

Waste: The Circular Economy

September 2017

Key findings

- Our current economic model of take, make and dispose, creates millions of tonnes of waste every year. This is not sustainable from an environmental or economic perspective and must change.
- London should adopt the 'circular economy model'.* Not only will it reduce the amount of waste generated, minimise the depletion of natural resources and reduce our carbon emissions, it will also create new job opportunities and boost London's economic activity.
- London is at the early stages of transitioning to a circular economy but the model has the potential to be transformative. The London Waste and Recycling Board has recently published a route map, focusing on five key business sectors, but will need Mayoral support and action to succeed.
- We are pleased to see that the Mayor's draft Environment Strategy recognises the importance of the circular economy.
- The Mayor needs to take a visible lead in pushing the circular economy model forward and must ensure organisations in the GLA Group to procure goods and services in line with its principles.



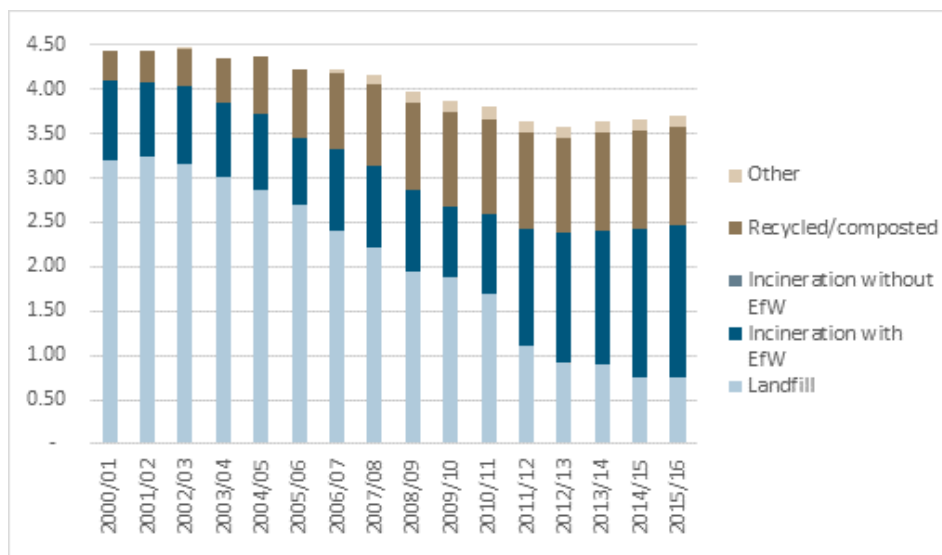
The circular economy in London

September 2017

Waste in London

London generates an enormous amount of waste every year. In 2016, local authorities collected 3.7 million tonnes of waste – enough to fill more than 1,500 Olympic-size swimming pools.¹ Despite attempts to reduce waste through reuse and repair, the total amount of waste generated in London has only slightly reduced over the last decade. More is being incinerated than ever before, and recycling rates have now dropped back down to 2010 levels.

Figure 1: Following a period of stagnation, recycling has now dropped



Source: DEFRA, [Local Authority Collected Waste: Annual Results Table, 2017](#)

A rising population means more waste and an increasing challenge to waste infrastructure in London. In 30 years, London’s population is estimated to grow to between 10-13million.² If Londoners continue to produce the same amount of waste per person it would require local authorities to collect nearly an extra one million tonnes of waste, equal to an extra 500,000 refuse trucks of rubbish on London’s roads each year.³ Experts have warned that this growth will be unsustainable and put an increasing strain on waste infrastructure, land and resource.

“Waste will continue to rise, we will run out of space and the growth will be unsustainable.”

Dr Liz Goodwin, London Waste and Recycling Board

The way we create, handle and dispose of waste must change. The Greater London Authority (GLA) has acknowledged the increasing pressure on waste infrastructure and has begun to consider alternatives to our current economy of ‘take, make and dispose’. An alternative model would require us to address the lifecycle of waste, not just at the point of disposal, but at the start with the design of products. The concept of a circular economy gives us this alternative model and an opportunity to move away from our traditional linear approach.

