

INVITATION TO TENDER

November 2020

Waste Composition Analysis - Reference 2020/21 – 13

1. Overview

This invitation to tender is issued by the London Waste and Recycling Board (LWARB) ('the Customer'). The tender is for the provision of consultancy services ('the Service Provider') to conduct waste composition analysis for purpose-built flats in London (detailed below). LWARB has an indicative budget of up to £85,000 including VAT.

2. Background to LWARB

The London Waste and Recycling Board (LWARB) is a partnership of the Mayor of London and the London boroughs to improve waste and resource management. The city's economic and environmental future depends on a transition to a low-carbon circular economy, and LWARB works to ensure that London's businesses, local government and communities thrive by helping them make the very best use of resources and materials.

More information about LWARB can be found on our website www.lwarb.gov.uk.

3. Background to the requirement

In 2017-18 LWARB's then Resource London programme established a flats initiative to reinvigorate London's household recycling efforts for residents living in purpose-built flats, specifically targeting housing estates and large blocks of social housing.

Residents in flats recycle less, but also tend to receive lower levels of service compared to kerbside properties. Over the past 2 years an LWARB partnership project with Peabody and six inner London boroughs demonstrated the effectiveness of the Flats Recycling Package at increasing recycling performance in flats in London (<https://resourceLondon.org/resources/research-and-innovation/making-recycling-work-for-people-in-flats/>). Resource London used waste composition analysis alongside other quantitative and qualitative methods to evaluate the effectiveness.

LWARB is now embarking on the next phase of its flats initiative. This project will build on findings from the previous research with the aim of further maximising the capture and quality of dry mixed recycling (DMR) (i.e. packaging), but also capturing other materials for recycling with high embedded carbon values (food, textiles and WEEE).

LWARB will be implementing the following changes on four estates (approx. 600 hh's) in one inner London Borough¹ to understand the impact on performance of:

- Interventions to reduce contamination of the DMR stream.

¹ Anticipated to be LB Lambeth.

From the previous research materials such as food waste, textiles and WEEE have been identified as the most problematic contaminants in the DMR, (5%, 1.7% and 0.5% respectively) as well as accounting for a significant proportion of the waste produced overall (28.1%, 4.6% and 1.2% respectively). By introducing facilities to capture these materials, contamination rates of the packaging captured through the DMR service could be significantly reduced.

- The introduction of the following services at each of the four estates to provide residents with a simple and convenient solution to recycle their waste:
 - WEEE banks (1.2% of the total waste).
 - a food waste service (28.1% of the total waste)
 - textile banks (4.5% of the total waste)

To enable us to measure and report on the impact of these interventions we will conduct waste composition analysis.

Findings from this research will then be shared with all local authorities and building managers so that they can implement the most impactful changes.

4. Objective of this work and requirements

To enable us to measure and report on the impact of our project, LWARB requires a Service Provider to conduct waste composition analysis of all waste (DMR and residual) produced by the four estates over the course of a week prior to any changes being made to enable the calculation of baseline capture rates and contamination rates. The analysis will be repeated at 3 and 8 months later, including analysis of the newly introduced WEEE, textile and food waste services to measure and quantify any changes.

The objectives of this work are to:

- Determine the amount and type of waste and recycling produced by the estates
- Deliver a reliable estimate of the recycling rate that is currently achieved by the estates and assess change in the recycling rate on each estate and
- Measure component parts of the residual and recycling streams to identify contamination of recycling and capture rate and changes throughout the phases.

LWARB have identified and secured a suitable site in Lambeth where the WCA work can be conducted and will arrange for collection and recycling/disposal of the waste at the end of the analysis.

In addition to the waste composition analysis, LWARB requires the Service Provider to assist in the identification of suitable estates for the project along with conducting site visits to the estates to assess their suitability and determine the waste and recycling service requirements in line with the Flats Recycling Package and additional materials to be introduced.

LWARB also requires the Service Provider to visit each site on a monthly basis following introduction of the changes to ensure that service standards are maintained and identify any issues.

5. Confirmation of deliverables

Preparation and planning

- Attendance at a virtual inception meeting to discuss the detailed requirements of the project. Meeting on Wednesday 2 Dec 3-4.30pm.
- Inception meeting minutes setting out the key outcomes, conclusions and action points, and a revised methodological proposal, if required, including a detailed description of how the work will be delivered and the objectives met.
- Work with LWARB to identify suitable estates for the project and conduct site visits to access suitability and determine requirements for delivering the project. Produce an improvement plan for each estate using the [Flats Recycling Package toolkit](#). For the purpose of costing, assume six site visits and production of an improvement plan for four estates.
- Produce a fieldwork timetable for each estate.
- The Service Provider will be responsible for assuring health and safety of the staff. We will expect to see an up to date generic risk assessment in advance of any collection and sorting, and copies of site-specific risk assessments within three days of first using the site.
- As part of the management of the works the successful contractor will ensure that any issues encountered are immediately raised with LWARB so they can be resolved in partnership with the borough and their waste management contractor.

