

# **TEEP Assessment Evidence Document**

**South Gloucestershire Council**

The following evidence document has been gathered using guidelines and the route map overview as set out in the WRAP Regulations Route Map:

<http://www.wrap.org.uk/sites/files/wrap/Route%20Map%20Revised%20Dec%202014.pdf>



Source: WRAP waste regulations Route Map

## Introduction

In line with the WRAP regulation route map step 1 provides an overview of the current waste collection and disposal service. Step 2 provides evidence on how collected materials are treated and recycled. Steps 3 and 4 cover regulation 12 and 13 of the revised Waste Framework Directive relating to the waste hierarchy and separate collection Necessity and Practicability (TEEP) tests.

## Step 1: Current Service and Contract

South Gloucestershire Council operates a kerbside sort collection service for around 110,000 properties including separate collections of paper, metals, glass and plastic.

There are around 103,300 individual properties within the district that receive the following service:

- A black 240 litre wheeled bin for residual waste.
- A green 240 litre wheeled bin for garden waste. (Opt in chargeable Service)
- A 55 litre green box for cans, glass, textiles, mineral oil, beverage cartons, small weee, household batteries and automotive batteries.
- A 50 litre bag for paper, newspapers and magazines.
- A 60 litre reusable bag for mixed plastics.
- A 60 litre reusable bag for cardboard.
- A 5 litre indoor kitchen caddy for food waste.
- A 25 litre external (collection) caddy for food waste.

There are also around an additional 7,000 households, which form part Multiple Occupancy Buildings that receive the following:

- Individual 240 litre bins or communal 1100 litre bins for residual waste.
- Three 240 litre wheeled bins for paper, cans and glass or 50 litre recycling boxes.
- A green 240 litre bin for garden waste and cardboard.

Flats do not currently receive a weekly collection of food waste or a fortnightly collection of plastic bottles due to limited capacity on the RCV to collect additional plastics. There is however room to collect additional food.

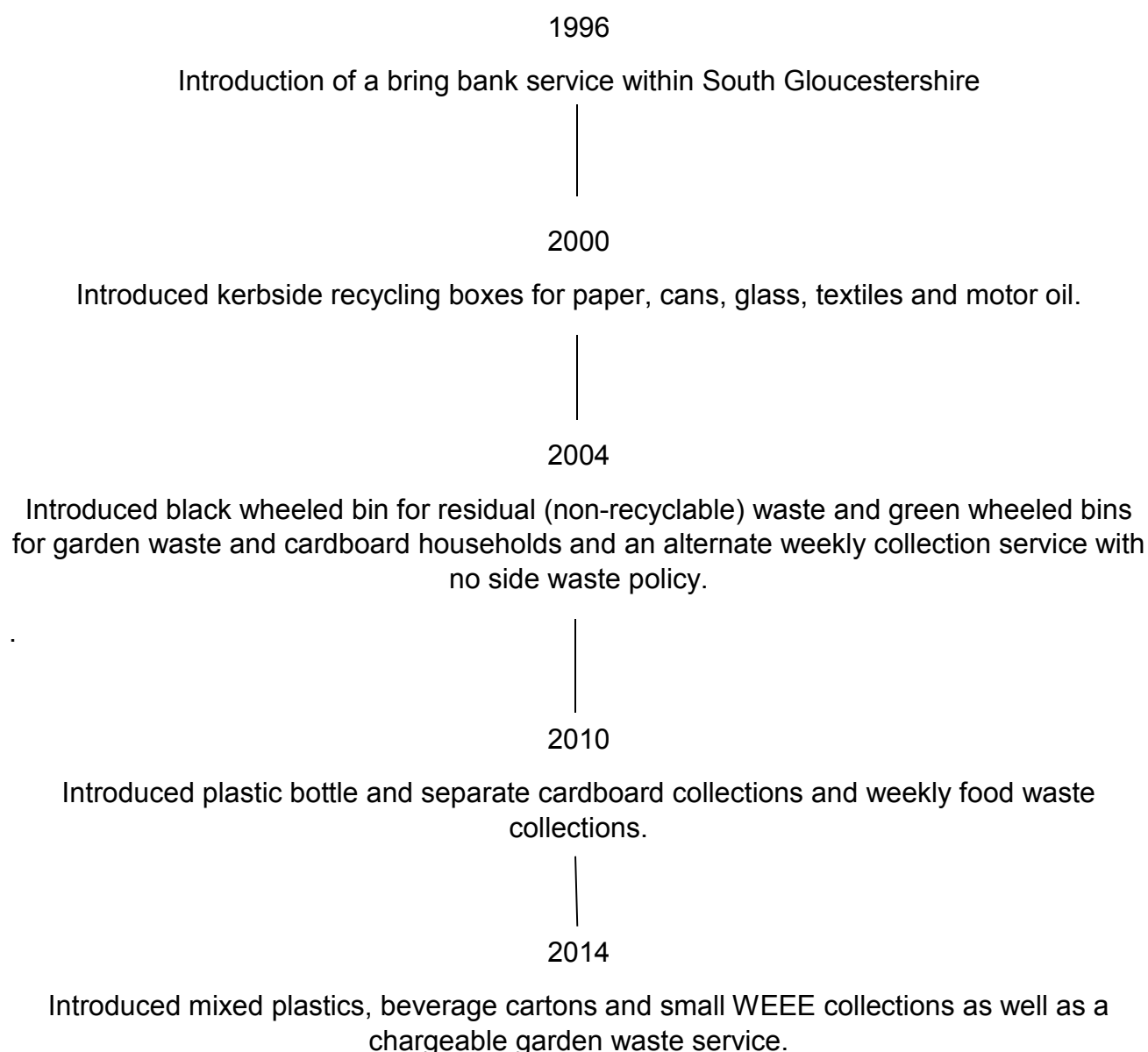
SITA operate a fleet of 59 collection and delivery vehicles and collect the above recyclable materials using the following vehicles.

