Cheltenham Borough Council

CABINET – 28TH OCTOBER 2008

Proposed Waste and Recycling Collection Systems

Report of Cabinet Member for Sustainability

1. Executive Summary and recommendation

1.1 The issue

1.1.1 This report presents a set of proposals to further reduce the amount of Cheltenham’s household waste which is sent to landfill.

1.1.2 Officers have evaluated a number of options to increase recycling and composting in line with the strategic objectives of the Gloucestershire Joint Municipal Waste Management Strategy which was approved by cabinet on 30th October 2007. The outcome of the evaluation process is contained within the report and a financial summary of the evaluated options is provided as Appendix A to this report.

1.1.3 If approved, the proposals will increase recycling and composting performance to 42% which is in excess of strategic and business plan targets.

1.2 I recommend that:

1.2.1. Cabinet approve the kerbside collection of cardboard with effect from April 2009.

1.2.2. A capital bid of £10,000 be included in the 2009/10 budget to upgrade the communal bin system for flats and properties in multiple occupancy.

1.2.3. A new kitchen waste collection service is introduced for 45,000 homes in the borough, starting in September 2009 and collected at the same time as garden waste.

1.2.4. The existing fortnightly collection service for garden waste be replaced by a charged-for weekly service, also from September 2009, collected at the same time and in the same vehicles as the kitchen waste.

1.2.5. Households who wish to participate in the weekly garden waste collection service will be provided with a special wheeled bin for this service at the cost of £30 per bin per annum.

1.2.6. A capital bid of £20,000 be included in the 2009/10 budget to enable households that do not wish to participate in the weekly garden waste collection service to purchase a subsidised home composter unit. All households will continue to be able to take garden waste to the Swindon Road depot free of charge.

1.3 Summary of implications
1.3.1 Financial

The financial implications of the recommendations contained in this report have been included in the current version of the MTFS and will be incorporated into base budget at the relevant time subject to approval by members.

Contact officer: Andrew Powers
E-mail: Andrew.powers@cheltenham.gov.uk
Tel no: 01242 264121

1.3.2 Legal

None arising directly from this report. Legal advice will be sought if any service level agreements with the County Council are required.

Contact officer: Jonathan Noel
E-mail: jonathan.noel@cheltenham.gov.uk
Tel no: 01242 775117

1.3.3 Other

It is anticipated that the recommendations outlined above will not be able to be met from within existing resources. The division will require an additional 4 drivers, 10 loaders and seasonal admin staff to process garden waste receipts.

Contact officer: Julie McCarthy
E-mail: julie.mccarthy@cheltenham.gov.uk
Tel no: 01242 264355

1.4 Implications on corporate and community plan priorities (note to author - refer to the summary section of the Priorities Assessment Tool, if used - please see Cabinet Report Procedure guidelines for more information on this)

Promoting sustainable living is a community aim and a corporate priority. Expanding recycling services is stated ambition in the council’s business plan 2008/09. Reducing, recycling and composting waste will contribute to the following corporate priorities:
2a – Expanding recycling service to include plastics, cardboard, commercial recycling and communal recycling to meet demand.
2b – Attempt to contain the amount of household waste generated in Cheltenham through education and promotion of best practice.

1.5 Statement on Risk (note to report author - refer to Corporate Risk Register or Service Risk Assessment and include risk assessment as an appendix).

The risk of failing to satisfy increasing public awareness and rising expectations to improve environmental management generally and more specifically recycling was transferred from the corporate risk register to the divisional risk register in March 2008. The divisional risk rating is 12 and this will be significantly reduced if the proposed systems are introduced. There are however a number of risks associated with change and a risk assessment is attached as Appendix B.
2. **Introduction**

2.1 The purpose of this report is to outline proposals to improve recycling and composting performance and increase the diversion of waste from landfill. The key drivers behind these proposals are both environmental and financial.

2.2 Anaerobic decomposition of biodegradable waste, as occurs in landfill, produces methane which is significantly more harmful to the environment than CO₂. Diverting waste from landfill is therefore a key objective in the council’s climate change strategy. The landfill capacity within the county is also becoming scarce.

