**Cambridge City Council**

| | |
|---|---|
| To: | Executive Councillor for Environmental and Waste Services: Councillor Jean Swanson |
| Report by: | Waste Strategy Manager - Jen Robertson |
| Relevant scrutiny committee: | Environment Scrutiny Committee 9/10/2012 |
| Wards affected: | All Wards |

**UPDATE ON RECYCLING**
**Key Decision**

## 1. Executive summary

1.1 The purpose of this report is to:-
- Update members on the progress since the report that went to Environment Scrutiny Committee on 4 October 2011.
- Decide on the way forward in terms of increasing recycling.

1.2 At ESC on 4/10/11, the Executive Councillor agreed that a Waste Compositional Analysis, participation monitoring work and survey work be carried out, so that data could be gathered to inform decisions about next steps in order to meet recycling targets of 50% by 2015-16. The work has not been completed yet but some initial results are available. (See Appendix A). Final results will be available in December 2012.

1.3 This report is brought to you to understand the variety of projects that have already been undertaken to provide a comprehensive service (see Appendix B) and to help shape decisions on where resources could be targeted in the future. There are a number of options detailed based on the outcome of the waste compositional analysis, associated participation work and other local authority campaigns.

1.4 In 2010/11 the overall recycling rate was 43.7% and reduced to 43.3% in 2011/12 due to a drop in the amount of green waste collected compared to the year before.

## 2. Recommendations

The Executive Councillor is recommended:

2.1 To agree that officers carry out further detailed work taking into consideration the final report from MEL and look at the effectiveness of different strategies to increase the overall recycling rate.

2.2 To include the strategy within the Portfolio plan for 2013/14

## 3. Background

3.1 Plastic pots, tubs and trays can now be recycled in the blue bins. The addition of this material was made on 30th July. However this is not going to increase the recycling rate significantly due to the lightweight nature of this material. The prediction is a maximum of 1%, which may include an increase in other blue bin materials, linked to the publicity around plastic pots, tubs and trays.

3.2 The contract with Viridor for sorting the dry recycling from the blue bin ends in November 2014. As part of the new contract it may be possible to add more materials to the range already collected. However this will be dependant upon discussions with colleagues from other authorities and the ability for a Materials Recycling Facility to comply with the Councils specification.

3.3 The Recycling Champions scheme continues to provide neighbourhood support through a team of over 100 volunteers. Volunteers' involvement varies from reading a quarterly newsletter to, at the other end of the scale, helping with contamination monitoring at recycling points, attending/running events to promote our schemes and informing neighbours of how to recycle in Cambridge. We are looking at how Recycling Champions can assist more with projects, gathering their views and providing support on additional work.

3.4 The table below shows recycling rates for Cambridge for the last 3 years. The main significant points over this period are:

- Moving to blue bins instead of boxes in November 2009. This change was responsible for the increase in dry recycling.
- Seasonal fluctuations having an impact on reducing the amount of garden waste collected.

| Year | Landfill (tonnes) | Dry recycling (tonnes) | Composting (tonnes) | Overall recycling rate | National recycling rate |
|---|---|---|---|---|---|
| 2009/10 | 25,594<br>59.1% | 17.93<br>(7,758) | 22.91%<br>(9,910) | 40.84% | 39.7% |
| 2010/11 | 24,928<br>56.3% | 21.39<br>(9,472) | 22.32%<br>(9,885) | 43.7% | 40.3% |
| 2011/12 | 25,090<br>56.8% | 22.27<br>(9,860) | 21.06<br>(9,323) | 43.33% | 41.5% |

3.5 Other service changes include:-

- The addition of batteries to the green bin collection service in May 2011
- The addition of commingled recycling at 250 blocks of flats in the city. We now have 11,479 flats that have either segregated recycling, or commingled recycling
- The addition of Small Waste Electrical and Electronic Equipment banks in June 2011 at 5 recycling points
- The addition of battery and bulb banks since March 2010 at 8 recycling points.

