

Appendix - Options Modelled

| Option | Description |
|--|--|
| Baseline | Current service |
| Option 1: Waste minimisation | Focus on waste awareness/ education/ waste reduction/ recycling and prevention initiatives |
| Option 2: Reuse and repair | Focus on facilitating or promoting reuse/ repair activities |
| Option 3: Revised Baseline with Consistent Collection measures, Extended Producer Responsibility (EPR) and Deposit Return Scheme (DRS) | As Baseline, plus: <ul style="list-style-type: none"> • Recycling collection consistent with materials indicated in consistent collections consultation (plastic, glass, metal, paper and card) • 'Free' garden waste collection for all districts • Separate weekly food waste collection for all households • EPR and DRS come into effect • Sensitivity on recycling to include batteries, textiles, small Waste Electronic and Electrical Equipment |
| Option 4: Retained charged garden | As Option 3, except: <ul style="list-style-type: none"> • Garden waste collection is retained as a charged service for all districts that currently operate a subscription service |
| Option 5: Restricted residual waste (A and B) | As Option 3, plus: <ul style="list-style-type: none"> • A: Residual waste collected fortnightly in 140L wheeled bins OR • B: Residual waste collected three-weekly in 240L/180L wheeled bins |
| Option 6: Twin stream recycling, fibre out | Option 3, plus fortnightly twin stream collection of dry recycling, paper and card in one box, plastics, glass and cans in wheeled bin |
| Option 7: Kerbside sort | Option 3, plus fortnightly kerbside sort collection of dry recycling |
| Option 8: Three-stream recycling | Option 3, plus fortnightly three-stream collection of dry recycling: paper and card in box 1, glass in box 2, plastic and cans in box 3. |

Options one and two (waste prevention and reuse) have been subject to a qualitative assessment and are activities that all councils should undertake and vary in their outputs and inputs. Good practise and initiatives that the LWP could deliver are contained within the draft Strategy.

The recycling collections were modelled using the Kerbside Analysis Tool which gives comparative annualised costs for different systems. All options modelled incur an additional cost for the LWP when considering total net costs. Service changes are required to contribute towards achieving the national recycling rate of 65% by 2035. Reaching these higher targets means more investment is required and the Government has stated a commitment to covering additional costs to local authorities for the new required measures. Furthermore, the Government is also intent on introducing EPR.

The collection options were also modelled using WRATE (The Waste and Resources Assessment Tool for the Environment) to determine the carbon impact as kg CO₂-eq savings.

As part of the process there have been a series of workshops held which allowed for input into the review. The criteria for the options to be measured against and their associated weighting were chosen at a workshop in June 2021 (which was attended by Officers and Councillors from all LWP authorities) and are outlined in the table below:

| Criteria | Weighting |
|--|-----------|
| Carbon | 4.7 |
| Recycling performance / reuse performance / waste prevention performance | 4.3 |
| Cost | 4.3 |
| Residual waste arisings | 4.1 |
| Educational / awareness raising | 4.1 |
| Compliance with National Policy | 4 |
| Public acceptability | 3.9 |
| Social value | 3.5 |
| Operational flexibility | 3.4 |
| Resource use | 3.2 |

FRM have considered each option in turn and evaluated using criteria agreed by the Partnership. Public acceptability, operational flexibility, compliance to regulations and social value indicators are more qualitative judgements and are scored using a 1 – 5 scoring system. The score has then been applied to an agreed weighting for each option.

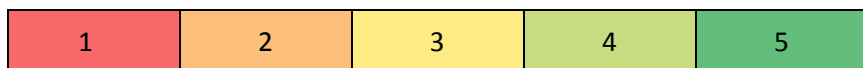
The overall results of this evaluation are presented in the table below.

All options result in an increase in the kerbside recycling rate for the LWP. Option 5a scores the highest overall for the assessment against the chosen criteria.

It should be noted that the costs and savings and recycling figures included in the report cannot be used directly as a basis for making service changes. The figures are indicative and modelled in comparison to LWP estimated baseline costs on an annualised basis. Further detailed business cases would be required to support decision making on proposed changes to waste services.

| | | <i>Business as Usual</i> | <i>Revised Baseline with Consistent Collection measures, EPR & DRS</i> | <i>As Option 3, with retained charged garden</i> | <i>As Option 3, plus restricted residual (140L WHB)</i> | <i>Option 3, plus restricted residual (3-weekly collection)</i> | <i>As Option 3, plus fortnightly twin stream collection of dry recycling</i> | <i>As Option 3, plus kerbside sort collection of dry recycling</i> | <i>As Option 3, plus three-stream recycling</i> |
|---|-----------|--------------------------|--|--|---|---|--|--|---|
| Criteria | Weighting | Baseline | Option 3 | Option 4 | Option 5A | Option 5B | Option 6 | Option 7 | Option 8 |
| Carbon | 4.7 | 3 | 3 | 3 | 5 | 5 | 1 | 1 | 1 |
| Recycling performance | 4.3 | 1 | 4 | 3 | 5 | 5 | 4 | 4 | 4 |
| Cost | 4.3 | 5 | 1 | 4 | 2 | 2 | 1 | 2 | 2 |
| Residual waste arisings | 4.1 | 1 | 4 | 4 | 5 | 5 | 4 | 4 | 4 |
| Educational / Awareness Raising | 4.1 | 1 | 4 | 3 | 4 | 4 | 3 | 4 | 4 |
| Compliance with National Policy | 4.0 | 2 | 3 | 2 | 3 | 2 | 4 | 5 | 5 |
| Public Acceptability | 3.9 | 3 | 5 | 4 | 2 | 1 | 4 | 3 | 3 |
| Social Value | 3.5 | 2 | 4 | 3 | 3 | 3 | 4 | 4 | 4 |
| Operational Flexibility | 3.4 | 4 | 5 | 5 | 5 | 2 | 3 | 2 | 4 |
| Resource Use | 3.2 | 2 | 3 | 3 | 5 | 5 | 3 | 3 | 3 |
| Total Score (with weighting applied) | | 94.8 | 140.5 | 133.6 | 153.8 | 135.7 | 120.3 | 125.4 | 132.2 |
| Highest Number = Best Option | | | | | | | | | |

Key



Worst performing

Best performing

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