

Additional modelling – chargeable garden waste collection service A precis of the main report

Following the initial option modelling, chargeable garden waste schemes were identified as an area to investigate further. The areas of investigation are identified below:

- Uptake – collection resources estimates has been undertaken on 20%, 30% and 65% of households taking part.
- Charge – analysis has looked at the impact of charging £35 per bin and £45 per bin.
- Increased HWRC garden waste – the modelling has investigated the impact of 5% and 15% of the current garden waste collected entering HWRC sites upon the introduction of a chargeable garden scheme. The cost per tonne at HWRC sites for processing garden waste has been set at £35 per tonne, based on County Council information.
- Residual waste – modelling has been undertaken on the impact of 5% and 15% of the current garden waste collected entering the residual bin upon the introduction of a chargeable garden scheme.

The table below shows the results of the modelling as whole system costs for the Baseline and each sensitivity. The shading indicates the most expensive (red) through to the least expensive (green). All the options result in savings compared to the Baseline, due to the income generation and reduced vehicles and staff requirements. Even with low uptake, the introduction of a food waste scheme and additional material going to the kerbside residual collection, the whole system costs appear lower than the current service. The greater the uptake the greater the saving, as the charge appears to offset the collection and treatment costs. It should be noted the analysis does not include the whole collection service costs, for example items such as central recharges, administration / back office, communications and spare vehicle are not covered.

Increasing the charge for garden waste collections reduces overall costs in each option, however, in reality the higher charges could reduce uptake. The modelling indicates a reduction in whole system costs of around £2.8million for the high uptake options (0a and 1a) and £1.3million for the low uptake options (0b and 1b). For all but two authorities, the additional residual waste collected at the kerbside did not result in significant additional collection costs but did incur additional residual treatment costs and an overall increase of between £0.5 and £1million compared to the Reference Options. Sensitivity 4 has looked as pulling together the SWP parameters which use the worst case assumptions of those modelled and assumes a 20% uptake of the scheme. The results still indicate that the overall cost are lower than the Baseline, however the introduction of a food waste collection does bring costs significantly closer to the Baseline.

Option	Reference Options	Sensitivity 1 Charge increased to £45	Sensitivity 2 Increased garden waste to HWRC	Sensitivity 3 Increased garden waste to kerbside residual	Sensitivity 4 Increased garden waste to kerbside residual and HWRC
Baseline	£36,690	£36,690	£36,690	£36,690	£36,690
Baseline + CG 65 uptake	£23,970	£21,090	£24,330	£24,920	
Baseline + CG 30% uptake	£26,230	£24,910	£26,590	£27,180	
Baseline + CG 20% uptake					£28,850
Option 1 + CG 65% uptake	£30,000	£27,120	£30,360	£30,570	
Option 1 + CG 30% uptake	£32,210	£30,890	£32,570	£32,780	
Option 1 + CG 20% uptake					£34,450

The analysis would suggest that once a chargeable garden scheme is chosen to be introduced, the next two most important factors are the level of uptake and level of charge, both of which influence each other and the overall service performance.

NB. This precis is taken from section 11 of the full report and is not a stand-alone document. This precis should be read in conjunction with the full information provided in the report.