

General Assumptions					
		Quantity			
	Measurement unit	Low	Central	High	Source
Bin/waste attributes					
Waste % sent to landfill	%		0.02		DEFRA Env18 Waste statistics 2021/22
Waste % sent to efw	%		0.98		DEFRA Env18 Waste statistics 2021/22
Recommended recycling capacity for FRP	litres/hh/wk		60.00		ReLondon Flats Recycling Package Toolkit
Quantity/time assumptions					
Kg per metric tonne	Kg/tonne		1000.00		
Minutes per hour	Minutes		60.00		
Days per week	Days		7.00		
Weeks per year	Weeks		52.00		
Months per year	Months		12.00		
Staff assumptions					
Hours worked per day	Hours		7.00		
Days worked per year	Days		220.00		
London Living Wage	£/hr		11.05		

NPV assumptions					
Inflation assumed	%		0.02		
Benefit assumptions					
FRP impact assumptions					
		Low	Average	High	
Uplift in dry recycling waste volume	%	0.16	0.26	0.40	ReLondon Flats Recycling projects (1& 2)
Reduction in contamination rate from FRP	percentage points	0.00	0.24	0.46	ReLondon Flats Recycling projects (1& 2)
Uplift in food waste recycling	kg/hh/annum	15.6	41.6	62.4	from WRAP data and ReLondon Flats Recycling
Emissions assumptions					
Social cost of carbon	£/tonneCO2e		241.00		
Energy from Waste (EfW)	CO2e emissions intensity		125.20		Based on WRAP CarbonWarm emissions factors - calculated for mixed recycling based
Landfill	CO2e emissions intensity		564.80		Based on WRAP CarbonWarm emissions factors - calculated for mixed recycling based
Mix (London average)	CO2e emissions intensity		134.43		Based on WRAP CarbonWarm emissions factors - calculated for mixed recycling based
CO2 emissions - recycling	CO2e emissions intensity		-394.50		Based on WRAP CarbonWarm emissions factors - calculated for mixed recycling based
CO2 emissions - composting / anaerobic digesiton	CO2e emissions intensity		84.83		Based on WRAP CarbonWarm emissions factors - calculated for food recycling via
Waste disposal costs					
Landfill	£/tonne		176.00		Taken from WRAP 2022 Gate Fees report
Energy from Waste (EfW)	£/tonne		125.00		Taken from WRAP 2022 Gate Fees report
Mix (London average)	£/tonne		126.07		Taken from WRAP 2022 Gate Fees report

Disposal fees - MRF	£/tonne		42.00		Taken from WRAP 2022 Gate Fees report
In-vessel Composting	£/tonne		31.00		Taken from WRAP 2022 Gate Fees report
Anaerobic Digestion	£/tonne		35.00		Taken from WRAP 2022 Gate Fees report
Contamination cost (£)	£/tonne		176.00		Taken from WRAP 2022 Gate Fees report
Material market values		Lower range	Average	Upper range	
Market value: Food and drink cans	£/tonne		145.92		WRAP MRF - approximate average price for past two years
Market value: Mixed glass	£/tonne		0.00		WRAP MRF - approximate average price for past two years
Market value: Plastic bottles	£/tonne		108.12		WRAP MRF - approximate average price for past two years
Market value: Mixed paper	£/tonne		108.12		WRAP MRF - approximate average price for past two years
Market value: Cardboard	£/tonne		71.30		WRAP MRF - approximate average price for past two years
Market value: Mixed plastics	£/tonne		100.00		WRAP MRF - approximate average price for past two years
Composition of dry mix recycling (recyclable material)					
Waste composition: Food and drink cans	% dry mix recycling		0.04		From ReLondon Flats waste composition data
Waste composition: Mixed glass	% dry mix recycling		0.20		From ReLondon Flats waste composition data
Waste composition: Plastic bottles	% dry mix recycling		0.01		From ReLondon Flats waste composition data
Waste composition: Mixed paper	% dry mix recycling		0.14		From ReLondon Flats waste composition data
Waste composition: Cardboard	% dry mix recycling		0.25		From ReLondon Flats waste composition data
Waste composition: Mixed plastics	% dry mix recycling		0.09		From ReLondon Flats waste composition data
Assumptions underlying estimate of improved resident experience					

Basis of calculation					
WTP for recycling	Minutes/week/hh		10.10		
Assumed rating uplift in odour condition (1-5)	rating uplift		1.00		
Assumed rating uplift in litter condition (1-4)	rating uplift		1.00		
Value of one rating uplift in odour condition	£/month/resident		0.98		
Value of one rating uplift in litter condition	£/month/resident		11.25		
Percentage of uplift achieved	%		0.10		

project (2)