

Report of: Head of City Works





To: Executive Board

Date: 21 April 2008

Item No:

Title of Report : Evaluation of recycling scheme and options for extension

 **Summary and Recommendations**

 **Purpose of report:** To report on the implementation of fortnightly refuse collections and extended recycling scheme.
 To highlight achievements, challenge  and lessons learned.
 To consider the way forward.

Key decision: No

Portfolio Holder: Cllr Jean Fooks

 **Scrutiny Responsibility:** Environment

Ward(s) affected: All

Report approved by:

 **Portfolio Holder: Councillor Jean Fooks**

Legal: Lindsay Cane

 **Finance: Andy Collett**

Strategic Director : Tim Sadler

 **Policy Framework:** Improving the environment in which we live and work.

 **Recommendation(s):**

That the Executive Board

1. Note this review and conclusions of the implementation of the waste and recycling scheme.
2. Request that the officers explore further and report on the options to improve the service and cost effectiveness.



Changes to Service

1. As noted in the Executive Board minutes of January 16th 2006, officers at City Works were tasked with making changes to the refuse and recycling regime in Oxford City. The purpose was to reduce the amount of residual waste going to landfill, avoid hefty landfill fines levied by the government and reduce the city's contribution to climate change. The scheme also needed to best utilised the city council's finances. Specifically officers were tasked to:
 - To substantially increase the recycling and composting of household waste within Oxford City with the aim to achieve a combined compost/recycling rate of 45%
 - To encourage greater participation by residents in recycling by implementing an alternate weekly collection service for residual waste and recyclables
 - To capture even more garden waste and cardboard from the household waste stream for composting
 - To introduce new materials, including plastics, which can be recycled to enable Oxford City residents to recycle a higher percentage of their household waste
 - To work with the Oxford Waste Partnership, as already agreed in the Memorandum of Understanding, to reduce the flow of domestic waste into landfill and to increase shared recycling targets through closer partnership working
2. The scheme was introduced with the aim of achieving a target of 45% (combined recycling and composting) in the medium term. A target of 38% was set in the first year of rollout (2007/8).
 - i. Oxford City Council moved from a weekly collection of domestic refuse in black bags to an alternate weekly collection of refuse in wheelie bins over a six month period commencing in November 2006
 - ii. This change was effected in three phases for all properties (approx 15,000 per phase) not classified as flats. Those properties classified as flats were to be the subject of a separate action plan as agreed at the Executive Committee meeting on 17/07/06.
 - iii. A new alternate weekly commingled recycling service was rolled out to all households included in each phase (i.e. 45,000 households)
 - iv. Green box collections were changed from a weekly collection to a fortnightly collection service
 - v. The pilot garden waste scheme was expanded from 14,000 households to all suitable properties (approximately 45,000)
 - vi. Before the rollout of the new regime a comprehensive communications strategy was devised and this was implemented before and during the rollout

3. The agreed budget for this work is set out below:

Funding	2006/07	2007/08
Capital	£2,175,000	-
Revenue	£827,000	£710,000
Revenue Contingency	-	£100,000

4. During the implementation phase in 2006-07 the budget was overspent as a result of the pressures and changes facing the service. Spending in 2007/08 has been prudent and has resulted in an under spend, however, progress on expanding/improving the scheme in HMOs and Flats has slowed as a result.

Achievements

Results Table 1: Overall Figures for May-December 2005-2007

		Domestic Refuse	Dry Recyclate	Compost	Total Recyclate	Recycling%	Full Year Target
Before AWC	May-December 2005	23,022	4,652	1,303	5,955	19%	18%
During Implementation	May-December 2006	22,456	5,086	2,577	7,663	24%	25%
After Implementation	May-December 2007	18,872	7,882	3,921	11,803	37%	38%

5. Results Table 1 (above) details the impact of adopting the new refuse and recycling/composting regime by comparing statistics from May to December 2005 with the same period in 2007, when all areas had been implemented.

- Domestic residual waste land filled dropped by 4,150 tonnes (22%) despite an increase of approximately 2,000 households on the council tax base
- Dry recyclate increased by 3,230 tonnes (69%)
- Waste composted rose by 2,618 tonnes (201%)

6. It appears clear that the adoption of the new regime has proved successful in diverting domestic waste from landfill sites and in increasing tonnages recycled and composted. Our May-December 2007 figure for combined recycling and composting is 37% compared to the same period in 2005 when it was 19%. This was achieved despite the floods in July 2007, which increased the amount of waste going to landfill.

