



London circular economy route map – progress to date

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Overview

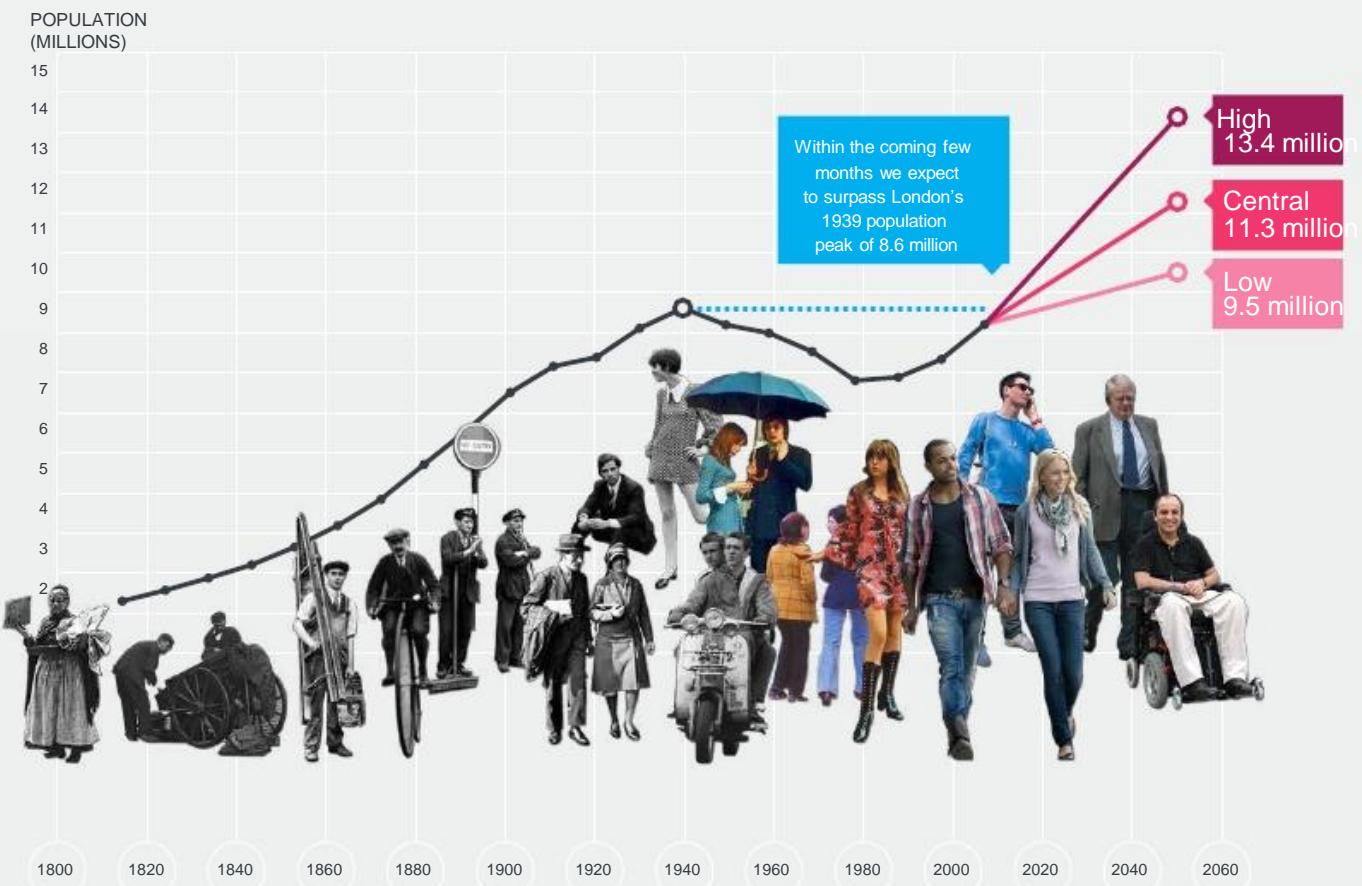
- London context
- Approach to the circular economy Route Map

London's population now exceeds 8.6 million people, the same as the last peak in 1939.

