adopted. The Action Plan focuses on the sectors and activities that are core to attaining the doubling target accepting that the general definition of the Green Economy and what constitutes it can develop in parallel.

Achieving net-zero will rely on transforming professional services as well as the traditional high emitting sectors such as transport, storage, manufacturing, and construction. A narrow view of the Green Economy would not suffice in assisting in London's radical transition, potentially missing out key emerging sectors and excluding carbon intensive sectors seeking to accelerate their journey to net zero. Too broad a definition risks diluting the Action Plan with an unclear baseline to measure progress from, capturing general economic activity and having insufficient focus on green growth.

The Action Plan captures both sectors that have a direct impact on net zero and sectors that are more loosely associated with net zero but have a significant impact on broader environmental goals. These sectors are outlined in the next section.

Pathway to Net Zero

SECTORS IN FOCUS

HOMES AND BUILDINGS:
Retrofit, building new **energy-efficient homes, heat pumps,** and **heat networks**

LOW CARBON TRANSPORT:
Low or **zero emission vehicles, sustainable aviation and martime, public transport** and **active travel**.

POWER:
Renewables, nuclear power, grid infrastructure, energy storage and **smart systems** technology.

INDUSTRIAL DECARBONISATION, HYDROGEN AND CARBON CAPTURE AND STORAGE:
Green hydrogen production and industrial use, **carbon capture, utilisation and storage** (CCUS) and **industrial decarbonisation**.

CLIMATE CHANGE RESEARCH AND DEVELOPMENT:
Private sector, academic and **public** research.

CLIMATE ADAPTATION:
Flood defences, the **retrofitting** of buildings to be resilient to extreme weather/climate events, **nature-based solutions** to **reduce climate impacts** and civil and mechanical engineering for **infrastructure adaptation**.

GREEN FINANCE:
The concentration of financial activity in Central London means that in our context **Green Finance could be a key area to identify** separately.

CLIMATE CHANGE STRATEGY, POLICY, MONITORING AND PLANNING:
Public, private and NGO sector **strategy** and **policy, outreach** to citizens, **environmental monitoring** and the use of a **planning system** to achieve net zero.

REDUCING LOCALISED POLLUTION:
Including **air pollution, water pollution** and **noise**; London has ambitious goals across all three of these areas.

REDUCE, REUSE, RECYCLE:
Including **waste management** and **circular economy**.

GREEN AND BLUE INFRASTRUCTURE:
Within a London context this will focus on **urban green** and **blue infrastructure**, and include activity aimed at **increasing biodiversity directly** or through offsetting.

FOUR PILLARS OF THE GREEN ECONOMY ACTION PLAN

1 **GREEN JOBS AND GREEN SKILLS –**
Upskilling and reskilling from vulnerable carbon intensive industries into well paid, stable Green Jobs. Creating a pathway for London's young talent into attractive Green Careers.

2 **GREEN ECONOMIC GROWTH –**
Stimulate demand for low carbon goods and services to achieve doubling of the Green Economy by 2030.

3 **GREEN ENTERPRISE AND INNOVATION –**
Provide support to accelerate green entrepreneurialism and businesses including SMEs contributing to a net zero carbon future.

4 **GREEN FINANCE AND INVESTMENT –**
Identify and pilot viable methods of attracting private sector investment which can be scaled to meet the financing needs of the doubling target.

Just Transition

GREEN ECONOMY AND SOCIAL JUSTICE

The cost of transition away from carbon intensive industries to a Green Economy should not fall on our most disadvantaged communities further exacerbating economic and social inequality. Equality, diversity and inclusion must therefore be embedded in every pillar and project associated with building a green economy.

AGE

Studies have shown that young Londoners consistently struggle to get jobs in London, with a 11% unemployment rate for 16–24-year-olds compared to just 5% for the working age population[1].

Workers aged over 50 have been severely impacted by the Covid-19 pandemic, with 1 in 4 workers aged over 50 being furloughed in 2020 according to a study by the Centre for Ageing Better[2].

The same study found that people aged over 50 are twice as likely to be out of work for 12 months or more compared to younger workers. Although older workers are more likely to rely on carbon intensive industries, all age groups will be adversely impacted by job reductions in sectors vulnerable to decarbonisation.

This is especially true for people who sit at an intersection of inequalities, such as young, black people. The Action Plan needs to focus on developing a credible pathway for young people leaving education or out of work into attractive green careers which offer good pay and development opportunities. At the opposite end of spectrum for older persons in vulnerable high emitting industries establishing a pipeline of sector specific upskilling and reskilling opportunities which utilise experience already gained as a pathway to green jobs.

DISABILITY

Approximately 39.3% of disabled Londoners are economically inactive. People with mental health problems are thought to find it most difficult to secure employment, and less than 1 in 4 people with mental health problems have a job. On Green Skills and Green Jobs, the Action Plan needs to address the accessibility of course provision and identification of roles which offer good propsects and greater partcipation from people living with disability.

GENDER

Green Economy opportunities which involve operational and site-based activities are still impacted by negative perception of working conditions and workplace culture. These act as a barrier of entry for greater inclusion of women and ethnic minorities. The Action Plan must address how existing demographic breakdown of industries such as construction are not replicated but dismantled in favour of more diverse and inclusive representation in economic activity for sectors such as retrofit, horticulture, transport, energy and power.

RACE

Young Black men face some of the highest unemployment rates in London, with 33% of young black men in London unemployed compared to only 15% of young white men[3]. Underemployment, lack of job security and employment in carbon intensive industries is disproportionately skewed towards Black Asian and Minority Ethnic people[4]. In contrast, environmental roles such as those in agriculture or energy are disproportionately made up of white people, with London's agriculture sector made up of 96% white people[5]. The actions put forth by the Green Economy Action Plan must consider race as a barrier to inclusion. The forthcoming solutions should be designed accordingly to ensure equal access to training, business development and other financial opportunities.

SOCIAL AND ECONOMIC DEPRIVATION

Pathways need to be created to bring London residents out of underemployment or from beneath the poverty line into stable, well-paid employment. This could include provision of financial or digital support for socio-economically deprived residents to upskill and obtain the relevant qualifications to secure a green job. A study found that young people from less affluent backgrounds were more likely to leave their job during the pandemic, with 41% of young people from the poorest households in London leaving work compared to 16% for young people from the most affluent households[6]. The hospitality sector, which is already dominated by younger and lower-paid people with fewer academic qualifications, was hit hardest by the pandemic[7]. The Action Plan will need to ensure that the most socially and economically deprived communities, particularly those impacted most by the pandemic, are not left behind in the transition to a greener, more sustainable economy.

1. London Data Store
2. Centre for Ageing Better
3. GLA and The Equal Group
4. Race in the Workplace – The McGregor-Smith Review
5. Green Jobs and Skills in London: cross-London report. Original source: ONS (2021) Environmental goods and services sector (EGSS).
6. Resolution Foundation, LSE and Political Science
7. London Assembly

Young people,
19%
of 16–24-year-olds
in London
are currently
unemployed

Over 50s
are more likely
than other age groups
to be **employed in precarious and carbon intensive industries**.

39%
of London's
disabled residents
are currently
economically inactive

38%
of people in carbon intensive industry
are non-white
making them
disproportionately vulnerable to potential job loss.

Redressing
Approximately 75% of roles affected by transition to Green Economy are held by men and white ethnic persons.
Redressing the demographic imbalance of sectors critical to the growth of Green Jobs and Skills including construction, horticulture and engineering by increasing participation of women and BAME persons is essential to a just transition.

Any
economic transition
must ensure that the most vulnerable communities
on socio-economic deprivation indices are
primary beneficiaries

Green Economy Action Plan

SUMMARY OF PAN LONDON RESEARCH

Primary Research

The London Council's survey was sent to all 32 London Boroughs plus the City of London to which 26 councils responded. In addition, London Borough of Hounslow has undertaken research, engagement and workshop sessions. A smaller number of London boroughs have formed a Steering Group to input into the Green Economy Action Plan.

London Borough of Hounslow has undertaken both primary and secondary research with a range of Innovation Districts and Zones.

Key initiatives underway and identified challenges for the London boroughs derived from that research are summarised in this section.

SUMMARY OF PAN LONDON RESEARCH

Green Jobs & Green Skills

CURRENT MEASURES:

- Bidding for funding to deliver Green Skills courses and increase capacity.
- Creating and promoting training and jobs (1:1 support, signposting to courses, green jobs fairs, kickstart placements, working with schools, supporting existing training centres).
- Linking current Green Skills/Job opportunities to existing services such as Job Centre Plus and Further Education colleges.
- Pivoting existing courses in construction to provide green skills top up.
- Launching zero barrier to entry upskilling courses with a pathway to employment.
- In house delivery of environmental services leveraged for apprenticeships and other green career opportunities.

ASPIRATIONS:

- Green skills and carbon literacy training for residents.
- Develop green skills centres/hubs including Mayoral Academies Programmes.
- Create sector specific academies focusing on high demand and high skills gap areas such as retrofit, heat pumps and electric vehicle infrastructure.
- Connect council suppliers and in house services aligned to green jobs and skills requirements with local residents and communities. This is to facilitate access to employment and training opportunities.
- Provide access to upskilling and reskilling opportunities for residents as a pathway to green careers.

