

Report of Director of Environment and Neighbourhoods

Report to Executive Board

Date: 14th December 2011

Subject: Recycling Strategy

| | | |
|--|------------------------------|-----------------------------|
| Are specific electoral Wards affected? If relevant, name(s) of Ward(s): | X Yes | <input type="checkbox"/> No |
| Are there implications for equality and diversity and cohesion and integration? | X Yes | <input type="checkbox"/> No |
| Is the decision eligible for Call-In? | X Yes | <input type="checkbox"/> No |
| Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number: | <input type="checkbox"/> Yes | X No |

Summary of main issues

1. This report seeks Executive Board approval to the next phase of implementation of the Council's recycling collection strategy.
2. The report provides an update on progress against the recycling strategy agreed in 2007.
3. Based on current performance and the proposed future strategy, the report proposes a new, increased household waste recycling target of 55% by 2016, and a long-term target to exceed 60%.
4. The report sets out details of service improvements to be implemented during 2012/13 in order to ensure continued progress.
5. The report sets out a strategy for a range of medium to long-term improvements to kerbside recycling collections, including a pilot of fortnightly recycling and residual waste collections in 2012/13, and the roll-out of food waste collections to suitable properties city-wide, with the speed of roll-out in line with resource availability.
6. The report proposes a commitment to undertake technical options appraisal work to assess the potential for bringing forward an anaerobic digestion solution for Leeds.
7. Finally, the report provides an overview of the resources, planning and communications required in order to ensure an effective and seamless implementation of what represents a programme of radical changes to kerbside waste and recycling collections.

Recommendations

- a) Note the contents of this report and reaffirm the vision and key principles of the Integrated Waste Strategy for Leeds;
- b) Approve the proposed increases to the Council's household waste recycling target to 55% by 2016, with a long-term target to exceed 60%;
- c) Approve the proposed expansion of the Rothwell recycling collection service by up to 6,000 properties in 2012/13, including an injection into the Capital Programme of £27k for the purchase of food waste bins, and give authority to spend this amount;
- d) Approve the proposal to implement a pilot of fortnightly collections of recycling and residual waste during 2012/13;
- e) Reaffirm the aim to roll-out of food waste collections to suitable properties city-wide, with the speed of roll-out in line with resource availability;
- f) Note the need to procure a treatment solution for food waste alongside the city-wide roll-out of food waste collections, and the intention to undertake a technical options appraisal with a view to promoting the delivery of an anaerobic digestion solution for Leeds should this represent the best VfM and environmental option;
- g) Note officers' intention to seek further Member approvals regarding specific collection service roll-out plans.

1 Purpose of this report

1.1 The purpose of this report is to secure Executive Board approval to the principles to be adopted for the next phase of implementation of the Council's recycling collection strategy. The report considers the following:

- a) Progress against the existing recycling strategy;
- b) The extent to which current, planned initiatives will contribute towards recycling performance;
- c) The Council's medium and long-term targets for recycling;
- d) The strategy to enable the Council to move towards achievement of its medium-term and longer-term targets.

2 Background Information

2.1 Current approved strategy

2.1.1 The Integrated Waste Strategy for Leeds sets a vision of *"a zero waste city, whereby we reduce, re-use, recycle and recover value from all waste, waste*

becomes a resource and no waste is sent to landfill". 'Zero waste' is not an absolute figure, but a target to strive for that encourages new levels of innovation and efficiency. It sees waste as a resource to be exploited through re-use, recycling and recovering value. The vision is supported by the three key principles of:

- Developing and promoting sustainable waste management;
- Working in partnership with communities, businesses and other stakeholders to deliver sustainable waste management;
- Ensuring that the strategy remains realistic and responsive to future changes.

2.1.2 In September 2007, Executive Board approved updates to the Integrated Waste Strategy for Leeds 2005-35 to address the statutory recycling targets set out within DEFRA's Waste Strategy for England 2007 and to reflect the Council's commitment to achieving a combined recycling and composting rate in excess of 50% of household waste. The Council's relevant key Waste Strategy targets are as follows:

- To achieve a combined recycling and composting rate of greater than 50% of household waste by 2020;
- To recover value from 90% of all household waste by 2020.

2.1.3 Since setting this recycling target in 2007, the Council has made excellent progress, with current performance for 2011/12 at 40% as compared to 22.3% in 2006/7.

