

Social & Economic Impacts of LWARB's Projects and Programmes

Final Report to LWARB

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EXECUTIVE SUMMARY

The London Waste and Recycling Board (LWARB) was established by the GLA Act 2007 to promote and encourage 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. LWARB has a fund comprising of money from central Government (DEFRA) and the GLA to achieve these objectives.

While the stated aims of LWARB relate to taking actions to improve environmental outcomes, its work leads also to social and economic impacts. In the current economic climate, it is clearly important to better understand the nature and extent of these impacts.

Accordingly, a number of projects within LWARB's current Business Plan have been reviewed to identify the extent of their contribution towards the Government's Plan for Growth. These projects are:

- Waste Infrastructure Projects;
- The London Reuse Network (LRN);
- Joint Procurement;
- Efficiency Reviews; and
- The Flats Recycling Programme.

Based on the approach described below, this review has identified that LWARB's work:

- Successfully addresses the failure of markets to allocate sufficient capital to waste infrastructure developers, bridging funding gaps against the backdrop of heightened levels of risk aversion among providers of debt finance (See Section E.1.4);
- Creates jobs, apprenticeships and training opportunities (See Section E.1.5); and
- Delivers savings to the public purse, both through activities such as Joint Procurement, Efficiency Reviews and the Flats Recycling Programme, and, importantly, through managing the infrastructure fund in a commercial manner (See Section E.1.6).

E.1.1 Approach to the Analysis

The methodology has been designed in consultation with the GLA which, as a key funding organisation, has a particular interest in understanding the value of LWARB's work.

The methodology is set out fully in the detailed report and all calculation sheets have been made available for review.

E.1.2 Key Findings

Following the above approach, and based on the number of direct jobs created, the present value GVA impacts of the currently funded infrastructure projects (considered over a five year period) and the LRN (considered over a ten year period) is estimated to be in excess of £100m.

In addition, direct savings to London Boroughs from Joint Procurement, Efficiency

Reviews and the Flats Recycling programme are at least £7.5 million.

Headline findings include:

- Infrastructure projects funded by LWARB should create over 200 jobs in construction, and approximately 100 operational jobs, delivering, over a five year period, a present value GVA of £34.8 million and a saving of circa 400,000 tonnes of CO₂;
- The manner in which LWARB funds such projects, on a commercial basis, with managed risk and appropriate returns, should lead to a net gain for the public purse. Moreover, LWARB's support for such projects extends beyond the financial, with developers noting the Board's key strength of providing market and regulatory advice that enables them to reach financial close in a timely manner;
- LWARB's funding for the London Reuse Network should lead, over a ten year period, to a present value GVA of £74 million arising from direct employment. The provision of training and work placements has the potential to further boost the economy, through increasing the productive potential of the workforce;
- Infrastructure projects for which LWARB's sole investment is *indirectly* via the Foresight Environmental Fund, are estimated to deliver, over a five year period, approximately 60 operational jobs and a present value GVA of £18 million;
- Joint Procurement initiatives led by LWARB have already saved London Boroughs £370,000, and it is expected that LWARB funded Efficiency Reviews will lead to savings over a five year period of between £4.1 million and £14.1 million; and
- The Flats Recycling Programme is expected to lead to savings to Boroughs of approximately £3 million in treatment/disposal costs over a five year period.

E.1.3 Contribution to Plan for Growth

Beyond the contribution presented above, LWARB's work can be seen, more broadly, as playing a key role in the transition to a green economy, which is a key element of the Government's Plan for Growth.¹ The cross-departmental 'roadmap' has a vision of the green economy of the future that will:

- **Grow sustainably and for the long term.** Growth in the economy will be achieved and wealth generated while emissions and other environmental impacts are reduced. Opportunities for green growth will be facilitated – including in a growing low-carbon and environmental goods and services sector – and the global competitiveness of UK industry maintained;
 - In creating new jobs in projects that reduce emissions and broader environmental impacts, LWARB's work is bringing about green growth, hastening the development of the low-carbon and environmental goods and services sector in the UK. In supporting innovative processes for managing residual waste, and for reprocessing plastics, and indeed in funding training, to increase the productive capacity of the economy, it is helping to increase opportunities for long term growth.

¹ HM Government (2011) *Enabling the Transition to a Green Economy: Government and Business Working Together*, 2011

