

## **London Waste and Recycling Board Response to the Draft London Environment Strategy**

1. The London Waste and Recycling Board (LWARB) is a statutory Board established by the GLA Act 2007 to help reduce waste and improve its management in London. The Board is chaired by the Mayor of London (or his representative). The Board also includes four councillors and two independents appointed by London's councils and one independent member appointed by the Mayor of London. LWARB has provided technical advice to the GLA during the drafting of the London Environmental Strategy. We are pleased to observe many of our recommendations have been included within the draft.
2. Within this document LWARB provides a detailed review of the draft London Environment Strategy (draft LES) with several recommendations for additional information that could be added in order to strengthen the Mayor's desire to move London towards becoming a zero carbon city.

### **3. Chapter 1: London's Environment Today**

- 3.1. LWARB fully supports the recognition within the draft LES that waste is one of the key environmental issues impacting London (p12). We would suggest adding to this section that there is a high cost to Londoners for disposal of waste, and that the production and management of waste contributes to climate change.

### **4. Chapter 3: New Approaches**

- 4.1. LWARB strongly support the assertions within this chapter that water, energy and raw materials for the products we consume will be less readily available in the future, and are pleased with the inclusion of a low carbon circular economy as one of four strategic approaches needed to tackle London's environmental challenges. We are also supportive of the statement within the chapter that the low carbon circular economy must be linked to the Mayor's other strategies to ensure it is factored into decision making across London (p30).
- 4.2. The statement on p31 describes a low carbon circular economy as one in which as much value as possible is extracted from resources through their use and reuse before they become waste. This description is more like a linear economy in that it assumes that resources eventually become waste. We would suggest the text used on p253 of the draft LES which states "The Mayor will take a circular approach to London's use of resources that designs out waste, keeps materials in use at their highest value for as long as possible and minimises environmental impact." more accurately reflects the concept of a circular economy and could be used in place of the description on p31. A definition used by the Ellen MacArthur Foundation states that the circular economy is: "...restorative and regenerative by design. Relying on system-wide innovation, it aims to redefine products and services to design waste out, while minimising negative impacts. Underpinned by a transition to renewable

energy sources, the circular model builds economic, natural and social capital”. This definition touches upon other key themes within the draft LES and might be more appropriate as it captures better the holistic nature of the systemic change that a move to a circular economy requires.

## **5. Chapter 4: Air Pollution**

- 5.1. We support the Healthy Streets approach for putting human health at the heart of planning public streets (p33). We would also support the addition of “avoidance of litter on streets, and adequate provision of waste and recycling receptacles” as part of the Healthy Streets approach. This would not only avoid littering, but also to support the waste policies contained within the draft LES. Litter can have a negative impact on health ( [Keep Britain Tidy Litter Report 2013](#) ).
- 5.2. LWARB agree that tackling air pollution is a key issue for the Mayor. We support the aims to reduce emissions from freight set out in proposal 4.2.1e (p81). We suggest inclusion within the air pollution chapter that new construction methods being developed as part of the transition towards a circular economy (such as reuse of demolition materials on-site, use of smart data to avoid over ordering of materials, and modular design) can help reduce air pollution by reducing the need for transportation.
- 5.3. We suggest that any calls by the Mayor for the government to provide a national vehicle scrappage scheme (p71) also request the government provide the necessary support to ensure infrastructure is in place to allow materials from scrapped vehicles to be reused, and remanufactured within the UK.

## **6. Chapter 5: Green Infrastructure**

- 6.1. LWARB agree that London’s green infrastructure is essential to the health of the city. We support recognition within the Green Infrastructure chapter of the role that urban food growing (p152) can have in contributing to not only to helping Londoners with healthier eating, but also to reducing air pollution and CO<sub>2</sub> emissions from food by reducing transport emissions. We suggest adding that urban food growing can also provide economic opportunities for commercial food growers on under utilised space within the capital such as basements and roofs.

## **7. Chapter 6: Climate Change Mitigation and Energy**

- 7.1. LWARB support the Mayor’s aim to become a zero carbon city and the need to develop local renewable energy sources which will be essential to power a circular economy. We also support the recognition within the draft LES that waste management will contribute to climate change (p213). It is unclear within the draft LES how the 0.2% figure for direct GHG emissions from waste has been calculated, and a reference would help? It is a little unclear in the paragraph on p.213 dealing with GHG emissions, what emissions are considered in chapter 6, as the text

suggests that indirect emissions are also considered. Perhaps a rephrasing could clarify exactly what is meant. We support proposal 6.1.5a (p231) to publish the London Energy and Green House Gas Inventory on an annual basis including indirect scope 3 emissions, because this will be a useful metric for tracking progress towards a circular economy.