- A refuse collection vehicle (RCV) for residual and green bin waste.
- Stillage vehicles for dry recycling cans, glass, textiles, mineral oil, beverage cartons, small weee, household batteries and automotive batteries.
- An RCV with a pod for mixed plastic or cardboard (depending on the collection week) and food waste
- Kerbsider to facilitate collections from Bring banks and flats recycling bins

South Gloucestershire Council has a 25 year Private Finance Initiative (PFI) waste contract with SITA South Gloucestershire to deal with household waste and recycling. Under the terms of the contract SITA are responsible for the collection and disposal of municipal (household) waste. The PFI contract transfers all operational matters and risk to SITA and they receive income from the sale of waste materials.

The council is responsible for contract monitoring, strategy and policy development as well as the management of a closed landfill site, which falls outside the scope of the PFI contract.

The following is an overview of the waste and recycling services since the introduction of the recycling bring banks in 1996.



## Step 2

### What Materials are Collected and How

The following table provides a summary of the materials collected, collection method, and the container used along with the number of properties that have access to this service.

<b>KERBSIDE</b>	<b>Collection method</b>	<b>Container Type</b>	<b>Contractor - In house</b>	<b>Coverage</b>
Paper	Kerbside sort	55 litre box or 50 litre bag	SITA	100,000 properties
Cans	Kerbside sort	55 litre box	SITA	100,000 properties
Glass	Kerbside sort	55 litre box	SITA	100,000 properties
Textiles	Kerbside sort	55 litre box	SITA	100,000 properties
Household and Automotive Batteries	Kerbside sort	55 litre box	SITA	100,000 properties
Automotive Oil	Kerbside sort	55 litre box	SITA	100,000 properties
Cardboard	Kerbside sort	60 litre reusable bag	SITA	103,000 properties
Mixed Plastics	Kerbside sort	60 litre reusable bag	SITA	103,000 properties
Food Waste	Kerbside sort	23 litre caddy	SITA	103,000 properties
Green Waste	Kerbside sort	240 litre wheeled bin	SITA	40,000 properties
<b>HWRC's</b>	<b>Collection method</b>	<b>Container Type</b>	<b>Contractor - In house</b>	<b>Coverage</b>
Asbestos	HWRC	Lockable container	SITA	four sites servicing 110,000 properties
Batteries, Household	HWRC	Sealed Container	SITA	four sites servicing 110,000 properties
Batteries, Vehicle	HWRC	Sealed Container	SITA	four sites servicing 110,000 properties
Books	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Bric-a-Brac	HWRC	ISO Container	SITA	four sites servicing 110,000 properties
Cans, Mixed	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Cardboard	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
Carpet	HWRC	Concrete hard standing bay	SITA	four sites servicing 110,000 properties
Chemicals	HWRC	locked cage	SITA	four sites servicing 110,000 properties

Gas Bottles	HWRC	locked cage	SITA	four sites servicing 110,000 properties
General Waste	HWRC	Concrete hard standing bay	SITA	four sites servicing 110,000 properties
Glass	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Green (Garden)Waste	HWRC	Concrete hard standing bay	SITA	four sites servicing 110,000 properties
Hardcore	HWRC	Concrete hardstanding bay	SITA	four sites servicing 110,000 properties
Metals, Mixed	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
News and Pam	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Plasterboard	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
Plastic Bottles, Mixed	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Plastic, Hard Mixed	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
Printer Cartridges	HWRC	240 litre bin	SITA	four sites servicing 110,000 properties
Shoes	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Tetra Packs	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Textiles, Mixed	HWRC	1100 litre Euro bin	SITA	four sites servicing 110,000 properties
Toner Cartridges	HWRC	240 litre bin	SITA	four sites servicing 110,000 properties
Tyres, Mixed	HWRC	Cage	SITA	four sites servicing 110,000 properties
Waste oil, Cooking	HWRC	Sealed Container	SITA	four sites servicing 110,000 properties
Waste oil, Mineral	HWRC	Sealed Container	SITA	four sites servicing 110,000 properties
WEEE Fluorescent Tubes	HWRC	Sealed Container	SITA	four sites servicing 110,000 properties
WEEE Fridges & Freezers	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
WEEE Large Domestic Appliances	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
WEEE Monitors / Crt or Tft	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
WEEE Small Domestic Appliances	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
Wood, Mixed	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
Mattresses	HWRC	RORO Container	SITA	four sites servicing 110,000 properties
<b>Bring Banks</b>	<b>Collection method</b>	<b>Container Type</b>	<b>Contractor - In house</b>	<b>Coverage</b>
Mixed Glass	Bring Bank	1100 litre bin	SITA	40 bring banks servicing 110,000
Paper	Bring Bank	1100 litre bin	SITA	40 bring banks servicing 110,000
Cans	Bring Bank	1100 litre bin	SITA	40 bring banks servicing 110,000

