

Overview of the Green Bin Options Appraisal

A three stage process was carried out to determine the options that would be consulted on. The primary considerations when carrying out the appraisal process for each option were:

- Will the option deliver the Council a financial saving?
- What impact will the service change have on customers?
- What impact will the service change have on the Council's recycling rate?

Stage 1 – Developing Long List of Options

A statistical analysis known as a Cartesian Product was used to generate service options based around the service variables set out in Figure 1. 14,400 service options were generated from this exercise.

Figure 1 - Service Variables

Food	Seasonality	Green
Separation of Food Food Separate No Food Food Commingled	Seasonality Seasonal service No seasonal service	Separation of Green Green Separate No Green Green Commingled
Food Collection Frequency (Summer) Food Weekly Summer Food Fortnightly Summer Food Three-Weekly Summer Food Four Weekly Summer		Green Collection Frequency (Summer) Green Weekly Summer Green Fortnightly Summer Green Three-Weekly Summer Green Four Weekly Summer
Food Collection Frequency (Winter) Food Weekly Winter Food Fortnightly Winter Food Three-Weekly Winter Food Four Weekly Winter No Food Service in Winter		Green Collection Frequency (Winter) Green Weekly Winter Green Fortnightly Winter Green Three-Weekly Winter Green Four Weekly Winter No Green Service in Winter
		Charging for Green Green Not Charged Green Charged

Stage 2 – Shortlisting of Options

The 14,400 options were reduced to 40 by removing variations of the same option and options that were illegal.

Table 1 (at page 4) summarises the 40 options. These options were reduced to 10 (highlighted in green) through the following sieving process.

Sieving exercise

1st sieve

The first sieve considered impact on the customer. It was not deemed acceptable for services to be removed completely.

Outcome

The following options were removed:

- options where there was no collection service for food; and
- options where there was no organic collection service (garden) .

2nd sieve

This sieving exercise considered which options would deliver savings. Operating a food waste service alongside a green waste service that is not charged will not deliver savings because more resources not less will be required.

Outcome

- All separate food waste options that were accompanied by a free garden waste service were removed.

3rd sieve

This sieving exercise considered the impact of collection frequency changes during the summer and winter for garden waste services.

Outcome

- Three-weekly service options removed due to scheduling difficulties and also a higher level of customer communications being required as the schedule would vary from month to month

Stage 3 Cost and Performance Modelling

Eunomia Research & Consulting Ltd carried out high level modelling of the 10 options resulting from stage 2 to determine anticipated savings and impact on recycling performance. Figure 2 provides a pictorial summary of the 10 options.

Figure 2 - Options Modelled

	Baseline	1	2	3	4	5	6	7	8	9	10
Food	Mixed With Garden	Mixed with Garden	Mixed with Garden	Weekly Separate							None
Summer Garden	Weekly	Weekly	Fortnightly	Weekly £				Fortnightly £			None
Winter Garden	Weekly	Fortnightly		Weekly £	Fortnightly £	Four Weekly £	None	Fortnightly £	Four Weekly £		None
Dry and Residual	Unchanged (weekly)										
	Baseline	1	2	3	4	5	6	7	8	9	10

Modelling outcomes

Option 1: Anticipated savings considerably lower than other options.

Outcome: Option 1 not progressed.

Options 2: This option anticipated to deliver savings of at least £400k and showed no impact on kerbside recycling performance. Benchmarking exercise found that over 50% of London council operate a fortnightly garden waste service. Level of impact deemed minimal.

Outcome: Option 2 put forward for detailed modelling and public consultation

Options 3: Option would deliver greater savings than option 2. Impact on kerbside recycling level approximately 6% reduction (overall 2% reduction on N195 recycling rate) which is less than options 4 – 10. 40% of London councils offer a charged garden waste service. Benchmarking shows that impact on satisfaction levels are highest in year 1 and reduce over time.

Outcome: Although potential for a certain amount of dissatisfaction the potential for significant savings warranted its inclusion in the consultation process.

Option 4- 6: These are variants of option 3 and delivered similar levels of savings. Recycling rate for option 4 is the same as option 3 and 1% less for option 5 and 6. These options included a charged garden waste service with reduced winter frequencies compared to option 3.

Outcome. These options were not put forward for consultation because they offered a reduced service compared to option 3.

Option 7- 9: These options although delivering the highest savings further reduced the Council's recycling rate and had a bigger impact on customers.

Outcome: These options were considered to have too negative an impact on customer and the Council's recycling rate so were not considered for consultation.

Option 10: This was included to understand what the cost savings would be for not operating either of the services. If implemented the Council's kerbside recycling rate would be reduced by approximately 18%.

The two options that delivered the required savings and had least impact on customers and the Council's recycling rate were determined as 2: **Free fortnightly combined green bin and food collection service** and 3: **Weekly charged (£60 per year) green bin collection service and free separate food collection service**. These two options were subject to detailed modelling and formed the basis of the public consultation process.