Projections show growth to 11.3 million inhabitants by 2050

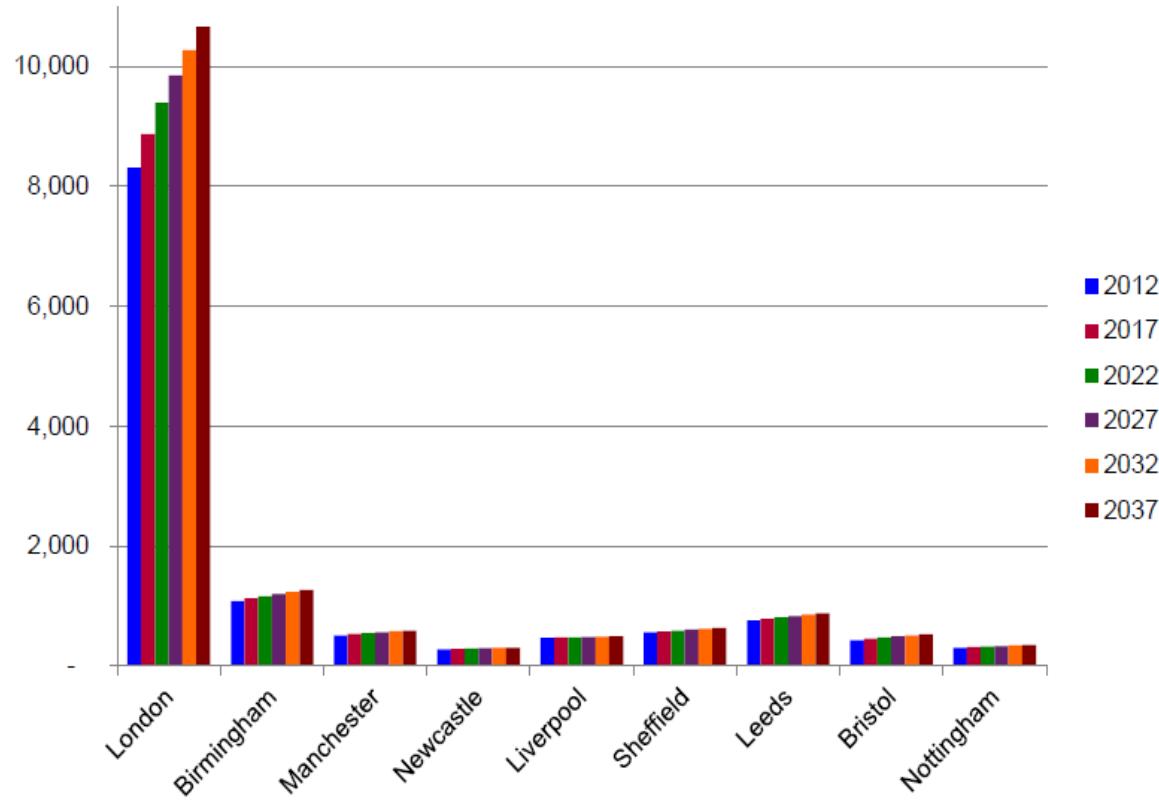
An overall increase of 37% from 2011 to 2050

Source: GLA Intelligence Unit



City trends

English City Population projects 2012-2037



LONDON INFRASTRUCTURE PLAN 2050

IMPROVING QUALITY OF LIFE AS LONDON GROWS



Overall vision

Our aim for London's infrastructure is to create a greener and more productive city that is environmentally, socially and economically sustainable - and which remains at the forefront of new technology.

With the right infrastructure in place we can create a city where everyone's quality of life improves.