GAP ANALYSIS - KNOWLEDGE AND SERVICE CAPABILITY:

- Uncertainty in defining 'green jobs', when they will be generated and at what scale, and what new skills will be needed.
- Lack of direction from government on green sector and subsequent lack of public narrative on benefits to both employment prospects and society.
- Low demand for green skills due to lack of market demand.
- Lack of forecasting to understand immediate market capacity for green skills translating to green employment.
- Lack of in-house resources & specialist or technical expertise.
- Significant skills gaps and capacity for retrofit and construction.
- Difficulty engaging SMEs in green skills and limited funding to offer support.
- Lack of understanding of specialist skills required for trades which offer a pathway to green skills and jobs.
- Lack of green vacancies to make a business case for offering green skills training and upskilling.
- Insufficient links to young persons and adults career advice provision to raise awareness of green careers.

Green Enterprise & Innovation

CURRENT MEASURES:

- Carbon reduction grant scheme for SMEs.
- Covid-19 grant funding for businesses to adopt a climate pledge.
- General business support and grants.
- Green business surveys to identify needs to support businesses in decarbonisation, and to map green businesses.
- Incubator and accelerator programmes to support R&D and innovation for start-ups and green entrepreneurialism.
- Toolkits to support SME decarbonisation.

ASPIRATIONS:

- Develop proposal for package of incentives for SMEs.
- Focus on improving the sustainability of existing businesses and green consumerism.
- Innovation focus on smart and integrated infrastructure, fibre networks and 5G.

GAP ANALYSIS - KNOWLEDGE AND SERVICE CAPABILITY:

- Difficulty in identifying and defining 'green businesses'.
- Providing incentives after Covid-19 grant funding ends.
- Low demand for green products and services.
- Difficulty in engaging SMEs in green skills as well as a lack of funding to support greening SMEs.
- Providing a credible and unique service offering to attract businesses not reliant on grants and rates relief.

SUMMARY OF PAN LONDON RESEARCH

Green Economic Growth

CURRENT MEASURES:

- Green Economy strategies and policies.
- Positioning of London in retrofitting and how UK growth is linked to London supply chains.
- Use of council procurement levers to increase sustainability and social value.
- Publicly owned community energy funds and companies focused on decentralised, low carbon and affordable solutions.
- Decarbonisation of publicly owned property portfolios and vehicle fleet.
- Upscaling delivery of Green and Blue infrastructure.
- Incentivising shop local and sustainable through voucher schemes.

ASPIRATIONS:

- Set environmental standards and targets to encourage low carbon circular solutions.
- Improve London's national-scale supply chains - generating economic growth through linking with wider UK supply chains.
- Linking opportunities for green growth with existing regeneration schemes in socio and economically disadvantaged areas.

- Stronger emphasis on businesses and contractors using local labour and supporting long-term local supply chain capacity.
- Provision of affordable and high quality flexible workspaces.
- Significant upscaling of electric vehicle charging and supporting infrastructure provision.

GAP ANALYSIS - KNOWLEDGE AND SERVICE CAPABILITY:

- Level of market nudge to allow sufficient time for supply chain and disruptors to bring forward suitable goods, products and services.
- Difficulty in incentivising or enforcing private sector businesses' use of local labour in a competitive global market.
- Resilience of wholly publicly owned organisations and companies not backed by HM Treasury.
- Support for existing businesses particularly SMEs to go green including co-ordinated sharing and implementation of best practice.

Green Finance & Investment

CURRENT MEASURES:

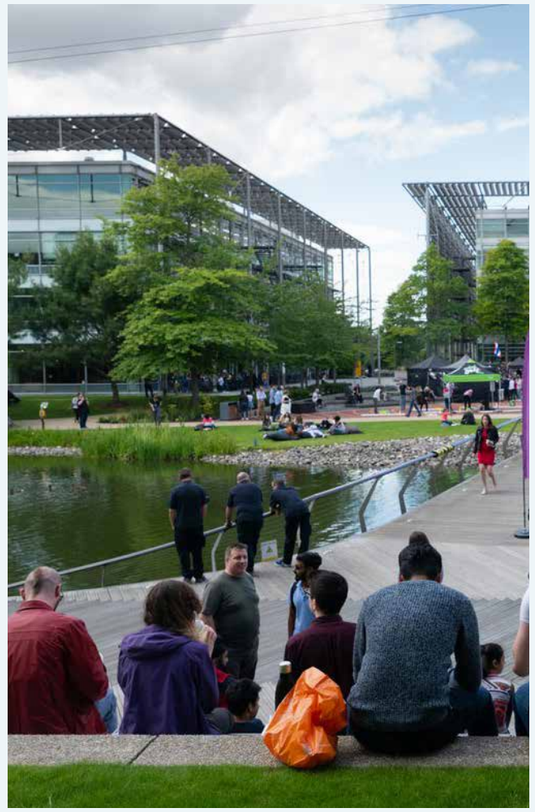
- Piloting novel and innovative Green Finance initiatives.
- Piloting place-based models of funding achieving multiple interventions and regeneration outcomes.

ASPIRATIONS:

- Pan-London investment model to operate at scale.
- Unlock emerging sources of capital funding such as UK Infrastructure Bank, climate bonds and community bonds.

GAP ANALYSIS - KNOWLEDGE AND SERVICE CAPABILITY:

- Creating a compelling and robust investment proposition which incorporates wider benefits beyond financial returns (social value & natural capital).
- Developing a clear advocacy ask to begin engagement with multiple sources of funding treasury, finance institutions and grant funding bodies.
- Green finance skills required in Local Authorities .
- Carbon bonds and community bonds.



Green Skills & Jobs

WHAT IS A GREEN JOB?

Employment in an activity that directly contributes to - or indirectly supports - the achievement of the UK's net zero emissions target and other environmental goals, such as nature restoration and mitigation against climate risks.

PURPOSE

A mission-based definition is preferred to establish a baseline against which to monitor progress towards doubling the Green Economy.

CHALLENGES

A mission-based definition encompasses all roles so further segmentation on sector and qualification basis is required to understand where implementation goals should focus. Particularly where there is need to develop actions to identify and increase green skills capability.

Vision	**London will have a diverse and inclusive pool of top talent equipped with the skills to access future employment opportunities in the Green Economy**		
Mission	Develop a structured Green Skills course provision focused on creating a credible pathway into Green Careers		
Purpose	To make sure regardless of background or education attainment level there is a route into Green Jobs.		
Objectives	**Short Term: 2022-2024**	**Medium Term: 2024-2027**	**Long Term: 2028+**
	Develop co-ordinated approach to set-up of Green Skills Hubs developed as part of the Mayoral Academies Programme.	Implementation and delivery phase of Green Skills Hubs established as part of the Mayoral Academies Programme	
	Continue pilot of Green Skills courses. Share best practices and lessons learned.	Develop a comprehensive and sustainable Green Skills portfolio of learning to deliver the required number of courses aligned with current employer opportunities and projected future growth.	Green Skills, carbon literacy and climate change embedded in all education provision including national curriculum, further and higher education courses.
	Engage with businesses to understand type of courses required including mechanism of delivery.	Accessible course provision aligned to employer need incorporating short courses and longer form courses. Green skills top-up based on pre-requisites to zero barrier of entry foundation courses.	
	Agree sectors of focus with partners from local authorities, research institutions and business	Course delivery and expansion aligned with sectors of focus	Expand focus to all Green Economy sectors
	Agree current baseline and projected Green Jobs growth to inform target for increase in Green Skills capacity.	Monitoring based on agreed Pan London metrics for Green Jobs and Green Skills growth including equalities impact	
	Establish investment need and potential sources for the expansion of Green Skills course capacity.	Secure funding for upscaling Green Skills programme and increase in Further Education teaching capability.	
Data and Delivera-bles	Number and % increase over time in courses delivered	Number and % increase over time in Green Jobs	% of Courses with carbon literacy/ green training
	Target for participation from underrepresented and at-risk groups	% conversation rate of participants that secure green jobs post skills intervention	% of councils with Green Skills/ jobs embedded in procurement
	% funding secured against investment need		

Green Jobs and Skills

Risk	Context	Mitigation	RAG
Training not translated to jobs	Once training has commenced, there is no guarantee the applicants are able to find and secure good work	Training to be provided based on empirical evidence of jobs availability and courses meeting employer technical requirements. Partnering with employers to create a brokerage between jobs and prospective employees. Ensuring training has wrap-around support to mentor and assist persons into work.	
Inequality	Sectors identified as key Green sectors are largely male- and white-dominated sectors. The need to diversify the sectors are at the forefront, as well as ensuring that any training opportunities are open to all.	Identify specific barriers of entry and develop a plan to overcome through 1. Meaningful changes to employment practices and culture where necessary 2. Engagement campaign targeted at underrepresented groups to debunk outdated perceptions	
Inability to measure (green) impact of programmes/ projects	Measuring the impact of employment through reduction of universal credit might not capture the transition towards green in the broader sense, e.g. when businesses transition towards greener modes of operation	Establish a clear baseline for the current status and definition of Green Jobs. Subsequent to this metrics for successful Green Skills to Green Jobs upscaling incorporating social value and just transition principles	
Availability of sufficiently qualified staff	This applies to all education settings but the need is particularly acute at Further Education level where it is anticipated the bulk of Green Skills course provision will be targeted for unskilled and skilled persons below Higher Education NVQ levels	Develop a pan London advocacy plan to engage with private sectors businesses who have or anticipate skills need and relevant government departments to secure funding for capacity building now to ensure sufficient training staff are available.	