2.3 The cost of landfill has significantly increased and the County Council face punitive measures proposed by the Government under the Landfill Allowance Trading Scheme. Failure to divert waste from landfill will have a negative impact on the council tax payer and as a collection authority we can play a significant role in reducing, recycling and composting waste and reducing the amount of biodegradable waste entering landfill.

2.4 It is therefore essential that ways are found to divert waste from landfill that are sustainable, cost effective an equitable to householders.

3. **Background**

3.1 The Gloucestershire Waste Partnership Joint Municipal Waste Management Strategy (JMWMS) was approved by Cabinet on 30th October 2007. The Strategy has also been approved by the County Council and the other five district councils in Gloucestershire.

3.2 The JMWMS includes a joint strategic statement by the Gloucestershire Local Government Association, signed by the leaders of all seven local authorities, with a vision that “all households in Gloucestershire will have convenient and easy to use collection services, enabling them to recycle and compost at least 70% of their rubbish by April 2010”. The Strategy also contains a high level collection system action plan which aims to:

- Increase the range of dry recyclables collected from the home
- Introduce the kerbside collection of kitchen (food) waste
- Introduce alternative weekly collection of residual waste once sufficient recycling and composting infrastructure is provided.
- Consider enforcement policies such as a no side waste ban and compulsory recycling measures.

3.3 The JMWMS sets targets for Gloucestershire to recycle and compost 40% of waste by 2009/10, rising to 50% in 2014/15. This council’s business plan for 2008/09 sets targets to recycle and compost 35% of waste in 2009/10, increasing to 40% in 2010/11.

3.4 Recycling and composting performance increased steadily from 2001 to 2006, although unfortunately this improvement tailed off from 2006 to 2008. Kerbside recycling for paper, glass bottles, tins and cans was introduced in 2002/03, and kerbside collection of garden waste in 2005/06. Recent improvements include the provision of neighbourhood collection points for cardboard and plastic bottles. The graph below shows the incremental and sustained growth in recycling and composting since 1998/99. It should be noted that 1000 tonnes, or 2%, has been
deleted from the 2007/08 results due to changed performance indicator guidelines regarding the treatment of wood, despite the material being diverted from landfill.

3.5 Existing service provision will not, however, enable this council to meet its strategic targets and it will not satisfy public demand for sustainable waste management. Pragmatic and affordable improvements are required to increase the diversion of biodegradable waste from landfill and improve equality of opportunity and service quality to all householders.

3.6 Officers have evaluated the available strategic and operational options and their findings are contained within the body of this report.

4. **Dry Recyclables**

4.1 The current green box system allows householders the opportunity to recycle paper, magazines, cans/tins and glass bottles and jars. Collections are made on alternate weeks and the system is well used. There is, however, significant public demand to increase the range of materials collected.

4.2 The two materials most requested for kerbside collection are cardboard and plastic. It is estimated that there is around 3,000 tonnes of mixed cardboard (grey kitchen cardboard and heavy duty brown cardboard) and 1,500 tonnes of mixed retail plastic in the household waste stream. The council currently provides neighbourhood bring facilities for both materials and in 2007/08 a total of 622 tonnes of mixed cardboard and 308 tonnes of plastic bottles were recycled in this way.

4.3 The kerbside collection of plastics is problematic. The material is high volume and low weight and would require a significant amount of space on the collection vehicle to accommodate the material. The only way of achieving this is to increase the collection frequency to weekly or to utilise additional vehicles and the cost estimate for this option is £160,000 capital for set up with £450,000 recurring revenue per
annum. This represents a significant increase to the council tax and in the current economic climate this is not considered a feasible option. Furthermore, the increase in fuel usage and the resulting increase in CO₂ emissions generated by providing a separate collection system for plastic would have a negative impact on the sustainability of this option.

4.4 Instead, it is the Cabinet’s aspiration to increase the number of recycling bring sites incrementally as new potential sites are identified and adequate collection capacity can be provided. It is also the Cabinet’s aspiration to increase the types of plastic that can be collected at bring sites, as and when improved facilities for downstream processing of plastics become available.

