The London Waste and Recycling Board – A model for the development of infrastructure and delivering Efficiencies in Waste Management

September 2012 | www.lwarb.gov.uk
Introduction
London’s Waste Authorities
Introduction to LWARB

- Government’s response to debate around a Single London Waste Authority and the review of Mayoral and Assemble powers in 2007

- Origins are as a ‘forum’ and ‘fund’ - but after stakeholder engagement, delivered as a statutory Board controlling a fund

- Established by the Government in the GLA Act and the London Waste and Recycling Board Order 2008

- First Chairman was Boris Johnson until 2010. Chaired by James Cleverly AM until 2012
Introduction to LWARB

LWARB has three objectives, prescribed by the GLA Act:

To promote and encourage, so far as relating to Greater London:
- the production of less waste;
- an increase in the proportion of waste that is re-used or recycled and
- the use of methods of collection, treatment and disposal of waste which are more beneficial to the environment

The Board Must:
- act in accordance with the municipal waste management strategy
- act in general conformity with the spatial development strategy

The Board May:
- ‘Do anything that it thinks will facilitate, or is incidental or conducive to, the carrying out of its functions…’ - (except borrow money)
Introduction to LWARB

Membership:

- Chair: The Mayor or his representative
- 4 Councillor members appointed by the London councils
- 2 Independent members appointed by the London councils
- 1 Independent member appointed by the Mayor
- First Board terms ran from August 2008 to August 2012
- Second Board terms run from August 2012 to August 2016
- Other than the Chair, members are restricted to serving two terms

Structures and Procedures

- Other than Board membership the Board may, in most areas, determine its own:
  - Committee structure
  - Procedures/Standing Orders
  - Staff structure
Introduction to LWARB

LWARB Board and Committee Structure

- **London Waste and Recycling Board**
  - Chair: Richard Tracy AM

  - **Investment Committee**
    - Chair: Melville Haggard

  - **Audit Committee**
    - Chair: David Williams
# Introduction to LWARB

## London Waste and Recycling Board Members 2012 - 2016

**Chairman, Mayor’s representative**

Richard Tracey, JP, AM.

**London Councils’ Cllr appointments:**

<table>
<thead>
<tr>
<th>Cllr Nicholas Paget-Brown</th>
<th>Deputy Leader and Cabinet Member for Environment, RB Kensington &amp; Chelsea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cllr David Williams, JP</td>
<td>Mayor of Merton</td>
</tr>
<tr>
<td>Cllr Clyde Loakes</td>
<td>Deputy Leader and Lead Member for Environment, LB Waltham Forest, Chair NLWA, Vice Chair LGA Environment Board</td>
</tr>
<tr>
<td>Cllr Bassam Mahfouz</td>
<td>Cabinet Member for Environment, LB Ealing, Chair WLWA</td>
</tr>
</tbody>
</table>

**London Councils appointed independents:**

<table>
<thead>
<tr>
<th>Melville Haggard</th>
<th>Quartermain Advisers, Member of UKGI/Green Investment Bank Investment Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbara Anderson</td>
<td>Non Executive Director, VKR V&amp;I CAP</td>
</tr>
</tbody>
</table>

**Mayor’s appointed independent**

| Matthew Pencharz                          | Mayor of London’s Environment Advisor                                       |
Business Plan 2011 - 2015
2011/12 14/15 Business Plan – Secondary Objectives

- Creation of a collaborative working environment with key stakeholders (including: the London Boroughs and the City of London, Waste Disposal Authorities (WDAs), the GLA, waste management companies and reprocessors, private sector financiers, feedstock providers, energy producers and users, and the third sector);
- Provision of support across the range of potential technology and non-technology solutions;
- Delivery of a ‘London Solution’ for waste management; and
(Non-Infrastructure) Projects Funded to Date

- London re-use Network
- Recycle for London
- Flats Recycling
London Re-use Network (LRN)

In 2010 LWARB approved funding to the London re-use Network (LRN)

- The LRN is delivered by London re-use Ltd (LRL) a social purpose company (operating as a trading subsidiary of LCRN)

- The LRN target is to become London’s approved re-use ‘network’ as set out in the Mayor’s Municipal Waste MS