- 7.2. LWARB support proposal 6.1.4 c (p235) to encourage the reduction of whole lifecycle building emissions. The draft LES states that “the Mayor will work through LWARB to assess how a circular economy approach can help contribute to reducing embodied carbon by , for example , re-using materials – or for new major developments to achieve a specified BREEAM credit for responsible sourcing of materials” It would be useful to clarify the form this work will take and how the Mayor will provide LWARB with the resource to undertake the task.

## 8. Chapter 7: Waste

- 8.1. LWARB are fully supportive of the Mayor’s aim for London to send no biodegradable or recyclable waste to landfill by 2026 and that 65 per cent of municipal waste is recycled by 2030 (p276). We welcome the inclusion of policies and proposals within the draft LES to help drive a reduction in waste and increase recycling rates across London and the proposal to set a minimum level of service for household waste recycling services. Evidence gathered by LWARB illustrates this to be an effective means of reducing residual waste as illustrated in London’s Recycling Routemap 2020, appendix 2C of the evidence base for the draft LES.
- 8.2. The draft LES has a strong drive towards dealing with the end of useful life of resources and improving recycling and we agree that London needs to recognise waste as a valuable resource (p252). LWARB suggest the draft LES could be strengthened by emphasising the way that a circular approach can avoid the creation of waste by keeping materials circulating at their highest value. We would therefore support the provision of additional information in this section which discusses waste avoidance through interventions such as design (for modularity and/or durability), new technologies such as additive manufacturing and the role of Internet of Things enabled devices, sharing of resources to better use underutilised capacity, the provision of products as services (the performance economy) and the exchange of materials and goods between organisations (industrial symbiosis). We would suggest the following may provide useful text: *Research by Arup into the effects of the circular economy on waste production in London has identified the potential to reduce municipal waste by up to 35% by 2041 through circular economy interventions which avoid the production of waste. The summary report can be found here [http://www.lwarb.gov.uk/wp-content/uploads/2016/12/Final-Report\\_Issue.pdf](http://www.lwarb.gov.uk/wp-content/uploads/2016/12/Final-Report_Issue.pdf). It will be essential to ensuring we are able to use goods and materials for longer to retain their value, and that London exploits wasted capacity within goods and services through changing business models such as provision of services instead of products (e.g. through leasing), and sharing of resources (e.g. ensuring there are no*

*empty freight lorries returning to depots by offering delivery services to other businesses, and apps which allow rental of empty office space).*

- 8.3. Plastic packaging is a ubiquitous part of the waste stream. LWARB supports proposal 7.1.1 b which states the Mayor will support campaigns and initiatives to cut the use of single use packaging (p273). The proposal focuses on action to tackle single use cups and plastic bottles. We recommend the focus of this proposal is broadened to include actions to reduce the usage of all single use plastic packaging, with an initial focus on coffee cups, whilst acknowledging the role that some single use packaging has on prolonging the shelf life of food. This would provide a more comprehensive approach to tackling an important waste stream. This proposal also mentions working with LWARB to improve access to tap water. LWARB would appreciate clarification of what actions are being referred to here and what resources will be made available from the Mayor to enable this to happen.
- 8.4. We are pleased that the role LWARB will play in delivery of the waste and circular economy aspects of this draft LES are recognised within the document (Box 29) (p256). The text could be improved to recognise that LWARB is a partnership between the LWARB and the 33 Borough's of London.
- 8.5. A key focus of LWARB's work is the delivery of a strategic approach to creating the right conditions to transition to a circular economy in London. In June 2017, LWARB published the circular economy route map for London which can be found here [http://www.lwarb.gov.uk/wp-content/uploads/2015/04/LWARB-London's-CE-route-map\\_16.6.17a\\_singlepages\\_sml.pdf](http://www.lwarb.gov.uk/wp-content/uploads/2015/04/LWARB-London's-CE-route-map_16.6.17a_singlepages_sml.pdf). This document was created with stakeholders from across London including the GLA. The route map sets a pathway for London to accelerate transition towards a circular economy through a series of recommended actions for LWARB and its stakeholders. The GLA has committed to working with LWARB to deliver a number of actions within the route map. We would therefore also suggest the inclusion of reference to the route map within a separate box or within the text.
- 8.6. LWARB supports policy 7.3.2 to reduce the climate change impact of waste activities (p285). We also support the carbon emissions performance standard, and the recognition within the waste chapter that waste contributes to green house gas emissions. LWARB would also support the inclusion of a priority to investigate how waste avoidance through delivery of circular economy activities in London can help contribute towards CO<sub>2</sub> reduction. This will help illustrate how the draft LES is recognising the importance of a low carbon circular economy for London, and is setting a cross cutting approach to action on climate change and progress towards a zero carbon city.
- 8.7. Planning will be an essential element in allowing London to benefit from a circular economy, and in delivering the Mayor's vision of Good Growth for London. Objective 7.4 includes reference to the need for the new London Plan to set policies for the identification and safeguarding of waste sites in London to enable 100% of London's

