

An aerial photograph of the London skyline, featuring the O2 Arena under construction in the foreground. The arena's white, curved roof is supported by several tall yellow cranes. In the background, the dense city skyline includes prominent skyscrapers like the Citigroup and Barclays buildings. The River Thames flows through the scene, reflecting the city lights.

Smarter cities
through collaboration

GREATER**LONDON**AUTHORITY



Hello!

I AM NATHAN PIERCE

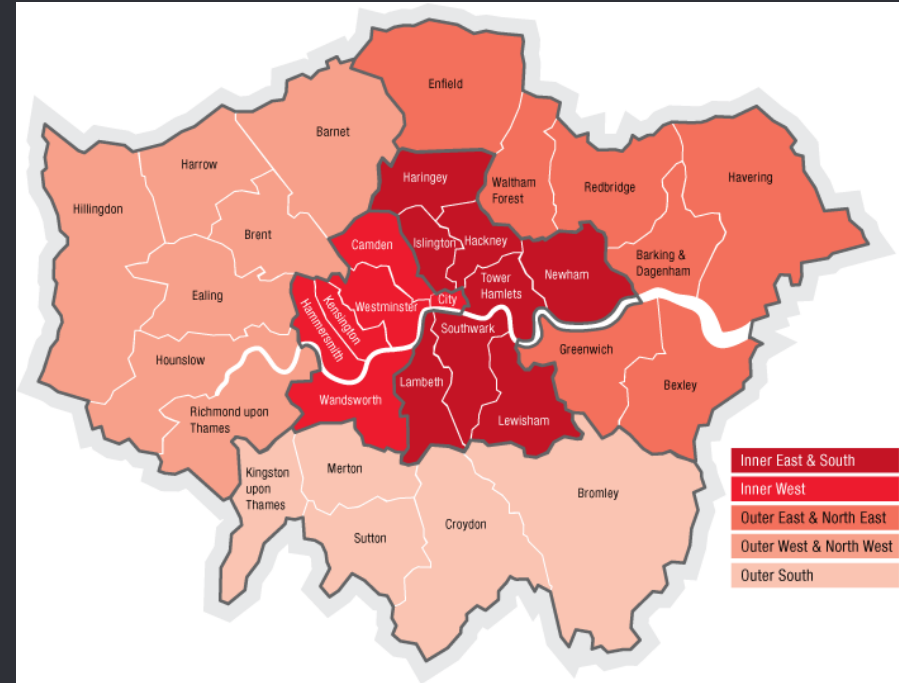
Head of Smart London & Sharing Cities

You can find me at @NathanPierceUK

London is big (for Europe) and fragmented

- **9 million population**
- **11 million by 2050**
- **55,000 growth per year**

- **32 Boroughs & city of London**
- **33 NHS CCGs & 39 NHS Trusts**
- **Transport for London**
- **Metropolitan Police Service**
- **London Fire Brigade**
- **London Ambulance Service**
- **Development companies & Opportunity areas**



LONDON DATASTORE

Launched in 2010 as a tool for:
Transparency & accountability
Not for asset management

Over 60,000 visitors per month
6,000 datasets

Now also used for:
Delivering data as a service
Private data sharing

The screenshot shows the London Datastore website interface. At the top, it features the logos for 'MAYOR OF LONDON' and 'LONDON ASSEMBLY'. Below this is the 'LONDON DATASTORE' header with navigation links for 'Data', 'Blog', 'Apps & Analysis', 'LODA', 'Area Profiles', 'Boroughs', and 'More'. A search bar is visible on the right side of the header. The main content area features a large aerial photograph of London with the Tower Bridge. Below the photo, there is a search bar with the text 'Search 725 datasets...'. A notification banner reads 'Updated 3 days ago: Bariatric incidents attended by LFB'. Below this, there is a row of nine data visualization icons representing different categories: 'JOBS AND ECONOMY', 'TRANSPORT', 'ENVIRONMENT', 'COMMUNITY SAFETY', 'HOUSING', 'COMMUNITIES', 'HEALTH', 'LONDON AS A WORLD CITY', and 'SLA PERFORMANCE'. A link 'Click on a circle to see more...' is positioned below the icons. At the bottom, there is a 'Welcome to the Datastore' section with a brief description of the platform and a mention of the '2015 ODI Open Data Publisher Award'.