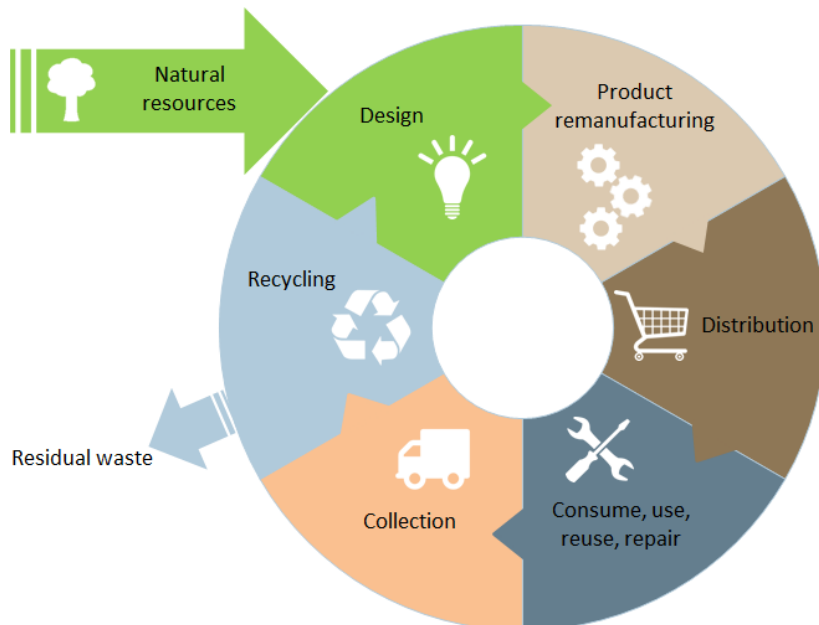
The circular economy in London

September 2017

How can the circular economy help?

People will always generate waste, but more can be done than just relying on recycling or incineration for its disposal. Waste is a necessary part of modern day living, but by relying on recycling or incineration, we miss out on the opportunity to utilise waste as a resource. Businesses are ready to capitalise on this opportunity - capturing the value of waste and making money from it, while providing the goods that people need.

Figure 2: The circular economy ensures natural resources stay in the economy for as long as possible



The circular economy offers a potential solution to London's wasted resources. The circular economy minimises the extraction of natural resources and re-uses and recirculates goods to extract the maximum value from the original manufacture. By seeking to recirculate materials after use by repair or recycling, the circular economy recognises 'waste' as a valuable commodity and minimises the amount of unusable refuse to dispose of.

Recognising its environmental and economic benefits, the Mayor has included the circular economy in his draft Environment Strategy. The circular economy features heavily in the draft Environment Strategy as its environmental benefits complement many of the Mayoral priorities, including making London a 'zero waste and carbon neutral city' by 2050. The Mayor's draft Environment Strategy says the circular economy is a "new way of thinking – moving towards a low carbon, circular economy – will turn a problem into an opportunity".⁴

Potential benefits of the circular economy in London

- Reducing 60 per cent of London's waste by 2041⁵
- Putting London "on track" to become carbon-neutral⁶
- Creating 12,000 new jobs by 2030⁷
- Giving £7 billion net benefit to London's economy⁸

The circular economy in London

September 2017

The beginnings of the circular economy in London

The circular economy in London is at the early stages, but already shows potential to transform the economy and environment.

Individual circular economy projects are growing in terms of size, customer numbers and environmental impact. This includes:

- OLIO, a food sharing app, has 250,000 members in London who have shared over 32,999 meals. Sharing edible food waste reduces carbon emissions and means fewer Londoners go hungry.⁹
- The Met procured a circular economy service during their estate reduction programme in 2015. Within 12 months, the service had helped the Met to save over £300,000 and make significant carbon savings.¹⁰
- Developers at the Old Oak and Park Royal Mayoral Development Corporation are planning with the circular economy in mind, designing buildings that are adaptable and flexible for changing uses, rather than one fixed end use.¹¹

These snapshots are encouraging but we currently have no reliable measure of the circular economy in London.

The London Waste and Recycling Board's (LWARB) Circular Economy Route Map has set a new policy direction, but its success will depend on the actions of the Mayor and other key stakeholders. LWARB's

Route Map is an important step forward for the circular economy in London. However, many challenges will need to be overcome if it is to deliver such an ambitious change – particularly how to get businesses to engage and participate in the transition to a circular economy.

LWARB: Setting the direction of the circular economy in London

LWARB's route map focuses on five key business areas: built environment, food, textiles, electricals and plastics. Stakeholders have been called to action in these areas, including the Mayor and the wider GLA family, which have been set the following tasks:

- Taking a leadership role in the acceleration of the circular economy, setting a vision for London to be a global leader.
- Procuring goods and services in a way which develops the market for circular goods and services.
- Incorporating the circular economy into main strategic documents such as the London Plan, the Environment Strategy, the Transport Strategy and Economic Development Strategy.

"This route map outlines a vision of a capital city thriving through the adoption of the principles of circular economy."

Dr Liz Goodwin, LWARB

The circular economy in London

September 2017

How the Mayor can help

The Mayor plays a key role in promoting the progression of the circular economy in London by his appointments to LWARB and by setting out his plans with an emphasis on re-use and recycling. There are already obstacles preventing the implementation of the circular economy - outside of green economy experts and environmentalists, the circular economy remains unknown and irrelevant in comparison to other budgetary demands. As well as setting policy, the Mayor can advocate for the circular economy and showcase its ability to improve environmental and economic outcomes for London.

Awareness of the circular economy needs to improve among London's businesses. Recent surveys have found that:

- 50 per cent of SMEs hadn't heard of the circular economy.¹²
- Nearly half of waste management companies didn't understand the term 'circular economy'.¹³

Experts stressed that an outreach programme which addressed business concerns would help overcome awareness and engagement issues.