EXPLANATION OF PILLAR ACTION - RAG STATUS

GREEN Sufficient capacity, funding and/or expertise exists to manage this risk using a partnership based approach.

AMBER There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Using a partnership based approach the shortfall in one or more of these areas can be addressed

RED There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Failure to adequately manage this risks undermining core delivery of the Action Plan

EXPLANATION OF PILLAR ACTION - DATA AND DELIVERABLES

The Data and Deliverables require further engagement with partners to establish agreed metrics and targets.

Green Skills and Jobs Sector Breakdown

SECTOR AND EMPLOYMENT TYPES

CLIMATE ADAPTATION
Hard engineering for infrastructure adaptation including flood risk and resilience to other climate events.

CLIMATE POLICY & RESEARCH
Including private sector, academic and public research. Strategy development and implementation. Citizen mobilisation.

GREEN AND BLUE INFRASTRUCTURE
Urban greening. Nature based solutions for climate change impacts including Suds for flooding canopy for heat.

INDUSTRIAL DE-CARBONISATION & INNOVATION
Including hydrogen production and industrial use, carbon capture, utilisation & storage (CCUS) and industrial decarbonisation.

CONSERVATION, HORTICULTURE, AGRICULTURE
Grounds and landscape maintenance, sustainable farming.

HOMES AND BUILDINGS
Retrofit, building new energy-efficient homes, heat pumps, smart devices and controls, heat networks and hydrogen boilers.

GREEN FINANCE
Funding and investment roles to deliver net zero including specialised financial products such as green bonds and finance institutions.

POWER
Including renewables, nuclear power, grid infrastructure, energy storage and smart cities supported by latest digital connectivity such as 5g.

SUSTAINABLE TRANSPORT
Low or zero emission vehicles, aviation and maritime, rail, public transport, active travel including infrastructure to support low carbon travel, freight and logistics.

CONSTRUCTION
Greened element of operational and supply chain construction delivery.

CIRCULAR ECONOMY
Reduce, Reuse, Recycle. Sustainable consumption and waste management.

BUSINESS & PROFESSIONAL SERVICES
Greening of roles in areas such as marketing, communications, project management, and business leadership.

Skills and Occupational Level

GLA ECONOMICS - IDENTIFYING GREEN OCCUPATIONS IN LONDON

NVQ Level	Broad skill level	Nature of change	Anticipated Skills Requirement	Example job roles
Up to GCSE NVQ 1	Lower-skilled occupations.	Job roles mainly change in a generic way, e.g. requiring increased environmental awareness or adaptations to work procedures.	On-the-job learning or short reskilling/ upskilling programmes.	Bus and coach drivers; refuse and salvage occupations driving electrified or other forms of low carbon alternatives.
GCSE – A-levels NVQ 2-4	Medium-skilled occupations.	Some new green job roles Significant changes to some existing job roles in terms of technical skills and knowledge.	Short-to-longer upskilling and reskilling programmes; TVET* courses.	New job roles: wind turbine technicians; solar panel installers Alteration of job roles to incorporate low carbon. For example car mechanic required to maintain EV vehicle component. Electrician installation of EV infrastructure.
Degree level NVQ 5-7	Higher-skilled occupations.	Locus of most new green job roles Significant changes to some existing job roles in term of technical skills and knowledge.	University degree; longer upskilling programmes.	New job roles: energy auditors, environmental economists; climate change policy analysts. Changing job roles: civil engineers, architects, town planners.

Can the Green Economy offset losses from carbon intensive industries?

- ➔ **Significant net growth in overall jobs is not anticipated.**
- ➔ **Growth of jobs in the Green Economy should provide sufficient opportunities to allow transfer from carbon intensive roles**
- ➔ **38% of people highly exposed to transition away from carbon intensive industry are non-white establishing acute need for upskilling and reskilling to attract disadvantaged groups**

ESTIMATED IMPACT OF NET ZERO POLICIES ON NET EMPLOYMENT IN LONDON - WPI/ IES

Sector	Jobs in London, 2019	Estimated jobs in London, 2030			Estimated jobs in London, 2050		
	Latest data	Based on current policies	With net zero policies	Change due to net zero policies	Based on current policies	With net zero policies	Change due to net zero policies
Agriculture	1,800	1,600	1,600	**0**	1,200	1,300	**100**
Mining and refinery	2,500	2,300	2,100	**-200**	1,700	1,600	**-100**
Utilities	28,000	25,300	26,500	**1,200**	19,600	26,500	**6,900**
Manufacturing and construction	328,000	325,900	329,500	**3,600**	311,400	312,900	**1,500**
Distribution, retail, hotel and catering	1,054,000	1,106,800	1,126,800	**20,000**	1,134,900	1,145,100	**10,200**
Transport and communications	708,000	766,900	782,200	**15,300**	838,000	838,800	**800**
Services	3,246,000	3,624,200	3,631,500	**7,300**	4,136,000	4,136,000	**0**
Total	5,368,000	5,853,000	**5,900,000**	**47,200**	**6,443,000**	**6,462,000**	**19,400**

Setting the Scene for the Green Economy in London

AREAS FOR GROWTH

CURRENT SITUATION:

- Estimated some 234,300 green jobs in the capital in 2020, 4.4% of total employment. The largest sectors were Power (83,000 jobs), Homes and Buildings (58,200) and Green Finance (50,700)
- Green jobs in London are predominantly high-level managerial, professional and associate professional/technical roles. There is also an over-representation in skilled craft jobs (19%, compared with 6% of all jobs in London).

ESTIMATED GROWTH:

- **There is substantial uncertainty in projecting green jobs;** projections made in the report present a range from 0.6 to 1.8 million green jobs.
- The central projection implies an increase of around 140% in skilled craft workers by 2030 (including electricians, gardeners and landscape gardeners, plumbers and heating & ventilation engineers).
- Retrofit and EV infrastructure are projected areas of high increased need. To catch up and keep pace in the mission to meet zero by 2030 an additional 34000-40000 charging stations are required and retrofit of on average 236,500 buildings required every year. Thousands of additional qualified staff will be required to meet this demand within London.

Green Skills and Jobs Sector Breakdown

WHERE IS TARGETED INTERVENTION NEEDED?

Sectors in GREEN highlighted as focus areas for local government.

CLIMATE ADAPTATION
Hard engineering for infrastructure adaptation including flood risk and resilience to other climate events.

CLIMATE POLICY & RESEARCH
Including private sector, academic and public research. Strategy development and implementation. Citizen mobilisation.

GREEN AND BLUE INFRASTRUCTURE
Urban greening. Nature based solutions for climate change impacts including Suds for flooding and canopy cover.

INDUSTRIAL DE-CARBONISATION & INNOVATION
Including hydrogen production and industrial use, carbon capture, utilisation & storage (CCUS) and industrial decarbonisation.

CONSERVATION, HORTICULTURE, AGRICULTURE
Grounds and landscape maintenance, sustainable farming.

HOMES AND BUILDINGS
Retrofit, building new energy-efficient homes, heat pumps, smart devices and controls, heat networks and hydrogen boilers.

GREEN FINANCE
Funding and investment roles to deliver net zero including specialised financial products such as green bonds and finance institutions.

POWER
Including renewables, nuclear power, grid infrastructure, energy storage and smart cities supported by latest digital connectivity such as 5G.

SUSTAINABLE TRANSPORT
Low or zero emission vehicles, aviation and maritime, rail, public transport, active travel including infrastructure to support low carbon travel, sustainable freight and logistics.

CONSTRUCTION
Greened element of operational and supply chain construction delivery.

CIRCULAR ECONOMY
Reduce, Reuse, Recycle. Sustainable consumption and waste management.

BUSINESS & PROFESSIONAL SERVICES
Greening of roles in areas such as marketing, communications, project management, and business leadership.

Rationale for Focus Areas

The areas in focus for skills development are based on predictions for the Green Economy at large, but also a pragmatic recognition of which areas councils can best influence and deliver most value to accelerate change:

DIRECT LOCAL AUTHORITY RESPONSIBILITY

Councils have statutory responsibilities for climate resilience including those as Local Lead Flood Authorities. Green and Blue Infrastructure and Climate Adaptation are central to discharging these responsibilities. Responsibility for housing stock and maintenance of other key infrastructure means councils are well placed from a policy and purchasing perspective to influence Homes and Buildings, Power, Sustainable Transport sand Construction.

ABILITY TO DIRECTLY INFLUENCE ACTION

London Plan and Local Plans have a significant impact on how developers build and how people subsequently live. Supplementary Planning Documents create opportunities for accelerated decarbonisation aligned to the sector areas identified.

BEHAVIOUR CHANGE AND NUDGING OF RESIDENTS

Shift residents and communities' behaviour in transport, consumption, and energy use. Councils are able to pilot low carbon goods and services to accelerate skills and jobs demand.

HIGH JOB CREATION POTENTIAL

Homes and Buildings, Green and Blue Infrastructure, Power and Transport have significant requirement to either adapt existing or build new infrastructure matched by skills and employment need.

Areas where existing capability is sufficient or other bodies better suited.