LONDON DATASTORE

 Login

Data ▾

Analysis ▾

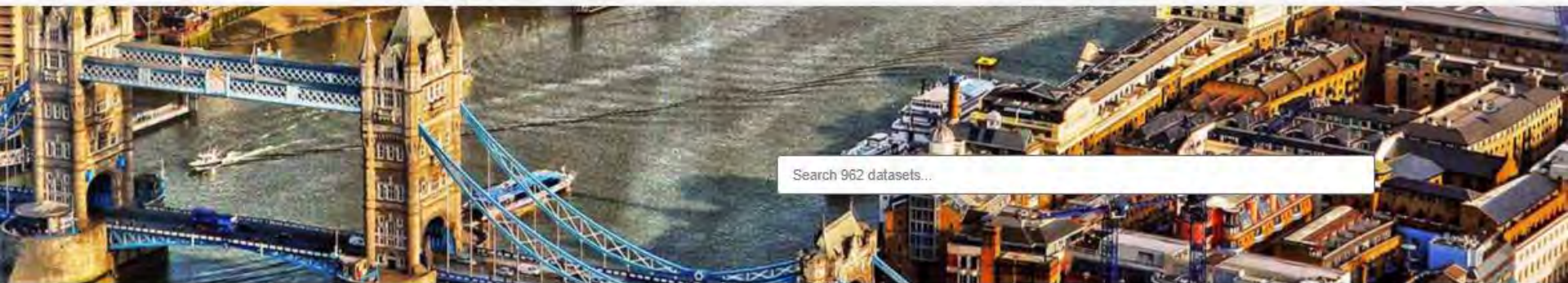
Collaboration ▾

COVID-19

Area Profiles

Blog

About



Updated 15 hours ago: Coronavirus (COVID-19) Cases

JOBS AND
ECONOMY

TRANSPORT



ENVIRONMENT

COMMUNITY
SAFETY

HOUSING



COMMUNITIES



HEALTH

LONDON AS A
WORLD CITY

Click on a circle to see more...

Welcome to the Datastore

Latest Tweet by @LDN_Data



LDNMayor Data

[Home](#) + [Research](#) + [Impact stories](#)

Understanding urban air quality

Turing researchers are working with the Greater London Authority to use machine learning and statistical methodology to better analyse air pollution sensor data, design better policy interventions, and improve urban quality of life



London Infrastructure Mapping Application



MAYOR OF LONDON

SAFESTATS

INFORMATION SHARING FOR TACKLING VIOLENCE

Boroughs Wards **Points**

Date (April 2009 - March 2017)