municipal waste to be managed within London by 2026 (p289). We support this need, alongside the need for adequate waste infrastructure to deal with London's waste, and the development of infrastructure to support circular economy outcomes of reuse, repair and remanufacture. Proposal 7.4.1b refers to the Mayor encouraging investment in new waste facilities through LWARB (p290). LWARB invest in circular economy businesses rather than new waste treatment facilities. We support the need to optimise London's waste sites to support circular economy activities and would suggest this proposal is strengthened by adding a commitment to analyse London's current and planned waste and industrial and commercial sites to identify spare capacity and space for supporting circular economy activities including reuse, repair and remanufacture including space for circular economy SMEs to trial new innovations.

- 8.8 The consultation document requests views on whether the Mayor should set borough specific household waste recycling targets. Household recycling rates need to improve in order to achieve the Mayor's targets. LWARB considers the 42 percent household recycling rate identified in the London Recycling Route map to be ambitious but achievable. However, LWARB also recognises that London boroughs face complex challenges in driving up recycling and that it is more difficult in inner London where these challenges are magnified. In order to achieve the aggregated increase to (or potentially beyond) 42 percent some London boroughs will need to outperform others. Whilst LWARB is sympathetic to the setting of individual targets (that reflect local challenges), we are concerned that they might not have the desired effect. Instead we suggest that LWARB works collaboratively with each London borough over the first year of the published final strategy to determine individual, costed, recycling plans. Each local recycling plan would establish bespoke low, medium and high (stretch) recycling ambitions for a given authority. It would then be for that authority, based on local factors and in negotiation with the Mayor, to determine and politically commit to a particular recycling ambition (low, medium, high). LWARB through Resource London has already provided a number of boroughs with bespoke service reviews; a number of authorities have recently introduced new services; and some authorities have already set out recycling ambitions, in these circumstance the review would be more light touch. In all circumstance the plans would be developed collaboratively and be influenced by local external factors (i.e. housing demographics, population density etc.) and existing waste and recycling contractual arrangements. Locally these plans will help raise the profile of recycling and support ongoing service development and improvement. Together these local plans would provide the first ever aggregated, achievable, costed recycling plan for London which could be used to target resources and make the case to central government for further funding. The delivery and logistics of this proposal require further consideration and consultation with the London Councils.