2.1.4 A benchmarking exercise with other local authorities, involving a number of the Core Cities and the West and South Yorkshire authorities, has been completed by the Waste Strategy and Policy team during October 2011 to inform the proposed strategy and to validate assumptions about collection systems, public acceptance, impacts on performance and costs associated with the various initiatives. Appendix A summarises the performance and collection strategies for these authorities.

2.1.5 In terms of performance, Leeds' overall recycling rate for 2010/11 of 34.7% compares favourably against most of the Core Cities, but lags behind some of the other Yorkshire authorities. Whilst there are similarities in the way collection services are offered by the various authorities, it is, however, important to consider on an individual basis what the components of the services are that contribute to the overall performance.

3 Main Issues

3.1 Introduction

3.1.1 Before moving on to the recycling strategy, it is first important to note that Waste minimisation and re-use, and working in partnership with Third Sector Organisations (TSOs), are key priorities within the Council's Integrated Waste Strategy for Leeds. Waste minimisation and re-use are highest in the Waste

Hierarchy and the Council's recycling strategy will always be in the context of its programme of work in these areas. The Council has implemented and continues to develop waste minimisation initiatives that are designed to encourage householders and businesses to consider how they manage their waste, and has invested substantially in this area. This has most recently included the development of a dedicated 're-use shop' at the East Leeds Household Waste Sorting Site, including the appointment of a voluntary sector tenant to operate this new facility. Overall, there has been a reduction in household waste generation in Leeds in recent years.

- 3.1.2 Based on the national picture in relation to recycling performance, the Council's current recycling rate of 40%, and the expectation that it will achieve its current targets earlier than anticipated, it is now timely to review the existing targets agreed in 2007, and to consider the longer-term aspiration for Leeds in respect of recycling.
- 3.1.3 In order to move forward towards the achievement of these longer-term recycling targets, the principles and approach for the next phase of the implementation of the recycling collection strategy now needs to be agreed.

3.2 Approved 2012/13 recycling initiatives

Extending garden waste collections

- 3.2.1 Over 207,000 dwellings across Leeds are now on a garden waste collection route, with collections provided on a fortnightly basis except from the end of November to the end of February due to the low yield of material during these months. This service has been highly successful, contributing 9.5% (i.e. percentage points) to the overall household waste recycling rate for Leeds in 2010/11.
- 3.2.2 It is estimated that another 28,000 properties may be suitable for a collection, enabling the capture of a further estimated 3,700 tonnes in a full year, and it has been agreed that this will be rolled out during 2012/13 as a part of the continuous improvement of recycling collections services. Based on its expected contribution to city-wide recycling performance of 1.4% (full year effect), it is recommended that this service improvement be prioritised over other potential roll-outs for 2012/13. The additional cost of the completion of the garden waste collection roll-out is estimated at around £100k for additional collections and this is provided for in the draft 2012/13 budget strategy. Disposal savings of around £130k will offset these additional collection costs.

Household Waste Sorting Sites (HWSSs)

- 3.2.3 Leeds currently operates nine HWSSs city-wide. The sites handle around 70,000 tonnes of waste per annum, of which just under 60% was recycled in 2010/11. This contributed just under 10% (i.e. percentage points) to the total recycling performance for the City, and the HWSSs therefore represent a key element of the Council's household waste recycling provision.

- 3.2.4 The sites are well distributed across the City and within a maximum twenty minute drive time for all householders. Eight of the nine sites have been significantly redeveloped to include easy access arrangements, split level reception bays, recycling opportunities for a wide range of materials, WRAP's national iconic signage, new staff amenity facilities and information points for customers.
- 3.2.5 Following the final closure of Gamblethorpe HWSS in August 2011 due to the expiry of planning permission, a joint working arrangement with Wakefield Council commenced to allow residents in the south east area of the City access to their Castleford site. This ensures that the maximum drive time of twenty minutes to a site is maintained for all residents.
- 3.2.6 Kirkstall Road HWSS is the only remaining site requiring modernisation, and a full design and cost report with business case will be brought to Executive Board for approval during 2012/13 in order to address this issue.
- 3.2.7 In addition, following the recent restructuring of the Waste Management operational service and implementation of extended opening hours from 1st November 2011, a target to reach an average 70% recycling performance across all sites has been set. Achieving this will add an estimated 1.2% to the overall recycling rate based on a full year effect.

Recycling from residual waste

- 3.2.8 In December 2010, the Council established a new, innovative framework contract for residual waste (and a range of other waste and recycling streams). One of the contractors currently allocated tonnages via the framework provides an element of recycling of residual waste, and this now makes an important contribution to the Council's recycling performance.
- 3.2.9 As regards the longer-term, the Council has now appointed a Preferred Bidder for the Residual Waste Treatment PFI contract whose facility will extract a minimum of 10% of the material that it processes for recycling. The facility is due to commence full operations in 2016, and this will ensure that, even after the implementation of the proposed, comprehensive recycling strategy, there is further capture of material for recycling from the residual waste.

