

### **Carrots and Sticks**

A review of waste financial reward and compulsory recycling schemes

May 2011



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### **Terms of Reference**

The Environment committee agreed the following terms of reference for its investigation on 8 September 2010:

- Consider the impact of waste financial incentive schemes on recycling performance;
- · Identify examples of best practice and lessons learned; and
- Make recommendations on how such schemes might be applied to London

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## **Contents**

	Foreword	7
	Executive Summary	8
1	Introduction	10
2	The policy and financial context	13
3	Types of financial incentive schemes	16
4	Evaluating the financial incentive schemes	21
5	Concluding comments	31
	Appendix 1 Recycling and landfill rates by borough 2009/10	33
	Appendix 2 Section 46, Environmental Protection Act 1990	34
	Appendix 3 Key findings	35
	Appendix 4 Orders and translations	36

### **Foreword**



The increasing costs of waste disposal and threat of financial penalties from the European Union, for failing to meet the landfill diversion targets it has set, are two strong reasons why a concerted effort is needed to boost recycling rates in the capital. There are others. Not least is the positive impact diverting waste away from landfill can have on the environment.

Boroughs have done very well to improve recycling rates over the past decade but we are now at the stage where that improvement is beginning to plateau. There are a number of reasons for this, including the nature of housing in London. Flats account for over 50 per cent of properties. An overriding challenge we face is improving recycling in flats and estates across the capital, where recycling rates are lowest, typically around 10 per cent.

We need to remain open to exploring different ways to further improve London's recycling performance. Financial incentive schemes are increasingly being used as a way of encouraging individuals to recycle more, and supporters of them believe that they boost recycling rates. This report - *Carrots and Sticks* - evaluates the merits of the Recyclebank reward-based and compulsory approaches to incentivising individuals to recycle. It explores their impact on recycling performance and considers the London-specific challenges the schemes would need to tackle.

We found that recycling rates had improved quite dramatically in boroughs operating either scheme. But less certain is whether the dramatic increases can be sustained, and whether individuals are prompted to manage their waste more sustainably in the long term. We need more data to properly determine the impact of financial incentive schemes on recycling rates.

Communications has a pivotal role to play. It contributes to the successful delivery of a scheme, but more importantly, can stimulate and help maintain an interest in how individuals can better manage their waste and contribute to a cleaner environment.

Whichever approach is adopted, boroughs should aim to ensure that that the scheme targets challenges we face in London, provides value for money, and encourages changes in behaviour and attitudes to managing waste for the better over the long term.

**Darren Johnson AM** 

Haves John

Deputy Chair, London Assembly Environment Committee

## **Executive Summary**

This report presents findings from the London Assembly's Environment Committee inquiry into the value of financial incentive schemes in boosting recycling rates in London.

While London has made great strides in recycling more of its municipal waste, the rate of progress could be improved. London currently recycles 32 per cent of its municipal waste: a significant improvement in a decade, but still below the national average of 39 per cent and the lowest of all nine English regions. Increasing recycling activity in flats and on estates (around 50 per cent of the London's housing stock) will be crucial to any further improvements in London's recycling performance.

Supporters of financial incentive schemes – the Mayor, local authorities who have tried them, central government and Recyclebank (an American company that has launched schemes across the UK) – believe that such schemes significantly boost recycling rates. They believe that providing incentives can, in the short term, help local authorities to meet EU waste targets and avert financial penalties. In the long term, they say that incentives can bring about a change in people's attitude and behaviour to manage waste more sustainably.

The Mayor also favours a reward-based approach to incentivising individuals to recycle and is keen to see a roll-out of the Recyclebank model across London.

Using four key indicators - impact on recycling rates, costs, public perception and tackling London-specific challenges - this report evaluates the merits of the Recyclebank model of rewarding recycling. To provide some counter-balance, the report also considers the merits of the compulsory approach to incentivising recycling.

The report points out that there are positive aspects to both types of schemes. Recycling rates have improved quite dramatically in boroughs where they have been introduced.

But there are also drawbacks. The high costs associated with implementing and running the Recyclebank scheme can be offputting. There are concerns that incentivising to recycle can encourage consumerism, and drive individuals to generate more waste to boost points and maximise their rewards. Awarding shopping vouchers as rewards for recycling may send messages counteracting

any waste prevention messages local authorities may also be promoting. The schemes may be susceptible to increased contamination rates: people may be tempted to set out items for recycling that cannot be recycled locally, either in their bid to gain rewards or to avoid financial penalty.

The report calls for a more comprehensive evidence base to be developed to properly determine the impact of incentive schemes over the long term. The Committee is concerned at the lack of evidence to support the hypothesis that schemes incentivising people to recycle can change attitudes or behaviour in the long term.

London faces unique challenges, not least, with its high proportion of flats and large transient population. The report points out both types of incentive scheme will need to address these challenges if they are to work effectively in London. Boroughs will need to tailor schemes to their housing stock; they will have to be able to identify cost-effective improvements to help drive up recycling participation and capture rates. A real emphasis on communications will also be needed. Effectively communicating the value of recycling and the need to manage waste sustainably will be key to the success of the schemes. The messaging will need to be consistent, continuous and targeted.

### 1 Introduction

- 1.1 This report presents findings from the Environment Committee inquiry, which looked at the value of financial incentive schemes in boosting recycling rates in London. These findings are intended to inform ongoing debate on the subject within London, and will also be relevant to the Government's review of national waste policy.<sup>1</sup>
- 1.2 The terms of reference for the inquiry were to:
  - Consider the impact of waste financial incentive schemes on recycling performance;
  - · Identify examples of best practice and lessons learned; and
  - Make recommendations on how such schemes might be applied to London.
- 1.3 London has made great strides in improving recycling, but the rate of progress could be improved. The average recycling rate has increased by 24 per cent over the last ten years, up from eight per cent in 2000/01 to 32 per cent in 2009/10. But London's recycling rate remains the lowest of all nine English regions and below the national average of 39 per cent.<sup>2</sup> Around two thirds of London boroughs are performing below the national average, and over half below London's average of 32 per cent. In contrast, the amount of municipal waste London produces is amongst the highest of the regions, with around half being sent to landfill and less than a third recycled. Boroughlevel recycling performance across London is mixed. Whilst many areas continue to make good progress each year, in some cases, increases in recycling rates have slowed.<sup>3</sup> In other cases recycling rates have gone down.<sup>4</sup>
- 1.4 The overriding challenge in inner London will be to improve recycling rates in flats and on estates. Flats account for around half of London's housing stock. Most of these can be found in inner London boroughs. Recycling and composting in flats and estates is low, typically around

<sup>&</sup>lt;sup>1</sup> The Government announced a review of waste policy in June 2010 and is due to report preliminary findings shortly. The use of waste financial incentives to boost recycling is likely to form part of further work to develop the Government's policy on waste.