4.5 Providing a kerbside collection of grey kitchen cardboard will have a positive impact on the council’s recycling performance and can be achieved at nil cost. Unfortunately, it is not possible at this time to economically collect heavy duty brown cardboard from kerbside as its bulky nature and resistance to compaction would require a much larger storage area and/or more vehicles.

4.6 Mixing coloured glass on the collection vehicle will provide a spare bay which can be used to store kitchen cardboard. Mixed glass has a lower value than separated glass but the loss of income is offset by increased recycling credits for the additional card. The collection of cardboard at kerbside can therefore be introduced within existing budgets providing it is done at the same time as the current range of materials i.e. on alternate weeks.

4.7 I therefore recommend that Cabinet approve the kerbside collection of cardboard with effect from April 2009.

4.8 It should be noted that the current bring sites for both mixed cardboard and plastic bottles will continue to operate alongside the kerbside collection of cardboard.

4.9 In addition to the green box scheme for the kerbside collection of recyclables, the council also provide a communal bin system for flats and properties in multiple occupancy. This was introduced following consultation with occupiers who felt the green box scheme was not suitable for their needs (storage space, carrying distance, etc.) and wanted a system that allowed small quantities to be transported to nearby communal storage and collection points.

4.10 The scheme works well in some areas but overall it has not delivered the anticipated recycling rates. The main reason for this is contamination of the communal recycling bins by individual householders, resulting in a mixed load consisting of general waste and materials for recycling which then has to be landfilled. A key factor in this is the type of communal receptacle used to contain the materials. It is a standard wheeled bin with different coloured lids to represent the segregation of the different materials. The whole lid can be opened and therefore it is easy for an individual to deposit carrier bags or kitchen bins of general waste in the wheeled bin.

4.11 A simple solution to this problem is to provide locked lids with openings which restrict the size of object which can be deposited. For example, glass bins will have an opening which will allow a bottle or jar to be deposited but it will be impossible to directly place a carrier bag of general waste, prompting the individual to use the easier option presented by the fully opening lid on the general waste bin. It is thought that having to deposit individual items will not deter committed recyclers, which make up the majority, but will deter the careless dumping of general waste.

4.12 Modification to this system can be carried out incrementally. I therefore recommend that a capital bid of £10,000 be included in the 2009/10 budget to upgrade the communal bin system for flats and properties in multiple occupancy.
4.13 To ensure that the incremental introduction of this service takes place as planned, a new objective will be placed in the Operation Division’s service delivery plan for 2009/10, with a target of achieving an increase of 1% - 2% dry recycling performance from properties in multiple occupancy by the third quarter of that year.

5. **Kitchen (Food) Waste**

5.1 It is estimated that at least 20% of household waste is kitchen food waste that can be collected separately and composted and it would therefore be sensible to target this particular waste stream to improve performance.

5.2 In order to collect and compost this waste stream it is necessary to use a highly controlled composting process, which is designed to eliminate the potential for disease transmission. Officers have worked closely within the Gloucestershire Waste Partnership and the County Council have procured processing capacity for the anticipated volume of waste. They have also indicated that they will provide local transfer facilities to enable the efficient collection of kitchen waste. Both the processing and transfer facilities will be able to deal with garden cuttings. However, the Cabinet believe that previous County Council decisions regarding PFI contracts and the resulting delay in introducing waste treatment solutions introduce a degree of uncertainty and risk to the diversion of kitchen waste from landfill. As such, should approval be given to proceed with the collection of kitchen waste, it will be necessary to enter into a legal service level agreement with Gloucestershire County Council to reduce that risk. The agreement will also include details of an incentive payment to be paid to this council in return for increasing diversion of waste from landfill.

5.3 Given the nature of this waste it is essential that it is collected frequently and it is proposed that this should be done weekly. Officers estimate that approximately 45,000 households could immediately benefit from this service. This does not include flats or properties in multiple occupancy as it would not be prudent to introduce further waste segregation until such time as the dry recycling service to these properties is running smoothly. Providing a service to 45,000 households will, given a 55% participation rate which is comparable to that of new recycling schemes, deliver the potential to compost 5,000 tonnes of food waste per annum, or 10% of total waste arising. However, the cost of introducing a separate weekly collection scheme for kitchen food waste to 45,000 households is estimated at £494,000 per annum (full year costs), with additional one-off capital investment of £171,000 for containers (refer to option 1 of Appendix A). Again, in the current financial climate this cannot be considered a feasible option and consideration must instead be given to a co-collection option, as described in Section 7 below.