The areas that are not being prioritised in this action plan have been excluded due to the following conditions:

1. **Generic/broadly defined roles and sectors**
2. **Higher education necessary**
3. **Limited opportunities for upscaling and wide scale transition prior to 2030**

It is less obvious how a skills course or additional education directly translates to a job in the green space. Therefore, local government budgets are more effective in other areas.

In addition, these sectors are not readily suited for supporting persons transition from vulnerable carbon intensive industries to stable, attractive green careers through upskilling and reskilling.

Sectors such as industrial decarbonisation including Carbon Capture Storage (CCS) and Green Hydrogen have limited capacity for upscaling prior to 2030.

This is not to diminish their importance but a pragmatic recognition that local government focus and intervention can deliver greater value aligned to the principles of just transition in other areas.

Immediate Actions

SUFFICIENT EVIDENCE EXISTS TO START IMPLEMENTATION

1 **PILOT GREEN SKILLS FOUNDATION** **and top up short courses with low barrier of entry offering a pathway to Green Jobs or relevant further education.**

2 **DEVELOP PLAN FOR UPSKILLING AND RESKILLING** **at NVQ level 1-4 from carbon intensive roles to net zero roles utilising Green Skills initiatives including Green Skills Hubs developed at sub regional partnership level supported by the GLA Mayoral Academies Programme.**

3 **Immediate opportunity**
UTILISING CAREER ADVISOR NETWORKS
and resident groups to showcase opportunities arising from green transition.

4 **Identify community and industry groups to**
SUPPORT WIDENING PARTICIPATION IN FOCUS SECTORS
from underrepresented groups.

Short Term Actions
2022-2024

ACTIONS WHICH REQUIRE FURTHER PARTNERSHIP ENGAGEMENT AND RESEARCH

Engagement with education and training providers alongside businesses to understand practicalities of delivering green skills intervention at NVQ level 1-4:

- ➔ Course length including whether short or long-term courses are more suitable.
- ➔ Understanding where green skills can be delivered as “top up” to existing curriculum versus the need for radically different or new courses.
- ➔ Balance of classroom and theoretical learning combined with workplace exposure and on the job training.
- ➔ Capacity building for teachers and trainers with sufficient expertise to deliver greens skills courses.

Building on sub regional studies and partnerships, develop a coherent Green Skills educational package which has sufficient coverage focused on areas combining skills needed with the capacity to support current jobs and projected jobs growth:

- ➔ Establish target for quantum of Green Jobs by sector, which need to be created in phases from 2022 to 2030, and the level of additional skills provision required to support this jobs growth.

Promotion of Green Careers not just Green Jobs particularly within underrepresented groups:

- ➔ Identify specific challenges around pre-existing negative stereotypes and perception of certain roles amongst underrepresented groups which can be credibly debunked to help boost participation.
- ➔ Identify where intervention is required to increase the attractiveness of green career pathways to underrepresented groups including working conditions, pay, flexibility and workplace culture.

An understanding of the limiting factors which currently constrain acceleration of Green Skills as a pathway to Green Careers:

- ➔ General skills shortage impact on green skills shortage: For example, does a lack of suitably qualified vehicle mechanics impact on the ability to upskill/reskill persons into electric vehicle maintenance.
- ➔ Confidence levels that a significant increase in green skills courses is supported by employment opportunities tied to demand for goods and services.
- ➔ Capacity particularly within Further Education colleges to have the teaching expertise and sufficiently qualified staff to deliver credible courses.

Double the size of the Green Economy by 2030 to ensure opportunities for all

Green Innovation & Enterprise

WHAT IS GREEN INNOVATION AND ENTERPRISE?

A new economy of businesses, services, products or solutions focused on achieving net zero and low carbon outcomes.

PURPOSE

- ➔ **Create conditions that allow businesses, including start-ups and SMEs to rapidly test commercial viability and scale up ideas that contribute to net zero**
- ➔ **Support businesses including SMEs to transition to more environmentally sustainable and socially responsible practices.**

CHALLENGES

- ➔ **What service offering should local government provide in anticipation of reduced grant funding capacity?**
- ➔ **What specific measures are needed to support and stimulate SMEs and green entrepreneurialism?**
- ➔ **Should sub regional partnerships be the basis for green innovation and enterprises?**

Vision	**A new economy of businesses, services, products or solutions focused on achieving net zero and low carbon outcomes.**		
Mission	Create conditions to enable businesses to rapidly test commercial viability and scale up ideas that contribute to net zero.		
Purpose	Encourage London businesses to become environmentally sustainable and socially responsible by default.		
Objectives	**Short Term: 2022-2024**	**Medium Term: 2024-2027**	**Long Term: 2028+**
	Engagement to identify required support for green entrepreneurialism and SMEs.	Establish clear service offering including business matchmaking and specialist incubator partners for centres of excellence.	
	Pilot toolkits and limited grant funding for decarbonisation of business including SMEs. Develop a Pan London Green Innovation and Enterprise prospectus, signposting to relevant services.	Pilot Green Innovation and Enterprise Hubs across London combining physical space with digital knowledge share.	Recognised Green Enterprise and Innovation Zones across London acting as catalysts for the continued growth of the Green Economy.
	Complete mapping and knowledge share of green business landscape across London.	Intervention to accelerate Green Innovation and Enterprise, supported by evidence of existing businesses and idea generation clusters with the potential for significant upscaling.	Low carbon and net zero normalised to business as usual. No longer a requirement to consider green business but business as green by default.
	Establish funding need and potential sources for R&D and innovation to accelerate net zero ideas.	Secure funding for low carbon R&D and innovation by emerging businesses and SMEs.	
Data and Delivera-bles	Participation of under represented groups in green entrepreneurialism and SMEs	Correlation between investment and grant funding to improved environment and social responsibility performance	Correlation between investment and growth of low carbon/net zero sectors.
	Impact on decarbonisation		

Green Innovation and Enterprise Risks

Risk	Context	Mitigation	RAG
Lack of funding for business incentives	Long-term funding for credible service offerings and incentives for businesses to become more environmentally sustainable.	Benchmarking of other Innovation and Enterprise Zones to identify potential incentives and required business support.	
Lack of interest from SMEs	It may be more difficult to engage SMEs due to greater financial pressures and lack of resources to implement green innovation.	Provide incentives and support to businesses including simplified planning processes. Use lessons learned from existing innovation and enterprise zones.	

EXPLANATION OF PILLAR ACTION - RAG STATUS

GREEN Sufficient capacity, funding and/or expertise exists to manage this risk using a partnership based approach.

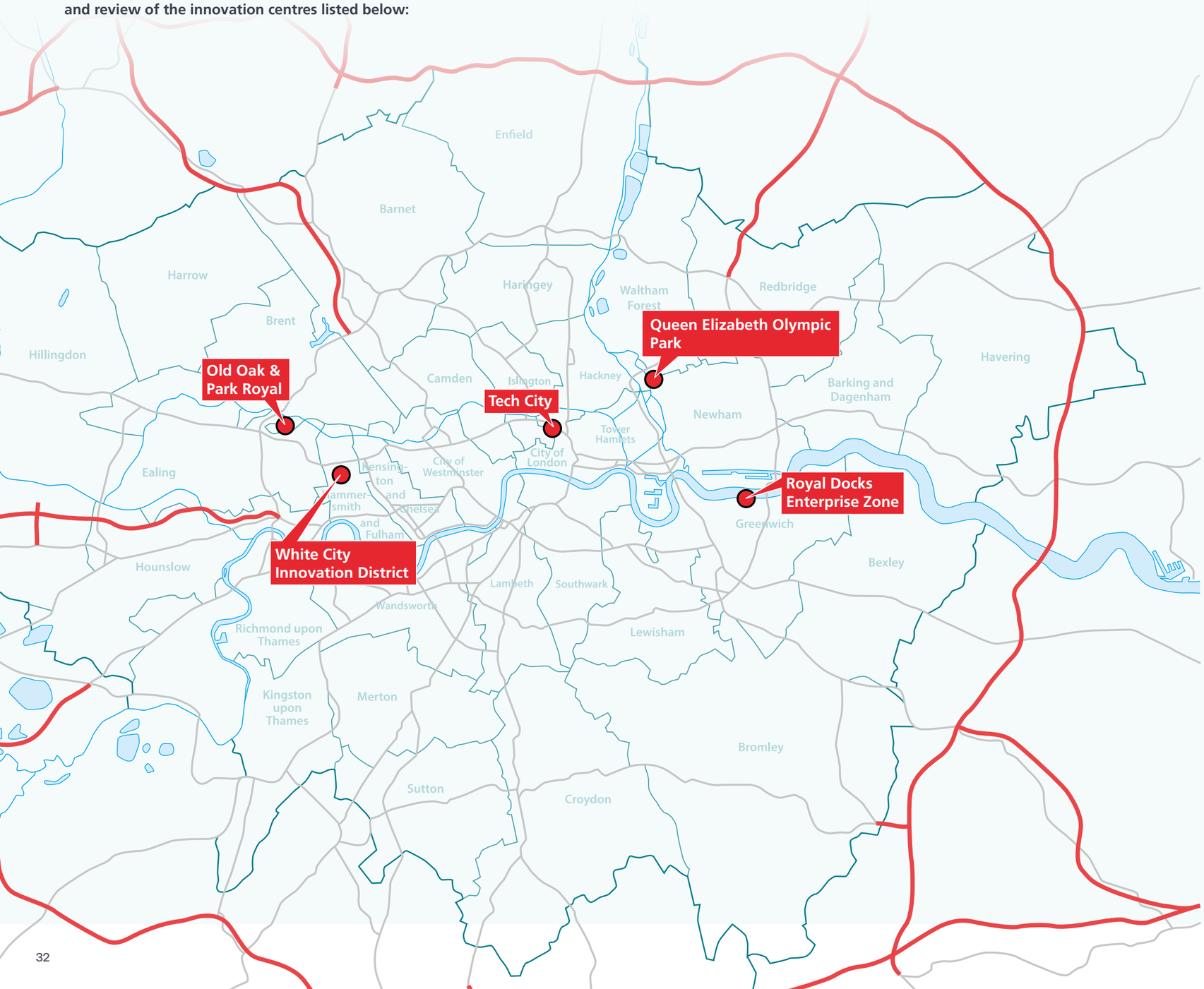
AMBER There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Using a partnership based approach the shortfall in one or more of these areas can be addressed

