

Cabinet

23 October 2008



Potential Improvements to Waste Management Performance

Report of John Richardson, Corporate Director, Environment, (Cabinet Portfolio Member for Environment – Councillor Bob Young)

1 Purpose of the Report

- 1.1 To seek approval for further extension of the kerbside green waste collection and support for home composting across the County as part of a package of measures to help mitigate landfill costs, improve satisfaction with services and meet environmental performance expectations.

2 Background

- 2.1 The England Waste Strategy (2007) highlights that despite some progress, as a country we are still consuming resources at an unsustainable rate. Whilst household waste only accounts for 9% of all waste arisings, it nevertheless is a key area which Councils can influence, and challenging national targets have been set for recycling and composting of 40% by 2010 and 50% by 2020. At the same time a landfill tax escalator (set to double by 2010 to £48 per tonne) provides a substantial incentive for investment in collection for recycling or treatment.
- 2.2 At a local level the County Durham Partnership have recognised the importance of improvements in waste performance through inclusion of two waste targets (below) in its set of LAA priority indicators. The bid for unitary status also references waste in several areas, with a commitment to improved recycling, reduction in waste landfilled and increased satisfaction with services.

		2007/08 (as per NI definition)	2008/9 Target	2009/10 Target	2010/11 Target
NI191 (LAA)	Residual household waste per Household (kg based on 227,829 households)	839.75	741.00	684.00	673.00
NI192 (LAA)	% household waste sent for reuse, recycling and composting	25.00	35.00	40.00	41.00
NI 193	% municipal waste landfilled	74.00	63.15	58.65	57.75

- 2.3 As can be seen from the above table, meeting these targets presents a considerable challenge. The estimated outturn for 2008/9 is approximately 30% recycling and composting (ie 5% below target). This is primarily due to the process problem with the aerobic digester technology. However the targets for 2009/10 and beyond are even more challenging, and cannot solely rely on the prospect of a re-commissioned fully operational digester to meet them.
- 2.4 On 31 July 2008 Cabinet therefore approved a number of actions to take the waste project forward to plan for new treatment capacity. Clearly this will take time, and in the short term LATs permits are likely to be needed to be purchased in order to reduce the risks of exceeding increasingly stringent landfill allowances. The report also highlighted that the LGR Waste Management Workstream would be presenting for consideration further measures to bring more immediate (and sustainable) benefits to performance.

3. High Level Options

- 3.1 There is an LGR Workstream looking at options for improved performance in the future in the following areas:
- ◆ Waste reduction measures
 - ◆ Home composting
 - ◆ Waste re-use initiatives
 - ◆ Enhanced recycling
 - ◆ Kerbside recycling
 - ◆ Bring sites
 - ◆ Third parties
 - ◆ Household waste recycling centres
 - ◆ Recycling of trade waste element of the municipal solid waste
 - ◆ Increased green waste collections
 - ◆ Separate collection of putrescible waste
- 3.2 For each element, current waste arisings were compared to the likely potential reductions, and the cost-benefits assessed by comparing interventions against continuing to dispose through landfill. Account was made of new initiatives, such as the recent Greencycle contract in four Districts which extended the range of materials to include plastics and cardboard.
- 3.3 The Workstream has recognised the need for an early win for Green Waste and costed options should therefore be considered.

