

GLA Planning

Circular Economy Statements LPG

Consultation summary report

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1. Introduction

On 19 October 2020, the Greater London Authority (GLA) launched a [consultation](#) on the Mayor's draft Circular Economy Statements London Plan guidance (LPG). The consultation closed on 15th January 2021. Online seminars were held during the consultation, attended by 100 people.

Thirty-three written responses were received. This document provides a summary of the consultation responses received. The Mayor would like to thank everyone who took part for engaging with the guidance.

2. Who took part?

Formal consultation survey

Respondents were asked what type of organisation they represent or whether they were responding as an individual.

Respondent type	Number	Percentage
Individual	5	15%
Business	16	48%
Campaign group	2	6%
Community group	0	-
Government body or agency	3	9%
Local authority outside London	0	-
London borough	5	15%
Professional body	0	-
Other	2	6%
Total	33	

Respondents were also asked equality monitoring information in order to assess how representative respondents were compared to the demographics of Londoners. The number of responses received on those questions was limited and therefore the relevant analysis has not been included in this consultation summary report.

Other engagement

During the consultation, several events were held with stakeholders to promote awareness of the guidance and consultation, and to answer questions, with over 100 attendees across the different events. This included a webinar for borough officers, which was attended by representatives from 19 different boroughs.

Other engagement was undertaken prior to the formal consultation, including technical meetings with consultants. Equality monitoring information was not collected for these engagements.

3. Consultation feedback and GLA response

As part of the engagement on the draft guidance, respondents to the formal consultation survey were asked to submit responses to specific questions, which are summarised here.

3.1 Core principles

Q1: To what extent do you agree or disagree with the three core principles?

Thirty respondents answered this question. One hundred per cent agreed with the three core principles set out in the guidance. Ninety per cent strongly agreed with core principle 3.

Principle 1: Conserve resources, increase efficiency and source sustainably

Response	Number	Percentage
Strongly agree	21	72%
Somewhat agree	8	28%
Total	29	

Principle 2: Design to eliminate waste (and for ease of maintenance)

Response	Number	Percentage
Strongly agree	23	77%
Somewhat agree	6	20%
Total	29	

Principle 3: Manage waste sustainably and at the highest value

Response	Number	Percentage
Strongly agree	26	90%
Somewhat agree	3	10%
Total	29	

Q2: Please tell us if you have any comments on the core principles and commitments set out in Section 2.1 and/or if you have any changes you would like to suggest?

Nineteen responses were received to this question. Respondents made the following points:

- The guidance should emphasise conserving primary materials, using secondary materials and reducing material demand, and should prioritise refurbishment over demolition. The guidance should encourage better use of existing buildings, including retrofitting for energy performance. The principles and commitments in the guidance should link better to the strategic approaches.

- There should be greater focus in the guidance on reusing and recycling materials onsite or locally, rather than sustainable sourcing.
- The guidance should emphasise Circular Economy (CE) approaches being embedded early on in the design process and at all life cycle stages. Pre-demolition audits should be mandatory, and a template audit should be provided with the guidance.
- The guidance should include best practice approaches and examples (for example – refurbishment, reuse and recycling) including for excavation and contaminated sites.
- The guidance should recognise more clearly that waste is not inevitable, and should shift the focus to materials being treated as a resource, using this term instead of ‘waste’. The guidance should emphasise eliminating and managing waste during operation, maintenance, refurbishment, adaptation and at end-of-life. Positive feedback was received on strategic approaches that are further up the Waste Hierarchy. It was suggested that the Waste Hierarchy should be referred to more in the guidance.
- The guidance should cover the qualities of reusable materials (not just quantities).
- There are potential conflicts that could arise from the application of the guidance – for example, designing for longevity vs. minimising the quantity of materials and transport emissions.
- There should be clearer links between the guidance and other submission requirements, including the Whole Life-Cycle Carbon assessment (WLC).
- The guidance should require and provide examples of evidence and justification to avoid developments only achieving the bare minimum.
- The guidance should make better use of data, and should be supported by the development of databases, markets and material passports to encourage reuse and high-quality recycling. The use of construction waste management certifications should be considered.
- There are a number of barriers to implementing the guidance, particularly contamination and achievability.

GLA response

The **principles and commitments** have been aligned to the Policy D3 circular economy principles to make the process simpler, simplify the guidance, make the reporting and assessment process easier and ensure reporting against the policy principles. All principles and commitments are still covered by the reporting requirements - for example, designing out waste is reflected in the CE targets table. The CE principles emphasise reuse of materials.

The decision tree has been developed to include a hierarchy of circular economy design approaches, which emphasises retention and refurbishment over demolition, and **reuse of materials** on-site.

Emphasis has been added on **sourcing materials locally**, particularly for reprocessed materials.

Pre-redevelopment audits are now required early on in the development and design process, and **pre-demolition audits** are strongly encouraged at pre-application stage and required at later stages.

Further detail on the circular economy design approaches has been included in the guidance. ReLondon (a strategic body of the Mayor of London and London Councils) through the Circular Constructure in Regenerative Cities (CIRCult) project, are developing further information for boroughs and industry, including **examples and best practice**.¹ Where appropriate, lessons learned and best practice examples from submitted CE statements will be shared to encourage innovation.

To emphasise material value, the terms '**resources**' and/or 'materials' are used more (rather than 'waste'). The guidance emphasises the need to design buildings in ways that will minimise waste throughout a building's lifecycle. The waste hierarchy has been emphasised more in the guidance.

Designing for longevity is included as a circular economy principle, in line with London Plan Policy D3. The guidance emphasises using secondary materials, with re-use on-site or locally preferred.

More links and references have been made to the **other submission requirements**, such as the WLC assessment.

The need for **evidence and justification**, where retention and refurbishment are not selected, is now emphasised.