3.3 Future service development opportunities

Recycling Improvement Plan – equality of access to recycling

- 3.3.1 Collections of mixed dry recyclables consisting primarily of paper, card, plastics and cans (known as SORT) are currently offered to over 95% of properties in Leeds.
- 3.3.2 The Recycling Improvement Plan, agreed in December 2009, was initiated in order to provide a systematic approach to addressing the issue of equality of access to recycling across the city. The Recycling Improvement Plan focuses in particular on survey and consultation work around city centre high rise, multi-occupancy and hard to reach communities with a view to tailoring services so as

to ensure that all residents in Leeds have access to recycling, whether that be a full suite of kerbside collections and recyclable materials or specialised communal reception points.

- 3.3.3 Since the start of this process, approximately 15,000 additional households now have access to kerbside recycling collections. Work will continue during 2012/13 to identify and close out any remaining gaps in terms of households without access to recycling.

Increasing the range of SORT materials collected

- 3.3.4 The Waste Strategy and Policy team has completed a market sounding of Materials Recycling Facility (MRF) operators during October 2011. The contents of the green (or SORT) bins are currently sent to a MRF in Beeston for separation back into the individual material streams prior to being transported to the reprocessors for recycling.
- 3.3.5 Feedback from MRF operators (and also indications from the reprocessors and successful schemes operated by other local authorities) has demonstrated the potential viability of co-mingling a greater range of dry recyclables in the SORT bins. These materials could potentially include glass, mixed plastics, textiles and tetrapaks. Inclusion of additional materials in the SORT bins would necessitate the increased capacity offered by fortnightly SORT collections, but would also alleviate pressure on residual waste bin capacity for residents.
- 3.3.6 Glass is of particular interest due to the proportion of the residual waste that it represents. The majority of glass recycled by Leeds is currently collected through a network of over 440 'bring bank' sites, some of which also have collection facilities for a wide range of other materials. In 2010/11, bring banks captured around 8,000 tonnes of glass, including banks located at household waste sorting sites (HWSSs). This contributed approximately 2.8% (i.e. percentage points) to the overall recycling rate for the City.
- 3.3.7 A small, but increasing number of multi-occupancy properties receive communal glass collections. Suitable properties receiving the mixed dry recyclables communal collections have been provided with separate glass bins which are collected on a weekly basis. In 2010/11, 650 tonnes of glass were captured by this service.
- 3.3.8 A report prepared for Leeds using support from WRAP ROTATE in 2011 supported the Council's current bring bank strategy, but highlighted the potential to expand kerbside collections into some areas where glass capture is particularly low. Low capture could be attributable to a number of factors such as failure to recognise certain types of glass packaging as suitable for bring banks, and socio-demographic factors, including the need to rationalise or increase bank sites in certain areas.
- 3.3.9 Compositional analysis of residual waste in Leeds undertaken between 2005 and 2009 indicates that there could be fairly significant tonnages of glass not being recycled. This is reinforced by the fact that the aforementioned report highlighted

Leeds' overall glass recycling performance as being some 4kgs below the national average at 17kg per head.