6. **Garden Waste**

6.1 The current garden waste scheme is provided to 42,000 households and diverts 6150 tonnes of biodegradable waste per annum from landfill (12.1% of total waste arising). Collections are made on alternate weeks using long life polypropylene bags. The operational cost of this service is £326,000 per annum. It is fully subsidised by the general rate fund in that it is free at the point of collection by those receiving the service.

6.2 Whilst it is a popular service there has been criticism about the overall effectiveness and sustainability of the scheme. Customer feedback has highlighted the following concerns:

- Infrequent collections – a weekly collection is preferred by many customers as the fortnightly collection generates large quantities and fetid smells, causes excessive weight due to rainwater ingress and causes decomposing waste to stick to the
inside of the bags.

- Manual handling – the use of bags, which are often quite heavy, is labour intensive and presents health and safety manual handling risks to both customers and collection operatives. The Health and Safety Executive (HSE) currently have a focus on improving safety within the waste collection and recycling industry. The most common accidents in the waste industry arise from manual handling and the HSE recommend that manual handling should be minimised wherever possible by the use of wheeled bins.

- Loss of bags – bags are often blown away in the wind after emptying.

- Counter productive – a fully subsidised service discourages home composting, this is the antithesis of the national waste hierarchy which first and foremost promotes waste reduction, including home composting.

- Inequality of opportunity - there are approximately 3,000 households not included in the scheme who could benefit from it. These householders regularly complain that their close neighbours receive the service when they do not. Furthermore, because the service is fully subsidised it effectively means that those households not receiving the service, including those who live in flats etc, are contributing to the cost through their council tax whilst not benefiting in any way.

7. Co-collection of kitchen and garden waste

7.1 Collecting kitchen and garden waste in the same vehicle is the most cost effective way of improving performance and increasing diversion of waste from landfill. To do so, however, it is necessary to provide a weekly collection and provide alternatives to the garden bag currently in use.

7.2 Continued use of garden bags, collected at the same time as the kitchen waste, would require a significant investment in additional labour. In addition to emptying bags the operatives would also be responsible for emptying household kitchen waste bins, thereby requiring additional travel to and from the collection vehicle. The estimated revenue growth which would be required for this option is £528,000 per annum (full year costs) with capital investment of £171,000 in 2009/10 (refer to option 2 of Appendix A).

7.3 Providing every household in the borough with a second wheeled bin is neither practical nor cost effective. Many households do not have a need for a second bin for garden waste or the space to store it. The estimated revenue growth required for such a scheme is £535,000 per annum (full year costs) with capital investment of £89,000 (refer to option 3 of Appendix A)

7.4 The most equitable, cost effective option to improve performance is to introduce a charge for the provision of a second wheeled bin and the removal of garden waste on a weekly basis. Customers who choose to subscribe to the service will benefit from the provision of a sturdy, manoeuvrable wheeled container for their garden waste and will receive a weekly collection as opposed to every other week. The second bin can also be used to hold kitchen waste and customers will receive, free of charge, a 5 litre kitchen caddy to temporarily store waste in their kitchens until such time as they are able to deposit it in the wheeled bin.

7.5 I propose that the charge for this service be set at £30.00 per bin per annum for the financial year 2010/11. This compares well with charges made by neighbouring GWP member authorities such as Cotswold (£30 per annum for a weekly collection) and Tewkesbury (£30 per annum for a collection every other week). Charging at the point of collection means that only those householders requiring the service pay for it.
Concessions will be available to households in receipt of council tax benefit.

7.6 Householders who do not wish to subscribe to the garden waste service will receive a 22 litre bin for the storage of their kitchen food waste and this container will be emptied weekly into the same collection vehicle. They will still have the option of taking their garden waste to our recycling centre in Swindon Road or to one of the County Council’s household recycling centres.