<sup>&</sup>lt;sup>2</sup> DEFRA statistics http://www.defra.gov.uk/statistics/files/mwb200910-annual.xls

<sup>&</sup>lt;sup>3</sup>For example, Richmond upon Thames, Southwark, Hammersmith & Fulham, Hackney, Lambeth. See Capital Waste Facts http://www.capitalwastefacts.com/
<sup>4</sup> For example Lewisham, Wandsworth, Waltham Forest. See Capital Waste Facts http://www.capitalwastefacts.com/

10 per cent.<sup>5</sup> Increasing recycling in these properties is imperative if London's average recycling rate is to improve.

- 1.5 One way to improve London's recycling rates might be to introduce financial incentive schemes. Supporters of such schemes local authorities who have tried them, the Mayor, central government and Recyclebank believe that financial incentive schemes can significantly boost recycling rates. In the short term, according to their supporters, such incentive schemes can help local authorities meet EU targets and avert financial penalties. In the longer term, they believe, waste financial incentives can change people's behaviour and thus help authorities to manage waste more sustainably. Local authorities across England are looking at using these schemes to help drive up recycling rates and encourage individuals to do the same.
- 1.6 The Mayor is keen to see a roll-out of the Recyclebank model or similar schemes across London. He is committed to working with waste authorities to provide incentives for Londoners to recycle and compost.<sup>6</sup> He favours a reward-based approach to incentivising individuals to recycle and Recyclebank provides such an approach.
- 1.7 This report therefore explores the merits of the Recyclebank model, and to provide some counter-balance, the compulsory approach to incentivising recycling. A number of London boroughs have used the compulsory recycling model for over five years.
- 1.8 Throughout the report we refer to written evidence submitted to the Committee by a range of stakeholders. A full list of stakeholders, along with copies of their submissions, has been published in a separate document accompanying this report. We also draw on the public discussion session held by the Environment Committee on 4 November 2010. Representatives from Recyclebank, the Royal Borough of Windsor and Maidenhead, the London Borough of Barnet and Closed Loop Recycling attended the session.

<sup>&</sup>lt;sup>5</sup> GLA commissioned surveys show average recycling or composting rates in flats and estates to be around 10 per cent or less. See the Mayor's draft Municipal Waste Management Strategy, *London's Wasted Resource* http://www.london.gov.uk/consultation/waste-strategy.

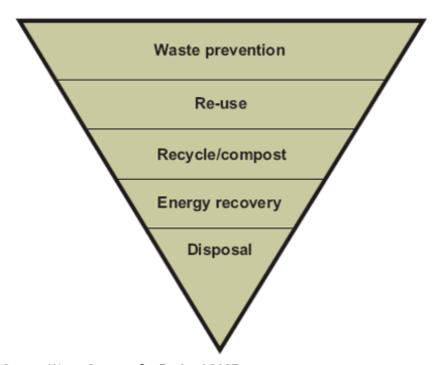
<sup>&</sup>lt;sup>6</sup> Policy 4.6, The Mayor's draft Municipal Waste Management Strategy, *London's Wasted Resource* http://www.london.gov.uk/consultation/waste-strategy

1.9 The outcome of our discussions with stakeholders and review of the written evidence we received is ambivalent. On the one hand, we were able to substantiate the premise that providing incentives to recycle can encourage behavioural change. On the other hand, the extent to which the behavioural change can be sustained remains debatable.

# 2 The policy and financial context

2.1 Recycling and composting is one of five methods set out in the Waste Strategy for England 2007 for managing waste in a sustainable way. The Strategy presents a hierarchical model of five ways to dispose of waste, with waste reduction at the top end of the hierarchy and disposal of waste to landfill at the other. The model is more commonly referred to as the waste hierarchy.

**Figure 1**The Waste Hierarchy



Source: Waste Strategy for England 2007

2.2 Recycling has a key role to play in meeting European Union landfill diversion targets. The EU has set challenging targets which if breached could result in the UK having to pay substantial financial penalties. <sup>8</sup> The Localism Bill will enable the Government to pass penalties for failing to meet waste recycling targets to those authorities believed to

<sup>&</sup>lt;sup>7</sup> The Waste Strategy for England 2007. http://www.defra.gov.uk/environment/waste/strategy/strategy07/documents/waste07-strategy.pdf

<sup>&</sup>lt;sup>8</sup> European Landfill Directive 1999/31/EC , http://ec.europa.eu/environment/waste/landfill\_index.htm

have caused or contributed to a breach of the targets. <sup>9</sup> London needs to increase participation and capture rates for recycling if it is to avert the very real threat of financial penalties.

- 2.3 The 1999 EU Landfill Directive sets limits on the quantity of waste permitted to go to landfill by key dates in 2013 and 2020. It also sets out standard landfill acceptance procedures and sets up a system of operating permits for landfill sites. The objective of the directive is to prevent or reduce as far as possible negative effects on the environment from disposing of waste to landfill, by introducing stringent technical requirements for both.<sup>10</sup>
- 2.4 The UK Government introduced two initiatives to help local authorities achieve the landfill targets set in the EU Landfill Directive. The first is the Landfill Allowances Trading Scheme (LATS); the second, Landfill tax.<sup>11</sup>
- 2.5 LATS sets landfill allowances for each waste disposal authority in England. One allowance represents one tonne of biodegradable municipal waste (BMW) that can be sent to landfill. Obligations under LATS can be met by trading off landfill credits. However, failure to meet the target allowance can trigger fines of up to £150 per tonne of waste.
- 2.6 Landfill tax is a levy applied to waste sent to landfill. It is set at £56 per tonne as of April 2011 and will steadily increase in future years. <sup>12</sup> In 2008/09, 1.9 million tonnes of London's BMW went to landfill, costing an estimated £61 million in landfill tax. <sup>13</sup>, <sup>14</sup> Based on the

<sup>&</sup>lt;sup>9</sup> Under Part 2,of the Localism Bill the Government will be able to pass on EU fines for breaches of air quality and waste.

http://www.communities.gov.uk/localgovernment/decentralisation/localismbill/

<sup>10</sup> http://ec.europa.eu/environment/waste/landfill\_index.htm

<sup>&</sup>lt;sup>11</sup> More information on LATS can be found at

http://www.defra.gov.uk/environment/waste/localauth/lats/. More information on landfill tax can be found at

 $http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?\_nfpb=true\&\_pageLabel=pageExcise\_ShowContent\&id=HMCE\_CL\_001206\&propertyType=document$ 

The standard rate will rise by £8 per tonne each year between now and 2014/15 http://www.letsrecycle.com/news/latest-news/general/chancellor-extends-landfill-tax-escalator-until-2014

<sup>&</sup>lt;sup>13</sup> State of the Environment in London Report (Latest update August 2010), Environment Agency, p50

<sup>&</sup>lt;sup>14</sup> The standard (active) rate of Landfill Tax in 2008/09 was £32 per tonne, Landfill Tax: recent developments, Antony Seely, 15/12/09, p13,

2008/09 tonnage the cost of landfill tax in London will rise to an estimated £152 million per annum by 2014/15, unless other forms of disposal (such as recycling) increase. This would represent an increase of 149 per cent.