3.6 Please see Appendix B for a list of the existing projects being undertaken in Waste Strategy for 2012/13 and some of the planned projects for 2013/14.

3.7 The recycling from the bring banks system is included in the above figures and accounts for 2.4% of the 2011/12 dry recycling figure.

3.8 There are two ways of increasing recycling rates:

- Reducing the amount of waste people generate i.e. waste prevention, which is difficult as we live in a throwaway society and this requires a more significant behavioural change by residents.
- Increasing the amount of material recycled. There are three main ways this can be achieved:

    - Increase participation in the schemes we provide
    - Increase the range and amounts of material residents recycle within the schemes, such as encouraging residents to recycle all their paper not just their newspaper in the blue bin.
    - Add additional schemes e.g. a separate collection of food waste or textiles.

3.9 In January 2012 MEL Research were commissioned, after a competitive tendering process, to carry out a waste compositional (WA) analysis, participation monitoring work by household (PM) and resident survey work (RS), in order to gain detailed information about what is being recycled and by whom.

3.10 The resident survey work will not be carried out until later this month. This element is also an important part of the picture as it is likely to indicate why some residents are not using the services to the maximum. MEL will be able to use this information to suggest cost effective strategies to increase recycling.

3.11 The initial results of the first phase of the WA work are attached at Appendix A. A summary of the key findings is below.

3.12 The final results of the PM show high levels of participation calculated over a 6 week cycle.

- Blue bin participation = 90% - ranging from 88.32 – 91.13%
- Green bin participation = 80% - ranging from 75.2 – 83.56%
- Black bin participation = 94% - ranging from 90.68 – 95.3%

3.13 The contamination rate for the dry recycling scheme was 2.9% in 2011/12 and continues to remain low.

3.14 The interim results from the first phase of the WA work, carried out in May, show that there is scope for improving capture of certain materials. The next phase of the WA will be carried out at the beginning of October and these results need to be incorporated. However, even though waste is seasonal it is unlikely that the composition of the residual waste will change much.

3.15 The results of the first phase show:
Just under 22% of collected residual waste could have been placed into the green recycling containers. This was almost totally made up of food waste.

- Overall 13% of collected residual waste could have been placed into the blue recycling containers.
- The main materials included in the 13% figure are paper, card and cardboard. However, there were also significant amounts of textiles i.e. 6.19% that could be recycled at bring sites or reused through charity shops and kerbside bag collections that charities offer.

3.16 The results are broken down by socio-economic groupings, based on A Classification Of Residential Neighbourhoods (ACORN) which define areas in terms of socio-economic measures. These groups

range from 1-5. Group 1 are described as 'Wealthy achievers' and Group 5 described as 'Hard pressed' people.

3.17 If we were able to capture even half the paper, card and cardboard and recycle it through the blue bin scheme this would account for a 3.5% increase in the recycling rate.

3.18 If we were able to extract the textiles from the black bin this would reduce the black bin waste figure thereby contributing to an increase in the recycling rate. If half of the textiles were recycled at textile banks in the city this would contribute a further 1.5%.

3.19 As members will be aware a bid for a weekly food waste collection for blocks of flats was submitted to the DCLG in August. We will be notified if this has been successful or not in October. We calculate that this may add a further 1% to the recycling rate.

**Examples of other schemes that LA's have implemented aimed at increased recycling**

3.20 Increasing capture rates of the main materials that can be recycled in the blue bin by encouraging residents to recycle more should be considered as a priority. Many authorities have carried out intensive communications work in low performing areas, and brought about increased capture rates for certain materials. There is little evidence of how successful these behavioural changes have been in the long term but the evidence below certainly shows that improvements were made and some increased rates have been maintained for 3/4 years.

3.21 **Case study 1** – Communications campaign to increase use of recycling services in County Durham

- Participation in certain areas was identified as low. Student housing in the City of Durham was targeted as well as certain housing estates. After the campaign student participation increased from 49.6% to 66.4%, and contamination by students dropped by 11.7%.
- The project team costs were £112,300 which included canvassing, surveying and participation monitoring. The total campaign funding was £237,600.