Time of Day



Day of Week



Injury Type



Hospital



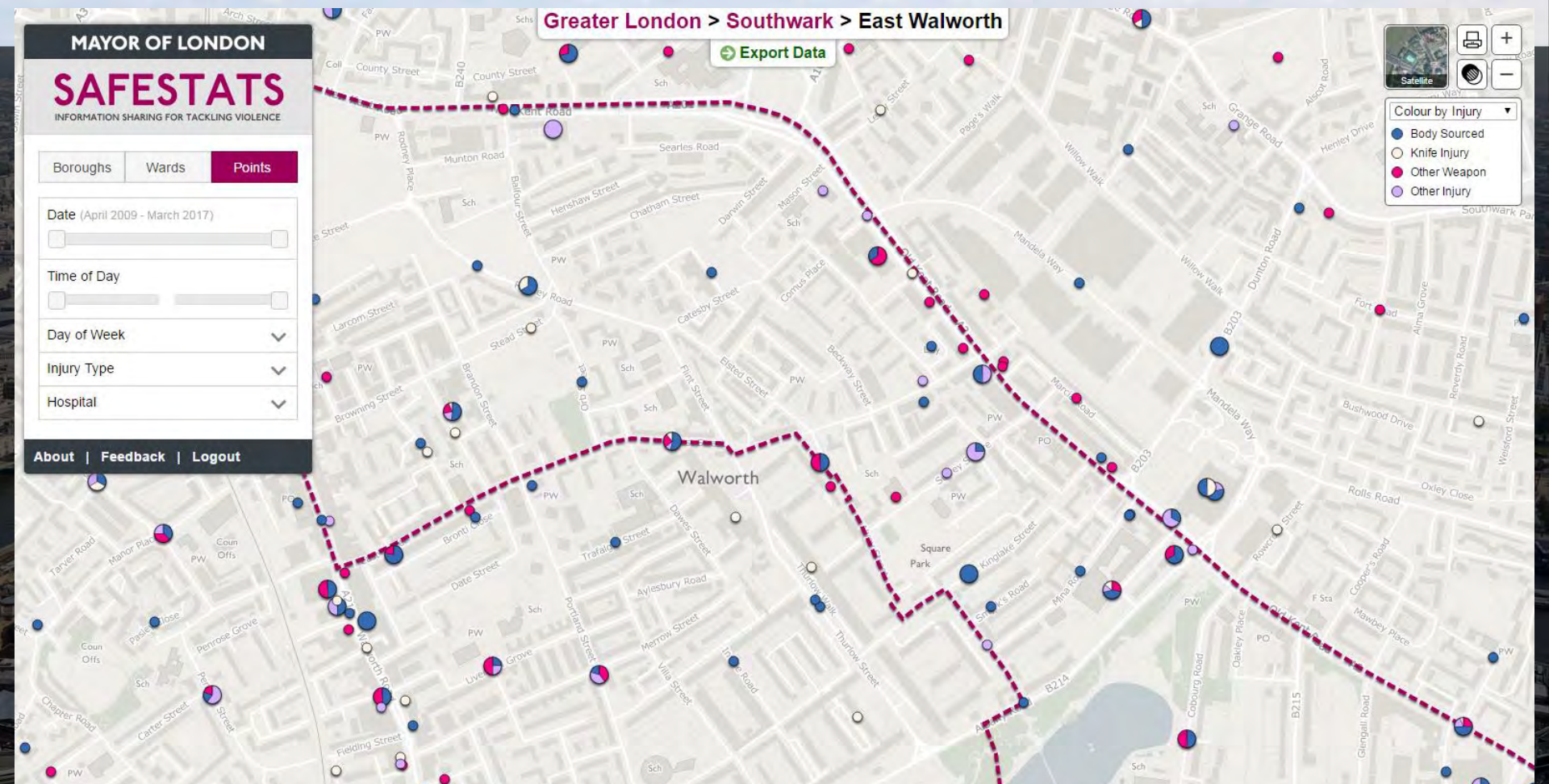
About | Feedback | Logout

Greater London > Southwark > East Walworth

Export Data



- Colour by Injury
- Body Sourced
 - Knife Injury
 - Other Weapon
 - Other Injury



Rouge Landlord Checker



Youth Map – Our London

Our London Map

Find activities for young people in London

Use the Our London Map search criteria below to find activities for children and young people in London. You can search by postcode, town, borough, and activity.

You can either search for activities with your postcode, choose 'Find Me', or search using activity areas like arts or sport.

Search for activities, locations and events

Age range: 0 - 25 years

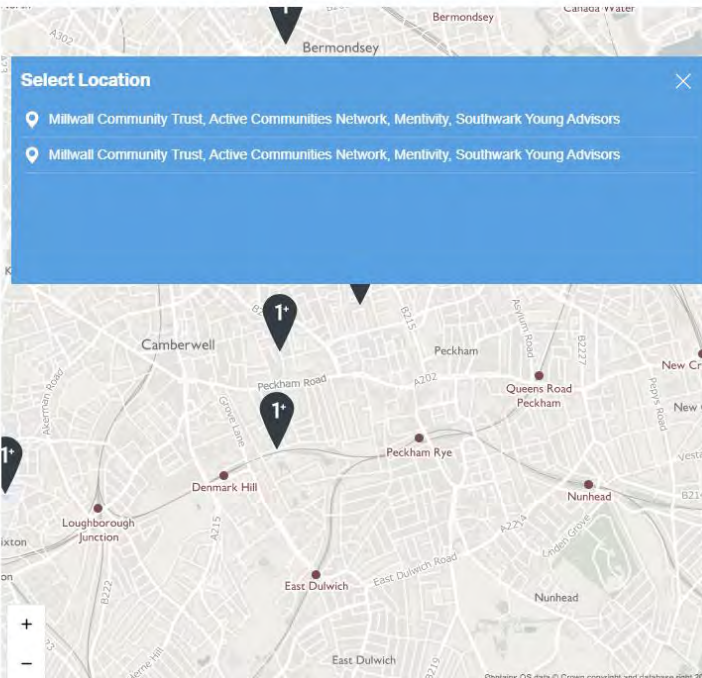
Select activity type:

Activity selected: "Sport"

Clear search form Find

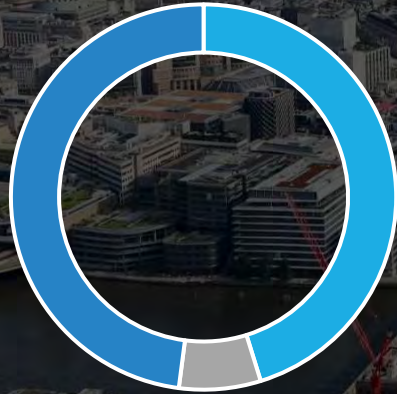
Select Location

- Millwall Community Trust, Active Communities Network, Mentivity, Southwark Young Advisors
- Millwall Community Trust, Active Communities Network, Mentivity, Southwark Young Advisors



The map displays the Peckham area in London, with several activity locations marked by black pins. The pins are located in the Peckham, Denmark Hill, and East Dulwich areas. The map shows streets, landmarks, and the River Thames in the background. A blue overlay box titled 'Select Location' is positioned over the map, showing a list of activity locations. The map also includes a search bar and a 'Find' button.