7. In addition to making progress in diverting refuse from landfill we have also:

- Encouraged residents to use a smaller than standard size wheelie bins for refuse; between October 2006 and December 2007 more than

10,000 residents opted for refuse containers smaller than the 240-litre standard

- Delivered an **additional** 15,500 green boxes, 10,200 blue boxes, 7,700 garden waste sacks and 4,400 blue wheelie bins to residents
8. In parallel with the implementation of the new regime a comprehensive education/communications strategy was implemented. There were many strands to the communications campaign including events at local supermarkets, the recruitment of 40 recycling champions from local communities and articles in the local press including a breakdown in 'Your Oxford' of where recycled materials go and how they are reprocessed. Officers and the Portfolio Holder also attended area committee meetings to explain the changes taking place to residents.

Challenges

9. A considerable number of challenges were met in the implementation of the new refuse and recycling services. In addition to those noted above significant challenges remain, including:
- Raising awareness and participation amongst students and transient populations
 - Finding containment solutions to properties with limited storage capacity
 - Dealing with houses of multiple occupancy
 - Implementing the new services in flat sites

Students and Transient Populations

10. Approximately 30,000 students attend courses in Oxford, of these approximately one third are first year students who have recently moved to the city. In many cases these students live in halls of residence or in shared houses and both of these housing types present particular challenges for officers in rolling out the new services.
11. While students make up the greatest proportion of difficult to reach groups there are also substantial numbers of new and settled residents in the City for whom English is spoken as a second language. In order to encourage these residents to properly participate in the new waste regime it has been necessary to approach them directly via individual visits.

Houses of Multiple Occupancy (HMOs)

12. HMOs and shared houses have been identified by enforcement officers and crews as sites where side waste and contamination of recyclate can be a problem. It has been difficult to estimate the proportion of households that are HMOs since not all will have been identified in Council records. Environmental Development estimates this number to be in excess of 5000 properties.

13. A recent targeted survey carried out in partnership with Environmental Health Officers identified that up to 50% of households surveyed in four streets in East Oxford were shared houses. Many of these households had insufficient capacity to store refuse and recycle and awareness of how to participate was generally poor.
14. In partnership with Environmental Health, City Works officers have targeted HMOs via door-knock surveys in which extra containers for recycling were provided. It is anticipated that officers shall continue to target these households via field officer visits, provision of adequate storage containers and information. Officers shall also continue to work in partnership with Environmental Development to target both households and landlords to ensure that residents are aware of how to participate in the new services.
15. Officers are currently putting forward a business case intended to address the issue of HMOs via provision of adequate containers, education and enforcement.

Flats

16. Planning for the implementation of the new services was based on 45,000 households, i.e. flat sites that had been identified were excluded from the three-phase roll out of the new services. These sites were excluded because it was clear that the system of one container for refuse and one container of each of the material streams to be recycled could not be either stored or serviced. While much work has been done to provide suitable containers to convert these sites over to alternate weekly collections many sites require tailor made solutions. Over 1,500 sites (approximately 11,000 households) have been identified in the city and of these there are approximately 3,500 households that have provision for commingled recycling and the overwhelming majority of these have also been converted to alternate weekly collections for refuse.
17. Oxford City Homes have identified that many of their larger sites would require engineering/building of new storage capacity for the containers and this is also the case with many of the larger flat sites not managed by Oxford City Homes.
18. Officers are currently putting forward a business case to allow progress to be made in converting outstanding flat sites to the new services. This has been done by the formulation of three categories which are:-
 - Easy – Where a solution can be found expediently with a containment adjustment at minimal cost.
 - Medium – Where a solution is tailored or adjustments can be made to the storage area at reasonable cost.
 - Hard – where it is judged that the most cost effective solution is to retain a weekly collection service.

Resistance to Alternate Weekly Collections

19. Since the introduction of alternate weekly collections (AWC), a number of complaints/queries have been received. These have been categorised into formal written complaints and general verbal query/concerns about the system. The number of complaints/queries received, both formal and informal, are included in the table below.