RED There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Failure to adequately manage this risks undermining core delivery of the Action Plan

Innovation Zones and Districts

PAN LONDON BENCHMARKING

London Borough of Hounslow has undertaken both primary and secondary analysis to understand the current status and future challenges as it pertains to green innovation and enterprise. This Included engagement with and review of the innovation centres listed below:



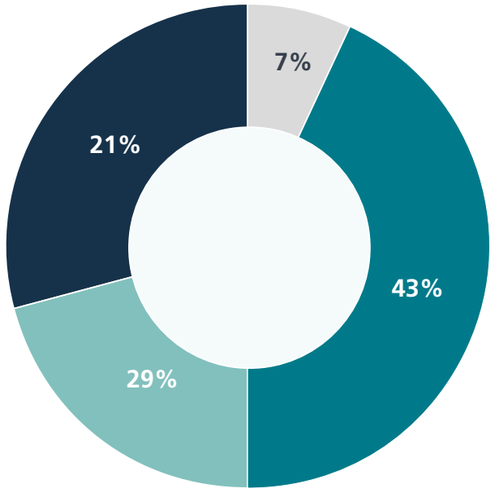
Pan London Green Enterprise and Innovation

"Green Enterprise and Innovation" is largely a self-created term. No councils or areas of London have a service offering or zones that can be explicitly described as "green". However, areas of focus for testbeds and subsequent upscaling do have significant overlap with the following net zero sectors:

- Sustainable aviation
- Sustainable freight and logistics
- Low carbon transport, including autonomous and green hydrogen powered vehicles
- Battery storage and technology
- Agri-tech
- Sustainable construction and manufacturing
- 5G and Artificial Intelligence including support to smart systems for digitally connected and sustainable cities
- SMEs including green entrepreneurialism

Pan London Green Enterprise and Innovation

BREAKDOWN OF SERVICE OFFERING



- **Business support (43%)** encompassing services such as in-house dedicated teams, IT, banking, legal and recruiting advice.
- **Networking (29%)** activities such as community and match-making events, workshops, talks and hack days.
- **Mentoring/Training (21%)** for funders and CEOs on strategic business (growth) operation, strategy and innovation.
- Other

SUPPORTING SME TRANSITION TO NET ZERO - CASE STUDY

The Better Futures+ programme – designed and delivered by West London Business – includes:

- ➔ Eight-part Zero Carbon business leadership webinar series covering everything from understanding scope 1, 2 and 3 emissions to Green Finance for SMEs
- ➔ 12 months free access to Climate Essentials, a tool that supports a business to calculate their carbon emissions and develop a tailored reduction plan
- ➔ Peer Learning sessions
- ➔ Sector and place-based workshops with expert facilitators
- ➔ Access to a network of specialist environmental sustainability consultants

In London Borough of Hounslow 20 SMEs participating in Better Futures+ are also being awarded £7,000 Hounslow Green Innovation and Growth grants. The twenty selected businesses are in diverse sectors ranging from hospitality and retail to logistics and manufacturing. They will be using this support to take their first steps towards achieving net zero. Each business has the opportunity to spend their £7,000 grant on sustainable innovation and clean energy solutions (for example, installing solar PV, upgrading building insulation or buying an electric van), as well as bespoke environmental consultancy.

Immediate Actions

SUFFICIENT EVIDENCE EXISTS TO START IMPLEMENTATION

1 INVESTMENTS AND SUPPORT

in both green start-ups and SMEs. This can take the form of match funding or kick starter funding for emerging businesses which meet desired net zero criteria.

- ➔ Develop and share lessons learned from existing sub regional programmes such as West London Business Better Futures targeted funding to support green business growth supported by Green New Deal funding.

2 Use local government PROCUREMENT AND PURCHASING POWER to open up competitive tender opportunities, incentivising sustainability and social value.

3 DEVELOP A CLEAR INNOVATION SERVICE OFFERING INCLUDING:

- ➔ Networking and knowledge share access to anchor businesses in key sectors and associated supply chains.
- ➔ Affordable and flexible workspaces which offer high quality facilities, digital connectivity and nearby cultural amenity.
- ➔ Attracting relevant net zero business clusters with potential to become recognised zones of green innovation and enterprise.
- ➔ Support to establish commercial viability of ideas quickly. Fail or Scale

Short Term Actions

ACTIONS WHICH REQUIRE FURTHER PARTNERSHIP ENGAGEMENT AND RESEARCH

A pan London approach to Green Enterprise and Innovation

The consideration of how London boroughs stimulate Green Enterprise and Innovation and support business access to opportunities is happening primarily at sub regional level. This makes sense as the unique offering local government can facilitate is driven by the businesses' activities specific to that locality.

In East London, the regeneration of Royal Docks and The Olympic Park has created opportunities in the digital and arts sector, as well as sustainable construction. In West London, the presence of Heathrow and its supply chain, affordable unit space and ready access to the wider UK creates opportunities in heavier industries such as manufacturing, sustainable freight, transport and logistics. Each region must be allowed to play to its relative and unique strengths.

This raises the challenge of what the Pan London role should be for Green Innovation and Enterprise?

Is it a simple co-ordination and monitoring action including signposting to relevant services available across the Capital? Is it more substantial for example, incorporating and facilitating access to international markets utilising London's diverse and strong economy committed to transformational change.

London's emerging green business landscape

Across all 33 London Local Authorities, current understanding of number, type and support requirements for green businesses can be considered patchy. Especially where these are truly nascent businesses and entrepreneurial ideas. These businesses may not yet be on the radar due to not pulling in significant investment or an established “hype” around the business or proposal. Several sources of information are being used to map green businesses. To avoid a fragmented understanding across London, the following should be considered:

- ➔ Co-ordinated sharing of existing green businesses mapping produced by Local Government either in house or through commissioned studies.
- ➔ Where further need for business mapping is identified, consider joint commision at sub regional partnership level.
- ➔ Representative sampling of emerging businesses using surveys and interviews to identify support requirements to foster Green Enterprise and Innovation.
- ➔ Commission research to understand barriers of entry to economic participation in SMEs, green start ups and entrepreneurialism focused on social deprivation, race/ethnicity and gender.

Green Finance & Investment

WHAT IS GREEN FINANCE AND INVESTMENT?

➔ **Releasing funding from traditional sources to deliver a green transformation programme.**

➔ **Emerging novel financial products and instruments including examples such as green bonds, community bonds and green finance institutions.**

PURPOSE

➔ **The definition is not restricted to the emerging products classed as "green finance" as the investment need requires making the case for increasing the scope of investable propositions to traditional funding sources.**

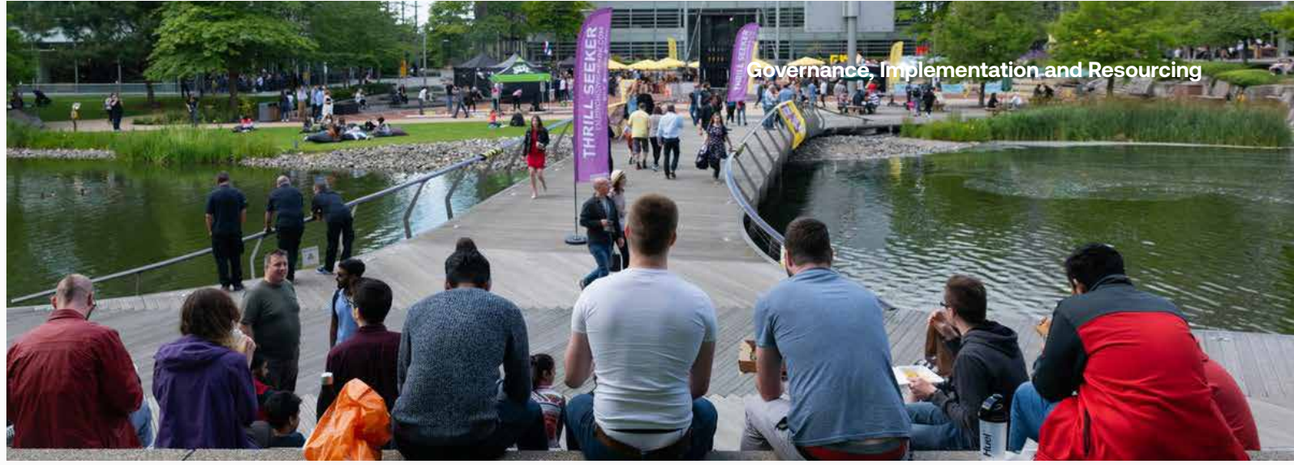
CHALLENGES

➔ **Scale of investment required is beyond local government finances and taxpayer funding alone. Private sector investment need is significant.**