- 2.7 The Government has also set correspondingly challenging targets for recycling and composting to help meet the EU landfill diversion targets and avoid financial penalties. The national strategy sets a target to recycle and compost at least 40 per cent of household waste by 2010, 45 per cent by 2015 and 50 per cent by 2020. <sup>15</sup> England recycled and composted 39.7 per cent of municipal waste during 2009/10, narrowly missing the 40 per cent target set for 2010.
- 2.8 The national targets are mirrored in the Mayor's draft Municipal Waste Management Strategy. <sup>16</sup> Recycling and composting is a key focus for the Mayor, and is one of the six main policy areas singled out for focused action in the Strategy. Reducing the amount of waste sent to landfill is also a key focus. The Mayor has set a target to achieve zero municipal waste to landfill by 2025.
- 2.9 Recycling also has an important part to play in the wider programme of sustainable waste management. Recycling can help divert waste away from landfill. In particular, it can play an important role in conveying the message of sustainable waste management to the public. The Committee was told that, of all the elements of the sustainable waste management agenda, as shown on the waste hierarchy, recycling is the easiest for people to understand and commit to.<sup>17</sup> By recycling, individuals feel that they are making a direct impact and are part of a positive environmental change.<sup>18</sup>

http://www.parliament.uk/briefingpapers/commons/lib/research/briefings/snbt-01963.pdf. Therefore 1.9 million tonnes at £32 per tonne = £60.8 million.

<sup>&</sup>lt;sup>15</sup> Waste Strategy for England 2007

<sup>16,</sup> London's Wasted Resource, October 2010

http://www.london.gov.uk/consultation/waste-strategy

<sup>&</sup>lt;sup>17</sup> Recyclebank, Transcript of the Environment Committee meeting dated 4 November 2010

<sup>&</sup>lt;sup>18</sup> Closed Loop Recycling, Transcript of the Environment Committee meeting dated 4 November 2010

# 3 Types of financial incentive schemes

3.1 The Committee focused on two types of financial incentive schemes. The first is based on the concept of rewarding individuals to recycle – the 'carrot approach'; and the second on compulsion – the 'stick approach'.

### Rewarding to recycle

- 3.2 The concept of rewarding individual efforts to manage waste more sustainably is not new. It has been much researched and trialled over the past decade. More and more, authorities are seeking to use incentives to engage and educate their residents about sustainable waste management.
- 3.3 The Department for the Environment, Food and Rural Affairs (Defra) carried out research in 2004. It found that local authorities were already operating a wide variety of reward-based schemes. <sup>19</sup> But the research also revealed that there had been little systematic evaluation of the costs and benefits of those schemes. Its primary recommendation was to support the commitment made in Defra's Five Year Strategy (December 2004), to carry out a pilot scheme to bring together a robust evidence base on the effectiveness of different incentive approaches.
- 3.4 It subsequently launched reward-based pilot schemes across the UK in March 2005. Ten London boroughs participated in the scheme.<sup>20</sup> The main aim of the pilots was to assess the impact and value for money of financial incentive schemes.
- 3.5 Authorities piloted a variety of schemes. Some were targeted at the community, for example to increase the use of 'bring banks' in estates or rewarding the community as a collective, or enabling the community to pass on its reward to a nominated charity or other worthy cause. Some schemes were targeted at individuals, for example, by using prize draws. Given the breadth of schemes trialled

<sup>&</sup>lt;sup>19</sup> Report to Defra from AEA Technology, *Evaluation of Local Authority Experience of Operating Household Incentive Schemes*, 2005

<sup>&</sup>lt;sup>20</sup> Bromley, Sutton, Hammersmith and Fulham, Lambeth, Haringey, Havering, Islington, Enfield, Hackney and Westminster

- and the differing approaches in reporting back on the impact and value aspects of the scheme, the findings proved inconclusive. <sup>21</sup>
- 3.6 Authorities across the UK are now looking to the Recyclebank model as an alternative to schemes previously tried. Recyclebank is a reward and loyalty programme originally set up in the United States in 2004. It aims to inspire individuals to engage in environmentally conscious activities. The programme has expanded quickly and now operates in over 300 communities across 29 states in America. In 2009 Recyclebank ventured into energy savings, setting up partnerships with utility companies in America and rewarding scheme members for reductions in their energy usage. Recyclebank also launched the UK arm of its programme in June 2009. The UK programme serves over 100,000 members.
- 3.7 Recyclebank acts as a loyalty scheme where points are awarded to a rewards account unique to an individual or household. The points are added each time recyclables are set out for collection. Points are based on the weight of the recyclable material put in the bins, and can be redeemed with participating local and national reward partners, or donated to selected schools through the Green Schools Programme.
- 3.8 The Royal Borough of Windsor & Maidenhead (RBWM) is the first authority to trial the scheme in England. The statistics show that the Recyclebank model can significantly improve participation and recycling capture rates. <sup>22</sup> The RBWM achieved 90+ per cent participation rates, 83 per cent capture rates for activated households and increases of 40+ per cent in the amount of dry recycled material collected. <sup>23</sup> <sup>24</sup>
- 3.9 The scheme can work well irrespective of area profile and demography. RBWM is an affluent area, while Halton Borough Council, where the second UK trial was launched, is one of the most deprived boroughs in England. Halton participation rates have

<sup>&</sup>lt;sup>21</sup> The pilot schemes were launched by Defra, following earlier research. Defra published its findings in 2006 - *Evaluation of the Household Waste Incentives Pilot Scheme*. See

http://www.defra.gov.uk/environment/waste/localauth/encourage.htm <sup>22</sup> Initial trials started with green waste in June 2009. The trial was extended in September 2009 to include a range of dry recyclables.

<sup>&</sup>lt;sup>23</sup> The 83 per cent capture rate is compared with the 65 per cent capture rate for non-activated households

<sup>&</sup>lt;sup>24</sup> Transcript of the Environment Committee meeting dated 4 November 2010

- increased 18 per cent and scheme participants recycle on average, 60 per cent more than non-participants.<sup>25</sup>
- 3.10 The RBWM is firmly committed to its Recyclebank scheme. The borough is convinced that the scheme significantly increases recycling rates and saves money on landfill and taxes. It also claims that participation in the scheme has helped inform residents of the economic value of recycling and stimulate the local economy. <sup>26</sup> This link between environmental and economic activity is central to the Recyclebank public relations campaign: it believes that environmental solutions create economic solutions. <sup>27</sup> (See the example given in Figure 2 on page 20).
- 3.11 Recyclebank also claims that the scheme can generate sustained behavioural change. Data from the two longest serving clients in the US Clayton, New Jersey and Upper Dublin, Philadelphia show that recycling performance is significantly higher than the pre-Recyclebank base line. The data also indicate that this improved level has been maintained since the implementation of the programme.<sup>28</sup>
- 3.12 During a site visit to the RBWM, members of the Environment Committee were informed by a resident that she had never recycled before but was now "a complete convert" to recycling, with up to three quarters of her waste now going in the recycling bin.<sup>29</sup>

### The compulsory approach

3.13 Under a compulsory scheme, households that fail to recycle may be penalised. Under Section 46 of the Environmental Protection Act 1990 (EPA) local authorities can require its residents to place household waste in the type and number of containers it provides. The authority has a duty to ensure that the containers are reasonably adequate and it must give notice that the resident is required to use them.