Waste compositional analysis (WCA)

- Conduct a three-phase compositional analysis of communal waste from four selected estates in one inner London borough with c.600 households. The WCA will be carried out once in the monitoring period 'before' (phase 1) the intervention and twice in the 'after' (phase 2 and 3) monitoring period. Pre-intervention fieldwork will be conducted in January 2021. Post-intervention fieldwork will be conducted in May 2021 (phase 2) and November 2021 (phase 3). Please note that these timing are subject to change and that phase 2 and 3 will require separate analysis of food waste, WEEE and textile banks/bins.
- The category list will be agreed between LWARB and the contractor but will be based on the category list in Appendix 2. LWARB may wish to add sub-categories for the WEEE and textiles collections. This will be discussed at the inception meeting. For the purposes of costing please use the category list in appendix 2.
- It is imperative that every estate is covered in the WCA and that data quality is equivalent for each estate.
- To avoid some of the difficulties with data 'noise' experienced in the past the preferred approach is for the contractor to have as much control and/or oversight over collection as is practically feasible. Collect the waste to be sorted, or arrange for the collection of waste, working with the local authority as appropriate. LWARB's preferred option is for the contractor to collect residual and recycling streams. If the contractor proposes to hire an RCV for the collection then a cost for this should be included in your tender. Where someone other than the tenderer is collecting the waste, we expect the tenderer to provide oversight of the process

to ensure the integrity of the sampling framework. LWARB invites suggestions from bidders on the most robust and cost-effective approach to meeting these criteria. The approach should be set out and an assessment of the risks along with how these will be mitigated. The precise logistics for the monitoring will need to be worked out with LWARB and the local authorities after the estates have been selected.

- The waste analysis will employ a bulk collection and sorting approach, though it will be necessary for samples to be collected in such a way as to ensure:
 - The sample covers a known estate
 - That every bin from every household on the estate is collected (regardless of size)
 - That the same estates can be re-visited in the post-intervention fieldwork.
- Managing risk is also a high priority with this approach: notably of bins being collected before the contractor can collect them. Close working with the local authorities on timetabling will therefore be required.

Monthly site visits

- Monthly site visits to each estate to ensure maintenance of changes introduced, including reporting back any issues identified to LWARB.
For costing, assume site visits will last for 8 months.

Analysis and reporting

- Provide all data from the waste composition analysis in Excel spreadsheet format and a meta data file. Three sets of data should be supplied – one at the end of phase 1 of the fieldwork, one at the end of phase 2 of the fieldwork and a further report at the end of phase 3 fieldwork covering the results of all three phases.
- Produce a brief factual report in Word format, outlining:
 - A non-technical executive summary that sets out the key results.
 - A summary of the method employed.
 - A description of the quantity of all waste arising per household per estate.
 - The composition of the waste per estate.
 - The capture rate for recyclable waste
 - An indication of the uncertainty associated with the results (ideally quantitative but qualitative if no suitable quantitative methods exist).
 - [For the post intervention report] For each estate an assessment of the differences between the pre- and post-intervention results.
- The report should be of publishable quality and prepared using LWARB's technical report template, which will be supplied. For costing purposes, you should allow for two rounds of edits.

6. Timetable

The timetable below gives an indicative timeline for this project. Bidders are advised that, except for the tender submission date, this timetable is not binding and may be changed if necessary.

Bidders are asked to note the timescale for delivery and in their tender submission they

should set out how they propose to complete the work within this timescale and identify key dates where they would expect input from LWARB and the councils team.

Milestone	Date
<u>2020</u>	
Invitation to Tender issued	Wednesday 18 November
Deadline for clarification questions	Midday Tuesday 24 November
Tender return deadline	Midday Friday 27 November
Inception meeting	Wednesday 2 December (3-4.30pm)
Identification of estates and site visits	By end December
<u>2021</u>	
Pre intervention WCA (Phase 1)	January
Phase 1 reporting	February
Post intervention WCA (Phase 2)	May
Phase 2 reporting	June
Post intervention WCA (Phase 3)	November
Final reporting	December

7. Interface/ Contract management

The main point of liaison between the Service Provider and the Customer will Gemma Scott, Local Authority Support Manager, LWARB.

gemma.scott@lwarb.gov.uk / 07503 734477.

All clarification questions should be sent to info@lwarb.gov.uk – by midday Tuesday 24 November 2020.