Material passporting is now referred to in the guidance. We will continue to work with ReLondon and others to explore how innovative approaches and **greater use of data** can improve CE outcomes, informed by the information received on CE statements.

It is recognised that there may be barriers such as dealing with **contaminated sites**. The guidance is flexible enough to allow for these scenarios, and they can be taken into account as material considerations by decision-makers.

3.2 'Building in layers'

Q3: To what extent do you agree or disagree that the concept of 'building in layers' is useful for applying circular economy principles to development?

Twenty-eight responses were received to this question, of which 96 per cent somewhat or strongly agreed that the concept is useful.

¹ https://www.designingbuildings.co.uk/wiki/Circular_economy_case_studies

Response	Number	Percentage
Strongly agree	17	61%
Somewhat agree	10	36%
Neither agree or disagree	1	4%
Total	28	

Q4: Please tell us if you have any comments on the concept of 'building in layers' and/ or if you have any changes you would like to suggest?

Thirteen responses were received to this question. Most respondents were supportive of the approach. Respondents suggested that:

- More guidance is needed on sustainable design approaches and building in design implications.
- Barriers to meeting the requirements of the guidance include infrastructure for CE uses and application to residential buildings with multiple owners.
- The guidance should give greater emphasis to building in layers at the pre-application stage. The guidance should provide ideas and examples for how building in layers can be achieved. Some examples were provided.
- The guidance should refer to application types, such as change of use.
- The guidance should consider a different approach for short-lived buildings.
- The guidance should require monitoring by layer.
- Figure 1 in the guidance should align with the layer definition table.

GLA response

The layers concept has been included in the decision tree, as well as a hierarchy of circular economy **design approaches**. Emphasis has been added on applying different and multiple circular economy design approaches for different layers.

In terms of **infrastructure**, London Plan policies aim to safeguard sufficient industrial capacity, which could potentially be used for storing materials to encourage more reuse, upcycling and recycling. ReLondon’s CIRCulT project includes storage and logistics requirements to facilitate more reuse.

Emphasis has been added on considering **building in layers** from pre-application stage to support innovation. Lessons learned and best practice examples will be shared by the GLA and partners.

Application types have been expanded on, including hybrid applications (for example, see Table 5 Minimum Submission requirements by planning application stage). The decision tree includes a hierarchy of circular economy design approaches. This hierarchy prioritises approaches where minimal changes are made

to the fabric of buildings, regardless of whether a scheme proposes change of use or not.

Different circular economy design approaches are emphasised depending on the nature of the development, including schemes where development will have a **shorter life**.

In terms of **monitoring**, reporting CE principles by building layer is now required for outline and full planning applications. The Bill of Materials now requires reporting by material type for consistency with the WLC assessment. The guidance highlights how building layers relate to material types (see Table 1).

Figure 1 has been amended and aligned to the layer definition table. For example, skin/shell is now the outer most layer.

Q5: Do you have any further comments to make on Section 2?

Eleven responses were received to this question. Respondents suggested that:

- The guidance should explain the relationship between embodied carbon and designing for longevity.
- Reducing transport emissions and cleaner modes of transporting waste should be encouraged.
- Innovative ideas should be explored, such as creating ID references for interior fixtures and making data available to potential users.
- Pre-demolition audits should capture material qualities.

GLA response

Designing for longevity is included as a circular economy principle, in line with Policy D3. Greater links have been made to the WLC assessment (see Section 1.2). The promotion of circular economy outcomes should also reduce the whole life-cycle carbon of the development or provide additional benefits beyond the development's life. Design decisions should be informed by the principles and results of both studies.

London Plan policies include supporting **cleaner modes of transport** (e.g. Policy SI 10 and SI 15 (part I)). The guidance emphasises the importance of local sourcing, especially for reprocessed materials.

The GLA will look to use levers and seek to influence wherever possible. **Ideas** suggested have been shared with partners.

Further information has been added on **pre-demolition audits**. Opportunities for reuse and recycling should be highlighted.

3.3 Development of CE statement

Q6: To what extent do you agree or disagree that the steps set out in Section 3.1 will result in the effective development of Circular Economy Statements?

Twenty-nine responses were received for this question, of which 76 per cent somewhat or strongly agreed that the steps set out in Section 3.1 would result in the effective development of Circular Economy Statements. Twenty-one per cent neither agreed nor disagreed and three per cent somewhat disagreed with this statement.

Response	Number	Percentage
Strongly agree	7	24%
Somewhat agree	15	52%
Neither agree or disagree	6	21%
Somewhat disagree	1	3%
Total	29	

Q7: Please tell us why?

Twenty-three responses were received to this question. Respondents suggested that:

- The guidance should emphasise providing information early on at pre-application stage.
- The guidance should emphasise benchmarks, targets, existing certifications, and industry-wide standards.
- There are some barriers to complying with the guidance, including information being unavailable until later in the process.
- Commitments made in the guidance can be easily reversed.
- The guidance should clarify how feedback will be provided, by whom and when.
- Resource and expertise is needed to assess CE statements.

GLA response

The guidance has been revised to require information early on. **Pre-application stage** is however voluntary but developments utilising the pre-application process are encouraged to provide the relevant information.

The guidance refers to existing **certification** such as Cradle to Cradle (C2C). Appendix 1 includes data collected to date for key CE statement metrics. Further metrics and targets are likely to be introduced as the evidence base develops. There are overlaps with BREEAM but the related credits are not mandatory and may not be pursued or achieved.

We recognise the challenge of obtaining some information early in the design process. A detailed assessment is not required at pre-application stage, and it is not expected that final materials will be known. The information submitted will be based on estimates and assumptions that may be altered as the design progresses and as opportunities are identified and acted upon. However, by including requirements early on, we expect to see circular economy principles embedded in proposals from the outset and greater innovation. Design teams are often able to make changes in response to new opportunities. The guidance includes information to support applicants and teams to overcome **barriers**. An email address has been added to the guidance and template that applicants can use for queries. We will consider what additional support applicants may need on an ongoing basis.