Type	During implementation	Post implementation
General Complaints/queries	5314	4060
Written formal complaint	3	0

The highest number of complaints/queries received was in January 2007 at 934. In February 2008 the monthly total was 386.

20. Where complaints cannot be resolved over the phone or via email correspondence, Field Officer visits are made to investigate the reasons behind dissatisfaction with the service. Many complaints are resolved through the provision of additional educational material, advice, guidance, new/alternative containment and working with the local environmental champions.
21. The need for an ongoing enforcement programme has also proved necessary. The city has unusual population shifts that occur every year/part year, due to the presence of the colleges and diverse range of business activity. This introduces the Alternate Weekly Collection system and various containment solutions to many new residents. Although field officers and a student liaison officer have carried out ongoing comprehensive communication and educational campaigns, two enforcement officers have been necessary to ensure that compliance with the scheme is maintained. It has been necessary to utilize the contingency funding for this purpose.
22. The introduction of the AWC system involved the introduction of a wheeled bin system. Some complaints were made regarding the introduction of the wheeled bin system rather than the introduction of AWC.
23. Many bins have been swapped due to their inappropriate capacity for the household. This has been an ongoing issue to ensure that people have the correct capacity for residual and recycling waste to enable them to participate in accordance with the scheme. There have been a number of requests for bin swaps and concern over the appropriateness of capacity issued at the outset of the scheme. The table below highlights the number of requests for appropriate containment.

Costs

24. The net cost of providing domestic waste services in Oxford City is high compared to other districts within and outside of Oxfordshire. The figure is approximately £4 million per annum and, as reported through Waste Data Flow for 2007/08, this equates to £65.99 per household. This is significantly higher than comparator districts. The table below compares the Oxford City Council's costs in comparison with our nearest neighbours.

Authority	Cost of waste collection per HH
Daventry District Council	74.97
South Northamptonshire District Council	73.97
Cotswold District Council	66.16
Oxford City Council	65.99
Stratford-on-Avon District Council	65.36
Aylesbury Vale District Council	56.57
South Oxfordshire District Council	53.67
Cherwell District Council	53.41
West Oxfordshire District Council	52.63
Vale of White Horse District Council	45.97

25. There are a number of elements to this amount that should be highlighted in order to place the figure in context. Oxford City Council provide a number of services free to the resident that other councils charge for:

- Garden waste collections (£523,400 potential income)
- Bulky waste collections (£168,940 potential income)

26. In addition to these costs we have many flat sites that remain on weekly collections of refuse. The operating cost can be reduced as the conversion to AWC is made for easy and medium site categories. However, where the cost of conversion exceeds the costs of weekly collection (hard category), the weekly service will be retained.

27. Oxford City Council currently run two dry recycle services; the blue box service for commingled recycle (cardboard, low quality paper, tins, plastic bottles) and the green box service for good quality paper and mixed glass. The operating costs of the blue box collections service is £550,000 per annum. The operating cost of the green box service is £760,000 per annum.

What can be done to reduce costs

28. The garden waste and bulky items collections that Oxford City Council currently provide free of charge cost the council approximately (£695,000) per annum in operating costs. Were charges to be introduced to cover half the costs of the bulky item collections and to make the garden waste collections cost neutral then savings would be in the region of £600,000.

29. The cost per household (based on 57,000 households in 2008/09) would be reduced by £10.66 per household making our cost per household

£54.91, which is near the bottom of the range of comparator collection authorities noted above.

30. If the city council were to introduce charges in a similar way to comparator authorities, this would reduce the relative cost per household as shown in the table below.

Authority	Cost of waste collection per HH
Daventry District Council	74.97
South Northamptonshire District Council	73.97
Cotswold District Council	66.16
Stratford-on-Avon District Council	65.36
Aylesbury Vale District Council	56.57
Oxford City Council	54.91
South Oxfordshire District Council	53.67
Cherwell District Council	53.41
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Vale of White Horse District Council	45.97

31. Through the reduction in the types of materials collected via the green box scheme and through the transference of flat sites to fortnightly collections it is now possible to reduce by one round the number of green box crews by taking off the dedicated flats recycling round. This will release a saving in the region of £50,000 which is part of a projected saving in the 2008-09 budget.
32. It is anticipated that further substantial savings can be made through the comprehensive rounds review that is now in its initial stages. The objective of the review will be to provide cost effective and improved services to residents of Oxford. A number of options will be considered:
- Four day week
 - Commingling materials from the green box with all other recyclable materials in a single collection
 - Partnering with private sector recycling waste operator for local tipping of recyclates which could offer different collection and storage options that benefit and simplify the scheme to the householder
33. It should be noted, however, that implementation of food waste collections across the city in 2009/10 would only be cost neutral if saving accrued via the rounds review are allocated to the service.
34. Officers shall also explore the possibilities of building partnerships with the private sector to allow more local outlets for recycled materials. Particular attention shall be focussed on expanding the range of materials that can be disposed of at a single outlet. This would allow different collection and storage options to be considered.