Circular economy – reusing more wasting less

Our ambition is to significantly reduce the amount of waste being disposed of by helping London move towards a circular economy, where materials are reused, re-manufactured or recycled rather than thrown away.

To realise this ambition, it will be essential to ensure correct incentives and facilities are in place.

A number of initiatives are running, including: working with various stakeholders to design a plan (or routemap) for London to accelerate this shift to a more regenerative economy; learning from other cities; and working with SMEs to reshape their business models.



Waste and Resources in the London Infrastructure Plan

- More than 65 per cent of London's municipal waste is sent to landfill or incineration each year costing London's boroughs in excess of £250m a year in gate fees alone. Unless recycling and reuse rates dramatically increase by 2050 the cost of managing London's municipal waste will double.
- The total cost to Londoners of managing local authority collected waste, including the collection, transport, treatment, and final disposal activities, is approximately £500 million. This figure represents 3-4% of total local government expenditure.
- If London was to accelerate its transition to the circular economy this would result in savings of up to £5 billion

By 2050, we estimate
we will need the following
across the city:



An additional
1.5 million
homes



Approximately
£1 billion of healthcare
investment over the next 5 years



A 20% increase in
energy supply capacity



A 50% increase
in public transport
capacity

High speed digital
connectivity



Around 600 more
schools and colleges



Around 40 new
facilities that will be
used for recycling,
remanufacturing,
reusing and waste
management.



An extra 9000ha
of accessible green space
including 10% more green
cover in central London
and town centres