The guidance outlines the importance of **justification** and **evidence** being provided if for example the hierarchy of circular economy design approaches in the decision tree is not followed.

Information on how and when **feedback** will be provided on CE statement has been included (for example in the Appendix 2 Application Flowchart).

Good practice **resources** are shared on the Circular Economy wiki² and will continue to be shared by the GLA and partners. The GLA will provide training on assessing CE statements for local authority officers.

3.4 Strategic approach

Q8: To what extent do you agree or disagree that defining a strategic approach to the circular economy (as outlined in Section 3.2) will be useful in developing a Circular Economy Statement?

Twenty-nine responses were received for this question, of which 89 per cent somewhat or strongly agreed that defining a strategic approach to the circular economy will be useful in developing a CE statement. Seven per cent neither agreed nor disagreed and three per cent somewhat disagreed.

Response	Number	Percentage
Strongly agree	12	41%
Somewhat agree	14	48%
Neither agree or disagree	2	7%
Somewhat disagree	1	3%
Total	29	

Q9: Please tell us if you have any comments on the guidance relating to defining a strategic approach to the circular economy (Section 3.2) and/or if you have any changes you would like to suggest?

Twenty responses were received to this question. Respondents suggested that:

² https://www.designingbuildings.co.uk/wiki/London_Circular_Economy_Statements_LPG_-_Additional_resources

- The information required needs to be clearer.
- The strategic approaches should be linked to the CE principles.
- The decision tree should be amended – it is too simplistic, the default appears to be demolish and recycle, and it works better for short-lived development.
- Strategic approaches should be emphasised (including reuse on-site, recycling, disassembly) for different development types, and should be framed as a hierarchy.
- Multiple strategic approaches are often needed.
- The strategic approach definitions should be amended (outline the unique components) and more should be added (e.g. repositioning, upgrading with refurbishment, selective deconstruction and designing for reuse)
- Discussions and decisions on design approaches are needed early-on at pre-application stage. Pre-demolition audits are important early on – they should be made mandatory.
- Justification or evidence for not adopting strategic approaches should be required by the guidance.
- Monitoring and a robust assessment framework are important and should be included with the guidance.
- The CE principles should be applied to longer-life buildings (e.g. longevity).
- The ‘building in layers’ concept should be more clearly embedded in the guidance.

GLA response

The **information required** has been made clearer (for example, see Table 5 Minimum submission requirements and Appendix 2 Application Flowchart).

The circular economy principles, strategic approaches and building in layers concept have been **linked** more clearly in the guidance

The strategic approaches have been renamed ‘design approaches’ to make them clearer and better link them to the circular economy principles.

The **decision tree** has been revised and the **hierarchy** of design approaches made clearer (for example, re-use onsite or locally).

It has been emphasised more that **multiple strategic approaches** will often be needed.

Additional approaches were considered, and the final set chosen based on their unique components. Deconstruction is emphasised more.

A **pre-demolition audit** is strongly encouraged at pre-application stage and required at later stages. Pre-redevelopment audits are required however from an early stage,

which can help to inform design approaches and encourage those further up the hierarchy to be selected.

The guidance refers to **evidence and justification** for adopting design approaches further up the hierarchy in the decision tree. The guidance emphasises the need for robust **justification** if demolition is proposed.

Appendix 3 Essential elements of CE statements has been added to support boroughs to **assess** policy compliance.

The CE principles apply to all types of development covered by the guidance. The decision tree highlights where some design approaches could be more relevant to certain types of development. All buildings should be designed for disassembly, adaptability and reuse and recycling.

Building in layers has been added to the decision tree.

Q10: Do you have any further comments on Section 3?

Eleven responses were received to this question. Respondents suggested that:

- The reporting requirements, including timings, should be clearer.
- The potential to impose a monitoring fee or penalty mechanism for non-compliance should be explored.
- There is a need for training and resources for local authorities to assess and monitor requirements, especially if applying to all major development.
- More information is needed on the suitability of different strategic approaches in different contexts.
- The decision tree should be amended – for example, including the building in layers approach.

GLA response

The **reporting requirements** have been made clearer – see for example Tables 5, Appendix 2 and 3 (Minimum submission requirements, Application Flowchart, and Essential Elements of CE statements). It has been made clear that post-construction reports must be received no more than three months post-construction.

The CE statement requirement is established in London Plan policy and should be factored into the costs of the planning application process by the planning applicant. A **monitoring or penalty fee** does not fall within the remit of the guidance.

Training and resources will be made available to local authorities to support assessment and monitoring. A template planning condition is available on the GLA's LPG webpage.

The **decision tree** includes more detail on the suitability of **different circular economy design approaches**, including in relation to building layers. Justification

for a chosen route will have to be determined on a case-by-case basis rather than through a rule-based approach. Greater links have been made to the WLC assessment to help inform the decision on the lowest carbon outcome for a project. The decision tree includes the **building in layers** approach.

3.5 What a CE statement should include

Q11: Section 4.4 sets out what a CE statement should include. To what extent do you agree or disagree with these requirements?

Twenty-nine responses were received to this question, of which 90 per cent strongly or somewhat agreed with the CE statement requirements and 10 per cent neither agreed nor disagreed.

Response	Number	Percentage
Strongly multiple strategic approaches agree	11	38%
Somewhat agree	15	52%
Neither agree or disagree	3	10%
Total	29	

Q12: Please tell us if you have any comments on the requirements for what a Circular Economy Statement should include and/or if you have any changes you would like to suggest.