 $\frac{\text{http://www.rsaaccreditation.org/index.php?option=com\_content\&view=article\&id=173:recyclebank-best-green-pr-campaign\&catid=44:green-awards\&ltemid=70}{\text{http://www.rsaaccreditation.org/index.php?option=com\_content\&view=article\&id=173:recyclebank-best-green-pr-campaign\&catid=44:green-awards&ltemid=70}{\text{http://www.rsaaccreditation.org/index.php?option=com\_content\&view=article&id=173:recyclebank-best-green-pr-campaign&catid=44:green-awards&ltemid=70}{\text{http://www.rsaaccreditation.org/index.php?option=com\_content&view=article&id=173:recyclebank-best-green-pr-campaign&catid=44:green-awards&ltemid=70}{\text{http://www.rsaaccreditation.org/index.php}}$ 

<sup>&</sup>lt;sup>25</sup> http://www.runcornandwidnesweeklynews.co.uk/runcorn-widnes-news/runcorn-widnes-local-news/2010/08/26/halton-borough-council-launches-expanded-recyclebank-scheme-55368-27135645/

<sup>&</sup>lt;sup>26</sup> RBWM written evidence to the Environment Committee

<sup>&</sup>lt;sup>28</sup> Recyclebank written evidence to the Environment Committee

<sup>&</sup>lt;sup>29</sup> The site visit took place on 19 November 2010.

- 3.14 There are two main penalties. It is a summary criminal offence to fail to comply with the authority's requirements, with a fine payable on conviction. However, under Section 47 of the EPA, a resident may be given a fixed penalty notice by an authorised local authority officer and avoid conviction.<sup>30</sup>
- 3.15 A number of London boroughs have adopted a compulsory approach in their bid to boost recycling rates. The London Borough of Barnet implemented compulsory recycling on a trial basis in 2004 and completed a borough-wide rollout in 2005. Harrow introduced compulsory recycling in 2006. Hackney introduced a pilot scheme in 2006, extending it to the rest of the borough in 2007. Following trials in 2006, Waltham Forest introduced borough-wide compulsory recycling in 2007 to doorstep properties only. Brent introduced compulsory recycling in 2008. Both Islington and Lambeth introduced compulsory recycling on 4 April 2011.
- 3.16 Boroughs are keen to soften the apparent severity of the scheme. They work with residents through communications and outreach programmes, both before introducing a scheme and afterwards.<sup>31</sup> The London Borough of Barnet, for example, regularly monitors participation in the compulsory recycling scheme, issuing further information to residents who fail to comply with the terms of the scheme, up to three times, before considering legal action.<sup>32</sup> In Hackney, up to three warning letters are issued to residents, following non-compliance with the scheme. Up to three further follow-up visits are made after the warning letters have been issued before considering prosecution.

 $<sup>^{30}</sup>$  A fixed penalty notice can be issued under Section 47ZA (1) and (2), and 47ZB of the Environmental Protection Act 1990. See

http://www.defra.gov.uk/environment/quality/local/legislation/cnea/documents/fixedpenaltynotices.pdf

<sup>&</sup>lt;sup>31</sup> Final Report of LB Waltham Forest's Compulsory Recycling Scrutiny Panel, February 2007. See paragraphs 33 - 37 and 55.

http://www.walthamforest.gov.uk/comp-recycling.pdf

<sup>32</sup> London Borough of Barnet written evidence to the Committee

Figure 2 - Characteristics of the reward based and compulsory models of financial incentive schemes

RECYCLEBANK	COMPULSORY
<b>Concept</b> Voluntary reward based scheme which aims to change behaviour by appealing to the participants' good nature and community spirit.	Requires voluntary action but tries to achieve it by threat of penalty, ie prosecution and a fixed fine.
Communication Generates increased awareness of recycling through incentive-led messaging.  Partnership approach – demonstrates the benefits for the environment, the local authority, the participants and the reward partners  Initiates dialogue with the participants that can be maintained and developed through the course of the relationship.  Delivery  High start up costs – capital outlay required for new vehicles or vehicle modification to accommodate new technology.  Appears to work better with comingled waste collections.	Generates increased awareness of recycling through directive messaging.  Adversarial approach – the local authority sets out the required action which the participants must comply with or face penalties.  Can discourage dialogue (but dialogue will vary between authorities).  Lower start up costs, though these can vary between authorities, depending on what is already in place.  Can work equally well with a comingled or kerbside sort.
Individual impact Easy to demonstrate individual input and practical impact for eg, through support for closed loop recycling – Recyclebank used a Mark & Spencer closed loop example in their advertising campaign to demonstrate how recyclables, such as an M&S milk bottle bought in Windsor can be consumed and recycled by a RBWM resident, collected by a recycling vehicle, RecycleBank points received for recycling, carton processed at Closed Loop recycling (Dagenham) into food grade plastic then re-manufactured by M&S to produce a new milk carton for sale in M&S Windsor and bought by a customer with a RecycleBank reward voucher.	Less easy to demonstrate individual input and the impact one's action might have, (but the messaging can vary between authorities).

# 4 Evaluating the financial incentive schemes

- 4.1 There are positive aspects to both reward-based and compulsory recycling schemes. But there are also drawbacks. Using the following four key indicators we evaluate both schemes:
  - Impact on recycling rates
  - Costs
  - Public perception
  - Tackling London-specific challenges

### Impact on recycling rates

4.2 We discuss the impact the two schemes have on recycling rates in the context of three main aspects. The first aspect relates to issues with the data, the second to the desired outcome, that is, the degree to which the schemes can sustain behavioural change. The third aspect relates to unintended consequences that can come from the schemes and the extent to which they can be managed.

#### Data issues

- 4.3 Supporters of reward-based schemes such as Recyclebank argue that they can generate significantly higher returns. The increased level of returns they argue is made possible by a more persuasive approach to communicating about sustainable waste management. By highlighting the environmental and economical benefits of individual action, and emphasising the link between the two, scheme operators can persuade people to change their behaviour.
- 4.4 Existing data would appear to support the claims. Participation, capture and yield rates in the UK trials at the Royal Borough of Windsor (RBWM) and Halton Borough Council were much improved. Participation rates in the Recyclebank trials in RBWM topped 90 per cent and increased by 18 per cent in Halton. Eighty-five per cent of households that signed up to the RBWM trial went on to activate their accounts and the amount of dry recycled material that was collected went up by forty per cent.
- 4.5 But data from both the US-based and UK-run schemes are limited. The US data cover a two-year period only, from 2008 to 2010. The data show a plateau in recycling activity, but the Committee heard that this reflects the dip in the economy, causing a decrease in the weight of recyclables collected. Even in these circumstances, the Committee was told, the proportion of materials being recycled is increasing against the overall decline in the total volume of waste

collected. Further data would be needed to evaluate the trend to date. The trials in RBWM and Halton commenced in June 2009 and August 2010, respectively. Again, more detailed analyses over longer periods of time will be needed to evaluate the schemes' true impact on recycling rates.

