

Appendix 1 - Waste Management Options Appraisal Longlist

Option	Green Residual	Grey Dry Recycling	Brown Garden Waste	Food Recycling	Bags/Boxes	Total Weekly Capacity (General + Dry Recycling)	Pros	Cons
1	240ltr bin Fortnightly	240ltr bin Fortnightly	240ltr bin Fortnightly (subscription)			240ltr	<ul style="list-style-type: none"> - Familiar. - Simple. - Only two or three containers. - Some capacity for improvement – increase capture rates, which are currently only 66% of available collected materials. 	<ul style="list-style-type: none"> - Will not meet 50% recycling by 2020 as only avg. 32% of total waste is targeted in grey recycling bin and avg. 14% garden waste (on a free collection), which is a total of 46%. - Will not significantly reduce waste arisings. - Risk of rising disposal costs. - Risk of fines for not meeting recycling targets in 2020 and beyond. - Charge for GW is not popular.
2	240ltr bin Fortnightly	240ltr bin Fortnightly	240ltr bin Fortnightly (free)			240ltr	<ul style="list-style-type: none"> - Familiar. - Simple. - Only two or three containers. - Some capacity for improvement – increase capture rates, which are currently only 66% of available collected materials. - Will increase recycling rate by approx. 4% (which was lost when charges were introduced). - Reduce flytipping. - Free GW would be popular. 	<ul style="list-style-type: none"> - Cost to the Council – savings will therefore be required to come from elsewhere. - Might reduce home composting and charity donations. - Discourages re-use. - Increased waste collected per household. - Will not meet 50% recycling by 2020 as only avg. 32% of total waste is targeted in grey recycling bin and avg. 14% garden waste (on a free collection), which is a total of 46%. - Risk of rising disposal costs. - Risk of fines for not meeting recycling targets in 2020 and beyond.
3	240ltr bin Fortnightly	240ltr bin Fortnightly	240ltr bin Fortnightly (subscription)		Bags / Boxes (Increase range of materials)	275ltrs	<ul style="list-style-type: none"> - Reduce landfill waste. - Reduce cost of collection and disposal. - Increase recycling to meet targets – all additional recyclable material, including other plastics, metals, WEEE and textiles is 13.2%, which is 45.2% dry recycling and an additional 10-14% garden waste recycling. - Easier for residents as additional recycling can be disposed of at the kerbside, rather than travel to a HWRC or other local recycling bank. 	<ul style="list-style-type: none"> - Possibly increase the quantity of containers at each property. - Possible litter from boxes/bags and waste not being adequately secured. - Agreement already in place with MRWA for the range of materials we can collect for recycling - would possibly require contract variations and alterations to the MRF - COST. - Cost to supply additional containers and future replacements. - Possible additional collection costs. - Possible H&S issues e.g. manual handling of boxes.
4	240ltr bin Fortnightly	240ltr bin Fortnightly	240ltr bin Fortnightly Food & Garden (free)			360ltrs	<ul style="list-style-type: none"> - No additional containers required. - Less vehicles required. - Can still charge for the GW fraction of the bin. - Increase recycling through the addition of food. 	<ul style="list-style-type: none"> - Must treat food waste more rigorously = more expensive treatment. - Already trialled in Wirral and was not successful. Very little food waste captured. IVC technology is unreliable. - Can lead to greater quantity of landfilled waste, if IVC treatment not successful. - Properties without a garden and no need for a 240ltr bin for food waste.