- 3.3.10 The costs of introducing a further separate collection of glass at the kerbside would obviously be high, and this is not considered to be value for money. However, its inclusion within the SORT bins represents a potential option to minimise the cost of capturing this material using existing infrastructure.
- 3.3.11 Whereas historically the co-mingling of glass was seen as negatively affecting the quality of the higher value materials such as paper, there are indications of growing acceptance of this practice from MRF operators and reprocessors. However, it should also be noted that by far the best environmental option for glass in terms of avoided carbon emissions, and therefore the Council's preference, is that it is reprocessed through re-melt rather than being used as aggregate, and the lower quality of materials recovered as a result of co-mingling rather than source-separating glass could potentially reduce the viability of this option. Market sounding responses were mixed in terms of contractors' indications of their ability to capture glass suitable for re-melt, although some contractors did claim a high proportion. It was also noted that the initial mechanical 'bag-splitting' phase of the MRF process, prior to material separation, may be a critical factor in dictating the ability to capture glass suitable for re-melt rather than for use as aggregate.
- 3.3.12 The Council's existing MRF contractor has shown willingness to consider a trial of glass in the SORT bins, and with this contract due to expire in May 2013, the Council could re-procure on the basis of the inclusion of this material provided that it could satisfy itself that the market would come forward with appropriate technical solutions, and that this would not result in a significant increase in MRF gate fee. Indications from the market sounding have been positive, however, further, more detailed analysis of the potential cost implications and procurement methodology is now required in order to determine the strategy.
- 3.3.13 Textiles are currently collected by the Council at a range of bring bank sites and at HWSSs. The textiles are donated to charities, with the majority going to support Yorkshire Air Ambulance. Given that textiles represent a relatively small proportion of the residual waste stream, and given the wide range of alternative options available to the public from the voluntary sector for re-use and recycling of textiles, it is recommended that the Council focus on promoting and supporting these sectors. WRAP are keen to understand better the optimum strategy for capturing textiles and have asked Leeds to participate in a project to look at all the options including a recovery bag system which could be utilised in the existing SORT collection, and how best to support the existing door-to-door and charity shop opportunities for textile re-use and recycling.
- 3.3.14 The inclusion of mixed plastics and tetrapaks in the SORT bins would make material separation simpler for the public and is likely to be well received, provided that this would be acceptable to MRF operators. However, this represents a relatively small proportion of the waste stream by weight and would therefore be unlikely to make a significant impact in terms of recycling performance. This option, similar to glass, should be further assessed in terms of

cost implications and in discussions with the market regarding its long-term sustainability.

3.3.15 As part of developing the MRF re-procurement strategy, officers also intend to consult on the extent to which environmental factors (e.g. carbon emissions) should be weighted within major, strategic waste related procurements of this kind.

Fortnightly SORT collections

3.3.16 As public participation in recycling increases, the Council is coming under increasing pressure to increase the frequency of SORT collections from the existing standard four weekly collection. However, to increase SORT collections city-wide to fortnightly, whilst expected to produce an increase in materials capture of around 35% compared to the standard service based on the experience of the pilot area in north-west Leeds (see Table 1 below), would cost the Council an estimated net £1.4m per annum (collection costs of £2.1m partially offset by £0.7m in disposal savings).

3.3.17 A strategy of increasing SORT collections in isolation would therefore be difficult to justify in the current public spending climate, and this option is not therefore recommended.

3.3.18 Alongside the demand for fortnightly SORT collections, there are also indications of a growing public acceptance that an increase in the frequency of these recycling collections would alleviate pressure on residual waste bin capacity, thus reducing the need for a weekly collection of residual waste.

3.3.19 In spite of high SORT participation in some areas, this is not the case city-wide, and residual waste composition data shows that there is still a fairly significant proportion of material which would be suitable for the SORT collection in the black bins. Performance data from the Rothwell area shows that the introduction of fortnightly residual waste collections alongside fortnightly SORT collections produces an increase in SORT performance well in excess of that observed from simply increasing the frequency of SORT collections, with a 78% increase in capture compared to the standard service (see Table 1 below).

Table 1

| SORT collection | Estimated number of households | Tonnes collected for recycling (2010/11) | Kg/HH collected for recycling |
|--|--------------------------------|--|-------------------------------|
| 4 weekly (with weekly residual) | 278,400 | 21,111 | 76 |
| 2 weekly (with weekly residual) | 30,000 | 3,094 | 103 |
| 2 weekly (with 2 weekly residual) - Rothwell | 8,500 | 1,147 | 135 |

3.3.20 Three of the Core Cities, Manchester, Nottingham and Bristol, operate this collection regime, as do all of the West and South Yorkshire authorities, with the exception of Bradford. Whilst accepting that other factors will undoubtedly have

had some influence on performance levels for these authorities, the recent benchmarking responses received further confirmed that the introduction of fortnightly residual and recycling collections can be expected to produce an increase in recycling and a corresponding reduction in residual waste.