➔ **Ensuring funding criteria and consideration go beyond standard cost benefit analysis to consider natural capital, social value and reducing structural inequalities.**

ACTION PLAN

Vision	**Net Zero Infrastructure and SME Financing applied consistently across London**		
Mission	To accelerate London's Transition to net zero through a Place Based Approach to investment		
Purpose	To enable and support councils to make the investment decisions required and deliver the Green New Deal infrastructure development for a net zero London		
Objectives	**Short Term: 2022-2024**	**Medium Term: 2024-2027**	**Long Term: 2028+**
	Shortlist low and zero carbon infrastructure schemes for funding through UK Infrastructure Bank (UKIB).		
	Shortlist of Green Economy Pan London investible propositions.		
	Continue pilot and knowledge share of novel/innovative green finance.	Move beyond pilot phase with a viable investment model reconciling technological domain and place-based funding.	Neighbourhood based funding model incorporating social value and natural capital outcomes is the norm
	Work with UKCCIC and London treasurers to establish new forms of financing to enable transition in London and across UK Major Cities.	Move from pilot to normalisation phase utilising tested and proven Green Finance mechanisms.	Green Finance embedded into traditional finance and investment institutions.
	Develop advocacy communications plan to secure central government funding and reinforce London role supporting national green economic recovery.	Secure funding for a five to ten year programme of infrastructure development from a sustainable funding mix including HM Treasury and private sector	Established multi year funding cycle for low/ zero carbon infrastructure similar to water, gas and electricity sector.
	Develop revenue generation model for low /zero carbon infrastructure which can be applied consistently across London.	Delivery phase of low/zero carbon infrastructure based on a credible revenue generation model.	
	Explore appetite for London area applicable Green Levy to specifically fund low/zero carbon infrastructure.		
Data and Delivera-bles	Social value and natural capital generated in the areas which need it most.	Reduced inequality over time using existing socio economic deprivation indices as baseline.	Progress against % of indicative financing required.
	Split of public and private sector funding.		



Green Finance and Investment Risks

Risk	Context	Mitigation	RAG
Lack of committed multi year funding for low/ zero carbon infrastructure development	To deliver optimally from a cost and effectiveness standpoint a high confidence pipeline of infrastructure investments needs to be agreed with four to six year minimum timescales as opposed to annual business case and funding allocation cycles.	Agree commitment at council level supported by GLA and central government to finance required infrastructure over multi year delivery periods consistent with other critical infrastructure including flood defences, water/sewage and power.	
Funding too slow and piece meal forcing up cost curve in final years to meet net zero targets	The scale of infrastructure required means delivery must be done at pace in early and middle years to avoid an escalatory cost curve with work deferred to later years.	Translation of infrastructure strategies to delivery plans with indicative funding and sources of financing.	
Insufficient funding central government funding for London areas	Levelling up agenda may prioritise investment to UK regions outside of London.	Ensure advocacy to central government demonstrates outcomes for socio-economically challenged areas relative to other UK cities. Linking London to wider national Green Recovery. Reduces reliance on public funding through increased private sector investment.	
Capacity and capability to implement new financing solutions	Green finance expertise within local government is limited.	Ensure pilot outcomes are focused on scalabilit	

EXPLANATION OF PILLAR ACTION - RAG STATUS

GREEN Sufficient capacity, funding and/or expertise exists to manage this risk using a partnership based approach.

AMBER There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Using a partnership based approach the shortfall in one or more of these areas can be addressed

RED There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Failure to adequately manage this risks undermining core delivery of the Action Plan

London's Investment Needs

THE CHALLENGE

MAKING LONDON A ZERO CARBON CITY WILL REQUIRE LARGE SCALE INVESTMENT

London alone needs £61 billion of capital investment for building and infrastructure, including £10 billion to retrofit buildings with energy efficiency measures to make them net zero carbon

Raising finance requires better coordination of funds and resources as well as the development of strong pipeline of projects across all London's public institutions to **give the private sector the confidence to invest**.

The Mayor will continue to lobby government to develop more funding and powers to support delivery, but **private sector capital** will also be required to achieve this ambition.

The Mayor's Energy Efficiency Fund is a £350m investment fund providing finance to enable, accelerate or enhance low carbon projects across London. The fund supports **energy efficiency, decentralised energy, electric vehicle charging infrastructure and renewable energy** generation projects.

The transition of our existing carbon intensive systems to net zero will require significant up-front capital, and presents unique challenges:

SCALE: the scale of investment is beyond local government finances

URGENCY: implementation must accelerate as soon as possible to meet net zero ambitions and deadlines

COMPLEXITY: the systemic transitions required are complex and interlinking and are unlikely to be achieved successfully through individual decision making

JUST TRANSITION: already stretched social inequalities risk being exacerbated

Source UK Cities Climate Investment Commission

Place Based Funding

RESEARCH FINDINGS IN SUMMARY

CURRENT APPROACHES IN THE UK: TECHNOLOGICAL DOMAIN BY TECHNOLOGICAL DOMAIN

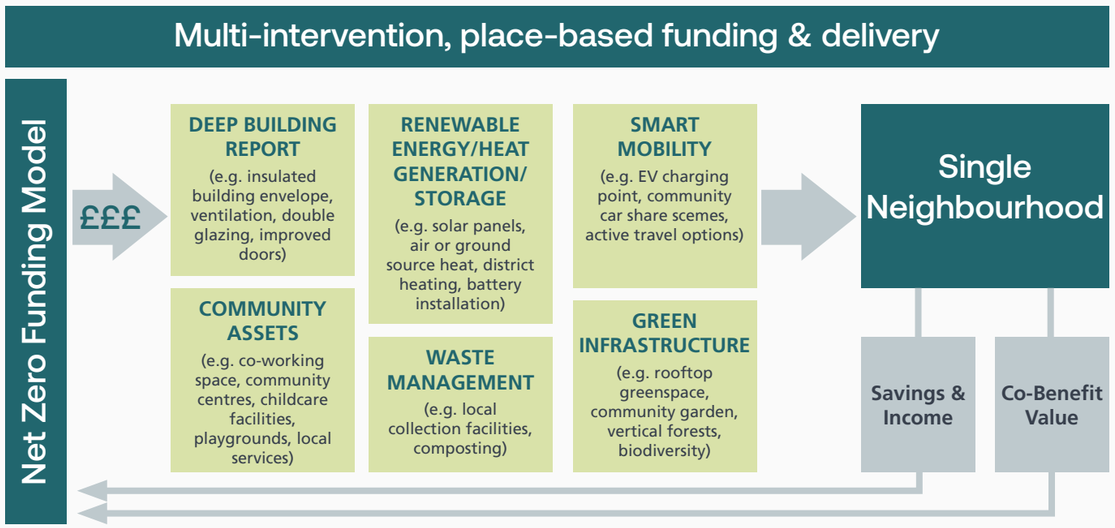
- **Fragmented spending requirement:** Majority of spend requirement is huge amount of micro spend at very local levels - needs aggregation
- **Returns:** Current approaches will place cost burden entirely on the taxpayer through combined government subsidy and direct requirement to spend driven by policy
- **Impact on Levelling Up:** This will create a mismatch between who has to pay and who benefits and will exacerbate inequalities.

PLACE-BASED DELIVERY: IMPLEMENTATION OF NET ZERO IN HOUSE BY HOUSE, STREET BY STREET, NEIGHBOURHOOD BY NEIGHBOURHOOD

- **New Approach:** Proposal of a new model of place-based, multiple-intervention implementation backed by a blended finance structure to marry multiple capital sources
- **Alternative Capital Sources:** Covering part of the capital through alternative capital sources such as patient institutional capital and outcome-seeking grand finance will reduce taxpayer burden and will better align investment with returns delivering a more just transition
- **Source such as:** Pension funds, Insurance companies, Philanthropic organisations, Broader government budget and Corporation
- **Creation of London place-based, net zero transition investment opportunity**

Place Based Funding Model

Development of a financing model moving away from technologing domains to enable delivery on a person by person, house by house, street by street, neighbourhood by neighbourhood basis.