- LWARB have allocated a minimum of £4.4m, but have committed, that where possible it will make further monies available to the Network (up to a total funding cap of £8.1m)

- LRL is developing the LRN through a mixture of direct investment and delivery of core/central services

- In October 2011 it published its 2011/13 Implementation Plan setting out its ambitions and activities to March 2013 towards the delivery of the LRN five year strategy
Core Services:

To bolster the sector and provide the framework for the network, LRL is developing a number of core/central services for network members:

- **Marketing** – central marketing resource, including branding and brand guidelines, literature and image library, communications templates, communications and press support

- **LoRNA (London Re-use Network Application)** – A ‘web based’ solution for all network members to transform existing re-use services by extending their reach, capacity and viability and critically create an easier way for customers to use the services

- **Telephone Hotline** – Dedicated re-use hotline for London, working with Boroughs. Launched in Hammersmith and Fulham and Wandsworth

- **Vehicle Fleet service** – established a joint buying club for new vehicles for network members, generating huge efficiencies savings for network members
<table>
<thead>
<tr>
<th>Scheme/Plan</th>
<th>Status</th>
<th>Award up to</th>
<th>Investment Committee</th>
<th>Review</th>
<th>Target R&amp;R</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Cluster Development Plan</td>
<td>Approved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restore</td>
<td>Approved</td>
<td>£368,000</td>
<td>Feb-11</td>
<td>End of year review complete. Next draw down due £20,000</td>
<td>700 Year 5 Tonnes</td>
</tr>
<tr>
<td>Barnet Reuse</td>
<td>Approved</td>
<td>£208,000</td>
<td>Jan-11</td>
<td>Year end review due. Next draw down £43,800</td>
<td>210</td>
</tr>
<tr>
<td>Central Cluster Development Plan</td>
<td>Approved in principle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundwork</td>
<td>Approved</td>
<td>£146,000</td>
<td>Feb-11</td>
<td></td>
<td>560</td>
</tr>
<tr>
<td>Furnish</td>
<td>Approved</td>
<td>£80,000</td>
<td>Apr-11</td>
<td></td>
<td>260</td>
</tr>
<tr>
<td>Pan London Paint Development Plan</td>
<td>Approved in principle</td>
<td>£75,000</td>
<td>Apr-11</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>William Wilberforce Trust</td>
<td>Approved</td>
<td>£70,000</td>
<td>Jul-11</td>
<td></td>
<td>180</td>
</tr>
<tr>
<td>Pan London Bike Plan</td>
<td>Approved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bikeworks</td>
<td>Approved</td>
<td>£150,000</td>
<td>Jan-12</td>
<td>Contracts being signed</td>
<td>221</td>
</tr>
<tr>
<td>West Depot</td>
<td>Approved in principle</td>
<td>£460,000</td>
<td>Feb-12</td>
<td>Details being finalised</td>
<td>1,798</td>
</tr>
<tr>
<td>Emmaus South Lambeth</td>
<td>Approved</td>
<td>£5,000</td>
<td></td>
<td>MD approval through Liquidity Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Total Awarded</strong></td>
<td></td>
<td><strong>£1,562,000</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Target Tonnage total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>4,194</strong></td>
</tr>
</tbody>
</table>
Recycling

- Funded the Greater London Authority and WRAP to deliver the Recycle for London campaign from 2008 – 13
  - Delivering London wide focus for campaigns and Borough support
  - Providing re-use messages and support the London re-use Network

- Flats Recycling Fund
  - LWARB has funded 29 projects in 26 boroughs totalling approximately £5 million
  - Estimate an average increase in collected recycling/composting of 43 per cent per project
  - The programme will cover 520,000 households
  - Over four years estimate an additional 75,000 tonnes of waste collected for recycling and;
  - Prevent 66,000 tonnes of CO2 entering the atmosphere (not counting the CO2 avoided from landfill)
Recycle for London

- Recycle for London (RfL) is a three year (2010-13) communications programme, delivered through a partnership of the GLA and WRAP working with London boroughs.

- LWARB has provided £3.5m funding; WRAP and the GLA also provide funding and in-kind support.