- 3.3.21 This strategy is strongly advocated by environmental organisations such as Friends of the Earth, and would serve to maximise the performance of what represents a substantial existing investment in terms of green bin infrastructure and collection services in Leeds.
- 3.3.22 In addition to this positive impact on performance, there are obviously also cost savings associated with the introduction of this collection regime.
- 3.3.23 It is proposed that a pilot of fortnightly SORT and residual waste collections be implemented in Leeds during 2012/13. The area of the pilot will be selected based on recycling participation data and in consultation with local Ward Members.
- 3.3.24 Clearly, the level of recycling participation observed in the Rothwell area will not reflect the city-wide position, with some higher and lower performing areas. It is recognised that some areas of the city with high levels of multi-occupancy properties and low levels of recycling participation would not be suitable for the fortnightly service. However, a city-wide roll-out of fortnightly recycling and residual waste collections to, for example, 80% of properties, would ultimately result in estimated savings in the region of £2.5m - £3m per annum, which would continue to increase in line with Landfill Tax rises. Additionally a potential increase in the overall NI 192 recycling rate of 2.5%, primarily based on increased SORT participation, could be achieved.
- 3.3.25 It must be emphasised that the implementation of any major change of this kind to kerbside collection services must be supported by adequate resources in terms of project management, route analysis, development of policies, resident consultation and communications to ensure maximum participation and that any disruption resulting from the transition is minimised. Some degree of provision of resourcing in these areas would be required to support the proposed pilot.

Food waste collections

- 3.3.26 Food waste collections were introduced in the Rothwell area of the City in February 2010 to around 8,500 properties. Residents are offered a complete kerbside recycling service based on an agreed model following an extensive option appraisal which was completed in September 2009. The Rothwell service consists of the collections shown in Table 2 below.

Table 2

| Material | Collection Frequency | Bin Size Litres |
|---------------------------------------|-----------------------------|------------------------|
| Food waste | Weekly | 23 or 47 |
| SORT materials | Fortnightly | 240 |
| Residual waste | Fortnightly | 240 |
| Garden waste (to suitable properties) | Fortnightly | 240 |

- 3.3.27 To ensure the success of the service, an extensive programme of resident communication was implemented, with specialist communications staff known as 'waste doctors' deployed to support the public and address any problems. Collection days were rescheduled to ensure residents had just one collection day each week for all waste types.
- 3.3.28 The service has been a major success and over 1,000 tonnes of food waste were recycled in 2010/11. In terms of overall recycling performance, Rothwell registered a kerbside recycling rate of 53%, as reported to Scrutiny Board in the 2010 evaluation report, which compared extremely favourably with the city-wide average of 28% achieved by the standard kerbside collection service.
- 3.3.29 A key element of the current recycling strategy involves the implementation of food waste collections, and the Council's waste flow modelling shows this as being essential to the achievement of existing targets for recycling of household waste. Food waste collections, together with treatment by anaerobic digestion of this waste (see later sections), are strongly promoted in DEFRA's Waste Strategy for England 2007 and their more recent Waste Policy Review 2011.
- 3.3.30 The Rothwell service, involving weekly food waste collections, fortnightly SORT, residual and garden waste collections, has been highly successful and has provided clear evidence that this model could be replicated in other areas of the City. It is estimated that extending food waste collections to suitable properties city-wide on the basis of the Rothwell model could enable the capture of approximately 30,000 tonnes of food waste per annum.
- 3.3.31 In the short-term, it is believed that there is scope within existing resources to extend the area covered by Rothwell food waste collection service through maximising service efficiencies. The extension would be subject to local resident and Ward Member consultation but would be based on the proximity of the existing food waste disposal contractor's facility in South Milford, and it is therefore proposed that this would be rolled out within either one or more of Garforth and Swillington, Ardsley and Robin Hood and Kippax and Methley wards in addition to Rothwell.
- 3.3.32 The main change to the original model will be the size of external collection bin offered. Rothwell model users were offered 2 bin sizes : a 47 litre and a smaller 23 litre container. Nearly all respondents with the 23 litre bin (94%) felt that it was the right size. 75% of those using the 47 litre bin said that it was either half full or less than half full. A survey of the 'fullness' of food waste bins also suggested that, on average, they were less than half full, suggesting that the smaller (23 litre) bin size would be adequate for the majority of households. Users and collection staff also found the 23 litre bin easier to handle generally. It is therefore proposed that the 23 litre bin be provided as standard for all future users.
- 3.3.33 It is proposed that this extension of service would be introduced during 2012/13 without a net cost impact on the budget. The additional costs of collection are for the provision of food bins and liners. Assuming a roll-out to 6,000 additional properties, food bins, based on offering 23 litre bins, will cost around £27k and will require an injection into the Capital Programme for this amount. The annual

revenue repayment (prudential borrowing) costs are £4k. Food liners will cost approximately £23k. However, based on the yields achieved in Rothwell, it is estimated that around £46k can be saved in disposal costs, rising to £69k in a full year.

3.3.34 As referred to above, part of the success of the Rothwell pilot was due to an extensive programme of communication with residents, therefore it will be necessary to invest in education and communication at a cost of approximately £20k.