8. Quality of Service

The Service Provider shall provide the services in a competent, timely manner in accordance with recognised industry quality standards. The Service Provider shall ensure an adequate supply of suitably qualified and competent personnel are available to fulfil the requirements of the Contract.

9. Delivery Personnel

LWARB requires Bidders to nominate Key Personnel with appropriate skills to perform the service for the duration of the contract.

Bidders shall provide a CV for Key Personnel as part of their submission. The CV shall demonstrate the individual's experience, competence and capability and their specific role in the project and should be no more than 3 pages.

The Service Provider shall ensure any changes to the Key Personnel be undertaken with minimal negative impact to the service and at no additional cost to LWARB or the participating councils.

LWARB officers may at its discretion request that the Service Provider remove and replace any Key Personnel from the service that LWARB considers in any respect unsatisfactory in the delivery and performance of the contract. LWARB shall not be liable for the cost of replacing any Key Personnel.

Bidders may include other specialists (“Sub-contractors”) in their Delivery Teams. However, the Service Provider will remain entirely responsible for the performance of the service. Such Sub- contractors must act in accordance with the terms and conditions of the contract entered into between LWARB and the Service Provider.

10. Submissions

Bidders are requested to submit:

- Details of their suitability to fulfil the contract, how the contract is to be managed and their approach to delivering the required specification within the project timeline indicated in 6 above. To include examples of relevant project experience. **Maximum 8 sides of A4** (excluding project experience and CVs which can be included as an Appendix).
- Details of the personnel comprising the Delivery Team, including CVs (should be no more than 3 pages) and a description of their role in delivering the contract.
- A Pricing Schedule giving day rates⁴ and anticipated number of days for nominated personnel (see Appendix 1) to **include VAT and expenses**.
- **An invoicing schedule** detailing what the payment milestones will be and when.
- **As appendices**, the tender submissions must include **A copy of your Health and Safety Policy**. This shall be a pass/fail criterion. Your bid will fail if it does not include the following minimum requirements:
You must provide a copy of your Health and Safety Policy statement and highlight where this delivers the core elements of Managing Health and Safety namely leadership and management, a trained/skilled workforce and creates an environment where people are involved and trusted. This should include your approach to handling any additional health and safety requirements arising from Covid-19.

Bids must be submitted by Midday on Friday 27 November 2020 with the reference “LWARB tender: 2020/21– 13” to info@lwarb.gov.uk

11. Contract

The contract will be let by the London Waste & Recycling Board, as the contracting organisation.

The following special terms shall apply: Travel and Expenses

All fees shall be inclusive of any travel and subsistence incurred to locations in Greater London.

Where additional expenses* are incurred, the following rates will apply:

SUBSISTENCE	
Hotel accommodation	Value for money must be sought at all times. Cost should not exceed £200 per night in Greater London and £175 per night elsewhere. Extras such as newspapers, minibar costs and entertainments will not be reimbursed. Prior approval should always be sought before hotel stays are booked.
TRAVEL	Actual costs incurred only may be claimed.
Public Transport (Train, tube, tram, bus, light rail)	Rail travel must be standard class. Upgrades to First Class travel may be paid personally but are not reclaimable.
Taxis	Taxis are only to be used in exceptional circumstances when other public transport is unavailable or impractical. Actual costs only may be claimed.
Mileage	You can only use your car where reasonable public transport is not available, and you have a valid business insurance cover. HMRC approved rates are applied

**additional expenses to be agreed with LWARB prior to being incurred.*

12. Evaluation

LWARB must be satisfied that each potential contractor has the appropriate capabilities and resources available to undertake the work to our requirements and provide the necessary services. The process we use to select contractors is a competitive one. Your tender submission will be evaluated by LWARB officers by way of the following:

criteria: _____

⁴ At a minimum staff are expected to be paid the London Living Wage.

Evaluation criteria	Weighting
Price ⁵	25%
Suitability of proposed methods to meet the objectives and deliverables of the project including delivering the project within the given timescales and examples of experience.	45%

Authority of allocated personnel, their skills and technical capability and the time allocated for their specific task.	30%
Approach to project management, including proposals for working effectively with multiple stakeholders	5%

Scoring	
Outstanding - cannot be faulted	100
Excellent	90
Very good	80
Good	70
Above average	60
Average	50
Below average	40
Poor	30
Very poor	15

Responses will be evaluated based on written submissions, but in the event of a high response rate and numerous submissions, a shortlist of two or three Service Providers will be drawn up and presentations required. These presentations will not ask for any additional development, but rather a face-to-face presentation of your submission.

13. Acceptance of bids

In issuing this invitation to bid, LWARB is not bound to accept the lowest or any bid and reserves the right to accept the whole or any specified part of the bid unless the bidder expressly stipulates otherwise.

