

London Ultra Low Emission Zone

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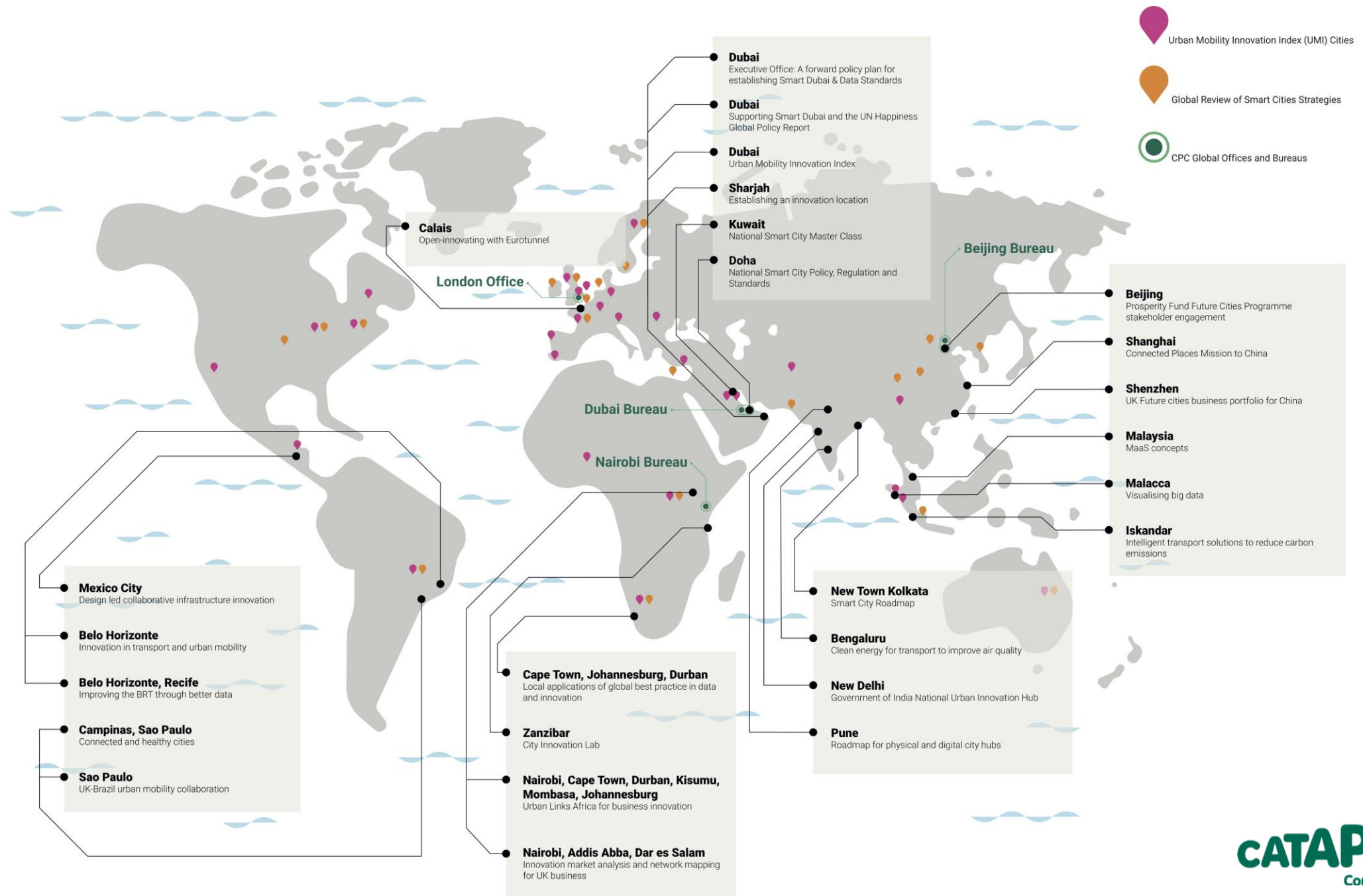