Current containment/receptacles

Containers

35. All suitable properties were provided with a wheeled container for refuse, a blue box and a garden waste bag when the new services were implemented. All residents would already have had access to the green box service either via a green box or via onsite recycling containers for flat sites.

Current containment for a single household

- A green wheelie bin (140ltrs, 240ltrs & 360 ltrs)
 - 1 garden waste bag
 - 2 green boxes
 - 2 blue boxes
35. Residents can also request additional recycling containment free of charge (2 X green boxes & 2 X blue boxes) or purchase a blue wheelie bin. In addition, garden waste bags are available to purchase up to a maximum of five per household..
36. For households with limited space, lilac sacks are available where the householder would have nowhere to store or present a wheeled bin for collection.
37. The range and number of containment options is an issue that we need to be mindful of, when we consider the introduction of new waste containment and collections, as we move the service forward.

Proposed new lines (food waste)

Oxford Waste Partnership – Kitchen Waste

38. To meet recycling targets the Oxford Waste Partnership (OWP) is committed to providing kitchen waste collection services to households within Oxfordshire commencing April 2009. To this end they are currently procuring an outlet for kitchen waste and garden waste and all districts are providing estimates of tonnages to be delivered to the outlet. The diversion of kitchen waste from landfill is a central plank of the Oxford Waste Partnership strategy to meet our landfill allowance quota under LATS.
39. The City Council has successfully bid to the Oxford waste partnership for part funding to launch a pilot food waste collection scheme covering approximately 6,500 households.

Containment Options

40. As noted above a single household is entitled to a refuse container/lilac sacks, 2 X blue boxes, 2 X green boxes and 1 garden waste bag free of charge. If food waste collections are to be implemented then an additional 21-litre container for presentation of food waste is required.
41. The quantity and variety of containers will exacerbate storage problems for some properties, and cause frustration and confusion for residents. Were it possible to commingle the glass and good quality paper from the green box scheme it would be possible to eliminate the requirement for green boxes, although this would entail the sacrifice of substantial income from the sale of good quality paper (approximately £180,000 for 2007/08) and potential income from mixed glass (estimated at £30,000 per annum). However, the savings achieved in reduced rounds substantially covers the income and the net effect would be the saving target in the 2008-09 budget of £225,000.

New disposal options and future change

42. Potential outlets for commingled recyclate (including glass and tetra packs) have been identified and at least one of these will come on stream in April 2009. The distance to the outlet, the possibility of bulking up and gate fees will all need to be assessed to ensure that this would be an efficient and cost effective option. Particular attention will be paid to the materials that will be accepted by the Material Recycling Facilities both for recycling and for energy from waste.
43. The Oxford Waste Partnership is currently procuring an outlet for garden and kitchen waste which is due to accept materials in April 2009. It is estimated that up to 5,000 tonnes per annum of kitchen waste could be diverted from landfill were a new collection system to be implemented over the whole city.
44. Officers shall also be seeking to work in partnership with neighbouring districts and the county council in line with the objectives of the Oxford Waste Partnership.

Conclusions

45. Most of the objectives set have been met and there is now an opportunity to improve performance and exceed our target and improve our cost effectiveness. There are remaining issues to resolve regarding containment, storage capacity at households and flats. Food waste will exacerbate the resolution of the remaining issues identified above and we are looking for a rationalisation of the service as a whole.
46. Another key objective is to drive down costs to ensure that we remain in budget and can offer value for money services to the residents of

Oxford. We will be exploring options to do this and have identified a way forward in our recommendations.

Recommendations

- Note this review and conclusions of the implementation of the waste and recycling scheme.
- Request that the officers explore further and report on the options to improve the service and cost effectiveness.

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Background papers: None