4. Green Waste: Home Composting and Kerbside Collection

- 4.1 Waste composition analysis undertaken across the county and nationally indicates that garden waste can account for up to 20% of all household waste arisings. This represents a considerable potential for reducing waste to landfill, as well as deriving carbon benefits through use of compost as a growing medium, rather than contributing to the production of methane in landfill.
- 4.2 The preferred option for dealing with green waste is through home composting, as this avoids the environmental impact and cost of collection. The Waste Resources Action Programme (WRAP) estimates that 30% of households have potential to home compost across the County. The County Durham Waste Awareness Partnership (made up of Districts and County representatives) has distributed some 32,000 compost bins to households, diverting over 14,000 tonnes of garden waste. In theory, this has avoided the Waste Disposal Authority paying approximately £893,000 p.a in landfill costs.
- 4.3 There are still a considerable number of households with gardens which are not home composting and to encourage more it is recommended that 5,000 composters be purchased, and sold to residents at a subsidised rates of £8 each. Full details of the proposed scheme are available in the Members Resource Centre.
- 4.4 Kerbside green waste collection services offer the greatest potential for improving performance. All Districts, with the exception of Chester-le-Street already offer some level of service (mostly free of charge, with the exception of Teesdale) and combined cover 58,000 out of 230,514 households, the majority (33,600) being in Easington.
- 4.5 The extension of green waste collection is currently limited by the availability of licensed composting facilities. This may increase over the coming year, subject to planning and licensing approvals for new or extended facilities.
- 4.6 It is considered that there are around 67,000 additional homes that could be suitable for a green waste collection and composting scheme. It is considered that a phased approach should be taken to extend the service, starting collecting early in 2009.
- 4.7 The table below illustrates the proposed programme with target dates and projected tonnage. Note should be made that Wear Valley have recently approved an extension of their green waste scheme to 11,000 households. These are not included in the figures.

District	Additional households	Estimated tonnage p.a.	Increase in recycling rate	Target start date
Sedgefield	20,000	3,000	1.2%	1/4/2009
Durham	20,000	3,000	1.2%	1/4/2009
Derwentside	12,000	1,800	0.7%	1/6/2008
Chester	15,000	2,250	0.9%	1/6/2009
Totals	67,000	10,050	4%	

NB: Calculation based on a predicted 0.15 tonne per household yield

- 4.8 The potential for extension of green waste collection in Teesdale (currently to 3,000 households who have opted into the service) is complicated by a charge being levied for the service (£15 per annum) and contractual obligations to the Teesdale Conservation Volunteers for delivery. It is however proposed to assess options for the extension of green waste in this area and bring forward further reports for consideration in due course.
- 4.9 If this programme of implementation was achieved it is predicted that an additional 10,050 tonnes of green waste could be diverted from landfill each year, with an improvement to composting/recycle rate of 4%. There are likely to be benefits in relation to resident satisfaction with services, as experience from the pilots indicate that these services are highly popular.
- 4.10 Subject to approval of these recommendations, it is proposed to develop, in consultation with Members, the detail of the areas to receive these new services. Objective criteria including size of gardens, density of housing area, accessibility and distance of travel will be used, and it is proposed to submit these plans for formal approval later in the year. Subject to future capacity being developed, there will be the potential for Members to consider a scheme like this county-wide, in line with many of the top performing Councils in the country.

5. Financial Issues

- 5.1 Defra have awarded a Waste Infrastructure Capital Grant (WICG) as follows to the County Council/new Authority. This is non-ring fenced.

2008/9	£867,470
2009/10	£863,816
2010/11	£316,890

The set up costs of both the home composting and green waste collection would meet the criteria for grant expenditure.

i) Home Composters

- 5.2 It is proposed to use £100,000 (split over this and next financial year) of the WICG to purchase 5,000 compost bins (2 sizes av. £20 each) and pass these on for sale to residents at the discounted rate of £8 each. Levying a charge will ensure the appropriate balance between incentive, by ensuring the composters are valued, as well as provide a return for the authority (which can be re-invested).

- 5.3 The bins when fully utilised could prevent 809 tonnes of green waste per annum going to landfill equating to £57,000 landfill costs.

ii) Green Waste Collection

- 5.4 It is proposed to utilise the WICG to meet capital costs. It is proposed that 38,000 bins would be purchased in 2008/09 costing an estimated £798,000 and 29,000 bins would be purchased in 2009/10 costing an estimated £609,000.