Prosperity, Innovation & Productivity

A neutral, expert convenor

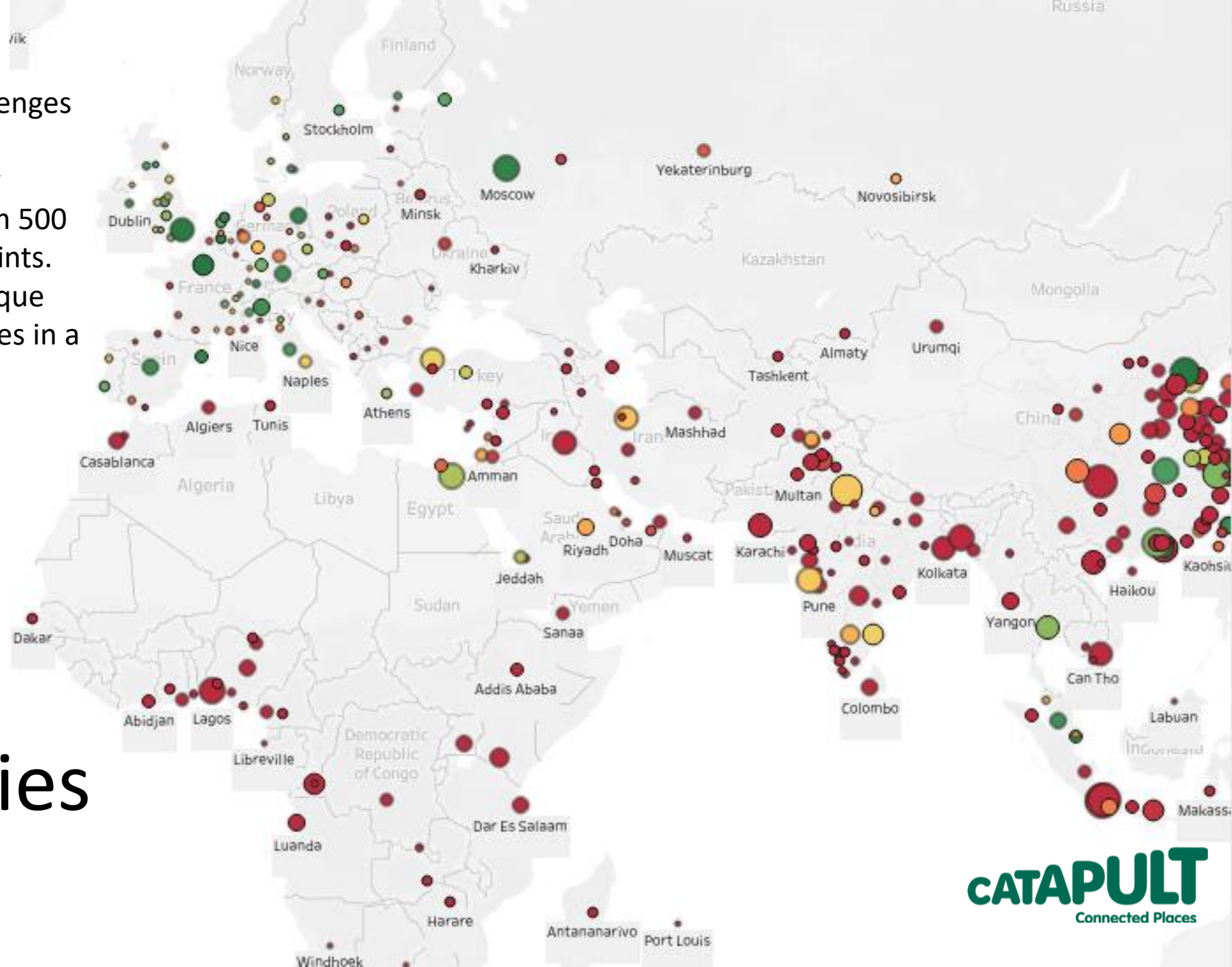
We operate at the intersection between
public and private sectors,
between local and central government,
between the now and the next.