3.3.35 The Council's full, long-term kerbside recycling strategy remains to roll-out food waste collections based on the Rothwell model to all suitable areas of the City. It is estimated that a roll-out of this service to 80% of properties city-wide would enable the capture of approximately 30,000 tonnes per annum, equating to an additional contribution of 8% to the overall household waste recycling rate for Leeds.

3.3.36 However, even taking into account the avoided landfill costs, separate collections of food waste on the Rothwell basis still involve a substantial additional cost to the Council over the standard service. Each additional food route would cost in the region of £230k (including the cost of bins and liners). Savings in disposal costs (based on the expanded Rothwell area) would be an estimated £90k per route, resulting in a net operational cost of £140k per new food waste collection route. Extrapolating this cost would mean that around £2.8m per annum would be required for a city-wide roll-out of this service.

3.3.37 The speed of roll-out of food waste collections is subject to the availability of resources. However, the combination of the potential to release resources through fortnightly SORT and residual waste collections and the increasing level of Landfill Tax represents a realistic opportunity to deliver this strategy.

Future recycling targets

3.3.38 Currently, city-wide recycling performance is at 40% for 2011/12 as compared to 34.7% in 2010/11. The Council has already committed to the following service developments for 2012/13.

- completing the Recycling Improvement Plan, providing access to recycling for all residents;
- providing garden waste collections to remaining suitable properties; and
- increasing the recycling performance at HWSSs.

3.3.39 The implementation timescales for the full kerbside recycling strategy have yet to be determined and remain subject to the outcome of the pilot of fortnightly SORT and residual waste collections, and the level of resources available for food waste collections in the medium-term. However, Table 3 below provides a summary of the potential recycling performance in 2016 (when the Residual Waste Treatment PFI facility is scheduled to commence full operations) based on the contributions to performance of the roll-out of the main recycling opportunities outlined above.

Table 3

| Service development | Estimated NI-192 performance contribution (2016) |
|--|--|
| Baseline performance (at Sept 2011) | 40.0% |
| HWSS improvement (70% average performance) | 1.2% |
| Garden waste roll-out completion | 1.4% |
| Rothwell food waste expansion | 0.3% |
| SORT Changes (Fortnightly and additional material) | 3.1% |
| Food waste roll-out (50% of suitable properties) | 4.0% |
| Sub Total | 50.0% |
| Residual Waste Treatment PFI | 5.0% |
| Total | 55.0% |

3.3.40 Based on the estimated performance impacts of the above range of opportunities, and assuming the level of service roll-outs indicated, the Council believes that a household waste recycling rate of 55% is achievable by 2016. It is therefore proposed that this be set as a new target.

3.3.41 Taking account of potential for developments in the recycling market and assuming progressive improvements in public participation in recycling, it is proposed that a long-term target to exceed 60% recycling also be approved.

Anaerobic digestion of food waste

3.3.42 Anaerobic digestion (AD) involves the composting of organic matter in the absence of air, with the main outputs a digestate that can be used as a soil improver and spread on agricultural land, and biogas that can be used in various ways as a source of energy. As previously mentioned, DEFRA is explicitly promoting food waste collections with AD due to the environmental performance of this option. There is also significant interest from other Government departments and sectors due to this technology's potential contribution to providing clean vehicle fuels and renewable energy.

3.3.43 The food waste collected in Rothwell is currently sent to an in-vessel composting (IVC) facility at South Milford to the south east of Leeds. This process is relatively simple, involving the composting of the material in an enclosed building to produce a product suitable for use on agricultural land, and is relatively cheap in itself compared to a more capital intensive AD facility. However, an increasing level of financial incentives is emerging for energy from AD, and the extent to which this may make AD more competitive than IVC and improves the economics of food waste collections needs to be considered. Opportunities for using the biogas arising from the process include combined heat and power, supply of gas to the grid and production of biofuels for use in vehicles. This latter option has the potential to meet the fuel requirements of the Council's fleet of waste collection vehicles, thus providing a 'closed loop' environmental solution for the City.

3.3.44 Although there is limited existing merchant AD treatment capacity in Leeds (and limited experience within the UK of AD of municipal waste), there is undoubtedly keen interest from the market. Research undertaken by CO2Sense has

demonstrated that there may be in the region of 70,000-80,000 tonnes per annum of food waste in Leeds suitable for treatment (including the estimated 30,000 tonnes of domestic food waste), and the Council is keen to explore whether it could act as a catalyst for bringing forward an AD solution for the City by working in partnership with other sectors.