3.22 **Case study 2** – Increasing recycling at flats in Barnet LBC and Bexley LBC

- Barnet ran a communications campaign for 5 months and increased the average monthly tonnage collected at flats by 4% during the campaign. The campaign cost £61,300.

- Bexley ran a communications campaign and increased the dry recycling rate in the target area by 3.5%. There are 13,000 flats in Bexley. They also reduced levels of contamination and increased capture rates for paper and cardboard by 20%. The campaign cost £48,200.

3.23 **Case study 3** – Gloucestershire campaign to increase use of the recycling services

- The recycling rate increased by 3% across the county area, with a 12% increase in low performing areas. This was achieved through door-to-door canvassing targeted at low performing areas. All six districts saw increases without any changes to the collection systems.
- The campaign across the county area cost £267,500 and was paid for by the Gloucestershire Waste Partnership which consists of the 6 district councils and the county. The costs per household compare favourably with the County Durham costs.

3.24 **Case study 4** – Waste Prevention reward scheme in Richmond and Brent

- A pilot scheme offering around 370,000 residents the opportunity to get a free reward card that will enable them to claim cash benefits for buying things that have been used before or have been made from unwanted materials or waste.
- The scheme has been possible because of £133,532 funding secured from DEFRA's household reward and recognition fund. However, ongoing funding is from a combination of subscription fees paid by business partners and a commission paid by both business and charity partners.
- This scheme has only been running since May 2012. If it proves a success the scheme will be rolled out across all 6 west London boroughs.

3.25 **Case study 5** – Bexley – Incentive scheme organised by Local Green Points

- The scheme aims to reward residents on a community basis for waste reduction and recycling, by earning green points as a community based on the amount of residual waste they create and the amount they recycle.
- These points are then allocated equally between each member of the community taking part in the scheme and can then be redeemed online, via the Local Green Points website, to pay for eco-friendly products.
- Whilst still at an early stage Bexley report some reductions in residual waste and state there is an increase in recycling although no specific figures are available.

- Set-up and running costs have been funded through the London Waste and Recycling Board Flats Recycling Programme, Recycle for London, Bexley Council and Gallions Housing Association.

3.26 **Case Study 6** - Peterborough textiles, books and WEEE doorstep collections

- Residents can call to arrange a free collection of the above items from their doorstep. The items are placed in ordinary carrier bags and a day to collect them is agreed with the resident. The collections are carried out by the council's bulky waste collection vehicle, during its normal area-based rounds.
- The council has partnered with a local charity, Sense, which takes the textiles and books and sorts them for re-sale in their shops. The WEEE goes to a local IT re-use and recycling facility.
- The scheme had very low start-up costs, as it uses existing vehicles and staff. In the 7 months since the scheme began the council has carried out a number of collections from households, resulting in the collectionof textiles, books and WEEE.

3.27 **General points about all campaigns**

- Per household costs for both flats campaigns were considerably more expensive than the county-wide campaigns.
- All the campaigns involved pre-campaign monitoring, door knocking/survey work and post campaign monitoring.
- These campaigns covered specific issues that were relevant to each authority e.g. the County Durham campaign wanted to communicate effectively with residents with limited literacy.
- The DEFRA reward and recognition fund has come to an end. The RECAP partnership bid for funding was unsuccessful.
- There is uncertainty as to whether reward based incentive schemes lead to long-term behavioural change. Many of these schemes have been introduced with significant service changes and it is therefore difficult to separate the direct effect of one or other of the changes.

**What are the options for Cambridge City Council?**

3.28 Out of the methods listed in 3.8 of how recycling rates can be increased, the viable options for Cambridge City are to increase the number or amount of materials recycled within existing schemes, or to introduce additional schemes.

3.29 Reducing the amount of waste people generate is something that the council is already working on in a variety of ways, including: supporting and participating in county-wide RECAP campaigns focussed on food waste prevention and re-use of textiles; running

'Take It Or Leave It' swap events; promotion of washable nappies; and working with colleges and students to encourage donation and re-use of unwanted items after graduation. Waste prevention (WP) activity in the population is difficult to monitor and Cambridgeshire is at the forefront of carrying out these types of campaigns with residents. Consequently there is little data available from other authorities on the effects of WP activity on the recycling rate.