LWARB will not enter into discussion with non-selected potential suppliers or justify its decision. Potential suppliers are deemed to have accepted these conditions by the act of submitting their quote. The selected preferred supplier cannot assume they have been granted the contract until a formal contract is signed.

14. Period for which bids shall remain valid

Unless otherwise stipulated by the bidder, bids shall remain valid for 30 days from the closing date for receipt of tenders.

⁵ This will be assessed by deviation from the lowest compliant tender

Appendix One Pricing Schedule

Specification for the provision of consultancy services

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An example breakdown table is shown below. Whilst this format is not mandatory, the breakdown you provide should include at least this information. Provide the breakdown as a separate Excel spreadsheet file in addition to a static form in your main tender document.

Role:	Project Director	Project Manager	Senior Consultant	Consultant	Junior Consultant	Total days	Total cost
Name:	Joe Bloggs	John Smith	Name	Name	Name		
Day rate (incl VAT):					£420		
Task	£850	£720	£650	£520			
<u>Project Management</u>							
Initiation meeting	1	1				2	£1,570
Monthly progress reports		20				20	£14,400
Quarterly meetings	6	6				12	£9,420
<u>Task 1 - Scoping</u>							
Develop delivery plan			3			3	£1,950
....						0	
Total days	7	27	3	0	0	37	
Total Fees	£5,950	£19,440	£1,950	£0	£0		£27,340
Expenses incl. VAT							£0

Please ensure all day rates are inclusive of VAT and inclusive of travel costs to and within Greater London.

Bidders should provide their best estimate of total price to deliver the specification outlined in the tender based on the day rate and days input for each of the nominated personnel.

Appendix Two Proposed Category List

Main material	Subcategory	Description/examples
Food waste	Edible	cooked and prepared meals; whole fruit and veg; fruit&veg flesh; whole coffee products (pods, bags); unused teabags; cakes: bread - slices, whole loaves, rolls, unused oils, margarine/butter, confectionary, condiments, meat & fish cooked and raw; sprouting potato
	Packaged edible	As above but still packaged
	Inedible	Bones; gristle; cheese wax; nut shells; fruit stones; pineapple, banana, avocado, melon skin; fruit cores; fruit stalks; tops and stalks of veg except broccoli, cauliflower, mushrooms; garlic/ginger/onion peel; teabags; coffee grounds; egg shells
Liquid food and drink containers		Liquid food and drink containers
Paper	Recyclable	news and mags, junk mail, household/office paper, envelopes, books, catalogues, directories
	Contaminated recyclable	Newspaper wrapped around peelings, chip shop paper
	Non-recyclable	Tissues and wipes, wallpaper, photopaper
Card	Recyclable	Cereal boxes, tea boxes, large packaging boxes and sheets of cardboard
	Contaminated recyclable	Card that contains foodstuffs, dirt or paint
	Non-recyclable	Waxed and laminated card: coffee cups, takeaway tray lids, food contaminated card,
Glass	Recyclable	Bottles, all colours
		Jars, all colours
	Contaminated recyclable	Jars & bottles that contain foodstuffs or paint
	Non-recyclable	Drinking glasses, pane glass, Pyrex
Dense plastic	Plastic bottles	Pop, milk, detergent, shampoo bottles
	Pots, tubs and trays	e.g. meat trays, yogurt pots, margarine tubs, clamshell packaging
	Contaminated recyclable	Plastic dense plastic packaging contaminated by food
	Non-packaging dense plastic	Toys, pipes, hangers, plastic furniture, household bowls
	Black plastic	Black plastic packaging
Polystyrene		Polystyrene
Plastic film	Carrier bags	Carrier bags and "bags for life"
	Recycling bag	Council issued recycling bags
	Compostable bags	Food waste biobags

	Other plastic film	Black sacks, bubble wrap, cling film, bread bags, crisp, magazine sleeves and biscuit packets
Metals	Recyclable	Food and drink cans, aerosols
	Contaminated recyclable	Cans still containing food etc
	Non-recyclable	Cutlery, pots and pans, tools, pipes
	Aluminium foil	All foil packaging
Garden waste		Green and woody, trimmings, cuttings, leaves, grass
Textiles and shoes		Clothing and non-clothing textiles, shoes, accessories
Nappies and other sanitary		Nappies, feminine sanitary products
WEEE*		Toasters, kettles, mobile phones, hair and beauty gadgets, electronic and electrical toys, power tools, keyboards, games consoles etc,
Hazardous household waste		Paint, chemicals, batteries
All other material		Combustible and non-combustible including DIY waste, wood and cork, carpet and underlay, pet waste and cat litter dead animals, crockery, plaster boards
Fines		Material falling through the 10mm screen

*Sub-category list may be expand