3.3.45 To this end it is proposed that the Council complete a technical options appraisal during 2012/13, securing external funding where possible, to assess formally the technical, procurement and partnership options that would best enable the delivery of an AD solution for Leeds.

4 Corporate Considerations

4.1 The importance of resident communication and engagement to success of the recycling strategy has been highlighted within this report. The identification of sufficient resources to develop and implement the necessary communications plans is of critical importance, and this has been discussed with the Corporate Communications team.

5 Consultation and Engagement

5.1 The Integrated Waste Strategy for Leeds was subject to extensive public consultation prior to adoption in 2006. The vision and objectives of the strategy remain unchanged, and a detailed action plan from 2009 through to 2012 has been developed and is publicly available.

5.2 It is proposed that a series of locality based consultations are undertaken to confirm the prioritisation of areas to receive fortnightly recycling and residual waste collections and food waste collections. This consultation will also be used to ensure that all residents have the required and appropriate access to recycling and any unresolved issues with collections are addressed prior to implementing further change.

5.3 As part of this staged consultation process, input into the detailed implementation plans and waste policies will be sought from Members, residents and other relevant stakeholders.

6 Equality and Diversity Cohesion and Integration

6.1 An Equality Impact Assessment has been completed on the proposed recycling strategy. Further, more detailed impact assessments will be required for the detailed kerbside collection implementation plans.

7 Council Policies and City Priorities

7.1 Reaffirmation of the Council's Integrated Waste Strategy 2005-2035 and approval of the proposals for the next phase of implementation of the recycling strategy all support wider aspirations for Leeds set out in the new Leeds Vision, City Priority Plans, Directorate Priorities and Cross Council Priorities.

7.2 The five new City Priority Plans developed by the Partnership Boards cover the period 2011 to 2015 with the most relevant in relation to the Waste Strategy being:

- *Safer and Stronger Communities - including city-wide cleanliness*
- *Regeneration - including sustainable growth*
- *Sustainable Economy - including low carbon economy*

7.3 This report also seeks approval of proposed increases to the Council's recycling targets which, if approved, will see Leeds stretch its long-term aspirations for recycling. This further supports the Council's vision that by 2030 Leeds will be locally and internationally recognised as the best city in the UK.

8 Resources and Value for Money

8.1 Summary of the financial implications of the proposals

8.1.1 The base budget for waste disposal costs in 2011/12 is £15.5m. As a result of Landfill Tax rising by £8 per tonne, inflation on Waste Disposal contracts, a reassessment of the optimum disposal points and a review of total waste tonnages next year, the Council faces an increase in disposal costs of £1.2m before any proposals to improve recycling further in 2012/13.

8.1.2 The proposals outlined in this report will actually reduce this cost to the Council next year by around £220k and will generate improved recycling performance.

8.1.3 Table 4 below shows the impact on costs of the proposals to be introduced in 2012/13, based on the assumption that the completion of the garden waste collection roll-out and the expansion of the Rothwell area is introduced from July 2012, and the pilot of fortnightly SORT and residual waste collections from October 2012.

Table 4

| | | Collection (£000) | Disposal (£000) | Total (£000) |
|---------------------|--|----------------------|--------------------|-----------------|
| Uplifted Base | Landfill Tax rising £8/tonne + gate fees | - | 1,185 | 1,185 |
| 2012/13 initiatives | Garden waste | 100 | (131) | (31) |
| | Expansion of Rothwell area | 46 | (46) | 0 |
| | Fortnightly collections pilot | (103) | (87) | (190) |
| | | | | |
| | Total net additional costs | 43 | 921 | 964 |
| | | | | |
| | Variance from uplifted base | 43 | (264) | (221) |

8.1.4 The draft 2012/13 budget for waste management services assumes the realisation of the savings summarised in Table 4 above.

9 Legal Implications, Access to Information and Call In

- 9.1 There are no direct legal implications arising from this report. Any decisions to implement service changes such as new or revised collection arrangements will be subject to existing decision making and governance arrangements including potential call in as appropriate.

10 Risk Management

- 10.1 The primary risks relating to the proposed strategy are those associated with disruption to refuse and recycling collections as a result of service changes. Detailed identification of risks and mitigations will be undertaken for the individual implementation plans.