Table 1 - Green Bin Options

	Food Separation	Food Frequency Summer	Food Frequency Winter	Seasonal	Green Separation	Green Frequency Summer	Green Frequency Winter	Green Charged	Final Result for Sieving Exercise
1	Food Commingled	Food Fortnightly Summer	Food Fortnightly Winter	No seasonal service	Green Commingled	Green Fortnightly Summer	Green Fortnightly Winter	Green Not Charged	
2	Food Commingled	Food Weekly Summer	Food Weekly Winter	No seasonal service	Green Commingled	Green Weekly Summer	Green Weekly Winter	Green Not Charged	
3	Food Commingled	Food Weekly Summer	Food Fortnightly	Seasonal service	Green Commingled	Green Weekly Summer	Green Fortnightly	Green Not Charged	
4	Food Separate	Food Weekly Summer	Food Weekly Winter	No seasonal service	Green Separate	Green Fortnightly Summer	Green Fortnightly Winter	Green Charged	
5	Food Separate	Food Weekly Summer	Food Weekly Winter	No seasonal service	Green Separate	Green Fortnightly Summer	Green Fortnightly Winter	Green Not Charged	
6	Food Separate	Food Weekly Summer	Food Weekly Winter	No seasonal service	Green Separate	Green Weekly Summer	Green Weekly Winter	Green Charged	

	Food Separation	Food Frequency Summer	Food Frequency Winter	Seasonal	Green Separation	Green Frequency Summer	Green Frequency Winter	Green Charged	Final Result for Sieving Exercise
7	Food Separate	Food Weekly Summer	Food Weekly Winter	No seasonal service	Green Separate	Green Weekly Summer	Green Weekly Winter	Green Not Charged	
8	Food Separate	Food Weekly Summer	Food Weekly Winter	No seasonal service	No Green	N/A	N/A	N/A	
9	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Four Weekly Winter	Green Charged	
10	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Four Weekly Winter	Green Not Charged	
11	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Three-Weekly Winter	Green Charged	

	Food Separation	Food Frequency Summer	Food Frequency Winter	Seasonal	Green Separation	Green Frequency Summer	Green Frequency Winter	Green Charged	Final Result for Sieving Exercise
12	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Three-Weekly Winter	Green Not Charged	
13	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Fortnightly Summer	No Green Service in Winter	Green Charged	
14	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Fortnightly Summer	No Green Service in Winter	Green Not Charged	
15	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	Green Fortnightly Winter	Green Charged	
16	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	Green Fortnightly Winter	Green Not Charged	
17	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	Green Four Weekly Winter	Green Charged	

	Food Separation	Food Frequency Summer	Food Frequency Winter	Seasonal	Green Separation	Green Frequency Summer	Green Frequency Winter	Green Charged	Final Result for Sieving Exercise
18	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	Green Four Weekly Winter	Green Not Charged	
19	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	Green Three-Weekly Winter	Green Charged	
20	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	Green Three-Weekly Winter	Green Not Charged	
21	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	No Green Service in Winter	Green Charged	
22	Food Separate	Food Weekly Summer	Food Weekly Winter	Seasonal Service	Green Separate	Green Weekly Summer	No Green Service in Winter	Green Not Charged	
23	No Food	N/A	N/A	No seasonal service	Green Separate	Green Fortnightly Summer	Green Fortnightly Winter	Green Charged	

	Food Separation	Food Frequency Summer	Food Frequency Winter	Seasonal	Green Separation	Green Frequency Summer	Green Frequency Winter	Green Charged	Final Result for Sieving Exercise
24	No Food	N/A	N/A	No seasonal service	Green Separate	Green Fortnightly Summer	Green Fortnightly Winter	Green Not Charged	
25	No Food	N/A	N/A	No seasonal service	Green Separate	Green Weekly Summer	Green Weekly Winter	Green Charged	
26	No Food	N/A	N/A	No seasonal service	Green Separate	Green Weekly Summer	Green Weekly Winter	Green Not Charged	
27	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Four Weekly Winter	Green Charged	
28	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Four Weekly Winter	Green Not Charged	
29	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Three-Weekly Winter	Green Charged	

	Food Separation	Food Frequency Summer	Food Frequency Winter	Seasonal	Green Separation	Green Frequency Summer	Green Frequency Winter	Green Charged	Final Result for Sieving Exercise
30	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Fortnightly Summer	Green Three-Weekly Winter	Green Not Charged	
31	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Fortnightly Summer	No Green Service in Winter	Green Charged	
32	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Fortnightly Summer	No Green Service in Winter	Green Not Charged	
33	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	Green Fortnightly Winter	Green Charged	
34	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	Green Fortnightly Winter	Green Not Charged	
35	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	Green Four Weekly Winter	Green Charged	

	Food Separation	Food Frequency Summer	Food Frequency Winter	Seasonal	Green Separation	Green Frequency Summer	Green Frequency Winter	Green Charged	Final Result for Sieving Exercise
36	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	Green Four Weekly Winter	Green Not Charged	
37	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	Green Three-Weekly Winter	Green Charged	
38	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	Green Three-Weekly Winter	Green Not Charged	
39	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	No Green Service in Winter	Green Charged	
40	No Food	N/A	N/A	Seasonal Service	Green Separate	Green Weekly Summer	No Green Service in Winter	Green Not Charged	
41	No Food	N/A	N/A	No seasonal service	No Green	N/A	N/A	N/A	