Twenty-nine responses were received to this question. Respondents suggested that:

- The guidance should align more closely with WLC assessment requirements (e.g. Bill of Materials) and timings. For the Bill of Materials, the guidance should add material type and include life span.
- The information required early on in the design process is too detailed and it may not be available. Contractors are often involved later. Some layers are decided later in the process.
- The guidance should provide good practice examples and solutions.
- The monitoring and assessment process should be clearer (e.g. how information will be verified and when CE statements should be updated) and there should be support for local authorities to assess CE statements.
- There should be greater emphasis on reuse (separate from recycling) and the Waste Hierarchy, including recovery, given the resource intensity of recycling processes and the extent to which recycling will be identified compared to downcycling. Waste to energy and incineration should be avoided.
- Pre-demolition audits are key and should be required for projects above a certain size.
- It is difficult to recycle excavated material on contaminated sites.
- Using an up-to-date London Waste Map can bring economic opportunities.

- The guidance should make clear the purpose of the data and how it can be accessed.
- There is a potential conflict between sustainable sourcing and carbon emissions, if materials are not sourced locally.
- The guidance should explain the use of recycled content by value (not volume) and provide example calculations.
- The guidance should require justification or evidence where design decisions go against circular economy outcomes.
- There should be support for standardising templates (e.g. via an online reporting form) for data comparison.

GLA response

The CE statements guidance has been aligned to the **WLC assessments guidance**, including the Bill of Materials (both use material type), submission timings (the post-completion report needs to be submitted within 3 months of construction completion) and the level of information required for different application types (e.g. outline) is similar. The guidance now includes in Section 1.2 information on links between the CE statements and WLC assessments.

The guidance outlines the minimum submission requirements (see Table 5) for different applications. Planning applicants are submitting CE statements to the GLA, which indicates that enough information is available to make assumptions and estimates to inform the CE statement at the different stages of an application, including early stages. The **information provided at pre-application stage** is voluntary. The guidance recognises that information submitted early on will be based on estimates and assumptions that may be altered as the design progresses and as an understanding of the CE statement opportunities are identified and acted upon. Applicants are not prevented from selecting newer lower carbon materials later down the line.

It is recognised that less information will be available for outline planning applications and information may be high-level, with gaps (for example, specific materials and products may not be known). However, it is expected that information on certain materials will be available at outline stage, for example based on experience from previous schemes, and to estimate costs. Applicants are expected to provide as much information as possible to ensure circular economy principles and targets are embedded early in the design process. Particularly important to include at outline stage are building layers or elements that are likely to be decided early on (for example site, structure, and skin/shell) and which have the longest lifespans or will be changed less frequently.

We are collating good practice **examples**, which will be shared for example on the [Circular Economy wiki](#) and through training and events. ReLondon, through

the CIRCuIT project, are producing a [webpage](#) to showcase the latest case studies and good practice examples.

Information on **monitoring and assessment** has been made clearer. For example, an Application Flowchart (Appendix 2) has been included and section 5 on monitoring. Training will be provided to local authorities to support CE statement assessment. The GLA scrutinises all CE statements submitted with referable applications. Applicants are expected to submit high quality data and undertake due diligence to ensure it is accurate.

Reuse and the **waste hierarchy** have been emphasised more in the guidance - for example, reuse on-site is included in the hierarchy of circular economy design approaches in the decision tree. In the CE statements (Recycling and Waste Reporting table and Operational Waste Management Plan), applicants should include how and where (on-site v offsite) waste will be managed in accordance with the waste hierarchy. The guidance includes more references to the waste hierarchy and a link. Information on recovery amounts (per cent) should be provided in the Recycling and Waste Reporting table in the CE statement spreadsheet. The hierarchy of circular economy decision approaches is outlined in the decision tree, and justification is required where those approaches at the top of the hierarchy are not selected.

More information has been added on **pre-demolition audits**, and these are strongly encouraged at pre-application stage and required at later stages.

The GLA and partners will share best practice examples, for example on dealing with **contaminated sites**, in the future via the Circular Economy wiki.

The GLA strongly encourages the use of the **London Waste Map** and will seek to understand the barriers to keeping information up to date.

The **data** will be used to assess performance, develop benchmarks and future metrics. CE statements will be available publicly through the London Datastore.

Local sourcing of materials is encouraged, particularly for reprocessed materials. Design decisions should be informed by the principles and results of both the CE statement and WLC assessment. Guidance on sustainable sourcing is broader than the scope of the CE statements guidance, however the embodied carbon should be a key consideration in all design decisions. In line with Policy D3, development must aim for high sustainability standards.

Percentage by **value** is a tried and tested metric that was introduced by WRAP³ and implemented on the 2012 Olympics very successfully. More detail has been provided in the guidance on 'percentage recycled content by value', including

³ We are aware that WRAP have discontinued this guidance, however we feel it still provides a robust tool for this calculation.

an example calculation from previous WRAP guidance. It is intended that more metrics will be introduced in the future.

Evidence and justification are required by the guidance. Elements that are contradictory to the aims of the circular economy should be designed out of buildings.

A CE statement **template** has been developed to support the **standardisation** of information submitted, and data comparison.

3.6 Structure

Q13: To what extent do you agree or disagree with the proposed structure for Circular Economy Statements set out in Section 4.1?

Twenty-eight responses were received to this question, of which 89 per cent strongly or somewhat agreed with the proposed structure, and 11 per cent neither agreed nor disagreed.

Response	Number	Percentage
Strongly agree	7	25%
Somewhat agree	18	64%
Neither agree or disagree	3	11%
Total	28	

Q14: Please tell us if you have any comments on the proposed structure and/or if you have any changes you would like to suggest.

Thirteen responses were received to this question. Respondents suggested that:

- The guidance should closely align with WLC assessment, and link more to WLC, and should refer to London Plan Policy SI 2.
- Clearer information on monitoring is needed.
- The minimum requirements, targets, responsibilities and approach to assessment against CE principles should be made clearer.
- The requirements for pioneering statements should be made clearer.
- It is difficult getting detailed information early on. Targets are less appropriate for pre-application or outline applications.