## 9. Chapter 10: Transition to a Low Carbon Circular Economy

- 9.1. LWARB are pleased the draft LES identifies that a low carbon circular economy will be crucial to ensuring London's businesses and workers are supported to be able to compete effectively in the growing global market for low carbon and environmental goods and services (p368). The circular economy will also provide businesses with the opportunity to become more resilient, resource efficient and competitive, helping to secure a prosperous future for London. We recommend that this chapter provides further context to the benefits of a circular economy to allow readers to understand how the circular economy contributes to climate change mitigation, provides resilience and competitive advantage to London's economy, and how it can build on the innovative work London is already leading. Paragraph's 9.2-9.4 provide suggested text.
- 9.2. *The circular economy is based on the principals of retaining value within goods for as long as possible and avoiding the production of waste. The circular economy enables uncoupling of economic growth from resource use which will help protect London's economy from fluctuations in the costs of materials that will become more and more constrained in the future. This will allow businesses the opportunity to become more efficient and capture value in supply chains through changes to products, processes and business models thus becoming more competitive in the global market.*
- 9.3. *By 2036, as well as reducing waste production, the circular economy could provide London with net benefits of at least £7bn every year and 40,000 new jobs (12,000 net additional jobs) in the areas of re-use, remanufacturing and materials innovation [<http://www.lwarb.gov.uk/wp-content/uploads/2016/09/LondonCircularEconomyJobsReport2015OnlineVersionFinal.pdf>].*
- 9.4. *Transitioning to a circular economy will be essential to ensure the city moves beyond business as usual in minimising the negative impacts of future change to one where London is able to benefit from the opportunities offered by the circular economy, and build upon its status as a world leader in this area.*
- 9.5. We support Objective 10.1 to enable the transition to a low carbon circular economy. Policy 10.1.1 (p371) currently concentrates on the low carbon and environmental goods and services sector. This wording does not reflect work already being undertaken within London to assist existing businesses across all sectors to benefit from the circular economy by moving to circular economy business models. LWARB would recommend the policy is altered to read, "To build on London's strengths and grow the low carbon sector and uptake of circular economy business models".
- 9.6. By reducing the production of waste, ensuring products are used for longer, reusing products (and so avoiding the use of energy needed to extract, transport, and create new products) and avoiding wasted capacity through better use of existing goods and services, the circular economy contributes to climate change mitigation. We would also suggest the proposals for policy 10.1.1 (p371) are amended to

illustrate that the Mayor will support the growth of a circular economy hub in London through the work of LWARB.

- 9.7. Policy 10.1.1 is aimed at delivering the objective to enable the transition to a low carbon circular economy (p371). As mentioned in paragraph 8.6, the London circular economy route map identifies strategic actions needed to be taken by the GLA and other stakeholders to enable the transition to a circular economy. The route map conservative estimates identify that delivery of the route map could result in contributing £2.8 billion net benefits per year towards London's economy by 2036. The GLA was involved in the writing and sign off of the route map and has already committed to a number of actions. LWARB would therefore recommend a new proposal is added to 10.1.1. which states the Mayor will support delivery of the circular economy route map in London.
- 9.8. We support proposal 10.1.1c (p373) to explore approaches that support innovative businesses to create solutions to London's environmental challenges. We would suggest the Ellen MacArthur Foundation is added as one of the global networks referred to in this proposal because they are already providing support to London through their global network. This network continues to provide access to global thought leadership and knowledge on the innovations and competitive advantages gained by businesses that are developing and delivering circular economy solutions.
- 9.9. We would also encourage inclusion within this chapter text which describes the role the Mayor is already playing with London regarded as one of the key global cities leading circular economy through the GLA's work with LWARB, and the Ellen MacArthur Foundation. We would suggest a policy or proposal is added to this chapter which states that the Mayor will continue to drive forward London's leadership towards becoming a circular city and will work with LWARB to identify metrics to measure progress of the circular economy in London. As previously mentioned in paragraph 8.7 of this document, LWARB would also support the inclusion of a priority to investigate how waste avoidance through delivery of circular economy activities in London can help contribute towards CO<sub>2</sub> reduction. This will help illustrate how the draft LES is recognising and taking a cross cutting approach to action on climate change.
- 9.10. The integrated elements set out at the beginning of Chapter 10 include recognition of the need for major investment in the City's infrastructure to create necessary integrated systems for energy waste and water to allow the transition to a low carbon circular economy. We would support this, and recommend an additional policy which includes the need for the Mayor to work with planners, developers and the GLA group to ensure major city infrastructure is built according to low carbon circular economy principles through inclusion of circular economy principles within the London Plan.
- 9.11. We support the need for financing mechanisms to be developed to catalyse the transition to a low carbon circular economy, and would be interested to

understand how proposal 10.1.1 f will provide investment to enable the circular economy. We would also suggest that London looks at financing mechanisms which support production of recycled materials such as recycled plastics which have been vulnerable falling oil prices.

9.12. We support policy 10.1.2 (p374) to build upon London's strengths and enable London's businesses, academia and citizens to actively compete in and contribute to the low carbon circular economy. We also support the inclusion of proposals 10.1.2a and 10.2.1b within the London Economic Strategy. We would suggest this policy is strengthened by the inclusion of a commitment to embed the policies needed to ensure London is able to fully exploit the opportunities offered by the circular economy within the London Economic Strategy.