11 Conclusions

- 11.1 Based on the above, it is proposed that the Council's strategic vision of 'zero waste' be reaffirmed, together with the principles of sustainability, partnership and flexibility and responsiveness to future changes.
- 11.2 Based on current and potential future performance, it is proposed that the current Waste Strategy target be increased to 55% by 2016, with a long-term target to exceed 60%.
- 11.3 In addition to continued work to close out the few remaining gaps city-wide in basic recycling provision, the main opportunities to enable Leeds to meet these targets are as follows:
- 11.3.1 Completing the roll-out of garden waste collections to remaining suitable properties;
 - 11.3.2 Increasing the recycling performance of Household Waste Sorting Sites city-wide;
 - 11.3.3 Introducing a pilot of fortnightly recycling and residual waste collections during 2012/13;
 - 11.3.4 Rolling out weekly collections of food waste to suitable properties city-wide, with the speed of roll-out in line with resource availability;
 - 11.3.5 Assessing the potential to increase the range of materials collected at the kerbside in the SORT bins where economically viable and environmentally sustainable.
- 11.4 Alongside the city-wide roll-out of food waste collections, there will also be a need to procure a treatment solution for food waste, and it is proposed that technical options appraisal work be completed during 2012/13 to assess the potential for bringing forward an anaerobic digestion solution for Leeds should this represent the best VfM and environmental solution.
- 11.5 The requirement for adequate resources, planning, phasing and communications in order to ensure an effective and seamless implementation of what represents a

programme of radical change to kerbside waste and recycling collections should be noted and emphasised.

12 Recommendations

12.1 Members of the Executive Board are recommended to:

- a) Note the contents of this report and reaffirm the vision and key principles of the Integrated Waste Strategy for Leeds;
- b) Approve the proposed increases to the Council's household waste recycling target to 55% by 2016, with a long-term target to exceed 60%;
- c) Approve the proposed expansion of the Rothwell recycling collection service by up to 6,000 properties in 2012/13, including an injection into the Capital Programme of £27k for the purchase of food waste bins, and give authority to spend this amount;
- d) Approve the proposal to implement a pilot of fortnightly collections of recycling and residual waste during 2012/13;
- e) Reaffirm the aim to roll-out of food waste collections to suitable properties city-wide, with the speed of roll-out in line with resource availability;
- f) Note the need to procure a treatment solution for food waste alongside the city-wide roll-out of food waste collections, and the intention to undertake a technical options appraisal with a view to promoting the delivery of an anaerobic digestion solution for Leeds should this represent the best VfM and environmental option;
- g) Note officers' intention to seek further Member approvals regarding specific collection service roll-out plans.

13 Background documents

- 13.1 Integrated Waste Strategy for Leeds 2005-2035
- 13.2 Recycling strategy – report to Executive Board - September 2007
- 13.3 Rothwell recycling pilot evaluation - report to Scrutiny Board – July 2010

APPENDIX A

| Local Authority Benchmarking - Performance Summary 2010/11 | | | | | | | |
|--|----------------|---|---|--|-----|------|-----------------|
| Authority | Authority Type | NI191 Residual household waste per household (kg/household) | NI192 Percentage of household waste sent for reuse, recycling or composting | NI193 Percentage of municipal waste sent to landfill | AWC | Food | Kerbside Garden |
| Leeds | Unitary | 615.38 | 35% | 66% | | | Yes |
| Core City | | | | | | | |
| Newcastle | Unitary | 597.86 | 33% | 60% | - | - | Yes |
| Manchester City | Collection | 631.43 | 26% | - | Yes | Yes | Yes |
| Sheffield City Council | Unitary | 623.16 | 29% | 16% | - | - | Yes |
| Liverpool City Council | Collection | 654.22 | 27% | - | - | - | Yes |
| Nottingham City Council | Unitary | 567.28 | 36% | 14% | Yes | Yes | Yes |
| Birmingham City Council | Unitary | 682.70 | 31% | 10% | - | - | Yes |
| Bristol City Council | Unitary | 536.24 | 37% | 58% | Yes | Yes | Yes |
| West Yorkshire | | | | | | | |
| Kirklees | Unitary | 626.19 | 34% | 5% | Yes | - | - |
| Wakefield | Unitary | 613.21 | 40% | 64% | Yes | - | Yes |
| Bradford | Unitary | 632.79 | 34% | 67% | - | - | Yes |
| Calderdale MBC | Unitary | 495.89 | 41% | 54% | Yes | Yes | - |
| South Yorkshire | | | | | | | |
| Rotherham | Unitary | 569.72 | 42% | 30% | Yes | - | Yes |
| Doncaster | Unitary | 626.76 | 42% | 54% | Yes | - | Yes |
| Barnsley | Unitary | 589.09 | 39% | 51% | Yes | - | Yes |