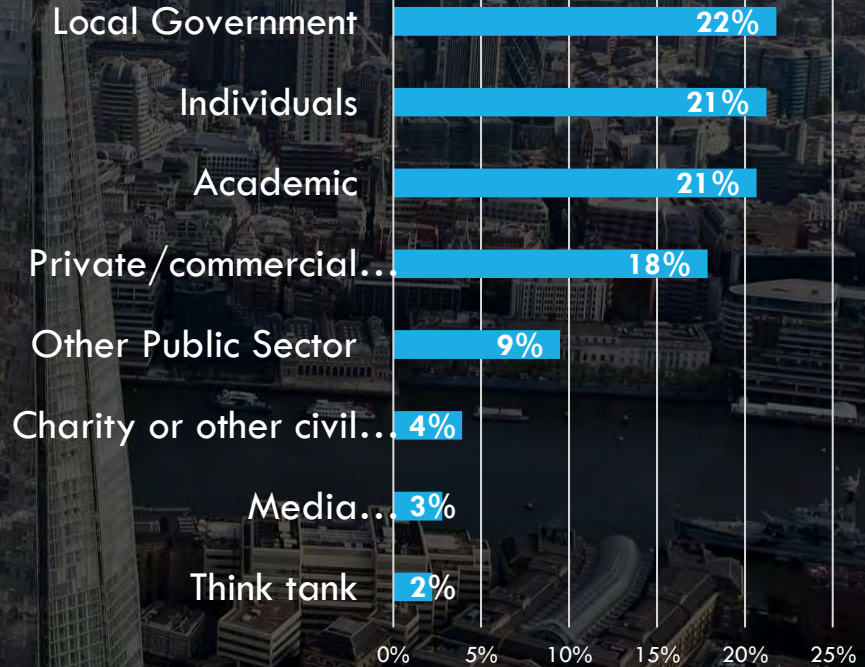
Who uses it?



48%
Strategic
(e.g. policy officers, planners, directors)

45%
Technical
(e.g. analysts, data scientists, researchers etc)

7%
Other



New Needs Emerging

Moving from...

Towards...