- Recycle for London programme is tasked to help reduce waste arisings and increase recycling in London through effective communications, by providing information about the services available to them and how to participate and also the financial and environmental benefits of reduction, re-use and recycling.

- RfL has the following objectives:
  - Reduce waste (with an emphasis on food).
  - Increase London’s municipal recycling rate year on year (with particular emphasis on household waste from flats).
  - Provide communications to support new infrastructure (including ‘On-the-Go’ recycling, business waste management, food waste collections, and re-use services).
  - Reduce the volume of specific material to landfill/incinerators such as textiles, batteries, WEEE, and furniture/other reusable products, to generate maximum social and economic value.
Infrastructure Development

- Strategy
- Process
- Infrastructure Pool
Targeted Financial Support

Infrastructure support in the form of two programmes

- Infrastructure Projects – Provision of funding to projects that meet the strategic requirements of LWARB (geographically and technologically) to the extent that funding is not available from the private sector; and

- Strategic Partnerships (Innovation) – through partnerships with project developers and other organisations, the development of innovative waste solutions;
Infrastructure Selection Strategy

- LWARB has worked with the GLA to identify regional “capacity gaps” for municipal waste based on anticipated requirements and known projects in development.

- As such, LWARB, based on the capacity gap analysis, will identify those areas that market-led developments will not address and will focus its resource on those gaps.

- It is envisaged that this will result in support of up to 10 key strategic scale projects across London (including those already committed to by LWARB over previous plan periods) covering the range of technologies / solutions set out in the gap analysis.

- Over previous plan periods, the majority of the infrastructure projects that LWARB has supported have been located in East London. This has been as a result of project proposals dominating this area of London.

- LWARB is particularly keen to support projects outside of East London during this plan period in order to support the development of localised solutions.
## Capacity Gap

<table>
<thead>
<tr>
<th>Year</th>
<th>Material Reclamation Facilities</th>
<th>Composting / Anaerobic Digestion</th>
<th>AD via MBT</th>
<th>RDF via MBT</th>
<th>Thermal treatment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1,875</td>
<td>1,148</td>
<td>137</td>
<td>38</td>
<td>894</td>
<td>4,091</td>
</tr>
<tr>
<td>2020</td>
<td>2,343</td>
<td>1,285</td>
<td>-215</td>
<td>569</td>
<td>1,416</td>
<td>5,398</td>
</tr>
<tr>
<td>2031</td>
<td>2,712</td>
<td>1,568</td>
<td>312</td>
<td>1,767</td>
<td>2,133</td>
<td>8,493</td>
</tr>
</tbody>
</table>

Source: Mayor’s Municipal Waste Management Strategy “Mayor’s preferred solution”
## Infrastructure Evaluation Process

<table>
<thead>
<tr>
<th>Stage</th>
<th>Activity</th>
<th>Who</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| Expression of Interest (EOI) Stage | EOI received and reviewed. Follow up telephone conversation using standard template to establish fit with LWARB objectives | LWARB’s Business Development Team reviews EOI and makes decision on the appropriate action. | i) Reject from pipeline (1)  
   a) Hold (2)  
   b) Progress to next stage |
| Request for Information (RFI) Stage | Project sponsor fills out RFI template and project undergoes RFI review. | LWARB’s Business Development Team reviews RFI and makes decision on the appropriate outcome. | i) Reject from pipeline (1)  
   a) Hold  
   b) Progress to next stage |
| Project Health Check (PHC) Stage | Project sponsor fills out PHC template and project undergoes PHC review (2) | Business Development Team confirms information with project sponsor and presents report together with recommendations to the Investment Committee. Investment Committee decides whether to progress project to next stage (Infrastructure Pool) | i) Reject from pipeline (1)  
   a) Place in Infrastructure Pool (4) |
| Business Plan Development Stage | Project Sponsor submits Business Plan for review (Business Development Team may provide assistance) | Business Plan reviewed by LWARB evaluation partners and Business Development Team. Recommendation considered by Investment Committee (project sponsor will normally be expected to attend the meeting and answer questions) Investment Committee make decision regarding investment project. Investment Committee make recommendation to the Board. Board makes final funding decision. | i) Investment Committee and/ or Board reject project  
   a) Investment Committee and Board approve project  
   b) Investment Committee and/ or Board request that further information is supplied before a decision is made  
   c) If the project is approved for funding, the project is progressed to Contracting stage (5) |
| Contracting | Detailed Term Sheet negotiated in accordance with commercial terms agreed by the Investment Committee and Board.  
Funding documents agreed and executed - funding is drawn down according to the terms of the contract. |                                                                                           |