7.7 This proposal will be revenue cost neutral in the 2009/10 financial year subject to the delivery of the service level agreement referred to in paragraph 5.2 and receipt of incentive payments from the County Council. Income estimates are based on the experience of Cotswold District Council where take up is approximately 50% of previous customer base. In 2010/11 this proposal will deliver full-year savings of £106,000 per annum, which can be used to maintain other essential services and offset increases in council tax. Capital investment of £170,000 will be required in 2009/10 (refer to option 4 of Appendix A).

7.8 It should be noted that the revenue implications in 2009/10 depend on when in the financial year the service is introduced. The key factor here is the ordering lead time for the wheeled bins and caddies. Officers report that suppliers are quoting current lead times from order to delivery at between 6 months and 12 months. Orders cannot be placed until full Council has approved the necessary funding (in theory, an order could be placed before this, with penalties becoming payable if Council subsequently decided not to approve the funding, but the Cabinet believes this approach would undermine the decision-making supremacy of full Council). As such, Council will be requested to approve the funding in December 2008, independently of the main budget setting process.

7.9 To promote waste reduction, reduce environmental impact and increase householder choice I also propose that subsidised home compost bins be made available to assist householders to compost their own garden waste without the need for council collection. The subsidy recognises the importance of waste reduction in the waste hierarchy and the contribution that home composting can make in reducing methane and CO₂ emissions. This will require a capital investment of £20,000 in 2009/10.

7.10 To summarise, I propose that:

- A new kitchen waste collection service is introduced for 45,000 homes in the borough, starting in September 2009.

- The existing fortnightly collection service for garden waste be replaced by a charged-for weekly service, also from September 2009, collected at the same time and in the same vehicles as the kitchen waste.

- Households who wish to participate in the weekly garden waste collection service will be provided with a special wheeled bin for this service at the cost of £30 per bin per annum.

- Households that do not wish to participate in the weekly garden waste collection service will have the option to purchase a subsidised home composter unit. All households will continue to be able to take garden waste to the Swindon Road depot free of charge.

8. Residual waste collections

8.1 Residual waste is the waste that is not recycled or composted but is disposed of at landfill. The JMWM sets a target to move to alternate weekly collections over the next three years but only once sufficient recycling and composting infrastructure is
8.2 I do not believe that necessary infrastructure is yet in place or that the imposition of alternate weekly collections of residual waste is necessary or productive at this time. I therefore propose that the council continue to provide a weekly collection service for residual waste. Only when the new systems have been implemented, tested, and confirmed as fit for purpose, and when the amount of residual waste for collection has been significantly reduced, could alternate weekly collections of residual waste even be considered, and only then after further consultation with householders.

9. **Collection Polices**

9.1 The JMWMS also commits the council to review all collection policies to drive segregation, encourage waste reduction and ensure waste collection does not have a negative impact on the street scene.

9.2 I therefore propose to work with the Cabinet-sponsored waste and recycling member working group over the next 4 months to review the full range of policies and report back to the Environment Overview and Scrutiny Committee and Cabinet in the summer of 2009.

10. **Shared Services**

10.1 The cabinet will be aware that this council has agreed a statement of strategic intent with Tewkesbury Borough Council and Cotswold District Council to explore the potential for shared environmental services. Officers are already working on the first stage of this process which is to depot share with Tewkesbury Borough Council at the Swindon Road site.

10.2 Members will also be aware that the Gloucestershire Joint Improvement Board has commissioned a report to detail the strategic business case for county wide improved joint working in waste management. This has identified that significant efficiency savings may be achievable in the long term.

10.3 The proposals contained in this report do not prejudice either of the above projects. In fact, by redesigning service delivery in line with the JMWMS, the proposals support the principle of joint working in Gloucestershire.

**Background Papers**

| Joint Working in Waste and Environmental Services – Cabinet report 15th January 2008 |

**Report Author**

Rob Bell, Assistant Director Operations, 01242 264181, rob.bell@cheltenham.gov.uk

**Accountability**

Councillor Paul Massey, Cabinet Member for Sustainability

**Scrutiny Function**

Environment Overview and Scrutiny