GLA response

More links have been made to the **WLC assessments** guidance and London Plan Policy SI 2.

More information is included on **monitoring** and a separate section has been added.

Table 5 has been added highlighting the **minimum requirements** for different application types. The targets have been made clearer. The Application Flowchart (Appendix 2) outlines the key stages and **responsibilities**. Appendix 3 highlights the essential elements of CE statements against the circular economy principles.

Information on **pioneering statements** has been made clearer – for example, Section 4 Elements of Statements includes options for pioneering. Table 5 highlights which elements are expected as a minimum requirement, and which are encouraged for different application types.

It is understood that it may be difficult to get **detailed information** early on. However, applicants are expected to provide as much information as possible to ensure circular economy principles and targets are embedded early in the design process.

3.7 Assessment

Q15: Section 4.3 sets out the criteria for assessing Circular Economy Statements. To what extent do you agree or disagree with this approach?

Twenty-seven responses were received to this question, of which 74 per cent agreed with the criteria for assessing CE statements, 22 per cent neither agreed or disagreed and four per cent somewhat disagreed.

Response	Number	Percentage
Strongly agree	7	26%
Somewhat agree	13	48%
Neither agree or disagree	6	22%
Somewhat disagree	1	4%
Total	27	

Q16: Please tell us if you have any comments on the criteria for assessing Circular Economy Statements and/or if you have any suggestions for additional or alternative criteria.

Seventeen responses were received to this question. Respondents suggested that:

- The CE statements assessment criteria should be closely aligned with WLC guidance.
- The minimum requirements should be made clearer, including the difference between standard practice and pioneering statements and how this will be identified. Some pioneering aspects were described as standard practice.
- The guidance should make clear how CE statements will be assessed, the need for objective assessment criteria, and how the information will be used.
- Resources will be needed to assess CE statements, especially if applying to lower thresholds.

GLA response

The guidance has been aligned with the **WLC guidance** as far as is practical, for example, with similar levels of information being required for different application types.

The **minimum requirements** are now outlined in Table 5, as well as information that is encouraged to be submitted. Information on level of ambition (see Section 3.4) has been updated with pioneering elements made clearer. Options for pioneering statements are included in Section 4 of the guidance.

An Application Flowchart (Appendix 2) has been added to make the **assessment process** clearer. To support assessment, Appendix 3 shows the essential elements of CE statements and how this links to Policy SI 7. The information will be used to assess performance, develop benchmarks and future metrics.

To support assessment, training will be provided to boroughs, and **resources** provided on the Circular Economy wiki.

3.8 Pioneering statements

Q17: Section 4.3.3 and Sections 4.4.48 - 4.4.52 set out the requirements for 'pioneering' statements. To what extent do you agree or disagree that this will support the delivery of development that will achieve more ambitious circular economy outcomes?

Twenty-six responses were received to this question, of which 69 per cent strongly or somewhat agreed, 23 per cent neither agreed or disagreed and 8 per cent somewhat disagreed that the requirements for 'pioneering' statements will support the delivery of development that will achieve more ambitious circular economy outcomes.

Response	Number	Percentage
Strongly agree	5	19%
Somewhat agree	13	50%
Neither agree or disagree	6	23%
Somewhat disagree	2	8%
Total	26	

Q18: Please tell us if you have any comments on the requirements for pioneering statements and/or if you have any changes you would like to suggest.

Nineteen responses were received to this question. Respondents suggested that:

- The guidance should make clearer the assessment criteria and align to WLC, and it should be clear how data will be verified.
- The guidance should apply pioneering requirements to the standard approach.

- There is a need for resources and training to support assessment.
- The guidance should promote innovative examples (demonstrator projects and contractual arrangements such as 'Product as a Service' schemes) and the GLA should provide support (including funding and in-kind) to applicants.
- Worked examples and pioneering statements should be shared to encourage improvement and innovation.
- The guidance should have clearer incentives that encourage development to be pioneering.
- Materials reused on and off-site should be reported separately to waste recycled.

GLA response

The guidance has been updated to make clearer the **assessment criteria** (see for example Appendix 3 Essential elements of CE statements). The Application Flowchart (Appendix 2) highlights that the GLA will review CE statements for referable applications. Applicants are strongly encouraged in the guidance to submit an independent pre-demolition audit. Boroughs that are intending to require CE statements for non-referable applications will need to scrutinise the information submitted.

The level of ambition section has been updated to make clearer **pioneering** aspects- for example, setting additional targets (for example, by providing separate targets for reuse and recycling, and for on-site and/or local and off-site reuse). Options for pioneering statements have been added to Section 4.

We hold regular workshops for local authorities on the Mayor's policies and we will hold a specific **training** session on CE statements.

The guidance is focused on explaining how to produce a CE statement and what is required to comply with London Plan policies, rather than providing specific examples of how to achieve circular economy outcomes. The GLA will promote good practice **examples and support**, for example, on the Circular Economy wiki. ReLondon are also developing a webpage promoting good practice examples and providing support to businesses in this area. A contact email address has been included for queries. We will consider what additional support applicants may need on an ongoing basis.

The guidance includes a **worked example** for the recycled content by value calculation (see Appendix 4) from previous WRAP guidance, and analysis of data collected from CE statements to date (Appendix 1).

The CE primer includes information on the benefits of a circular economy and **incentives to be pioneering**.

The Recycling and Waste and Reporting table has been updated to include separate columns for **materials reused on and off-site, from materials recycled**.

3.9 Monitoring

Q19: Sections 4.463 – 4.4.70 sets out how Circular Economy Statements should be monitored and reported on post-planning/completion. To what extent do you agree or disagree with this approach?