1) Projects may be rejected because they a) are not consistent with LWARB’s current Business Plan b) are not developed enough.  
2) Projects may be placed on hold for a number of reasons, such as further evidence may be required in respect of one (or more) aspects of the proposal.  
3) This is a detailed early due diligence process that will test the robustness of the proposal in relation to the site, feedstock, technology, off take, financials, funding, project team / management and conformity with LWARB objectives.  
4) Only projects in the Infrastructure Pool will be eligible for financial assistance from LWARB.  
5) A recommendation to fund by the Investment Committee or the Board is subject to successful negotiation of contracts and should be regarded as an in principle decision only until such contracts are agreed.  

NOTE: At each stage, the Business Development Team, Investment Committee or full Board may request further information and/or clarification from the applicant before a decision is made.
LWARB Investment Pipeline

Expression of Interest (EOI)

LWARB has held two open calls for EOIs, one in 2008/9 and the second in 2010/11:
- 1st call: received 234 EOIs covering waste treatment, reprocessing and reuse infrastructure, as well as communication and awareness projects.
- 2nd call: restricted focus to waste treatment and reprocessing infrastructure, and waste innovation projects; 38 new EOIs received.

Request for Information (RFI)

10 project proposals currently at RFI stage

Project Health Check (PHC)

10 project proposals currently at PHC stage

Infrastructure Pool

LWARB currently has 10 Projects in its Infrastructure Pool:
- 3x AD,
- 1x ATC Technology,
- 1x Pre-treatment,
- 1x MRF,
- 3x Plastics Re-processors, and
- 1x Specialist Waste Re-processor
(Five of these have LWARB funding provisionally committed)

Business Case Development

3 infrastructure projects are currently developing business cases for submission

Business Case Evaluation / Due Diligence

No business cases are currently being evaluated

Funding Determination

LWARB has committed funding to 7 infrastructure projects:
- 3x Reuse projects: £8.5 million
- 1x ATC Technology: £8.9 million
- 1x plastic re-processor: £1 million
- 1x AD: £1.5 million
- 1x Pre-treatment: £4 million

Contracting

LWARB is currently in contract negotiations with 3 waste infrastructure projects from the above committed to projects.

Monitoring

LWARB has contracted with and is monitoring 4 waste infrastructure projects:
- 3x Reuse projects: £8.5 million
- 1x ATC Technology: £8.9 million
## Infrastructure Pool

<table>
<thead>
<tr>
<th>Project Sponsor</th>
<th>Project types</th>
<th>Capacity (tonnes per year)</th>
<th>Location</th>
<th>Status of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronation Nursery</td>
<td>Anaerobic digestion</td>
<td>15,000</td>
<td>Essex</td>
<td>Pool</td>
</tr>
<tr>
<td>Confidential</td>
<td>Anaerobic digestion</td>
<td>44,395</td>
<td>Greenwich</td>
<td>Funding committed</td>
</tr>
<tr>
<td>TEG Group</td>
<td>Anaerobic digestion</td>
<td>49,000</td>
<td>Barking and Dagenham</td>
<td>Contracted</td>
</tr>
<tr>
<td>Biossence</td>
<td>Thermal treatment</td>
<td>130,000</td>
<td>Havering</td>
<td>Contracted</td>
</tr>
<tr>
<td>Powerday</td>
<td>Materials reclamation facility</td>
<td>950,000</td>
<td>Hillingdon</td>
<td>Pool</td>
</tr>
<tr>
<td>GreenTech</td>
<td>Plastics Reprocessing</td>
<td>25,000</td>
<td>Enfield</td>
<td>Funding committed</td>
</tr>
<tr>
<td>Closed Loop Recycling</td>
<td>Plastics Reprocessing</td>
<td>85,000</td>
<td>Barking and Dagenham</td>
<td>Pool</td>
</tr>
<tr>
<td>Orchid Environmental Limited</td>
<td>MBT/MHT</td>
<td>160,000</td>
<td>Bexley</td>
<td>Funding committed</td>
</tr>
<tr>
<td>Confidential</td>
<td>Plastics Reprocessing</td>
<td>20,000</td>
<td>Greenwich</td>
<td>Funding Committed</td>
</tr>
<tr>
<td>Confidential</td>
<td>Reprocessing Plant</td>
<td>40,000</td>
<td>Barking and Dagenham</td>
<td>Pool</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>1,518,395</strong></td>
</tr>
</tbody>
</table>
Efficiencies Programme