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5	240ltr bin Fortnightly	240ltr bin Fortnightly	240ltr bin Fortnightly (subscription)	23ltr bin Weekly		263ltrs	<ul style="list-style-type: none"> - Increase Wirral's recycling rate to 42%, assuming a 30% capture rate. - Less biodegradable waste to landfill. - Weekly collection of food waste likely to be more popular, especially in Summer. 	<ul style="list-style-type: none"> - Increase the number of containers per household. - Cost to supply food waste containers (in house and external). - Replacement containers? - Supply caddy liners? - Cost to run additional service. - Capture of food waste likely to be low (around 30% of available – 7,000 tonnes of 23,000 tonnes, but can be as low as 10%). - Increases household waste capacity to 263ltrs per week, so total waste arisings likely to increase.
6	240ltr bin Fortnightly	240ltr bin Fortnightly	240ltr bin Fortnightly (subscription)	70ltr bin Fortnightly		275ltrs	<ul style="list-style-type: none"> - Increase Wirral's recycling rate to 42%, assuming a 30% capture rate. - Less biodegradable waste to landfill. 	<ul style="list-style-type: none"> - Increase the number of containers per household. - Cost to supply special food waste containers (in house and external). - Requires a specific liner for optimum effectiveness - £12 per annum per property. - Replacement containers? - Cost to run additional service, but less than the weekly food waste collection option. - Capture of food waste likely to be low (around 30% of available – 7,000 tonnes of 23,000 tonnes, but can be as low as 10%). - Increases household waste capacity to 275ltrs per week, so total waste arisings likely to increase. - Fortnightly food waste collection using aerobic bin is untested on a large scale. - Understanding and acceptance of the aerobic bin chemistry and success.
7	240ltr bin 3-Weekly	240ltr bin Fortnightly	240ltr bin Fortnightly (subscription)	23ltr bin Weekly		223ltrs	<ul style="list-style-type: none"> - Encourage waste prevention and reduction, although overall capacity only 5ltrs less each week. - Reduce cost of collection and disposal. - Help encourage better use of dry recycling and the food waste collection systems. - AHP collection available for families requiring additional capacity for nappies or medical waste? - Remove the issue of "smelly waste" in bins for two (or more) weeks. 	<ul style="list-style-type: none"> - Major change for residents. - Collection confusion – calendars essential. - Likely to be unpopular. - Increased risk of flytipping. - Disruption to service more difficult to manage (e.g. bad weather, industrial action). - Increased contamination in recycling bins. - Increased use of HWRC. - Cost of AHP collections – resident or Council to pay? - Another container for AHP collections – this could possibly highlight vulnerable properties.

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9	240ltr bin 3-Weekly	240ltr bin Fortnightly	240ltr bin Fortnightly (subscription)	70ltr bin Fortnightly		235ltrs	<ul style="list-style-type: none"> - Encourage waste prevention and reduction – overall 25ltrs less capacity per week. - Reduce cost of collection and disposal. - Help encourage better use of dry recycling and the food waste collection systems. - AHP collection available for families requiring additional capacity for nappies or medical waste? - Remove the issue of “smelly waste” in bins for two (or more) weeks. 	<ul style="list-style-type: none"> - 5ltrs less kerbside disposal capacity per week. - Would require a larger food waste container. - Major change for residents. - Collection confusion – calendars essential. - Likely to be unpopular. - Increased risk of flytipping. - Disruption to service more difficult to manage (e.g. bad weather, industrial action). - Increased contamination in recycling bins. - Increased use of HWRC. - Cost of AHP collections – resident or Council to pay? - Another container for AHP collections – this could possibly highlight vulnerable properties. - Fortnightly food waste collections are untested on a large scale for household collections.
10	140ltr bin Fortnightly	240ltr bin Fortnightly	240ltr bin Fortnightly (subscription)	23ltr bin Weekly		213ltrs	<ul style="list-style-type: none"> - Encourage waste prevention and reuse through less capacity. - Reduce cost of collection and disposal. - Potentially increase recycling. - Retain a more frequent general waste collection. - Could also add in an optional AHP collection. 	<ul style="list-style-type: none"> - 27ltrs per week less capacity – possibly require a larger food waste container to capture more of the org. catering. - Could be unpopular. - Increased risk of flytipping. - Cost of supplying new bins and/or containers. - Logistics of removal of old bins. - Increased contamination in recycling bins.
11	140ltr bin Fortnightly		240ltr bin Fortnightly (subscription)	23ltr bin Weekly	Bags / Boxes Source separated materials	210ltrs	<ul style="list-style-type: none"> - Source separated recycling is compliant with Waste Framework Directive (TEEP). - Weekly collection of food and recycling. - Optional weekly / fortnightly collection of AHP. - Increased range of recycling collected at the kerbside. - Welsh collection systems – proving that this is an ideal collection to achieve recycling rates over 50%. - Encourages waste prevention and reuse. - Likely to increase quality of recyclate. 	<ul style="list-style-type: none"> - Logistics of removing current 240ltr grey bins. - Removal of 240ltr green bins. - Delivery of new 140ltr bins and recycling containers. - Replacement containers. - More sorting of recycling required by residents. - Lots of containers has not been popular when introduced in other areas.