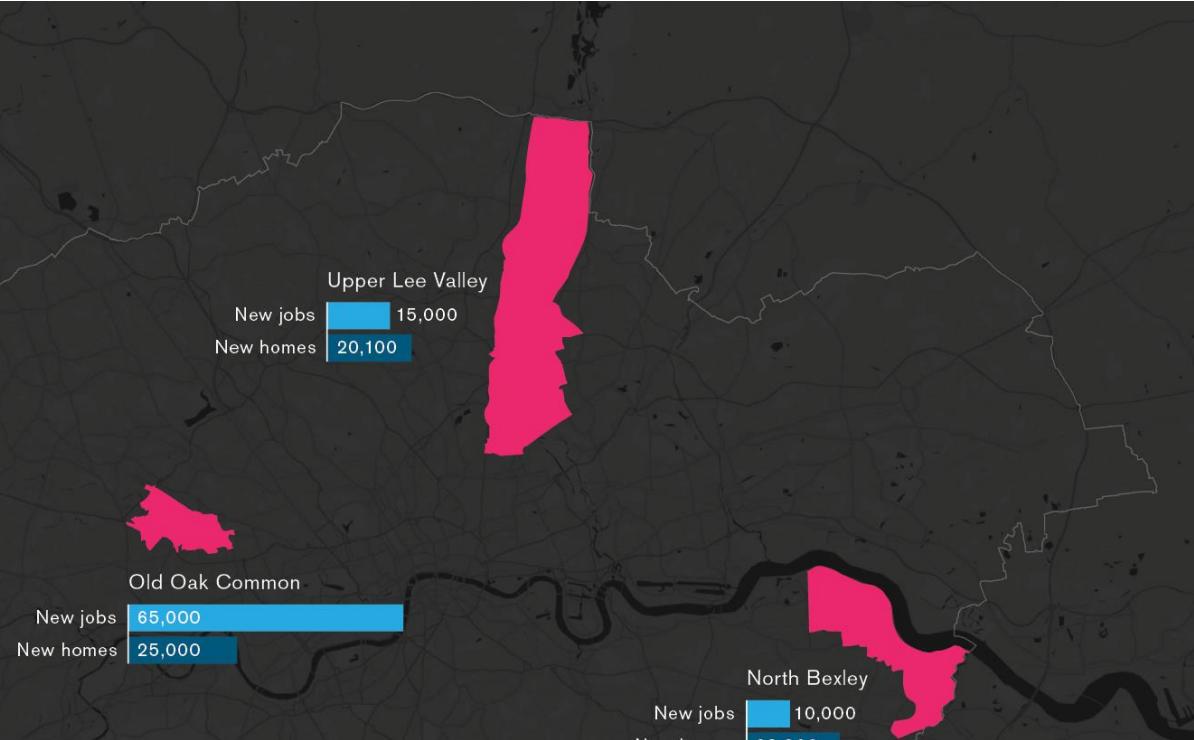


Thames Tideway Tunnel
and other water infrastructure

Case studies

Looking in more depth at three selected areas – Old Oak Common, North Bexley and the Upper Lea Valley – we will assess how collaborative working can evolve as a matter of course throughout London.

These areas have been chosen because they are (a) large and important in their own right (b) at different stages of development (c) but all far enough from having ‘spades in the ground’ for a more coordinated approach to have a positive effect.



The Mayor set up the Infrastructure Delivery Board in November 2014 to lead the construction of the city. The board is taking forward work that is both cross-cutting (affecting different sectors) and sector specific.

Delivery – Cross-cutting

- Area case studies
- Infrastructure programme plan and map
- Circular economy**
- Green infrastructure
- Market research on attitudes to growth
- Regulation changes