Twenty-seven responses were received to this question, of which 77 per cent strongly or somewhat agreed with the approach to monitoring and reporting, 15 per cent neither agreed or disagreed and 7 per cent somewhat disagreed.

Response	Number	Percentage
Strongly agree	12	44%
Somewhat agree	9	33%
Neither agree or disagree	4	15%
Somewhat disagree	2	7%
Total	27	

Q20: Please tell us if you have any comments on the monitoring of Circular Economy Statements and/or if you would like to suggest any changes.

Nineteen responses were received to this question. Respondents suggested that:

- More information is needed on reporting indicators and requirements and monitoring.
- Use of Building Information Modelling (BIM) should be supported to improve waste estimates early on.
- Post-completion reports should be secured by condition, with penalties or actions imposed.
- Resources, expertise, and training should be provided to boroughs to assess and monitor, especially for non-referable schemes.
- An online reporting form or standard electronic format should be used to support data analysis and share lessons learned.
- Metrics or targets should be added or clarified (e.g. add a separate target for minimum amounts of reused materials; clarify 20 per cent by value target).
- The guidance should align with the WLC and Be Seen guidance in terms of securing requirements, submission timings and life-cycle approach.

GLA response

More information has been included on **reporting indicators and requirements and monitoring** (see for example Sections 3.4 and 4, Table 5 and Appendix 3).

The policy has been well received to date. Project teams are often keen to change their designs, even in small ways, to consider new opportunities. The guidance aims to drive change.

Training will be provided for boroughs and **resources**, for example on the Circular Economy wiki, will be available to support **assessment and monitoring**. We encourage CE statements for **major development** applications. However, we recognise that local authorities need sufficient resource to assess CE statements. Circular economy approaches are a fast-moving area in which new research, tools and approaches are being developed. We have not set specific requirements for how non-referable developments could meet the guidance to allow local authorities to take their own approaches. As the process develops, standards will be improved and we will share learning, for example via the Circular Economy wiki.

The guidance now includes a **standard template** Excel spreadsheet for applicants to complete and submit as part of their CE statement.

Existing **targets** are set by current policies in the London Plan and London Environment Strategy. Targets may change in the future as more evidence and data is obtained. The Recycling and Waste Reporting table asks for data to be submitted separating recycled and reused materials. The guidance clarifies that the 20 per cent recycled content target is for the building as a whole, rather than for each building element or layer.

Greater consistency has been achieved between the guidance and the **WLC** and **Be Seen** Energy Monitoring guidance, for example, submission timings, benchmarks being provided and minimum information requirements

Q21: Do you have any further comments to make on Section 4?

Eleven responses were received to this question. Respondents suggested that:

- Environmental Product Declarations (EPDs) and tracking site activities should be required. It may be difficult to get information (e.g. on recycled content from manufacturers) and verify data without EPDs, quantify reused construction materials (due to difficulty tracking site activities) and record material mass (as many materials are not ordered by weight). Data may be high-level estimates.
- The guidance should make it clear how data will be collated and made accessible (e.g. to waste planners), for example via an online reporting form.
- There should be more requirements on end-of-life strategies, such as providing examples and requiring evidence early on.
- The guidance should require justification, and make clear how much should be provided.
- Measuring mass alone is onerous and a crude metric.
- Clearer benefits and incentives are needed.

- The guidance should provide examples and case studies of compliant CE statements.

GLA response

It is recognised in the guidance that less information will be available for outline planning applications and information may be high-level, with gaps (for example, specific materials and products may not be known). However, it is expected that information on certain materials will be available at outline stage, for example based on experience from previous schemes, and to estimate costs. Applicants are expected to provide as much information as possible to ensure circular economy principles and targets are embedded early in the design process. Particularly important to include at outline stage are building layers or elements that are likely to be decided early on and which have the longest lifespans or will be changed less frequently. We recognise that EPDs may assist with providing detailed, precise information regarding materials and as such are encouraged for pioneering statements; however, these could curtail development unnecessarily if mandated by the guidance for all relevant schemes.

Section 3.3 of the guidance highlights how **data** should be submitted. The Application Flowchart (Appendix 2) highlights roles and Table 5 highlights the key stakeholders who should be involved by application type. To enable transparency of information and monitoring, post-construction reports and any appendices will be **accessible** to the public through the London Datastore. Appendix 1 in the guidance includes data analysis from CE statements collected to date.

More information has been provided in the guidance on requirements relating to an **end-of-life strategy** (see Table 5 and Section 4.7).

Paragraph 2.3.3 and 4.6.8 of the guidance set out the **justification required** for CE statements.

Information is required by **mass / weight (kg)** to achieve consistency and enable comparison and analysis. The same information is required in the WLC assessment. Where materials are measured in alternative metrics, such as m³, these should be converted into kilograms by applying material densities. There is a simple conversion factor from volume to weight (multiple by density). The London Environment Strategy requires reporting of the municipal waste target by weight and London Plan policies refer to tonnes.

The CE primer sets out **benefits and examples** of circular economy design approaches. The GLA will continue promote good practice examples and share these with partners, for example via the Circular Economy wiki, to encourage innovation. ReLondon, through the CIRCulT project, are producing implementation case studies and developing online portals and platforms, including around materials exchange, to improve the availability and visibility of data.

3.10 Resources, terms and further comments

Q22: Are there any other resources that may be useful to include in Section 5?

Fifteen responses were received to this question. Respondents suggested that:

- The GLA should share more resources*, examples and up-to-date metrics (including via a webpage).
- More guidance is needed to assess CE statements, including what constitutes compliance.
- The GLA should clarify the relationship between LPG and the CE primer. The documents could be merged.

*The following resources were specifically recommended for inclusion in the guidance: CE primer, London Energy Transformation Initiative (LETI) guidance, Ellen MacArthur Foundation (EMF) procurement programme, CIRCuiT, UK Green Building Council (UKGBC) Circular Economy guidance, Clarion Housing Circular Economy strategy and academic research.