Catapult's Global Project



City Typologies Dashboard

Cities are facing the multiple challenges of urbanisation. Connected Places Catapult has developed a new city typologies tool based on data from 500 global cities and 1000's of data points. The tool allows analysis of the unique innovation-based attributes of cities in a way that currently does not exist.



City Typologies Dashboard

This Dashboard

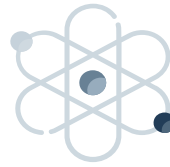
Helps UK plc to navigate the global landscape of urban innovation



1

500 Cities

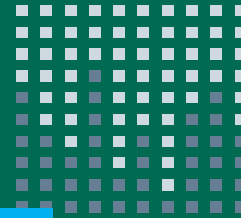
A vast global
landscape



2

65 Indicators

Uniquely curated
and adapted for
CPC



3

175,000 Data Points

Up-to-date and
relevant

Air Quality

Air Quality

Reducing levels of global air pollution is one of the 17 Sustainable Development Goals

“...By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality.”

Air pollution is the biggest environmental risk to health and it may be damaging every organ in the body

- *WHO*

9 out of 10 people breathe air that exceeds WHO guideline limits containing high levels of pollutants

There is also growing evidence that dirty air worsens infection and death rates from coronavirus.

Road transport contributes to excessive concentrations about 70% for nitrogen dioxide (NO₂) and about 30% for particulate matter (PM)

– *European Environmental Agency*

AIR POLLUTION – THE SILENT KILLER

Every year, around
7 MILLION DEATHS
are due to exposure
from both outdoor
and household air
pollution.

Air pollution is a major environmental risk to health. By reducing air pollution levels, countries can reduce:



Stroke

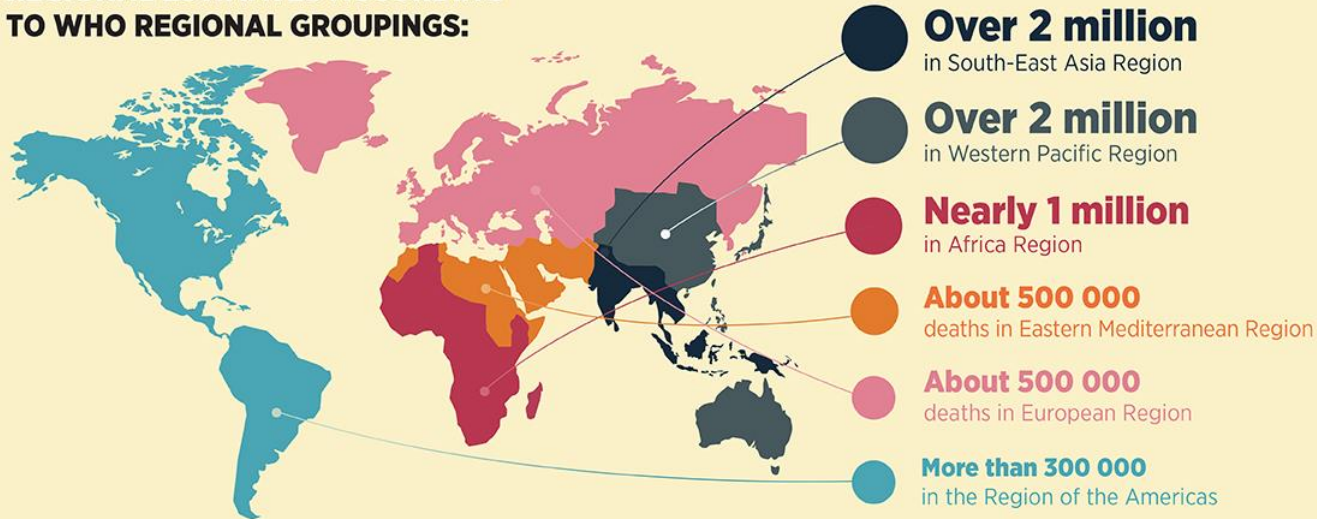


Heart
disease



Lung cancer, and
both chronic and acute
respiratory diseases,
including asthma

REGIONAL ESTIMATES ACCORDING TO WHO REGIONAL GROUPINGS:



CLEAN AIR FOR HEALTH

#AirPollution



Air Quality in Malaysia

Malaysia's air quality is considered moderately unsafe

Contributors to poor air quality in Malaysia include:

- transboundary haze from other countries
- industrial fuel burning, petroleum production and refining,
- rubber and palm oil processing,
- vehicle emissions,
- and waste burning.

London's Ultra Low Emissions Zone

Ultra Low Emission Zone

Thousands of Londoners die prematurely each year because of long-term exposure to air pollution, while over 450 schools in the capital were in areas exceeding legal air quality levels. And every Londoner in the capital lives in an area exceeding World Health Organization guidelines for the most dangerous toxic particles.

Around half of emissions from road transport are nitrogen oxides (NO_x), which contribute to illegal levels of nitrogen dioxide (NO₂), and particulate matter (PM).

The ULEZ was created to reduce these emissions, to protect children from lung damage, reduce the risk of breathing illnesses and heart disease in adults, and improve the health of people exposed to the highest levels of pollution.



The Mayor of London launched the Ultra Low Emission Zone (ULEZ) in central London on 8 April 2019.

The ULEZ is central to the Mayor's plans to improve the health of Londoners by cleaning up the city's toxic air, which leads to the early deaths of thousands of Londoners every year.

Most vehicles driving in the ULEZ must meet new, tighter emission standards or pay a daily charge to travel within the area.

For example cars not complying with minimum standards (Euro 4) pays £12,50 in addition to the congestion charge. Lorries pay £100. Fines up to £1000.

The money raised is reinvested into London's Transport system.