Open Data

Open + Private Data

Static tables

Static tables + live feeds

Technical audience

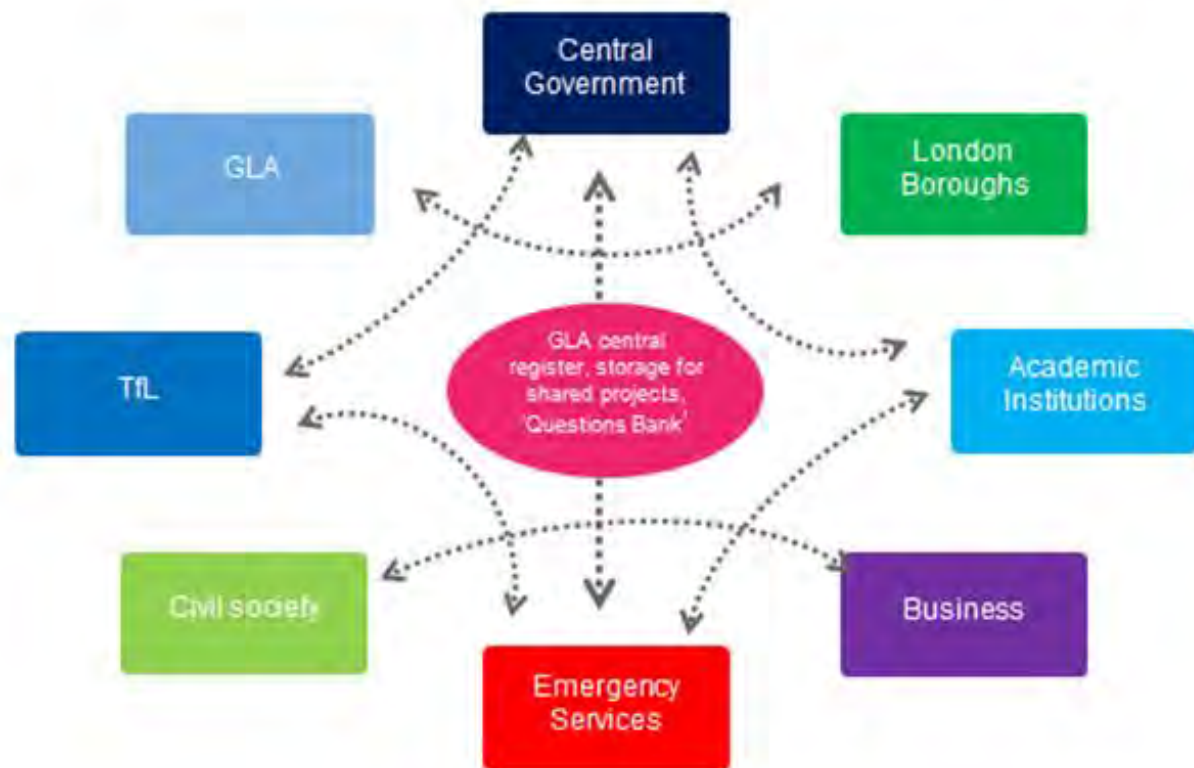
Technical + strategic audience

Transparency

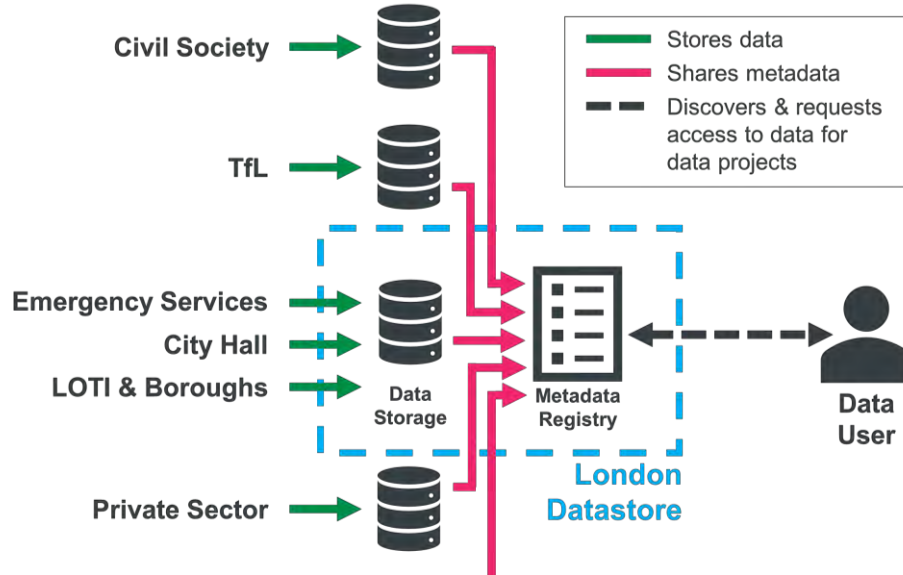
Transparency + policy tool



Hypothesis: Federation of London data with Datastore 3.0 as central register of data & APIs



LONDON DATASTORE 3.0



Platform

- Central metadata registry
- Data storage
- Permissions management
- API

Additional content

- Showcase data reuse
- Curated data collections
- Guidance

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SHARING CITIES

Our priorities in the final year of the programme



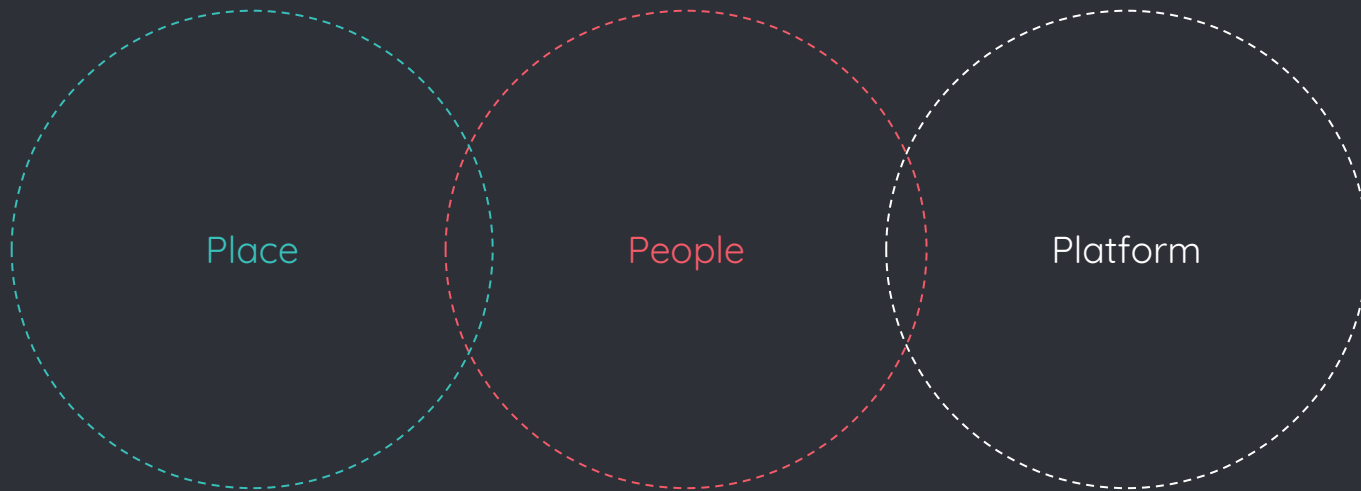
€ 24M
EU
Funding in
2016

€ 876M Potential
investment
(above € 500M
target)

€ 264M Triggered
investment



- BUILDING SMART CITIES TOGETHER



Sharing Cities: Building retrofit solutions

SMART, LOCAL AND FAIR ENERGY SYSTEM IN THE ROYAL BOROUGH OF GREENWICH, LONDON

In London's Greenwich Peninsula ward conservation area two social housing estates underwent a deep energy retrofit.

41% of the borough's emissions come from housing, with 10% of households living in fuel poverty.

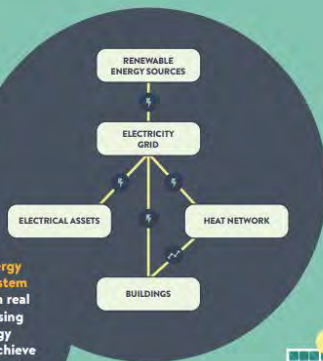
LOCAL INTERVENTIONS

Energy efficiency fabric improvements

Water source heat pump:
Drawing water from the Thames basin to deliver locally generated energy with lower emissions

Sustainable Energy Management System (SEMS): Taking in real time data and using dynamic energy management to achieve additional cost and carbon savings at a district level

Internet of Things (IoT) technologies: Smart thermostats, temperature, humidity and boiler sensors, and energy monitoring



HELPING MILAN REALISE ITS VISION FOR NEAR-ZERO EMISSION DISTRICTS

In Milan, building heating systems are responsible for nearly 50% of local emissions.