HOUNSLOW CASE STUDY – CREATION OF THE LOW CARBON AND RESILIENT NEIGHBOURHOOD DEMONSTRATOR MODEL

A. ACCESSIBLE AND RESILIENT NATURAL ENVIRONMENT
- → Air quality
- → GHG Reduction
- → Biodiversity
- → Accessibility

FUTURE NEIGHBOURHOOD CREATION
- River Crane Green Infrastructure
- Water meadow catchment and tree canopy conservation
- Green Assets

B. FAIR GREEN ECONOMIC GROWTH AND GND
- → New jobs & skills
- → Green businesses
- → Circular economy
- → Collaboration
- → Jobs Inclusivity

FUTURE NEIGHBOURHOOD CREATION
- EV and Cycle Hubs
- Pedestrian and cycle accessibility
- Co-design air quality mitigation in schools and public buildings
- Green travel corridors

KEY ACTIVITIES IN PROGRESS
- Green partnerships
- Decarbonising public buildings
- Decarbonising Social Housing
- Clean Air for All
- School Streets scheme
- River Crane green corridor
- Tree planting in open spaces
- Green Skills Hub
- Green business engagement
- High Street master plan
- Community Groups Engaged

FUTURE NEIGHBOURHOOD CREATION
- Extensive recycling and repair campaign
- ULWN and circular economy hub
- 'High Street' co-desgn
- Support to retailers and business
- E-cargo bike - Last mile delivery
- Heathrow travel

FUTURE NEIGHBOURHOOD CREATION
- Decarbonise public realm buildings
- Energy grid development and local power storage
- Local circular waste system
- 15-minute neighbourhood co-design

FUTURE NEIGHBOURHOOD CREATION
- Dedicated council officers liaison
- Extensive community groups
- Behaviour change and choice
- Energy innovations

C. LOCAL NEIGHBOURHOOD DEVELOPMENT
- → Public realm
- → Local co-design
- → Innovation
- → Decarbonisation

FUTURE NEIGHBOURHOOD CREATION
- Co-design services improvement
- Carbon literacy technology
- Mixed reality technology
- Engagement summits

D. COMMUNITY AT ITS HEART AND SOCIAL JUSTICE
- → Local engagement
- → Green choices
- → Co-design
- → Support the vulnerable

Immediate Actions

SUFFICIENT EVIDENCE EXISTS TO START IMPLEMENTATION

1 CONTINUE PILOTING PLACE-BASED FINANCING MODELS eschewing technological domain-based approaches in favour of more holistic outcomes.

→ See UK Cities Climate Investment Commission - City Investment Analysis Report

2 DEVELOP A SCALABLE INVESTMENT MODEL FOR LOW CARBON AND RESILIENT NEIGHBOURHOODS.

3 EXPLORE POTENTIAL FOR FUNDING LARGE SCALE AND LOW CARBON NEIGHBOURHOOD INFRASTRUCTURE such as electric vehicle charging infrastructure, energy and storage infrastructure, through the United Kingdom Infrastructure Bank

4 Explore using the principle of **MAYORAL COMMUNITY INFRASTRUCTURE LEVY** appetite for a low/zero carbon specific levy to build a funding pot for multi borough schemes.

→ This could incentivise councils potentially at sub regional level to collaborate on schemes which could deliver at scale.

Short Term Actions

ACTIONS WHICH REQUIRE FURTHER PARTNERSHIP ENGAGEMENT

Reconciling current central government funding approaches which are majority sector specific with the need for place and neighbourhood-based financing models.

Further work is required to develop specific advocacy requirements for central government funding contribution to the green economy transformation programme.

- ➔ Indicative costing for delivery of the transformation programme is needed to scope a sustainable funding mix from both public and private sources.

Articulating London's role in the levelling up agenda to ensure urban areas of relative deprivation are not left behind. Evidence based demonstration of the link between a UK green recovery and a London green recovery.

Develop credible revenue generation models for low or zero carbon infrastructure to attract investment including:

- ➔ Electric vehicle charging infrastructure
- ➔ Decentralised energy including heat networks
- ➔ Renewable energy generation including community led projects
- ➔ Green Hydrogen energy. (Widespread conversion of gas grid for Hydrogen will not happen before 2030 however blended supply and local production are potential priority areas over the next few years.)
- ➔ Smart cities infrastructure promoting energy efficiency and reduced consumption.
- ➔ Green and blue infrastructure for local carbon offset and inset
- ➔ Multi modal transport infrastructure

Green Economic Growth

WHAT IS GREEN ECONOMIC GROWTH?

There is considerable overlap with this pillar and others in the Green Economy Action Plan. Green Jobs and Skills create the intellectual capability and labour capacity to build a Green Economy. Green Innovation and Enterprise stimulates the business, products and services essential for transition to Green Economic Growth.

PURPOSE

For the purposes of the Action Plan Green Economic Growth is stimulating the demand for low carbon goods and services. This means where necessary intervention signals to the market that demand exists or is growing sufficiently. If possible, helping to create that demand through purchasing power.

CHALLENGES

- **Emerging low carbon goods and services may require support during transition until economies of scale and innovation result in lower costs and increased effectiveness.**

ACTION PLAN

Vision	**Good growth defined by increase in eco-system services, natural capital and social value**		
Mission	Intervention signalling market to accelerate the transition to low carbon goods, services and products		
Purpose	Create robust long term demand for low carbon goods and services		
Objectives	**Short Term: 2022-2024**	**Medium Term: 2024-2027**	**Long Term: 2028+**
	Use of council purchasing power through sustainable procurement		
	Analysis of three to six year procurement pipeline across each sub regional partnership		
	Identify gaps in low carbon goods and products and/or professional services capability.	Market engagement based on publicly available long term procurement pipeline to bring forward capacity especially in local supply chains to deliver low carbon goods and services low carbon goods and services where required.	
	Support and where possible reward businesses able to demonstrate shift to a more environmentally and socially responsible model.	Accelerate transition of existing businesses to green operating model with particular emphasis on SMEs.	
	Pilot and knowledge share consumer behaviour change incentivising shop local and circular economy practices.	Scale successful interventions to further stimulate circular economy and local value creation.	
	Pilot and knowledge share of wholly publicly owned companies delivering or stimulating demand for low carbon goods and services	Scale successful interventions and build partnerships to increase resilience of wholly publicly owned model.	
Data and Delivera-bles	TBC	TBC	TBC
	TBC	TBC	TBC

Green Economic Growth Risks

Risk	Context	Mitigation	RAG
Resilience of models relying on wholly or predominately publicly owned operating model	Relying on market intervention alone will not deliver the transformational changes in low carbon goods and services required. The correct and appropriate level of intervention by public bodies including local authorities needs to be determined.	Share lessons learned from pilots of wholly owned models for creating demand in low carbon sectors such as energy and power generation. Share best pratice examples of Community Wealth Building and value creation.	
Councils assume excessive risk for failure.	There is a danger that in extending public intervention in areas where councils have less acquired experienced risk increases underpinned by public funds. Examples around the UK have shown green incentive schemes gone wrong can severely undermine public trust causing significant financial and reputational losses	Clear process of robust governance and transparent assessment of risks and benefits prior to commitment of public funding.	

EXPLANATION OF PILLAR ACTION - RAG STATUS

GREEN Sufficient capacity, funding and/or expertise exists to manage this risk using a partnership based approach.

AMBER There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Using a partnership based approach the shortfall in one or more of these areas can be addressed

RED There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Failure to adequately manage this risks undermining core delivery of the Action Plan

Immediate Actions

1 **ENSURE LOCAL GOVERNMENT PROCUREMENT FRAMEWORKS** continue to signal market demand for low carbon goods and services by incentivizing sustainability and social value in evaluation criteria.

2 **PUBLISH LONG TERM FORECAST OF LOCAL GOVERNMENT PROCUREMENT OPPORTUNITIES** to incentivise higher levels of social value commitment from suppliers.

3 **MARKET ENGAGEMENT** based on long term pipeline of opportunity to increase capacity in required low carbon good and services based on reliable future demand.

4 **ESTABLISH THE LONG TERM VIABILITY** of low carbon good and services delivered under a wholly publicly owned model.

Governance & Implementation

Governance structure moving forward

RECOMMENDATIONS

1. A review of the Steering Group representation to establish if additional partners with specific Green Economy expertise is required for implementation phase of the Action Plan

2. The broad nature and scope of the Green Economy Action Plan has highlighted clear interdependencies with other lead borough programmes. A process is required to rationalise where appropriate actions which significantly overlap with those identified in related lead borough programmes. In other instances the interdependencies will need to be acknowledged with signposting to other Action Plans which offer more detailed implementation objectives in specific sectors such as Retrofit.

3. Further consultation is required on the division of labour and actions reflecting available resources and capacity. Particularly whether actions are led at local borough level or sub regional partnership level.

4. Establish clear roles and responsibilities between Green New Deal mission and Building the Green Economy Action Plan

5. Onboarding of an academic partner to support development of metrics, ongoing evaluation and financing strategy for the Action Plan.

ACTION PLAN – RISKS

Risk	Context	Mitigation	RAG
Lack of committed multi year funding for low/ zero carbon infrastructure development	To deliver optimally from a cost and effectiveness standpoint a high confidence pipeline of infrastructure investments needs to be agreed with four to six year minimum timescales not annual business case and funding allocation cycles.	Agree commitment at council level supported by GLA and central government to fund required infrastructure over multi year delivery periods consistent with other critical infrastructure including flood defence, water/sewage and power.	
Funding too slow and piece meal forcing up cost curve in final years to meet net zero targets	The scale of infrastructure required means delivery must be done at pace in early and middle years to avoid an escalatory cost curve with work deferred to later years.	Translation of infrastructure strategies to delivery plans with indicative funding and sources of funding.	
Insufficient central government funding for London areas	Levelling up agenda may prioritise investment to UK regions outside of London.	Ensure advocacy to central government demonstrates outcomes for socio-economically challenged areas relative to rest of UK. Links London to wider national Green Recovery. Reduces reliance on public funding through increased private sector investment.	
Capacity and capability to implement new financing solutions	Green finance expertise within local government is limited.	Ensure pilot outcomes are focused on scalability	

EXPLANATION OF PILLAR ACTION - RAG STATUS

GREEN Sufficient capacity, funding and/or expertise exists to manage this risk using a partnership based approach.