Environmental benefits alone will not be enough to incentivise the circular economy. Guests highlighted that although an intimate knowledge of the circular economy may be unnecessary for the public and some businesses, both groups will need to become active participants in this new way of waste management for it to become

successful. Much like successful recycling systems, participation in the circular economy will need to be straightforward, convenient and cost effective; preferably linking into existing local systems. There are activities that the Mayor could include in his final Environment Strategy that would enable the circular economy in London and allow him to act as a circular economy role model to the business and wider community.

The Mayor should use the purchasing power of the GLA Group to encourage the growth of London's circular economy. The GLA Group spends £11 billion per year on procurement activities.¹⁴ The GLA has recently updated its Responsible Procurement Policy; reflecting the need to procure circular economy services, thereby ensuring better environmental outcomes for London. The Environment Strategy highlights the need to show leadership in implementing these policies with the intention to influence other procurement bodies. The Mayor cannot rely on his Environment Strategy alone though and communicating this leadership requires a clear vision for a circular London.

Setting a whole-city vision for the circular economy will be challenging but London is not alone. The Mayor should set a vision and specific milestones, especially in relation to future growth, towards the circular economy. This could be done by drawing on examples from other cities such as Amsterdam, Helsinki and Paris. Recently Paris set out ten circular economy guiding principles: these include setting a vision and objective and giving financial incentives to the circular economy.¹⁵

The circular economy in London

September 2017

Endnotes

The circular economy in London report forms part of a larger investigation the Environment Committee is conducting into waste management. Other topics in this series will look at recycling collections in London and energy from waste. All three topics, including the circular economy, will become part of a final report that will be launched in early 2018. If you have any questions, please contact environment.committee@london.gov.uk

* UKIP recognises the value of some aspects of the circular economy to cut down on unnecessary waste, but other aspects which have been advocated by some proponents of the circular economy model, such as a significant increase in state ownership of property and state control of, and interference in the market, are not desirable.

¹ Department of Environment, Food & Rural Affairs (2017), Local authority collected waste: annual results table. Available online at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/592899/LA_regional_spreadsheet_march_2016rev.xls

² Mayor of London (2014), *London Infrastructure Plan 2050 A Consultation*, Available online at <https://www.london.gov.uk/file/19038/download?token=1Zj5uQZf>

³ = Waste growth projection to 2050 extrapolated from [DEFRA 2016 LA Waste Management data](#) and [GLA 2016-based population projections – long term trend](#). Model simplifies and assumes that population growth only factor in future waste requirements.

⁴ Mayor of London (2017), *London Environment Strategy – draft for public consultation*, Available online at https://www.london.gov.uk/sites/default/files/les_full_version.pdf

⁵ ARUP and London Waste and Recycling Board (2017), *Circular Economy Effects on Waste Production in London – Impact Assessment Report*, Available online at http://www.lwarb.gov.uk/wp-content/uploads/2016/12/Final-Report_Issue.pdf

⁶ Old Oak and Park Royal Development Corporation & London Waste and Recycling Board (2017), *Circular and Sharing Economy Scoping Study for Old Oak and Park Royal*, Available online at https://www.london.gov.uk/sites/default/files/9_circular_and_sharing_economy_study.pdf

⁷ London Waste and Recycling Board (2017), *London's Circular Economy Route Map*, Available online at http://www.lwarb.gov.uk/wp-content/uploads/2015/04/LWARB-London%E2%80%99s-CE-route-map_16.6.17a_singlepages_sml.pdf

⁸ WRAP (2015), *Employment and the circular economy – Job creation through resource efficiency in London*, Available online at <http://www.wrap.org.uk/sites/files/wrap/London%20Circular%20Economy%20Jobs%20Report%202015%20Online%20Version%20Final.pdf>

⁹ Communication with OLIO

¹⁰ Communication with Met

The circular economy in London

September 2017

¹¹ London Waste and Recycling Board (2017), *Business Plan 2017 – 2020*, Available online at http://www.lwarb.gov.uk/wp-content/uploads/2015/04/LWARB-Business-plan_spreads_14.3.17.pdf

¹² Fusion Observatory, (2014) *How to shift towards the circular economy from a small and medium business perspective: A guide for policy makers*. Available online at https://www.kent.gov.uk/_data/assets/pdf_file/0013/19210/How-to-shift-towards-the-circular-economy.pdf

¹³ Chartered Institution of Waste Management, (2014) *The Circular Economy: what does it mean for the waste and resource management sector?* Available online at

http://www.ciwm-journal.co.uk/downloads/CIWM_Circular_Economy_Report-FULL_FINAL_Oct_2014.pdf

¹⁴ Greater London Authority, (2017) *The GLA Group Responsible Procurement Policy*, Procurement, Version 7.8, Available online at <https://www.london.gov.uk/moderngovmb/documents/s57893/05c%20Responsible%20Procurement%20Policy%20v7.8.pdf>

¹⁵ Mairie De Paris, (2017) *PLAN ÉCONOMIE CIRCULAIRE DE PARIS 2017-2020*. Available online at <https://antoinetteguhl.eelv.fr/wp-content/blogs.dir/670/files/2017/07/Volet-strat%C3%A9gique-Annexe-1.pdf>