In Sharing Cities' pilot area, 70% of real estate assets were attributed G-F energy class.

Before & After: Complex Interventions

- Photovoltaic Panels
- Roof & facade thermal insulation
- High-performance stairwell windows
- LED lighting
- Thermal regulation & thermostats
- Heating system remote management

CO-DESIGN PROCESS

Over 900 families & 12 co-design meetings

DESIGN
Scenarios Presentation

KNOWLEDGE
Sharing of energy analysis

TRUST
Introduction & Listening

IMPACT: LONDON

With Greenwich Energy Hero, residents were able to momentarily reduce their energy consumption by 80% and alleviate pressure on the grid during peak demand.

At Ernest Dence estate, the completion of the retrofit works combined with the installation of a heat pump could lead to 68% CO₂ savings.

527,000kg CO₂

2.4M kWh (667 homes annual usage)

Projected annual savings after retrofit works completed

IMPACT: MILAN

60% energy reduction across entire retrofit programme.

Greater citizen awareness of retrofit impact on energy bills, environment and wellbeing.

470,000kg CO₂

annual savings

Sharing Cities: E-mobility solutions

HOW LISBON'S BIKE SHARING SCHEME BECAME THE CATALYST FOR AN ACTIVE CYCLING CULTURE

Portugal has one of Europe's lowest rates of cycling. Car ownership is traditionally very high.

Lisbon is an old city with many historic districts and narrow streets. It is also very hilly.

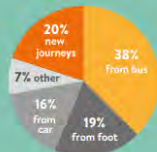
Lisbon introduced its first city-led bike sharing scheme in 2017 through Sharing Cities to help realise its new city strategy for mobility.

Upgrading Lisbon's cycling infrastructure has unlocked the city's micro-mobility network. Since 2017, 3 million journeys have been made by 16,000 users.

Daily users



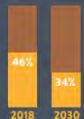
Mode shifts



FUTURE IMPACT: LISBON

Cycling lanes expected to double to over 200km.

3-fold planned increase in bike fleet with 2,000 bikes in circulation, 80% of which will be electric.



Target reduction in private car use to 34% by 2030



MILAN: A HUMAN-CENTRIC E-MOBILITY STRATEGY DELIVERS FIRST AND LAST-MILE MOBILITY OPTIONS ACROSS THE CITY

Mainstreaming Mobility-as-a-Service
Expanding accessibility to sustainable transport has been a key priority of the Municipality of Milan.

10 mobility islands have been implemented in Milan to respond to strategic goals set by the city

What is a mobility island?

A mobility island brings together multiple mobility services in one location, making it easier for people to access a range of low carbon mobility options.

MAINSTREAMING MOBILITY-AS-A-SERVICE

150 e-bikes equipped with child seats integrated into the city's bike sharing scheme = 3,300kg CO₂ saved in 2019

14 new bike-sharing stations in the south-east suburbs & 60 electric vehicle charging points

9 e-vans and 2 e-cargo bikes for last-mile logistics = 39,000kg CO₂ saved in 2019

175 smart parking sensors for the disabled, loading and unloading, and mobility islands