- 4.6 In addition, modifications to existing UK data are needed. The implementation of both UK-run schemes was supported by intensive communication programmes, and in RBWM changes were made to the service provided. For example, garden waste was initially included in the RBWM pilot scheme and larger wheeled bins, capable of storing twice as much as the existing ones, were provided. However, the data do not distinguish between the impact of the scheme on recycling behaviour, and the impact that either the communication programmes and/or service changes would have had. An RBWM representative told the Committee that it was very difficult to "pin down what the precise impact of the communications strategy was in ...hard numbers."
- 4.7 Similarly, data on the compulsory model show that it has a positive impact on recycling performance. Recycling participation and capture rates increase and more recyclable materials are collected. Data from the London Borough of Barnet show that on average, recycling participation rates increased to 85 per cent, and in some areas to 95 per cent. The data also showed that the amount of recyclables collected went up by 28 per cent in the first year of the scheme. At the start of the scheme in 2005, the recycling rate in Barnet was 22 per cent; it now stands at 33 per cent. Harrow also saw an increase in recycling rates from 27 per cent to 46 per cent after introducing compulsory recycling.<sup>35</sup>
- 4.8 But again, implementation of the compulsory schemes and there are several in London was accompanied by changes to the existing waste service or intensive communication campaigns, or both.<sup>36</sup> Once again it is not possible to clearly separate out the impact of the different elements.

<sup>&</sup>lt;sup>33</sup> Wheeled bins with a capacity of 240 litres replaced 56 litre twin boxes previously in use.

<sup>&</sup>lt;sup>34</sup> Transcript of the Environment Committee meeting, 4 November 2010

<sup>&</sup>lt;sup>35</sup> DEFRA statistics http://www.defra.gov.uk/statistics/files/mwb200910a.xls See Table 3

<sup>&</sup>lt;sup>36</sup> London Boroughs of Hackney and Waltham Forest from 2006 and Brent from 2007

### Sustaining behavioural change

- 4.9 Any recycling scheme needs to be judged as much by its success in creating sustained behavioural change as in achieving short-term results. As we have seen, recycling schemes encourage behavioural change in two ways. A scheme can offer incentives to individuals to encourage them to continue to participate. Alternatively, an authority can seek to use the law to enforce participation. Whether either approach leads to sustained behavioural change is guestionable.
- 4.10 It remains uncertain whether reward-based schemes inherently lead to long-term behavioural change. Representatives from Recyclebank told the Committee that participants may need to be re-incentivised after some time.<sup>37</sup> Such evidence casts doubt on their argument that the communications approach facilitates behavioural change based on altruistic motives. <sup>38</sup> The data limitations, as discussed above, make it difficult to determine whether the Recyclebank scheme leads to long-term change.
- 4.11 Re-incentivisation may also be needed for compulsory schemes. The London boroughs of Hackney and Waltham Forest introduced compulsory recycling in 2006 when their recycling rates were 16 and 22 per cent respectively (in 2005/06).<sup>39</sup> Hackney's recycling rate has improved by eight percentage points, but the increase has been maintained at the same level over the last three years. Waltham Forest's recycling performance improved by six percentage points, but remained at comparable levels over the last four years, except for a two percentage increase during 2007/08.<sup>40</sup> Brent introduced compulsory recycling in 2007, saw a nine percentage point increase up to 2008/09 but has maintained the recycling rate at around 29 per cent for the last couple of years.<sup>41</sup>
- 4.12 The Committee questions whether the focus on re-incentivising individuals to recycle is appropriate. We suggest that it may be more appropriate to communicate with and educate residents continually to

http://www.warwickshire.gov.uk/Web/corporate/pages.nsf/Links/05AE3ABC84CD EC748025766C0043966E/\$file/Compulsory+Recycling+in+Brent.pdf

<sup>&</sup>lt;sup>37</sup> Recyclebank; Transcript of Environment Committee dated 4 November 2010

<sup>&</sup>lt;sup>38</sup> The question of motive was highlighted in the London Borough of Hillingdon's written evidence to the Environment Committee

<sup>&</sup>lt;sup>39</sup> See http://www.mrw.co.uk/home/hackney-introduces-compulsory-recycling/3001666.article and

http://www.localgov.co.uk/index.cfm?method=news.detail&id=41577

<sup>&</sup>lt;sup>40</sup> Capital waste facts http://www.capitalwastefacts.com/

<sup>&</sup>lt;sup>41</sup> See

maintain the interest in managing waste more sustainably. We were told by a representative from Recyclebank that, "you cannot separate the communications that we are doing around the incentive scheme from the incentives themselves." We were also told that one of the additional benefits of the scheme is that it provides the opportunity for "more fluid communication... with the resident."<sup>42</sup>

- 4.13 The uncertainties around the legal process of the compulsory model complicate the situation further. No one has as yet been fined under the compulsory model and the process of prosecution remains untested. There are doubts that the legal framework is sufficiently robust to support enforcement.
- 4.14 Section 46 of the Environmental Protection Act 1990 sets out the legal basis for compulsory recycling schemes. Subsection (1) allows the authority to specify the type and number of containers it is providing for waste collection and to further specify the type of waste to be placed in each of them. Thus the legal premise the authority can draw on is that the materials it nominates for recycling must not be placed in the residual waste bin.<sup>43</sup>
- 4.15 But enforcing the compulsory approach will be a challenge. The legislation was designed to provide an enforcement tool to deal with side waste, and waste being put out incorrectly or at the wrong time. 44 It was not designed to enforce compulsory recycling schemes. 45 So the question remains as to whether an authority can enforce the requirement (not to put certain materials in the residual waste bin) and if so, what precise process it would need to follow to bring about a successful prosecution.

### Managing unintended consequences

4.16 Whether a reward-based or compulsory model is adopted, waste financial incentive schemes can have unintended outcomes. Boroughs need to consider carefully how they might manage the schemes.

<sup>&</sup>lt;sup>42</sup> Transcript of the Environment Committee meeting, 4 November 2010

<sup>&</sup>lt;sup>43</sup> Section 46(4) Environmental Protection Act 1990. In house legal opinion to London Borough of Waltham Forest Compulsory Recycling Scrutiny Panel supports this interpretation of the section.

<sup>&</sup>lt;sup>44</sup> Side waste is household refuse presented outside of a standard wheelie bin.