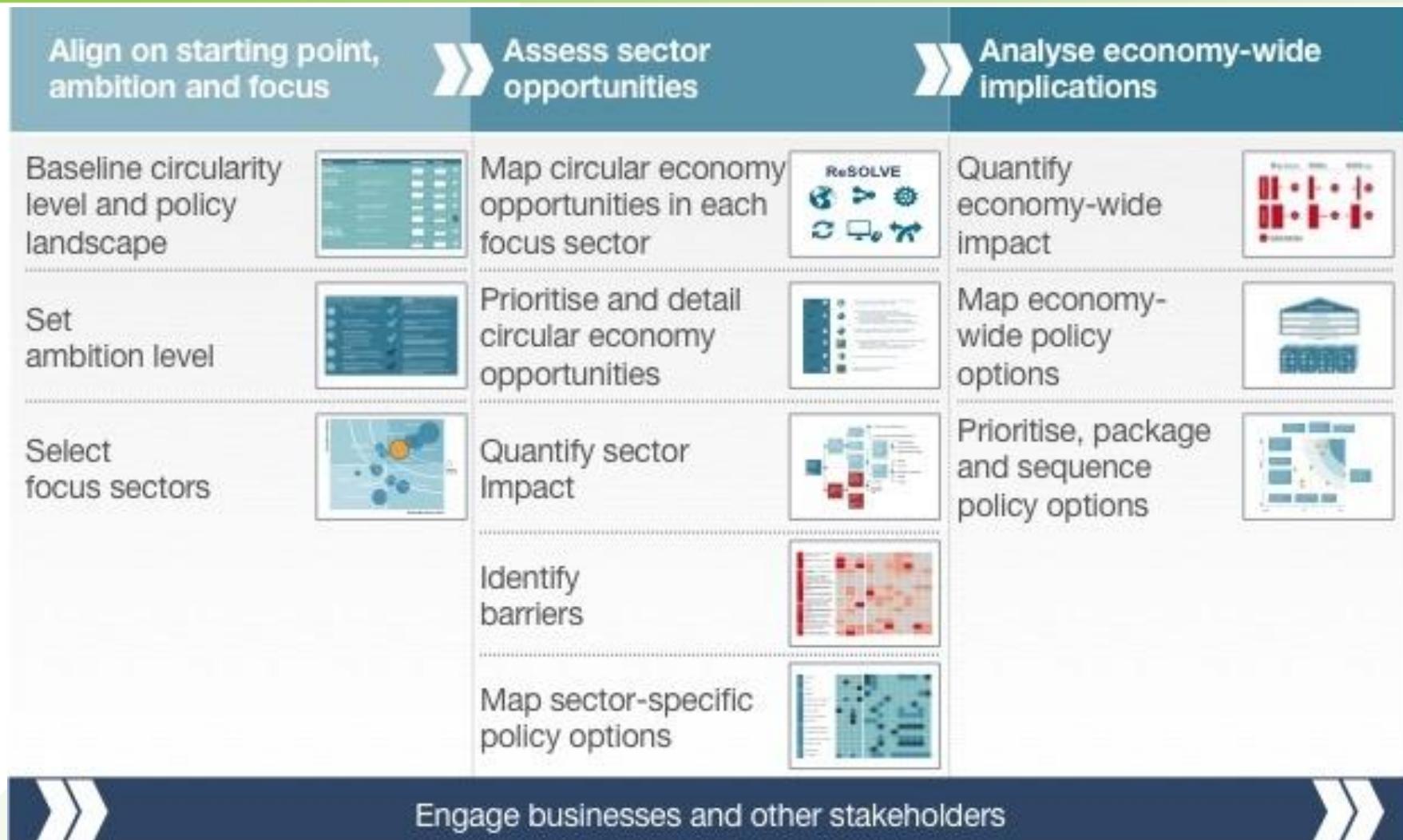
Delivery – Sector specific

- Transport
- Digital connectivity
- Energy supply and demand
- Integrated water management
- Housing and social infrastructure



The emerging circular economy Route Map for London

EMF Toolkit for Policy Makers - Methodology



Focus Sectors

Priority Sectors – selection criteria: waste, GVA, employment

- Electricals
- Construction and Built Environment
- Textiles
- Food
- Plastics

Enabling Sectors – Selection criteria GVA employment, London specialised sectors

- Government
- Finance
- Creative / Digital
- Higher Education
- Media

Cross cutting themes

Five circular economy business models (from Accenture)

- Renewable inputs – they will shift to using renewable energy or secondary materials as the inputs for products;
- Recover value at end of life through biological or technical (i.e. non biological) recycling;
- Prolong product life –through maintenance, designing for durability, re-use and remanufacture of products and components;
- Sharing economy – share assets (e.g. cars, rooms, appliances) through sharing platforms;
- Products as services – sell access to products while retaining ownership of assets or dematerialise through books or online shopping.

Plus...

- Using public and private sector procurement to drive change

The size of the prize for London

- Arup for GLA estimate savings of c.£5bn cumulatively to 2050 on the cost of new waste infrastructure alone;
- Eunomia estimate annual waste savings of low £00's millions annually from additional recycling and reuse activity;
- Other estimates pro rata for London suggest tens of billions of pounds – For e.g Growth Within identifies savings of 1.8 EUR within EU in built environment, mobility and food
- WRAP and Green Alliance estimate 205,000 (54,000 net) new jobs from circular economy – London version of the report has been commissioned
- Amec Foster Wheeler engaged by LWARB to triangulate various estimates to arrive at a central estimate for the London Route Map

NEXT STEPS



Route Map timetable

- Evidence base to be published in December 2015
- Priority Sector working groups will be established and “Chapters” published sequentially early next year
- New Mayor following elections in May 2016
- Delivery of programmes and projects 2016 onwards
- Next selection of focus mid Mayoral term?

Emerging projects

- Jobs report will be published in December on job creation opportunities for London
- Pilot projects – we are seeking out pilot projects to demonstrate circular approaches
- Public sector – we are hoping to develop a project looking at how circular economy business models can be implemented by public sector organisations to deliver better quality services at reduced costs
- Venture Capital Fund – LWARB is looking to develop a VC fund to support SMEs developing circular economy business models.
- GLA group circular procurement project
- Recycling harmonisation project

Challenges / Opportunities

- Integration with other strategies
- Reach – penetration to other policy areas and organisations
- Available resources
- Political change



Thank you

London Waste and Recycling Board

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