- **Use natural resources efficiently.** Effective demand management and efficiency measures for energy and other resources will be used in our homes, offices and businesses across the economy. Inputs of materials to production processes should be optimised and the level of waste to landfill should decrease. New processes and products will be required creating new market opportunities;
 - LWARB is enabling the level of waste to landfill to decrease through supporting the development of new waste infrastructure, and the enhancement and expansion of separate collection from households. Support for the LRN is also enabling waste to be diverted from landfill, while allowing homeowners, offices and businesses to use resources efficiently through expanding opportunities to donate items for reuse and/or use reused items. LWARB is also at the forefront of the development of innovative new processes, notably in respect of plastics recycling and reprocessing.
- **Be more resilient.** The UK will have a reduced reliance on fossil fuels whilst maintaining secure supplies of energy and other natural resources. The economy will be more resilient and prepared for the implications of climate changes and environmental risks such as floods and heat waves;
 - Through its support for developers of energy-generating AD and gasification projects, and indeed through its support for boroughs in increasing collections of food waste in particular, LWARB is helping to reduce the UK's reliance on fossil fuels. Moreover in increasing the diversity of supplies of energy, it is helping to increase overall resilience. In addition, the compost and digestate produced from the IVC and AD facilities developed with LWARB's support will provide UK farmers' with opportunities to reduce their dependence on energy- intensive, and often imported, synthetic fertilisers.
- **Exploit Comparative Advantage.** UK businesses will be well placed to take advantage of the expanding markets for greener goods and services.
 - In providing essential funding, along with much-valued advice, to project developers, LWARB is enabling UK businesses to position themselves within this market. Indeed it could be seen that for London, the existence of LWARB, and its associated financial and strategic support, is a key component of the comparative advantage of London, and the UK more broadly, in the expanding market for greener goods and services.

E.1.4 Addressing Market Failure

Developers of waste infrastructure face the challenge of heightened levels of risk aversion amongst investors. While the appetite for risk has declined across the board, the waste sector faces a number of specific challenges in obtaining finance, particularly in respect of some of the more novel processes.

LWARB's 2013-2015 Business Plan clearly articulates the way in which the infrastructure fund is applied, in order to enable projects that are 'on the margins of private sector delivery' to progress to achieve project close.² In so doing, the stated

² London Waste and Recycling Board (2013) *The London Waste and Recycling Board: Business Plan 2013 - 2015*, 1 March 2013

intention is to 'deliver London's infrastructure requirements ahead of the economic curve'. The business plan makes clear that 'projects that are likely to be delivered by the private sector on a timely basis without LWARB support will not be considered as qualifying for financial support by LWARB'.

In these times of elevated risk aversion, it is clear that in the absence of LWARB, the market would not be delivering the required waste infrastructure for London. Moreover, it was reported by developers that beyond simply providing finance, the skills and experience of LWARB staff meant that they were able to support with advice and guidance where necessary. Market knowledge and regulatory expertise were particularly appreciated by developers, who felt that this aspect of LWARB's contribution marks them out from other potential funding sources.

E.1.5 Creating Jobs, Apprenticeships and Training

The London Reuse Network plans to create 190 new jobs, 1,660 work placements, more than 3,000 training places and apprenticeships and over 3,700 volunteering places by March 2016.³

Increasing the skills of the London workforce, through training and apprenticeships, will raise the productive capacity of the economy. This is important, as long term growth is driven primarily by productivity. As noted by the Nobel Prize-winning economist Paul Krugman:⁴

Productivity isn't everything, but in the long term it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.

The drivers of productivity growth are factors which either improve the quality of outputs, or the efficiency with which inputs (such as capital, labour and materials) are transformed into outputs. Productivity can be strengthened through improvements in 'human capital' through increased flows into further education and training.⁵

E.1.6 Saving Public Money

As noted previously, loans made by LWARB are on a commercial basis. Our modelling suggests that assuming a 0% failure rate, the present value profit to LWARB on loans to the current phase of 'committed and funded' projects will be £3.7 million. Accordingly, on the basis that the anticipated IRR is realised, there will be no net cost to the public purse.

Sensitivity analysis has been undertaken, and a project failure rate of just under 17% would still result in LWARB covering the costs of its loans (i.e. not making a loss).⁶ In these times of straitened finances, this would appear to be an exemplary use of public funds, especially given the fact that investment risk is managed, with returns appropriate to risk, and comprehensive due diligence is undertaken.

³ <http://www.londonreuse.org/london-re-use-exceeds-targets/>

⁴ Krugman, P. (1994) *The Age of Diminished Expectations*

⁵ Department for Business Innovation & Skills (2011) *Sources of Economic Growth*, 1 February 2011

⁶ This applies the extremely unlikely assumption that any project failures also resulted in the loss of assets against which LWARB loans were secured, resulting in LWARB being unable to sell these assets.

E.1.7 Scaling up or Replication

While LWARB is not the only possible source of public sector funding for the waste sector, it has the following characteristics that differentiate it from alternatives, such as the Green Investment Bank:

- Is responsible for a region and so has unmatched market intelligence with regard to London, and its distinct challenges, and is therefore able to provide specialist support to developers;
- Has excellent local and regional government connections due to the make-up of the Board;
- Has a different approach to risk – at times providing development loans as well as providing debt finance to smaller projects in which the banks are not interested (as the return for the bank does not warrant the cost of due diligence);
- Focuses on getting infrastructure on the ground and will provide financial products that enable private sector finance to get projects over the line;
- Tends to focus on innovation; and
- Tends to focus on providing infrastructure that supports the development of a secondary materials economy, rather than being focussed on large waste management solutions *per se* (i.e. reuse infrastructure, reprocessing infrastructure, DE waste projects, AD, composting);

In the transition to a green economy, it is clear from this analysis that the LWARB model, more widely applied, holds considerable potential to stimulate growth, employment and environmental improvements. At the same time this model is an exemplary use of public funds at a time of severe budgetary constraints. We consider that this approach could successfully be replicated elsewhere in the UK at a regional scale.