<sup>&</sup>lt;sup>45</sup> See guidance issued from the Department for Environment Food and Rural Affairs issued in August 2005

- 4.17 Stakeholders raised two main concerns about a weight-based reward scheme, such as the Recyclebank model trialled in the RBWM and Halton. The first concern is that they may encourage consumerism, in turn producing more waste. The more a scheme participant recycles, the more reward points they receive. The points are converted to shopping vouchers. It has been suggested that participants may be encouraged to shop more to redeem their vouchers, or that they may buy more goods to generate more waste so that they can boost their points. There are alleged cases where individuals may have deliberately generated more waste to boost their points and maximise their rewards. However, Recyclebank has stated that there are procedures in place to prevent this type of abuse. If any mixed messages do occur, this could counteract any waste prevention messages local authorities may also be promoting.
- 4.18 The second concern is that the scheme model may be susceptible to increased contamination rates. <sup>49</sup> In their enthusiasm to increase the number of points collected, people may be tempted to set out items for recycling that cannot be recycled locally; this could be tackled by targeted communications. <sup>50</sup>

### Costs

4.19 It is clear from the evidence the Committee received that the Recyclebank weight-based scheme is considerably more expensive to implement than the compulsory scheme; it demands high capital and revenue investment. By contrast, far less capital and revenue costs may be involved when setting up a compulsory scheme, depending on what infrastructure is already in place.

<sup>46</sup> Written evidence to the Environment Committee from Wastewatch, the Chartered Institution of Waste Management, East London Waste Authority.

<sup>&</sup>lt;sup>47</sup> East London Waste Authority, written evidence to the Environment Committee: refers to a recycling incentive scheme operated by Tesco. According to anecdotal reports, customers learned that cutting up their waste generated greater rewards. Thus the scheme paid out more rewards than were necessary.

<sup>&</sup>lt;sup>48</sup> Wastewatch written evidence to the Environment Committee.

<sup>&</sup>lt;sup>49</sup> Written evidence to the Environment Committee from Wastewatch, the Chartered Institution of Waste Management, Hammersmith and Fulham.

<sup>&</sup>lt;sup>50</sup> An independent waste composition analysis commissioned by the Royal Borough of Windsor and Maidenhead, following the pilot scheme confirmed that contamination levels had reduced and the quality of the recyclate had increased. For further information see http://www.eastmidlandsiep.gov.uk/uploads/Waste-%20Becky%20/Incentives,%20rewards%20and%20behavioural%20change-20Royal%20Bororugh%20of%20Windsor%20and%20Maidenhead\_1.pdf

- 4.20 The Recyclebank model requires capital investment. New equipment and technology is needed to monitor recycling activity, and to calculate the points to be awarded. New bins, bin lifts, on-board scanning equipment and weigh cells need to be purchased. The RBWM spent £1.2 million replacing wheelie bins and £350,000 on retrofitting their fleet with the lifting and scanning equipment. The retrofit for each vehicle cost £36,000. The RBWM project that the costs for the bins will be amortised over eight years, and over 10 years for the retrofitted equipment.
- 4.21 It should be noted that a rise in prices for recyclable materials is likely to increase the financial viability of the reward-based model.
- 4.22 Revenue investment typically covers publicity and subscription costs. The Committee did not receive any detailed information on publicity costs from RBWM or Recyclebank. But some detail was provided on subscription costs, which are based on one of two models. The RBWM opted for the first of the two models set out below:
  - A flat subscription fee levied per household, irrespective of whether the account is activated. This is also subject to a performance-based sliding scale should the percentage of weight collected above a stated threshold be exceeded.
  - A percentage of the landfill diversion savings.
- 4.23 The RBWM has managed to reach a position where the scheme implementation costs have been neutralised when offset against the net increase in the weight of recycling materials. The RBWM target figure was a 25 per cent increase in the weight of recycled materials against an established baseline. The weight increase is currently in excess of 40 per cent. <sup>51</sup>
- 4.24 A similar target would be challenging for London boroughs where street-level properties already have high participation rates.<sup>52</sup> A number of boroughs are already achieving high recycling rates without the use of incentive schemes. Six London boroughs are achieving

26

<sup>&</sup>lt;sup>51</sup> Transcript of the Environment Committee, 4 November 2010

<sup>&</sup>lt;sup>52</sup> London Borough of Hammersmith & Fulham written evidence to the Environment Committee

- recycling rates above the national average rate of 39 per cent; more than half are achieving in excess of 30 per cent. 53
- 4.25 Compulsory schemes, in contrast to reward-based schemes, would appear to delivered at lower costs, if sufficient recycling infrastructure is already in place. The London Borough of Barnet's communications strategy for implementing compulsory recycling cost approximately 70 pence per household.<sup>54</sup>

### **Public perception**

- 4.26 There is no obvious public preference for either of the two schemes. The statistics from the UK-based Recyclebank schemes seem to put public support squarely with the reward-based approach. But other research uncovers a more varied response.
- 4.27 Fifty-three per cent of London households surveyed in 2005 were in favour of compulsory recycling. The research, commissioned by the GLA, surveyed 1,005 London households about their attitudes and behaviour to waste and recycling. 55 Attitudes to incentives and charging were also explored.
- 4.28 In-depth analysis of the survey responses showed that support for compulsion is strongest amongst those who are
  - already recycling consistently;
  - aged between 25 and 54;
  - from middle income households;
  - using a kerbside collection service; and
  - long-term residents in houses.
- 4.29 Support was weakest amongst older households, black households, those in low-rise flats and social rented accommodation, and households without kerbside collection. Non-recyclers were mostly

<sup>53</sup> Defra statistics http://www.defra.gov.uk/statistics/files/mwb200910a.xls See Table 3

<sup>&</sup>lt;sup>54</sup> Transcript of the Environment Committee, 4 November 2010

<sup>&</sup>lt;sup>55</sup> The research was commissioned in partnership with London Waste Action and the Government Office for London.

- opposed to compulsion by a large margin, while low recyclers were only just positive. 56
- 4.30 Anecdotal evidence we received suggests a preference for community-focused schemes. The analysis showed that community-based schemes which rewarded individuals performed relatively poorly. But the performance was much better in schemes which focused on rewarding communities.<sup>57</sup>

### Tackling London-specific challenges

- 4.31 To be fully effective in London, reward-based schemes will need to address three main challenges:
  - infrastructure complexities, particularly on estates,
  - managing communications so that the messaging is tailored and consistent; and
  - access and equalities issues.
- 4.32 The first two challenges noted above are also likely to be relevant to compulsory schemes.

### Infrastructure challenges

- 4.33 Probably the largest single challenge for boroughs is overcoming the infrastructure challenges presented by flats and estates across London. Boroughs will need to learn how to work with the existing housing limitations; they will have to be able to identify cost effective improvements to help drive up recycling participation and capture rates.
- 4.34 Around half of London's housing stock is made up of flats, a large number of them on estates and in multi-occupancy buildings.