Description of Workstreams
Introduction to the Efficiencies Programme

- The Mayor’s Municipal Waste Management Strategy required LWARB to develop a four-year programme (2011-2015) to identify and implement efficiencies in municipal waste management in London

- LWARB’s Business Plan undertakes to deliver such a programme and provides a £4.6 million budget over 4 years

- The Efficiencies Programme was developed in consultation with London Councils and London Waste Authorities

- In December 2011 the Board approved the Efficiencies Programme Plan

- LWARB will be working in partnership with Improvement and Efficiency South East (iESE), Local Partnerships, and WRAP, and will act as the front door to London Boroughs who wish to access help from these organisations
Efficiencies Programme Workstreams

The programme has been divided into the following seven work streams:

1. **Joint Procurement**
LWARB is developing a cycle of joint procurements for waste management equipment where there is sufficient scale to generate volume savings. LWARB will work with London’s waste authorities and London Councils to explore opportunities to jointly market recyclate.

2. **Waste Management Services Framework**
LWARB will continue to work with iESE to deliver the Waste Management Services Framework. The Framework covers for waste & recycling collection, street cleaning, grounds maintenance and London specific bulky waste collection services. LWARB and iESE will support London authorities who wish to use the Framework and in particular any early adopters where learning can be shared with others.

3. **Re-use and Recycling Sites (RRC)**
LWARB recognises the important role that these sites offer in providing a large range of recycling opportunities for householders. LWARB will develop a programme of support in consultation with London’s waste authorities. The support will initially be directed to those authorities looking to implement business waste services and those looking to work in partnership. Capital funds will be repayable.
4. Efficiency Reviews
LWARB will offer repayable grants to Boroughs to fund efficiency reviews of waste related services. LWARB have appointed Eunomia to help to develop the efficiency review process and deliver the reviews. LWARB will also work with WRAP, Local Partnerships and iESE where appropriate to help deliver service changes. LWARB Funding will be repayable from savings delivered.

5. Service Sharing
LWARB will work with Local Partnerships, and other organisations as appropriate, and waste authorities to develop London-wide and local shared services. In the first instance this will look to build upon the success of other London-wide service contracts, such as the London-wide Hazardous Waste Contract, and offer niche waste related services across borough boundaries. LWARB believes that significant efficiencies (financial and operational) may be achieved by targeted shared service activities amongst the waste authorities.

6. Best Practice Tools
LWARB will continue to support and improve its existing tools such as the London Waste Map. LWARB will look to investigate how it can help to disseminate and share good practice within London using tools such as twinning and mentoring and a brokerage service.

7. Model Specifications and Contracts
LWARB, working with iESE propose to build on the existing ‘Base Specifications’ within the Waste Management Services Framework to develop a series of comprehensive waste & recycling model hybrid/output specifications for use by London waste authorities.
Achievements

Summary
Achievements Summary

- Since it was established LWARB has committed almost £56,762,000 to various projects and waste infrastructure to improve waste management in the capital.

- Helped to create over 300 jobs through investments, and over 100 trainee roles.

- Anticipated 437,060 tonnes diverted from landfill annually, once all funded projects are fully operational.

- Over £174m of external investment attracted through LWARB commitments (total project costs – LWARB commitment + London Green Fund match funding).

- £18m invested in the London Green Fund, Waste UDF (Foresight Environmental Fund) – matched by £18m London European Regional Development Fund – and at least another £35m from the private sector.