- 5.5 The total revenue costs are estimated to be £916,050 per annum. This comprises the following:
- Contract hire, maintain and operate 5 additional refuse collection vehicles at £57,000 each per annum (over 2 years) totalling £285,000.
 - 5 three person collection crews would be required at £84,000 each per annum totalling £420,000.
 - The cost of composting the waste is £21 per tonne and this would total around £211,050 during 2009/10 for the predicted tonnage.
- 5.6 In addition, one-off revenue costs of totalling £60,000 would be required for delivery of bins and publicity incurred over 2008/9 and 2009/10.
- 5.7 In arriving at the above costs detailed option appraisals have been undertaken to help maximise value for money, for example around staff, vehicle utilisation and duration of service. Every effort will be made to reduce these costs still further, and an update provided to Members as the operational detail of the scheme is developed.
- 5.8 It is important to note that with this programme an estimated 10,050 tonnes of green waste will be diverted from landfill (assuming it would otherwise be in residual waste), which would have cost the Authority £712,645 (2009/10), £793,045 (2010/11) and £873,445 (2011/12) in disposal costs. Furthermore, whilst the aerobic digester remains out of commission, the Authority is likely to be in a position where it needs to purchase LATs permits to avoid penalties for exceeding its landfill quotas. Based on current market rates for permits (£30/tonne) the cost of purchasing an equivalent amount of permits in 2009/10 would be £301,500 p.a. This cost would of course vary both in 2009/10 and in future years.
- 5.9 From these projections and assumptions the following summarises the costs of green waste collection against those of landfill:

	2009/10	2010/11	2011/12
Potential Waste Disposal Cost (assuming equivalent LATS purchase also required)	£1,014,145 (£712,645 + £301,500)	£1,094,545	£1,174,945
Potential collection costs (excluding £60k set up 2008/9)	£916,050	£916,050 (+RPI)	£916,050 (+RPI)

- 5.10 Given the fact that the green waste scheme in part offsets existing landfill costs, it can be concluded that
- £712,645 (2009/10) might be considered budget neutral;
 - £60,000 one off revenue and £203,405 might be considered as growth, albeit less growth than would have been required with LATs purchase of the equivalent amount.

5.11 It is important to note that Local Government Reorganisation will likely provide an opportunity to reduce costs through service rationalisation. For this reason, it is proposed to appoint the additional crews on a fixed term basis only, in order to retain maximum flexibility in the design of future converged services.

6. Risk

6.1 The predicted budgets and performance are based on current knowledge (from pilots across the County) and the likely tonnage projections. In particular the resource requirement assumes availability of composting facility at Consett and Wingate, both of which are currently operational. Contract(s) will be required with the relevant composting service provider to avoid price increases and to secure the availability of the outlets.

6.2 Due to European-wide recycling initiatives, there is currently a shortage of wheelie bins, with delays of up to 5 months, and fluctuating prices. Assurances will be sought that the required bins can be delivered on time and quoted prices honoured. Bins will need to be delivered in early February to ensure delivery can be completed for 1/4/09. It must be recognised that delays in the delivery of bins by the supplying companies are sometimes experienced which can lead to slippages in distribution and target start dates.

6.3 The proposed scheme together with existing collection will provide a service to 136,000 households out of 184,500 (working estimate only) who have gardens of sufficient size (i.e nearly three quarters) **Appendix 2** details the distribution across the County. Selection of the areas will be based on objective criteria set out in paragraph 4.10 of this report. Clearly this will leave some areas without the service, (as indeed is currently the case). In future there is potential to extend this scheme county-wide, when the level of efficiencies through rationalisation of services are clearer and linked to a bid commitment for converged collection arrangements.

7. Summary

7.1 County Durham, like most local authorities, faces some challenging targets for recycling and composting in the years ahead. Current lack of treatment capacity and the rising costs of landfill are combining to make investment in recycling or composting services an imperative.

7.2 The measures outlined in this report are estimated to collectively add 8.9% to existing performance, thereby increasing the prospect of meeting challenging LAA and Government Targets.