9.13. We would suggest the Strategy recognises the potential for Brexit to impact upon the delivery of the Mayors Environmental Strategy and the ability for London to benefit from the circular economy. We would support the inclusion of text within the Strategy to ensure such impacts are investigated and action to mitigate these impacts is taken where feasible.

9.14. We support proposal 10.1.2a to support start-ups and business growth across the economy. However the current proposal focuses on the low carbon and environmental goods and services sectors only. We would recommend this is altered to read: *"To support start-ups and business growth across the economy to transition to circular economy business models, including the low carbon and circular economy business sector."*

## **10. Chapter 11 : GLA Group Operations – Leading by Example**

10.1. We support the need for the GLA group to lead by example in delivering driving and enabling best practice for the policies and proposals included within the draft LES. We would suggest strengthening of the examples included in this section by the inclusion of commitment to assist in delivering the circular economy route map, ensuring circular economy principles are embedded in new GLA group development (including refitting of existing office space), and ensuring incorporation of the circular economy into other GLA policy documents. We would also request that potential impacts of one policy on another are carefully considered to avoid unexpected and unwanted consequences.

## **11. Suggested Technical Amendments**

11.1. The following recommendations are based on technical amendments which we hope will assist in ensuring the draft LES is as accurate as possible in the information it provides.



- 11.2. The anaerobic digestion paragraph on p265 of the draft may be more accurately described as having gross savings of £120m as this figure does not appear to include the cost of treating food waste, it would be more accurate to say ‘...save £120m in waste disposal cost’.
- 11.3. Box 28 (p255) provides useful definitions of terms used in the waste chapter. We would suggest a more technically correct definition of Municipal waste to be “household waste or waste (such as business waste) that is similar in composition to household waste irrespective of who collects or disposes of it”.
- 11.4. The diagram on p268-269 which illustrates the composition of Local Authority collected waste provides a useful overview of the policies set out in the waste chapter. However, it is currently unclear as to what the diagram is showing, for example is this total waste produced by a household or the residual bin of a household with access to good recycling services? We would therefore suggest clarification through the related text.
- 11.5. Within proposal 7.1.1a (p273) LWARB would support the addition of a footnote to explain to readers what the TRiFOCAL project is, for example:  
*TRiFOCAL London – Transforming City FOod hAbits for Life, is an initiative being led by Resource London - the partnership between WRAP and LWARB - together with Groundwork London. The organisations won a bid with the LIFE programme of the European Commission to deliver the €3.2million initiative in London, which will be a test bed for other European cities. The TRiFOCAL Project will seek to encourage three food centric behaviours: the promotion of healthy and sustainable eating; the food waste prevention; and the recycling of unavoidable food waste through targeting householders, businesses, local communities and schools. The Trifocal project commenced in September 2016.*
- 11.6. LWARB support the need to reduce the amount of food waste. On p279 of the draft LES it states that introducing food waste collections reduces the amount of food people waste as they become more aware of how much they are throwing away. It would be useful to include a reference to this evidence, as LWARB are not aware of one.
- 11.7. All waste authorities that have reduced collections of residual waste have experienced cost savings and recycling improvements. We would therefore suggest the wording on p281 of the draft is amended from saying “Some waste authorities have” to read: “Waste authorities can achieve cost savings and recycling improvements by reducing collection...”.
- 11.8. Modelling carried out shows it is feasible to achieve a **42%** increase by 2022 and not 42% - 43% (p281).
- 11.9. We are pleased the role Resource London provides to waste authorities is recognised on p281. The Resource London programme is delivered by LWARB and

WRAP, and is funded until 2020. We would suggest clarification is added to the wording on this page.

11.10. We will continue to work with the Mayor through the Resource London team to increase recycling rates in flats. The Resource London team have already begun to deliver a specific flats work stream to support flats recycling. We would therefore suggest a more accurate wording for proposal 7.2.1 b (p282) could be to say “The Mayor of London will continue to encourage Resource London to provide support and funding to waste authorities .....

11.11. We are pleased proposal 10.1.2 (p375) a recognises the role the Advance London project will play in providing support for businesses to develop more sustainable circular business models . However we would suggest the wording is altered to read “continue to support” as the project began in January 2017.