GLA response

The GLA will share best practice **resources** and **examples** via the Circular Economy wiki. **Up-to-date metrics** have been included in the guidance (see Appendix 1). Data from CE statements will be available publicly via the London Datastore. Using the CE statements data, the GLA will develop and share further metrics in the future. ReLondon, through the CIRCuiT project, are developing case studies and guidance for boroughs and industry to support implementation.

Further information is included on the minimum requirements of CE Statements (see Table 5), options for pioneering statements (see Section 4) and essential elements of CE statements, in relation to policy (see Appendix 3).

A link to the primer has been added to the guidance, however it is not considered necessary to merge the two as they serve different purposes.

Q23: Are there any other terms used in the guidance that should be defined in the glossary?

Seven responses were received to this question. Clarification has been added in the guidance to key terms, and therefore the glossary has been removed. The following terms have been clarified, following consultation feedback:

- New Rules of Measurement (NRM) (see 2.1.3)
- Value (financial or other) (e.g. see 2.1.4)
- Demolition audit (see 4.6)
- Design for reusability - add 'as a whole' (Table 3 now includes this)

The following terms, which were raised in response to this question, have been removed from the guidance:

- Sustainable sourcing (it was noted that this term is too broad. It has been made clearer that local sourcing is encouraged, especially for reprocessed materials)
- 'as is practicable' (requirements have been made clearer)

Further suggestions included:

- Waste streams (e.g. AD/ Pyrolysis add to municipal definition)
- Metric could be embodied carbon of primary materials displaced by reuse/recycling of secondary materials
- Add Frequently Asked Questions (FAQs)
- Add 'repositioning' as an option, close to 'repurpose'

GLA response

The definition of **municipal** waste from the London Plan has been added (see footnote 31).

Metrics will be developed further in the future, as we receive more data.

The guidance clearly sets out the requirements for relevant development and a **FAQs** section is not believed to be needed currently. This will be kept under review as the guidance is implemented.

The circular economy design approaches and their definitions have been reviewed and made clearer. 'Repurpose' has been removed from the decision tree hierarchy of circular economy design approaches, to reflect that minimal changes should be made to the fabric of buildings, regardless of whether they are changing use or not. 'Repositioning' has not been added as this could also draw attention away from making the best use of building fabric, and also as this would not be sufficiently distinct from other design approaches.

Q24: Do you have any further comments to make on the guidance?

Twenty-one responses were received to this question. Respondents suggested that:

- Make the requirements, reporting process, roles and responsibilities (e.g. for assessment and monitoring) clearer (including LA role).
- Include a standard template to enable data comparison at different stages.
- Provide solutions/ideas and good practice examples, such as using vacant land, introducing collection services and recycling centres, manufacturer guidance (e.g. on recycled content, take back options, end of life routes), product EPDs. Good practice examples were also shared. Make clearer the benefits.

- Require evidence and justification.
- Requirements difficult to achieve, especially for lower threshold applications. Tailor methodology to project size.
- Barriers include influencing Government, industry and supply chain; logistical support for transport, storage and testing of materials; consideration early-on; data accessibility to LA planners.
- Resources, training, expertise and support for LA officers to assess, particularly for lower threshold applications.
- Securing monitoring via planning condition or Section 106 agreement (include template).
- Link to other submission requirements, in particular to WLC and embodied carbon.
- Positive feedback for reuse, recycling, resource efficiency, refurbishment and longevity as strategic approaches.

GLA response

An Application Flowchart (Appendix 2) has been added to make clearer the **reporting process**. Also, Table 5 highlights the minimum submission **requirements**, and key actors to involve.

A **standard CE statement template** has been added and should be completed by applicants / developers as part of their CE statement submission. This has been introduced to make the requirements clearer and standardise information collection.

The GLA will share **best practice examples** via the Circular Economy wiki and through training. ReLondon, through the CIRCulT project, are delivering training, developing e-learning and producing case studies highlighting implementation of circular economy in London. An example of **recycled content by value calculation** has been included. The purpose of the guidance is to provide information on what is expected in a CE statement.

The guidance refers to **justification** required.

CE statements are being submitted. Whilst information early on may be **high-level** with gaps, as much as information should be provided to embed circular economy design approaches into the scheme. CE statements are currently only required for referable applications.

The GLA works with partners to address **barriers** to the circular economy. The GLA is looking at safeguarding land for circular economy uses if not on-site. We are trying to retain industrial capacity and provide sufficient capacity for increased demand for more circular economy sites. ReLondon are looking at storage and logistic requirements needed to facilitate more reuse and are discussing with boroughs developing circular economy hubs centres for innovation, reuse, remanufacturing

and re-testing. Data from CE statements will be accessible through the London Datastore.

Boroughs will be expected to ensure that CE statements are submitted as part of referable applications and that a post-construction CE statement report is secured. Where possible we would also encourage boroughs to review the information submitted. The GLA will be reviewing CE statements for referable applications, similarly to the review we undertake of energy strategies. Boroughs that are intending to require CE statements for non-referable applications will need to scrutinise the information submitted in addition to securing the post-construction statement and storing the information received. We hold regular workshops for local authorities on the Mayor's policies and we will hold a specific **training** session on CE statements. The guidance and CE template include an email address for queries. We will consider what additional support may need on an ongoing basis.

The submission of a post-construction report should be **secured** by local planning authorities (LPAs) either by condition or obligation. As the LPA approves the discharge of conditions and obligations, it is responsible for verifying that reports have been received for referable applications and for submitting these to the GLA for review. **Suggested wording** for securing post-construction monitoring reports is available on the GLA's website. This wording may be adapted over time to improve the submission process and ensure it is robust.

More references have been included to other submission requirements, such as the **WLC guidance** and **embodied carbon**.