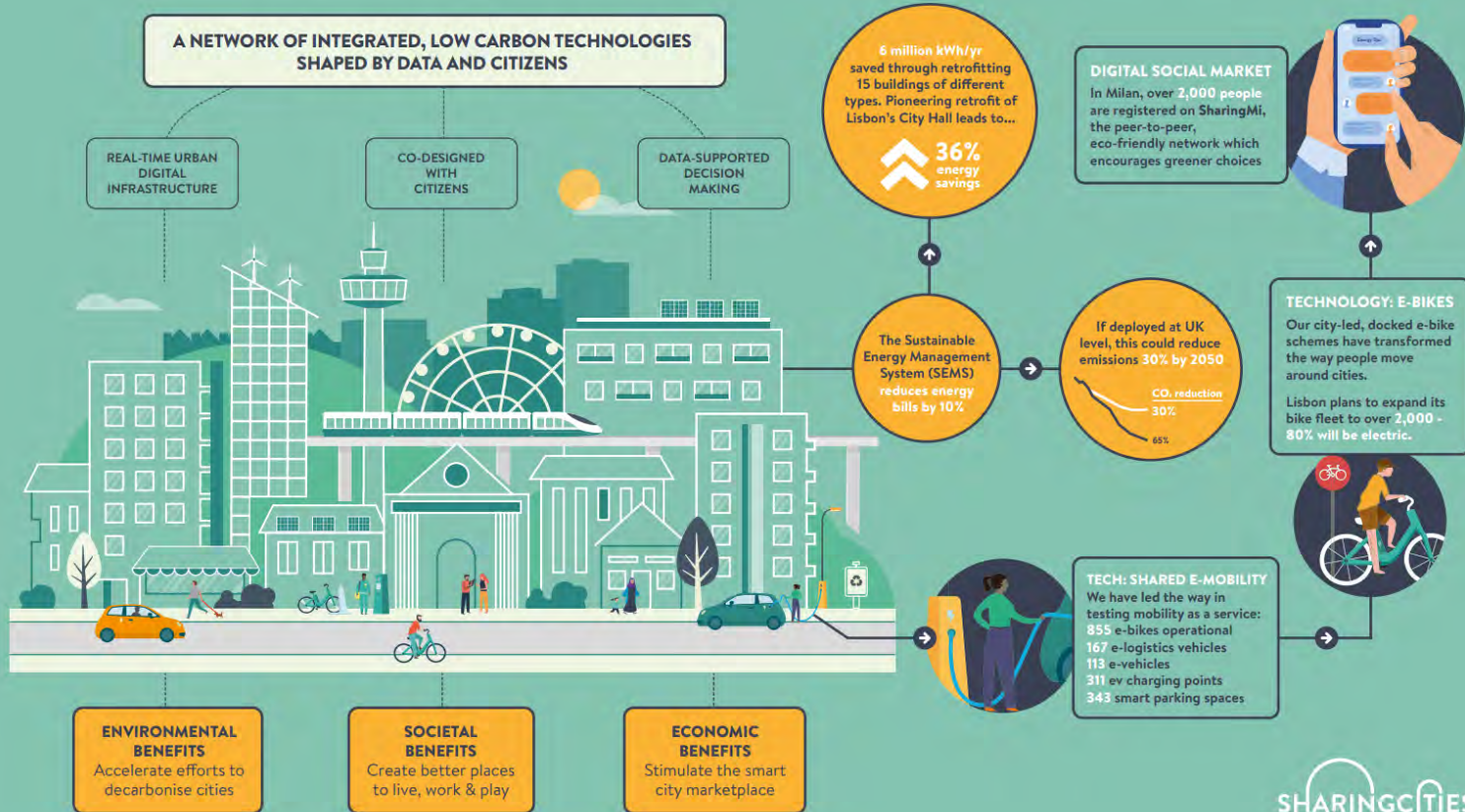
IMPACT: MILAN

Greater access to low-carbon mobility options for families. Improved access to e-mobility network for people living outside the city centre.

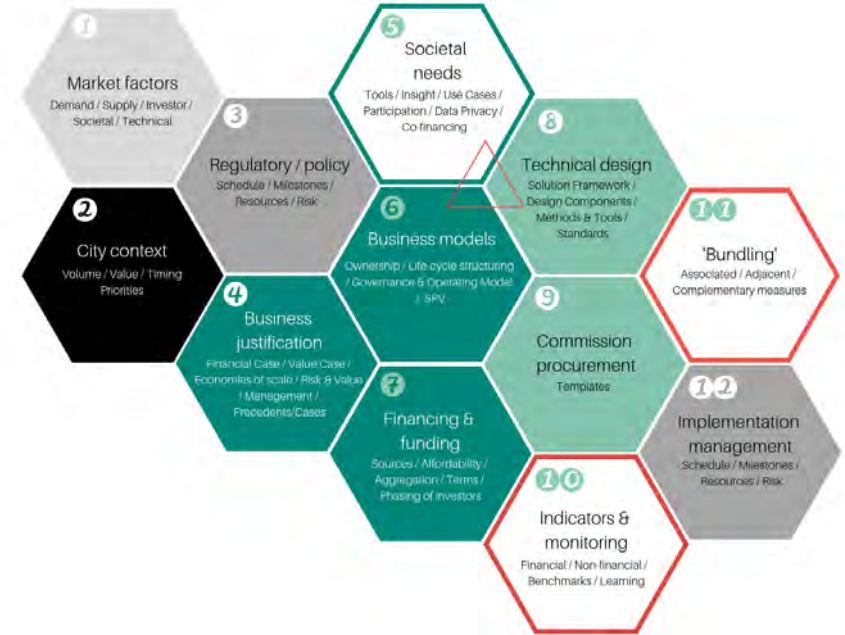
35km of new cycle paths planned by December 2020 beyond pilot area.