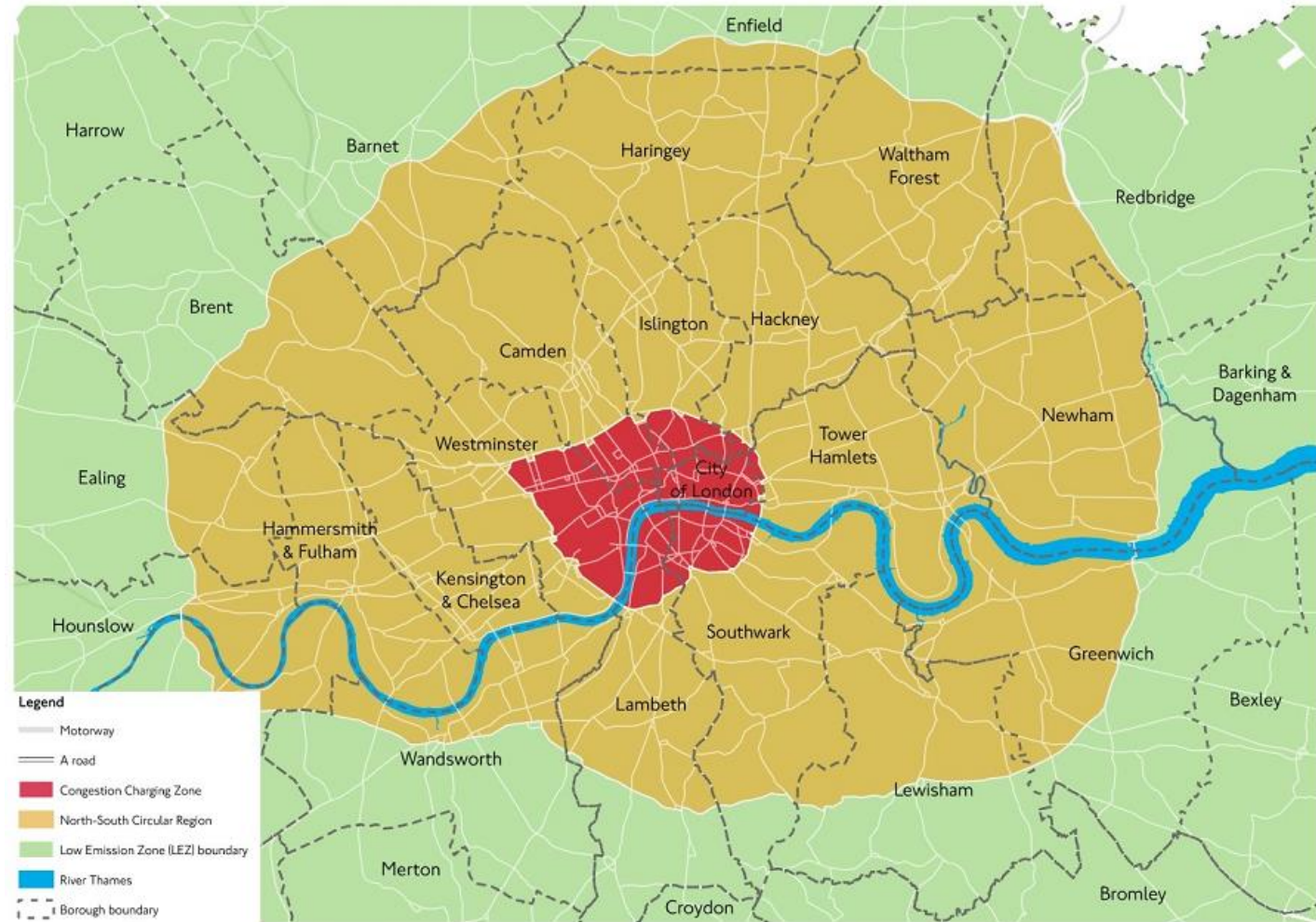
Ultra Low Emission Expansion ULEX

ULEZ will expand in October 2021

The expansion is expected to reduce nitrogen oxide (NOx) pollution by a further 28% – removing 4,400 tonnes of NOx in Inner and Outer London by 2025.

ULEX will cover an area encompassing 3.8m of the capital's residents.

ULEX forms a key part of the UK Government's Plan for London to comply with air pollution limits by 2025 or sooner.