  Improving recycling rates from flats and estates (currently around 10 per cent) is essential if London is to achieve the recycling and composting target set in the Mayor's draft Municipal Waste Management Strategy.
- 4.35 Boroughs have tried a range of schemes to improve recycling performance in flats and on estates, but have had to withdraw them.

 $<sup>^{56}</sup>$  Information and phrasing taken from the survey report, Household Waste Behaviour in London 2005

<sup>&</sup>lt;sup>57</sup> Comment from GLA officer, Transcript of the Environment Committee 4 November 2010

The reasons why the schemes failed vary, and include the high costs associated with implementing them, logistical challenges, and low participation. The Mayor's draft strategy identifies a number of common barriers, including lack of space for recycling storage and difficulty in transporting materials to a collection point.<sup>58</sup>

- 4.36 Financial support from the London Waste and Recycling Board (LWARB) will undoubtedly go some way to meeting the infrastructure challenges. LWARB was established in 2007 to provide a strategic overview on waste management in London. It has put aside £5 million to fund a programme of infrastructure improvements for London's flats and estates. 59 60 In June 2010, £1.3 million was invested in a first round of funding for flats recycling in 12 boroughs. 61 These included distributing reusable bags to enable residents to easily transport their recycling to communal bins, recycling containers on each floor of blocks of flats and the conversion of waste chutes into recycling chutes, making it easier to recycle from top-floor properties. A second round of funding totalling £3.7 million was awarded in March 2011. Eighteen boroughs benefited from this round of funding. 62 LWARB has supported 30 London boroughs from the fund, to improve recycling rates in flats and on estates.
- 4.37 The modified community-based model that Recylebank operates, called iRecycled, may also provide a way forward. The scheme is based on self-reporting and works by allocating reward points that equate to an equal share of the total amount recycled in the area. Once residents tell Recyclebank they have recycled, the area total is worked out and points are deposited into the Recyclebank account of each participating household. 63 The RBWM rolled out a new phase of

<sup>58</sup> London's Wasted Resource, The Mayor's draft Municipal Waste Management Strategy, October 2010

<sup>&</sup>lt;sup>59</sup> London's Wasted Resource, The Mayor's draft Municipal Waste Management Strategy, October 2010

<sup>&</sup>lt;sup>60</sup> Established by the GLA Act 2007, LWARB was set up 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 in London. See

http://www.lwarb.gov.uk/ for further information

<sup>&</sup>lt;sup>61</sup> Havering (in partnership with Barking & Dagenham, Newham, and Redbridge), Waltham Forest, Croydon, Hillingdon, Lambeth, Hammersmith & Fulham, Camden, Westminster and Hackney.

<sup>&</sup>lt;sup>62</sup> Tower Hamlets, Lambeth, Brent, Hounslow, Hackney, Richmond, Westminster, Merton, Islington, Lewisham, Wandsworth, Southwark, Ealing, Bromley, Bexley, Enfield, Harrow and Croydon

<sup>63</sup> http://www.rbwm.gov.uk/web/wm\_recyclebank.htm

- its Recyclebank scheme focusing on rewarding communities for recycling, in December 2010. Flats and multi-occupancy properties in the borough are included.
- 4.38 Lambeth is the first London borough to pilot iRecycled, launching the scheme in May 2011. 64 Both the RBWM and Lambeth schemes should present options for tackling London-specific challenges, particularly the challenge to improve recycling in flats and estates.

4.39 Constant and consistent messaging is essential to the success of an incentive scheme, particularly in flats and on estates. Low participation was one of the reasons why boroughs withdrew incentive schemes in these types of properties. Communication will need to be tailored to reach a diverse and guite often transient population. Boroughs with high levels of transiency may have to invest more resources.

### Making the schemes accessible

- 4.40 One stakeholder was concerned about the potential for the Recyclebank model to exclude households which might want to participate in the scheme but do not have online access. 65 Participants are required to register and receive communication online. 66 Twentysix per cent of households in London do not have online access. 67
- 4.41 The stakeholder also expressed concern that people who move home frequently may also find themselves excluded from the scheme.<sup>68</sup> Recyclebank has confirmed that when members move home they have up to a year to redeem their points. Recyclebank is also introducing new 'earn opportunities' for other environmental actions. So members living anywhere in the UK and actively participating in the Recyclebank programme in any of the 'earn opportunities' can continue to save and redeem their points at any time, provided of course the schemes are operated locally. This scenario also highlights a potential political issue of borough-wide schemes where some reward residents for recycling and others not.

<sup>&</sup>lt;sup>64</sup> The scheme was launched on 16 May 2011 and covers all households with shared

recycling arrangements across the borough <sup>65</sup> East London Waste Authority written evidence to the Environment Committee 66 Recyclebank have confirmed that Members can also participate by phone. Participants have access to a UK Based call centre to report recycling, order rewards, check account balances and report any issues.

<sup>&</sup>lt;sup>67</sup> In Q1 2010, 74 per cent of all London households had internet access, Ofcom <sup>68</sup> East London Waste Authority written evidence to the Environment Committee.

## 5 Concluding comments

- 5.1 Recycling is integral to any programme of sustainable waste management, and to diverting waste from landfill.
- 5.2 Recycling is a concept readily understood by householders. It is relatively straightforward and arguably the most visible way an individual can engage in managing their waste more sustainably. It also provides a tangible expression of responsibility, and of contributing to a better environment at an individual level.
- 5.3 Recycling also provides a platform from which to engage individuals in other methods of sustainable waste management.
- 5.4 The evidence shows that compulsory and reward-based schemes have helped to boost recycling rates. But the schemes were introduced alongside service changes and a detailed communications strategy so it is hard to untangle the impact of the component parts. This limitation in data analyses, along with time restrictions on available data for reward-based schemes makes it difficult to understand the true impact of the schemes on recycling performance and behavioural attitudes. We would wish to see the development of a more comprehensive evidence base over the next few years to help determine the degree to which incentive schemes lead to behavioural change over the long term.
- 5.5 What remains unsubstantiated is the belief that either type of scheme on its own can bring about a long-term change in attitudes and behaviour, towards recycling and/or other sustainable methods of managing waste. The increase in recycling rates following the introduction of the Recyclebank scheme could plateau and further incentivisation may be needed.
- 5.6 The Committee questions whether the focus on re-incentivising individuals to recycle is appropriate. From the evidence we received, we conclude that it may be more appropriate to provide continuous education and communication to residents. This can help with maintaining momentum and individual interest in recycling and other forms of sustainable waste management, the ultimate aim being to minimise waste. In the longer term we would wish to see further investigation into how individuals might be incentivised to reduce the amount of waste they produce.

- 5.7 There are cost and legal limitations to the Recyclebank and compulsory models respectively. Recyclebank involves sizeable capital outlay and considerable revenue costs. The uncertainties of enforcing the compulsory model within existing legislation may to some extent undermine the scheme's validity.
- 5.8 There are London-specific issues that need to be addressed around housing stock, equality of access to the schemes and capturing the large transient population. Looking forward, we would wish to see further investigation into the use of either borough-wide or London-wide reward cards to reward residents for sustainable waste management. This approach could be based on a similar concept to existing schemes such as the Nectar reward scheme or Tesco Club card, allowing residents to benefit from a range of community-based activities, for example, reduced entrance fees to leisure centres.