4. Other themes raised during engagement

25 November 2021 – all stakeholders engagement event

Additional questions raised from the consultation events (which were not highlighted above) were:

- Volume or area of materials should be used rather than kg for reporting.
- How will you challenge assertions that retention of an existing building isn't viable?
- A target for reuse is needed.
- Is there the potential for taxation to be used as a lever in favour of reuse?
- Is the minimum 20 per cent recycled content for each element (external wall) or material (brick)?
- How relevant are privately owned reclamation yards in promoting re-use? How does someone with a new reuse or remanufacturing enterprise access 'circular economy sites'?
- Does the Bill of Materials template need to be finalised before planning?

GLA response

We want to get consistent figures for analysis. We recognise that **kg** isn't always available, but we have received over 30 statements now that have included kg for the key materials.

The LPG, aims to drive more consideration of **retention** over demolition, making sure this is seen as the starting point. The requirements for pre-redevelopment and pre-demolition audits will enable the scrutiny of applications in order to ensure that the potential to retain existing buildings has been robustly explored.

With better data we would look to **targets** based on embodied carbon saved through reuse, rather than only weight. This would also help to delineate 'high value recycling' from typical downcycling.

Taxation is a Government decision. The Architect's Journal Retro First campaign is lobbying on this point.

The minimum **20 per cent recycled content** target is for the building overall.

Privately owned **reclamation yards** may be part of the picture for encouraging take-up of the circular economy. However, this is outside the scope of this guidance. Organisations such as ReLondon and resources such as the London Waste Map may be able to provide further information.

The **Bill of Materials** table needs to be finalised at full application stage

30 November 2021 – borough engagement event

Additional questions raised from the consultation events (which were not highlighted above) were:

- Why does the guidance only apply to referable schemes instead of all major developments?
- When will evidence need to be submitted post-planning?
- Are we involving construction contractors?

GLA response

London Plan policy requires **referable applications** to produce CE statements, but encourages boroughs to introduce lower thresholds.

The **post-completion CE statement** must be submitted within 3 months of completion of construction.

Organisations such as ReLondon are keen to engage with **construction contractors** as part of this process.

3 December 2021 - all stakeholders engagement event

Additional questions raised from the consultation events (which were not highlighted above) were:

- What process is there to encourage design teams to design building elements to be demounted at the end of life of a building?
- How does the LPG ensure buildings are designed to reduce waste during construction (e.g. packaging waste, which can account for up to 25 per cent of construction waste by volume, temporary protection and hoardings, and temporary shuttering for concrete structures)?
- Is there any work taking place to help create the infrastructure; associated businesses; tools and logistics to support circular economy practices (e.g. digital platforms to identify sources of available resources)?
- What level of detail is required to be submitted at planning, when the design is only at RIBA Stage 3, particularly within the Bill of Materials?
- The focus appears to be on minimising waste within the building design and construction rather than considering wider circular economy business models that could be adopted, particularly during the operation of the building. Is that intentional?
- How is viability assessed in the context of Table 1?

GLA response

CE statements are expected to demonstrate circular economy principles, including design for disassembly, provide **end of life** scenarios in the Bill of Materials, and submit an End of Life strategy.

The Recycling and Waste Reporting table includes **monitoring of construction waste** produced. Applicants and developers need to demonstrate compliance with Policy SI 7 targets.

The GLA is looking at safeguarding land for circular economy uses if not on-site. London Plan policies E4-E7 seek to retain sufficient industrial capacity, and this approach factors in the provision of sufficient capacity for circular economy sites. ReLondon are looking at storage and **logistics** requirements to facilitate reuse and are discussing with boroughs developing circular economy hubs the potential for centres for innovation, reuse, remanufacturing and re-testing. ReLondon are developing **online platforms**, including around materials exchange, to improve the availability and visibility of data. To enable transparency of information and monitoring, post-construction reports and any appendices will be made available to the public through the London Datastore.

Table 5 in the LPG sets out the minimum submission requirements by application type. Refer to the CE statement template **Bill of Materials** table.

The guidance encourages a focus on **operational** waste, for example by requiring an Operational Waste Management Plan to be submitted at full application stage.

Applicants will be expected to provide an explanation for how they are meeting the circular economy principles, and robust **justification** where they are not following the hierarchy of circular economy design approaches outlined in the decision tree (Figures 4 and 5 in the guidance).

5. Equality impacts

As part of the consultation, a draft Equality Impact Assessment (EqIA) was undertaken, which did not identify any negative equality impacts on protected groups. A survey on the EqIA was published and consulted on as part of the overall consultation on the draft guidance.

No responses were received to the EqIA survey on the draft CE statements guidance. No responses to the main LPG consultation survey referred to or identified any equality impacts resulting from the guidance.

The EqIA however has been updated for the published [CE statements guidance](#) and will be kept under review.

6. Next steps and monitoring

There was a significant level of interest in the development of the policy at pre-consultation stage. We would like to thank everyone who took the time to contribute, including in the context of a pandemic situation.

All views that were shared have been considered in the development of the final CE statements guidance and the key points are detailed in this report.

Data from CE statements will be analysed by the GLA and lessons learned will be shared. CE statements will be shared publicly through the London Datastore. Training will be provided to borough officers.

Stay informed:

Circular Economy statements LPG [consultation webpage](#)

Circular Economy [wiki](#) and [case studies](#)

Previous [GLA circular economy consultation events](#)

The guidance will be monitored and kept under review. For any queries please email: circulareconomystatements@london.gov.uk / londonplan@london.gov.uk

Appendix 1: Summary of formal engagement

Date	Activity Type	Participation	Representation
13 Oct – 15 Jan 2021	Consultation survey and written responses	All	33 responses
25 Nov 2020	Webinar	All	40 attendees
30 Nov 2020	Webinar	Borough	20 attendees
3 Dec 2020	Webinar	All	40 attendees