3.30 The results of the participation work (3.12) show that we have very high participation in all our schemes, so there is no need for us to focus on this.

3.31 Introducing new recycling schemes is generally very costly, but we have been able to provide one option for this based on working with third sector organisations.

**Option 1**

3.32 We could use the data from the WA to carry out generic campaigns across the city targeting particular materials. This could be done within existing resources, but is unlikely to increase recycling by more than 1%. This would take us to 45% recycling. This option would be supported by the Recycling Champions scheme with volunteers asked to promote messages at events and through their other activities.

3.33 We could also introduce a doorstep textile collection similar to Case Study 6, through our bulky waste collection service. If we were able to add textiles to the new MRF contract in the future, this could provide a stop-gap, or could be an alternative if we are unable to include in the new MRF contract. This would enable us to collect high quality textiles, and by working with a charity keep costs low and benefit the local community. Again this is unlikely to increase our recycling rate by more than 1% on its own.

**Option 2**

3.34 Using ACORN data the Waste Strategy team could carry out a limited campaign targeting a particular area in the city by delivering specific literature to encourage recycling of targeted materials. This would require extra resources for producing and delivering literature. This might produce a 1% increase in recycling. Recycling Champions would also be able to back this work up.

**Option 3**

3.35 We know that the WA data shows that more material can be captured in the blue bin, particularly from those living in certain areas in the city. We are anticipating that it will be easiest for residents to increase their

blue bin recycling, but more will be known about this once we have the results of the MEL survey work.

3.36 We could target communications to these areas to increase capture rates, by carrying out a communications programme which would be focused on face to face canvassing to persuade residents to recycle more through the blue bin scheme. This approach is similar to Case study 3.

3.37 It is important to measure the success of the campaign and the actual impact on materials recycled. We would therefore need to monitor the canvassing work and the campaign as a whole by carrying out a pre and post campaign monitoring exercise. One way in which the post campaign monitoring can be done is through resident workshops to find out whether the campaign has changed behaviour. Tonnage monitoring would also be crucial.

3.38 This type of campaign could achieve a 3-5% increase in recycling.

3.39 In order to do this we would seek specialist advice to design an appropriate campaign around visiting residents at home to deliver information about how easy it is to recycle and why it is important to do so.

## 4. Implications

(a) **Financial Implications**

At the current rate a 1% increase in dry recycling saves the County Council £28,544 of landfill tax. At present the recycling credit paid by the county council for waste diverted from landfill is £38.65 per tonne which for a 1% increase in dry recycling would generate an extra income of £17,100. Any increase in recycling will result in additional income for the material from our contractors. We do not receive recycling credits for green waste as this material is composted through a county council contract with AmeyCespa (formally Donarbon) at Waterbeach, which the county pays for.

The outcome of the DCLG funding will have a financial impact and will need to be taken into consideration upon proposals for the Portfolio Plan for 2013/14.

(b) **Staffing Implications** (if not covered in Consultations Section)

There are no staffing implications

(c) **Equal Opportunities Implications**

An Equality Impact Assessment has not been carried out as no decisions have been made as to which options may be implemented. This will be done once it is decided what changes are to be made

(d) **Environmental Implications**

The following climate change rating has been assigned :

- +H to indicate that the proposal has a high positive impact from diverting refuse from landfill.

(e) **Consultation**

No consultations planned.

(f) **Community Safety**
There are no community safety implications.

## 5. Background papers

These background papers were used in the preparation of this report:

## 6. Appendices

Appendix A – MEL report
Appendix B – Project work

## 7. Inspection of papers

To inspect the background papers or if you have a query on the report please contact:

Author's Name: Jen Robertson
Author's Phone Number: 01223 - 458225
Author's Email: jen.robertson@cambridge.gov.uk