Sharing Cities: Smarter Cities Through Collaboration

Embedding smart city solutions at scale, engaging citizens and improving cities



ENGAGING THE MARKET: PLAYBOOKS & PACKAGING



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DIGITAL LONDON

Supporting our route to net zero by accelerating the uptake of proven green tech

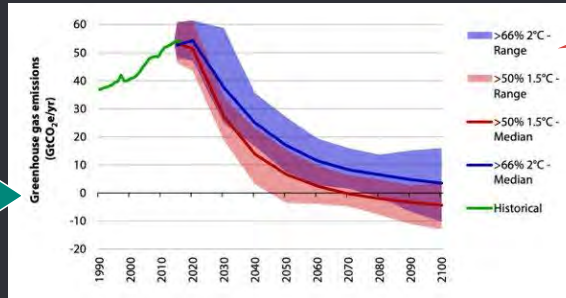
THE CHALLENGE

SHARING CITIES

The Sharing Cities programme demonstrated how vital green tech will be to meeting the Mayor's 2030 carbon reduction targets, and the potential for green tech to drive good growth. But scaling proven solutions is difficult, particularly in London which is fragmented. A lack of understanding and capacity inhibits growth.



Green tech solutions have been proven to work time after time, through programmes such as Sharing Cities.



All the technology we need to reach net zero is available to us today – but we fail to scale...

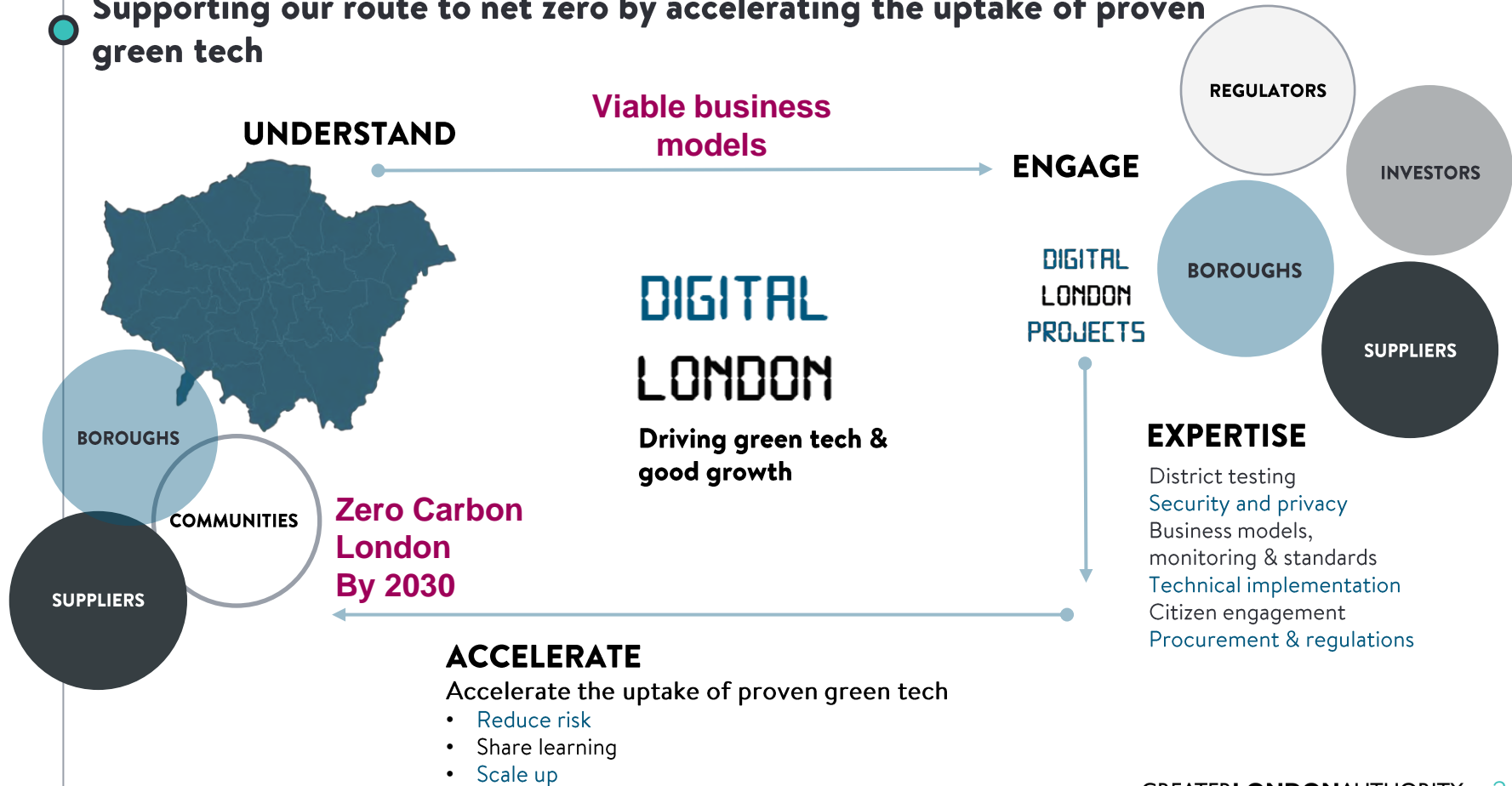


There are three main challenges to overcome:

- Low risk appetite
- Lack of funding
- London's fragmentation

These make it difficult to collaborate & achieve scale

Supporting our route to net zero by accelerating the uptake of proven green tech



Thanks!

ANY QUESTIONS?

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