Fall in air pollution

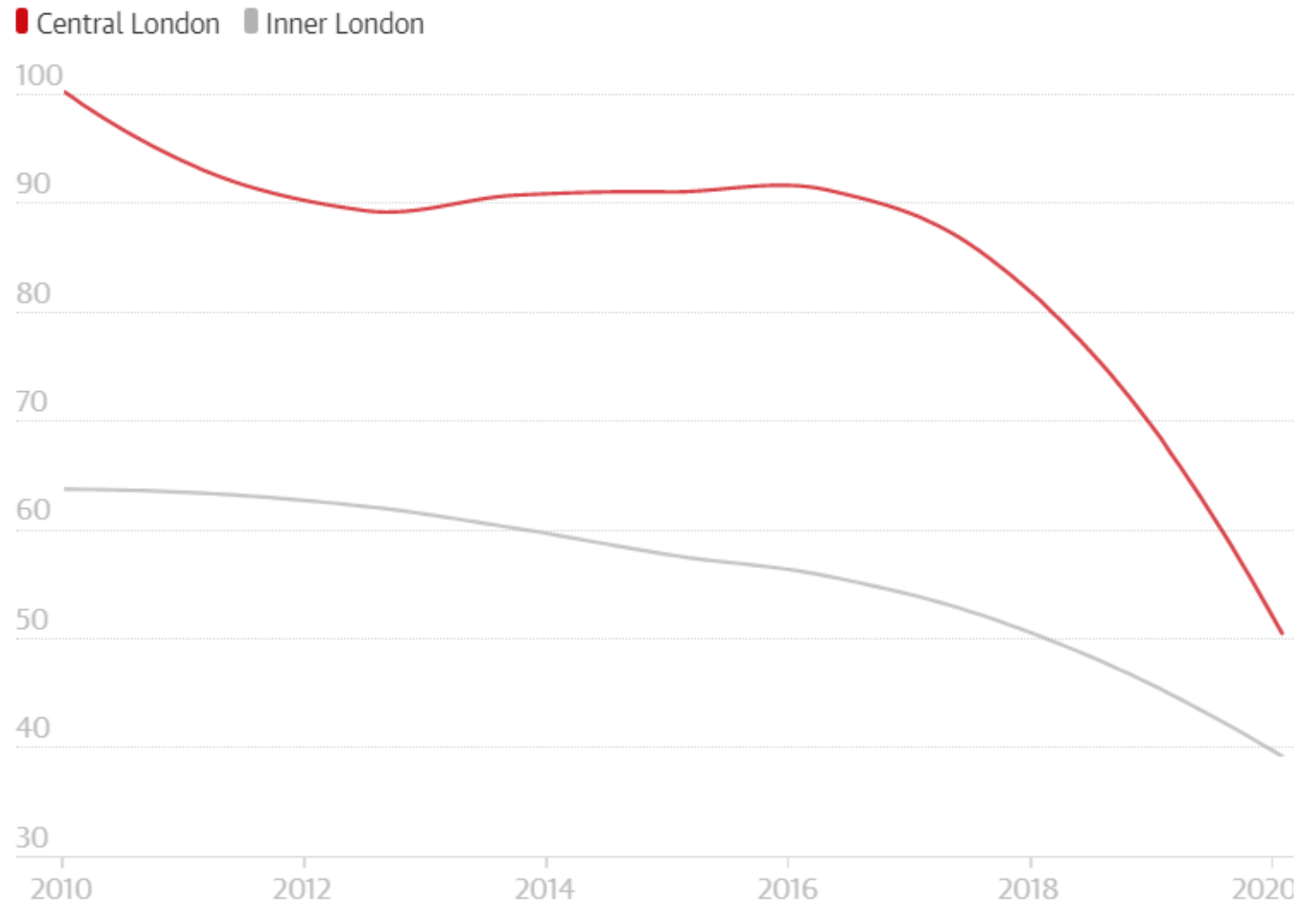
More than 9,500 people in London were dying early each year due to dirty air in 2015
- *King's College London*

Even before the lockdown, London was seeing a decrease in air pollution.

Air pollution in London has plunged since the introduction of ULEZ, with a **94% reduction** in the number of people living in areas with illegal levels of nitrogen dioxide.

The number of schools in such areas has **fallen by 97%**, from 455 in 2016 to 14 in 2020.

Nitrogen dioxide levels in micrograms per cubic metre at roadside locations, monthly average



Guardian graphic | Source: Mayor of London report. Note: central London = current congestion charge and ultra-low emissions zone. Inner London = within the North and South circulars

Key impacts so far

There has been a **71% Reduction** in the number of older, more polluting, non-compliant vehicles detected in the zone: a reduction of 44,100 vehicles on an average day

There was a **96% increase** in vehicles that were compliant

There was a **79% compliance rate** in January 2020.

ULEZ is improving air quality in the capital. Nitrogen dioxide (NO₂) emissions from road transport are **down 31% - equivalent to 200 tonnes**

London's Clean Air initiatives

- Cleaner Vehicles
- Air Quality monitoring and mapping
- School air quality audits
- 7 low emissions bus zones
- None-road Mobile Machinery
- EV Infrastructure
- Mayors Air Quality Fund
 - £22 million over 10 years to support projects by London boroughs to improve air quality.
- Ultra Low Emission Zone

Connect. Spark. Accelerate.

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cATAPULT
Connected Places