AMBER There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Using a partnership based approach the shortfall in one or more of these areas can be addressed

RED There is currently insufficient capacity, funding and/ or expertise to adequately manage this risk. Failure to adequately manage this risks undermining core delivery of the Action Plan

CONCLUSION

At its core, developing a green economy is a mission to grow the economy, create sustainable opportunities for all Londoners and enable London to reach its net-zero targets.

The Mayor has committed to a doubling of the Green Economy by 2030, which will require a radical transformation of London's economy. Some areas of the green economy will require further research and project planning, but other interventions are ready right now.

In light of the Covid-19 crisis, the need to accelerate the transition to net-zero is more pertinent than ever. The city is at a crossroads between business as usual and a new, resilient, green economy.

Covid-19 has highlighted how precarious employment and sectoral reliance is a great threat to economic wellbeing in some communities. A green economy must take equality seriously and seek to redress some of the inequalities that have become even more visible throughout the pandemic. A transition to the green economy must put justice and redistribution of economic opportunities at the heart of all actions.

The Action Plan emphasises the need for partnership and engagement with private sector partners who have the expertise and investment capacity required to complement public leadership and funding. Additionally, councils must work with SMEs, schools, education providers, voluntary organisations and communities to unlock the opportunities and resources we already have in our city.

The four key pillars underpinning the Green Economy Action Plan have overlap but serve as means of segmenting what is a broad area of focus. Aligned to these pillar key deliverables drawing on the Pillar Action Plans are:

GREEN JOBS AND GREEN SKILLS

- Develop the capacity to deliver significant uplift in Green Skills training capability at Further Education level
- Develop a comprehensive suite of Green Skills learning for persons at all educational attainment levels and career experience providing a pathway to Green Careers.
- Develop green skills in the working population of London to ensure future employment opportunities remain local and provide Londoners with good work.

GREEN INNOVATION AND ENTERPRISE

- Create Centres of Excellence for Green Enterprise and Innovation across London with defined service offering available in person and digitally
- Create high quality and affordable office and testbed space for SMEs and green entrepreneurialism to enable ideas to rapidly scale or fail.

GREEN FINANCE AND INVESTMENT

- Pilot models of investment including neighbourhood and place based funding to deliver schemes at scale
- Pilot novel and innovative Green Finance and Investment mechanisms to support funding directly to green entrepreneurialism and SMEs
- Develop revenues generation models to create attractive investable proposition for low/zero carbon infrastructure.

GREEN ECONOMIC GROWTH

- Publish long term pipeline of council procurement opportunities to use public purchasing power to signal market direction and provide confidence In demand for low carbon goods and services.
- Map of the implementation goals of the Action Plan against United Nations Sustainable Development Goals.

Double the size of the Green Economy by 2030 to ensure opportunities for all

LITERATURE REVIEW

Below is a summary of the research and literature which has been reviewed to inform this Green Economy Action Plan:

- **(DRAFT) RCU- Green Skills Adult Education Provision**
- **GLA Economics - Identifying Green Occupations in London**
- **LGA - Local green jobs- accelerating a sustainable economic recovery**
- **UK Cities Climate Investment Commission - City Investment Analysis Report**
- **GLA- Green New Deal**
- **Inner Circle - Green Recovery and Skills Scoping**
- **WPI/Centre Forward London - Green Jobs and Skills in London**
- **Centre for Ageing Better - A Mid-Life Employment Crisis**
- **The Equal Group Design Labs Press Release**
- **Race in the Workplace – The McGregor-Smith Review**
- **Green Jobs and Skills in London: Cross-London Report**
- **Resolution Foundation, LSE and Political Science - Pandemic Risks Worsening Social Mobility**
- **London Assembly – London's Recovery Coronavirus Crisis**
- **Element Energy - Analysis of a Net Zero 2030 Target for Greater London**
- **Centre for Economic Performance - Jobs for a Strong and Sustainable Recovery from Covid-19**

Double the size of the Green Economy by 2030 to ensure opportunities for all

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THE ROYAL BOROUGH OF KINGSTON UPON THAMES
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RGU INFORMED STRATEGIC DECISIONS
Sutton
UK CITIES Climate Investment Commission
A partnership between CATAPULT Connected Places CORE CITIES UK LONDON COUNCILS
WPI ECONOMICS
West London Alliance A BETTER WEST LONDON FOR ALL NOW AND IN THE FUTURE
CATAPULT Connected Places
TOWER HAMLETS

About Hounslow

The borough of Hounslow is situated in west London.

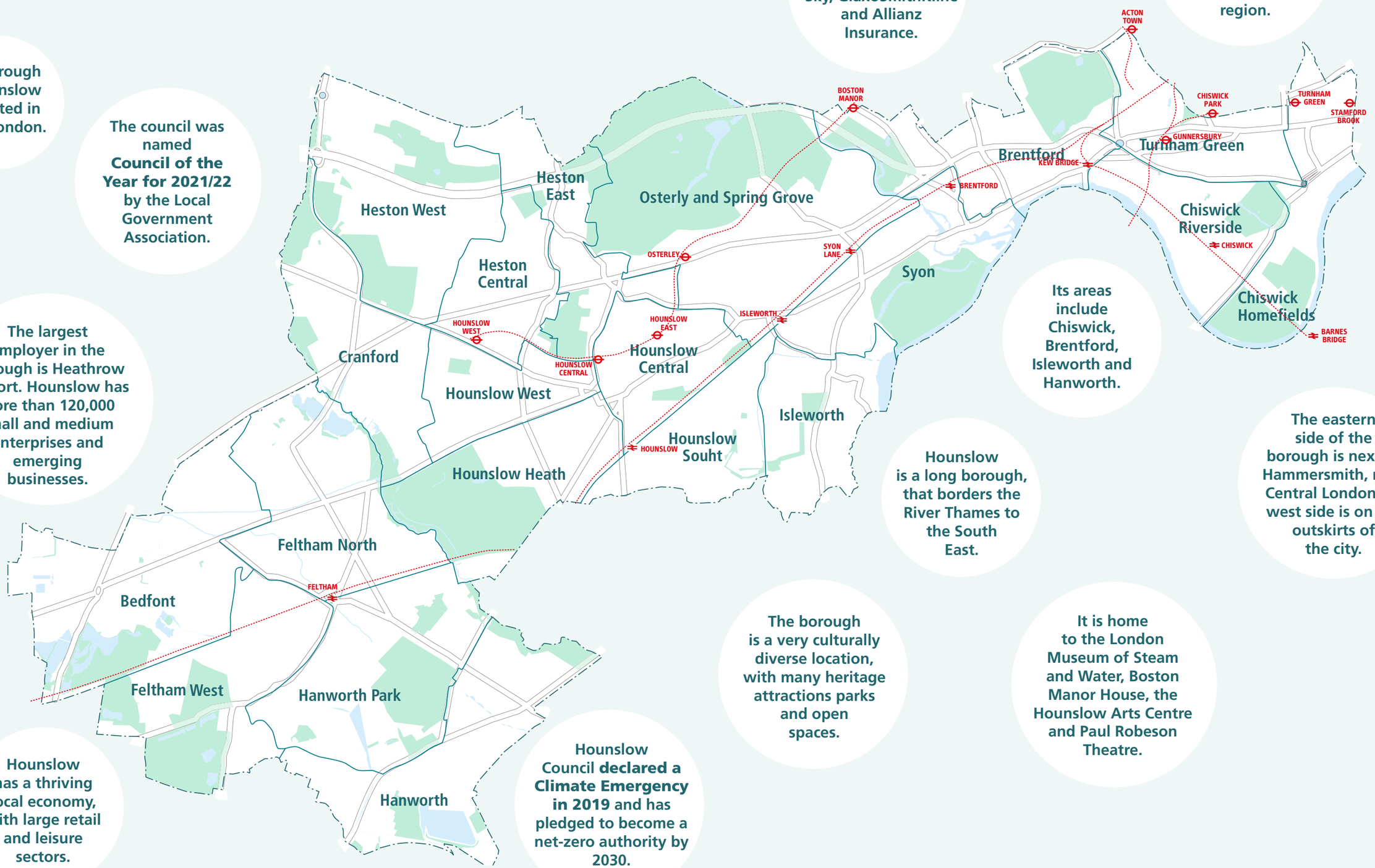
The council was named **Council of the Year for 2021/22** by the Local Government Association.

The largest employer in the borough is Heathrow Airport. Hounslow has more than 120,000 small and medium enterprises and emerging businesses.

Hounslow has a thriving local economy, with large retail and leisure sectors.

Other notable businesses situated in Hounslow include Sky, GlaxoSmithKline and Allianz Insurance.

The borough enjoys good road, rail and tube transport links both with Central London and the wider region.



Its areas include Chiswick, Brentford, Isleworth and Hanworth.

Hounslow is a long borough, that borders the River Thames to the South East.

The eastern side of the borough is next to Hammersmith, near Central London. Its west side is on the outskirts of the city.

The borough is a very culturally diverse location, with many heritage attractions parks and open spaces.

It is home to the London Museum of Steam and Water, Boston Manor House, the Hounslow Arts Centre and Paul Robeson Theatre.

Hounslow Council **declared a Climate Emergency in 2019** and has pledged to become a net-zero authority by 2030.

London Borough
of Hounslow