# Appendix 1 Recycling and landfill rates by borough 2009/10

Authority	Authority type	Recycling or Composting	Landfill
Bexley LB	Unitary	50.70	47.34
Royal Borough of Kingston upon Thames	Unitary	46.16	44.74
Harrow LB	Collection	46.09	N/A
Richmond upon Thames LB	Collection	43.01	N/A
Hillingdon LB	Collection	40.90	N/A
Bromley LB	Unitary	40.20	38.07
West London Waste Authority	Disposal	38.10	62.42
Ealing LB	Collection	37.55	N/A
Sutton LB	Unitary	37.51	60.04
Greenwich LB	Unitary	35.42	10.07
City of London	Unitary	35.19	77.35
Havering LB	Collection	34.35	N/A
Merton LB	Unitary	33.62	63.87
Hounslow LB	Collection	33.19	N/A
Barnet LB	Collection	33.07	N/A
Barking and Dagenham LB	Collection	32.75	N/A
Croydon LB	Unitary	32.24	65.78
Redbridge LB	Collection	31.58	N/A
Enfield LB	Collection	31.07	N/A
Royal Borough of Kensington and Chelsea	Collection	30.65	N/A
Camden LB	Collection	29.75	N/A
Islington LB	Collection	29.06	N/A
North London Waste Authority	Disposal	28.85	40.59
East London Waste Authority	Disposal	28.82	44.34
Brent LB	Collection	28.69	N/A
Waltham Forest LB	Collection	27.92	N/A
Hammersmith and Fulham LB	Collection	27.24	N/A
Lambeth LB	Collection	27.15	N/A
Western Riverside Waste Authority	Disposal	26.76	77.75
Tower Hamlets LB	Unitary	26.39	62.78
Haringey LB	Collection	25.12	N/A
Wandsworth LB	Collection	24.99	N/A
Hackney LB	Collection	24.32	N/A
Westminster City Council	Unitary	24.08	16.55
Southwark LB	Unitary	22.13	45.70
Newham LB	Collection	18.80	N/A
Lewisham LB	Unitary	16.85	10.87

## Appendix 2 Section 46, Environmental Protection Act 1990

The Environmental Protection Act 1990 defines the fundamental structure and authority for waste management and control of emissions into the environment.

### Section 46

46 (1) "the authority may, by notice served on him, require the occupier to place the waste for collection in receptacles of a kind and number specified"

46 (4) "In making requirements as respects receptacles under subsection (1) above the authority may, by notice under that subsection, make provision with respect to –

(d) the substances or articles which may or may not be put into the receptacles or compartments of receptacles of any description and the precautions to be taken where particular substances or articles are put into them"

46 (6) "Any person who fails without reasonable excuse, to comply with any requirements imposed under subsection (1), (3)(c) or (d) or (4) above shall be liable on summary conviction to a find not exceeding level 3 on the standard scale."

## **Appendix 3 Key findings**

There are positive aspects to both types of schemes. Recycling rates have improved quite dramatically in boroughs where they have been introduced. But there are also drawbacks.

The high costs associated with implementing and running the Recyclebank scheme can be off-putting.

Incentivising to recycle can encourage consumerism, and drive individuals to generate more waste to boost points and maximise their rewards. Awarding shopping vouchers as rewards for recycling can send messages counteracting any waste prevention messages local authorities may also be promoting.

The schemes may be susceptible to increased contamination rates: people could be tempted to set out items for recycling that cannot be recycled locally, either in their in a bid to gain rewards or to avoid financial penalty.

A more comprehensive evidence base needs to be developed to properly determine the impact of incentive schemes over the long term. The Committee is concerned that there is no evidence to support the hypothesis that schemes incentivising people to recycle can change attitudes or behaviour in the long term.

Incentive schemes need to be specifically designed to address London-specific challenges around housing stock, transient populations and equality access issues.

A real emphasis on communications will be needed. Effectively communicating the value of recycling and the need to manage waste sustainably will be key to the success of the schemes. The messaging will need to be consistent, continuous and targeted.

# **Appendix 4 Orders and translations**

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#### Vietnamese

Nếu ông (bà) muốn nội dung văn bản này được dịch sang tiếng Việt, xin vui lòng liên hệ với chúng tôi bằng điện thoại, thư hoặc thư điện tử theo địa chỉ ở trên.

#### Greek

Εάν επιθυμείτε περίληψη αυτού του κειμένου στην γλώσσα σας, παρακαλώ καλέστε τον αριθμό ή επικοινωνήστε μαζί μας στην ανωτέρω ταχυδρομική ή την ηλεκτρονική διεύθυνση.

#### Turkish

Bu belgenin kendi dilinize çevrilmiş bir özetini okumak isterseniz, lütfen yukarıdaki telefon numarasını arayın, veya posta ya da e-posta adresi aracılığıyla bizimle temasa geçin.

### Punjabi

ਜੇ ਤੁਸੀਂ ਇਸ ਦਸਤਾਵੇਜ਼ ਦਾ ਸੰਖੇਪ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਲੈਣਾ ਚਾਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਉਪਰ ਦਿੱਤੇ ਡਾਕ ਜਾਂ ਈਮੇਲ ਪਤੇ 'ਤੇ ਸਾਨੂੰ ਸੰਪਰਕ ਕਰੋ।

#### Hindi

यदि आपको इस दस्तावेज का सारांश अपनी भाषा में चाहिए तो उपर दिये हुए नंबर पर फोन करें या उपर दिये गये डाक पते या ई मेल पते पर हम से संपर्क करें।

#### Bengali

আপনি যদি এই দলিলের একটা সারাংশ নিজের ভাষায় পেতে চান, তাহলে দয়া করে ফো করবেন অথবা উল্লেখিত ডাক ঠিকানায় বা ই-মেইল ঠিকানায় আমাদের সাথে যোগাযোগ করবেন।

### Urdu

اگر آپ کو اس دستاویز کا خلاصہ اپنی زبان میں در کار ہو تو، براہ کرم نمبر پر فون کریں یا مذکورہ بالا ڈاک کے پتے یا ای میل پتے پر ہم سے رابطہ کریں۔

### Arabic

الحصول على ملخص ل ذا المستند ببل غتك، فسرجاء الانتصال ببرقم الدائف أو الانتصال على العنوان العبريدي العادي أو عنوان العبريد الإلكتروني أعلاد.

### Gujarati

જો તમારે આ દસ્તાવેજનો સાર તમારી ભાષામાં જોઈતો હોય તો ઉપર આપેલ નંભર પર ફોન કરો અથવા ઉપર આપેલ ૮પાલ અથવા ઈ-મેઈલ સરનામા પર અમારો સંપર્ક કરો.

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