8. Recommendations

8.1 It is recommended that Cabinet:

- 1) Note the challenging LAA and Government Targets relating to waste, and the measures outlined in this report to help meet them in the short term.
- 2) Approves the extension of green waste collection to a further 67,000 households across the County, including the purchase of bins and notes that a further report detailing the collection areas will be submitted for agreement.
- 3) Approves the purchase of 5,000 compost bins be subsidised over two years at a cost of £100,000 which would be met from the Waste Infrastructure Capital Grant Scheme and the subsequent sale at the subsidised rate of £8.00 per unit.
- 4) Notes that the budget provision for this initiative will be found from the costs which would otherwise have been incurred for landfill.

Background Papers:

Revised Joint Municipal Waste Management Strategy for County Durham
2007 – 2020.

High Level Waste Management Options 2008-11 Waste Management Workstream

Green Waste Extension Proposals, Waste Management Workstream

Home Composting Proposals, Waste Management Workstream

England Waste Strategy (2007)

LATS Trading Website. www.lats.defra.gov.uk (restricted)

County Durham Local Area Agreement 2008-11

Contact Rod Lugg 0191 383 3340

Appendix 1: Implications

Local Government Reorganisation

(Does the decision impact upon a future Unitary Council)

These proposals contribute to a Bid commitment to raise performance in waste management and improve resident satisfaction. It is also consistent with the expectation from John Healey, Minister of State for Local Government for tangible improvements from 2009/10 in some services. The report covers matters that currently span responsibilities of collection and disposal authorities.

Finance

The financial implications are detailed within the report and would be offset by the current cost of landfilling the material.

Staffing

Additional staff will be employed, having temporary contracts to allow rationalisation of refuse collection services in line with the LGR process.

Equality and Diversity

All District Councils currently provide assisted kerbside pull-outs (and return) for vulnerable people. It is proposed to continue this practice in relation to the green waste scheme.

Accommodation

An operational plan is being developed detailing the deployment of personnel and equipment associated with this service.

Crime and Disorder

None

Sustainability

Composting garden waste is more sustainable than landfilling as the process reduces methane and carbon dioxide emissions. There are also benefits to local agriculture in reducing use of chemical fertilisers by using organic waste instead. All composting facilities are located within the County.

Human Rights

None

Localities and Rurality

Until more composting sites are developed the service will be targeted on the basis of accessibility. The present availability does not facilitate providing the service to isolated areas, however there is a potential to extend the service wider in the future.

Young People

None

Consultation

The County Council Environment Portfolio Holder has been involved in the preparation of this report.

This report has been developed through close consultation between the Waste Disposal Authority (Durham County Council) and the Waste Collection Authorities (Durham District Councils). The Environment Agency has also been consulted and has no objection to these proposals.

Trade Unions have been consulted regarding the staffing issues raised in the report and have no objection to the proposals for temporary appointment of staff relating to these new services.

The Environment and Neighbourhoods Programme Board have considered and endorsed the proposals set out in this report. The Joint Implementation Team received this report on 17th September and a further report on the business case and operational options at its meeting on 1st October. They have endorsed the progression to Cabinet.

Health

No implications

APPENDIX 2

	City of Durham	Sedgefield Borough	District of Easington	Derwentside District	Teesdale District	Wear Valley	Chester-le-Street	Total
Approximate Total number of households**	38,938	40,699	42,924	41,328	11,787	30,346	24,492	230,514
Households now receiving service	6,000	3,400	33,600	8,000	3,000	15,000***	None	69,000
% of households within District covered at present	15.4%	8.4%	78.3%	19.4%	25.5%	49.4%	0%	29.9%
Proposed additional properties (Early-Mid 2009)	20,000	20,000	0	12,000	0	0	15,000	67,000
Total households receiving service after proposed extension	26,000	23,400	33,600	20,000	3,000	15,000	15,000	136,000
% of households receiving service after proposed extension	66.8%	57.5%	78.3%	48.4%	25.5%	49.4%	61.2%	59%
Estimated number of households with gardens outside the scheme*	5,150	9,159	739	13,062	6,430	9,276	4,597	48,411

* This estimate is based on assumption that 20% of households are not suitable for inclusion due to lack of garden, accessibility etc. This requires further detailed assessment.

** Source of data is Wastedataflow.

*** Includes recent approval for 11,000 households in Wear Valley