## Cost/income of Service

The following table provides an overview of the cost and income of waste services

<b>Materials</b>	<b>Cost (£)</b>	<b>Income (£)</b>	<b>Cost per household per annum (£)</b>
Dry recyclate	-	-	
Garden waste	£987,156	-	
Residual waste	£3,781,200 (incl landfill tax and haulage)	-	£33.49
Community Composting	£35,648	-	
Food Waste	£178,613	-	
CA site disposal	£1,107,070 (incl landfill tax and haulage)	-	
Waste Minimisation	£115,608	-	
Bulky Waste			

## Tonnages of materials collected 2013/14

Material	Q1		Q2		Q3		Q4		Total Recycled	Total Reused
	Recycled	Reused	Recycled	Reused	Recycled	Reused	Recycled	Reused		
	Tonnage	Tonnage	Tonnage	Tonnage	Tonnage	Tonnage	Tonnage	Tonnage		
Green glass	533.6	-	516.1	-	501.2	-	622.7	-	2,173.5	-
Clear glass	489.6	-	464.7	-	487.5	-	606.8	-	2,048.6	-
Mixed glass	548.6	-	600.8	-	483.0	-	533.6	-	2,166.0	-
Paper	1,653.4	-	1,637.6	-	1,768.1	-	1,874.4	-	6,933.5	-
Card	1,019.6	-	1,125.5	-	1,120.0	-	1,653.4	-	4,918.5	-
Books	18.6	-	20.5	-	15.3	-	28.9	-	83.2	-
Mixed cans	280.5	-	316.7	-	289.0	-	191.7	-	1,077.8	-
Plastics	79.6	-	-	-	91.0	-	142.6	-	313.2	-
Mixed Plastic Bottles	422.6	-	445.8	-	456.4	-	605.9	-	1,930.6	-
Green garden waste only	8,274.0	-	7,636.8	-	4,985.6	-	3,537.8	-	24,434.2	-
Waste food only	1,204.5	-	1,087.4	-	1,154.9	-	1,343.5	-	4,790.2	-
Other compostable waste	722.6	-	1,028.3	-	524.8	-	612.6	-	2,888.3	-
Wood	231.7	-	1,048.1	-	78.5	-	-	-	1,358.3	-



WEEE - Large Domestic App	107.2	-	129.1	-	111.7	-	55.6	-	403.5	-
WEEE - Small Domestic App	253.2	-	197.9	-	151.6	-	217.1	-	819.9	-
WEEE - Cathode Ray Tubes	156.1	-	142.7	-	121.4	-	131.4	-	551.6	-
WEEE - Flourescent tubes and other light bulbs	1.1	-	0.4	-	0.2	-	1.2	-	2.8	-
WEEE - Fridges & Freezers	70.0	-	91.8	-	86.5	-	81.0	-	329.3	-
Other Scrap metal	749.3	-	698.7	-	547.8	-	716.8	-	2,712.6	-
Automotive batteries	16.1	-	11.0	-	10.8	-	8.3	-	46.1	-
Post consumer, non automotive batteries	6.4	-	4.7	-	2.7	-	6.8	-	20.5	-
Large vehicle tyres	0.7	-	2.1	-	0.8	-	1.6	-	5.1	-
Mixed tyres	24.2	-	22.6	-	15.6	-	15.0	-	77.4	-
Rubble	1,662.4	-	1,548.9	-	812.3	-	928.8	-	4,952.4	-
Plasterboard	104.8	-	155.7	-	106.5	-	154.3	-	521.3	-
Vegetable Oil	0.6	-	1.4	-	0.8	-	0.9	-	3.6	-
Mineral Oil	13.4	-	13.4	-	7.6	-	10.9	-	45.4	-
Bric-a-brac	-	14.2	-	23.1	-	25.0	-	18.4	-	80.8
Composite food and beverage cartons	4.3	-	3.6	-	2.5	-	3.3	-	13.8	-
Gas bottles	1.1	-	0.5	-	0.2	-	2.6	-	4.3	-
Ink & toner cartridges	9.1	-	0.6	-	0.2	-	0.3	-	10.3	-

Textiles & footwear	112.9	-	118.2	-	-	-	-	-	231.1	-
Textiles only	-	-	-	-	79.1	-	85.1	-	164.2	-
Footwear only	0.7	-	-	-	1.2	-	1.7	-	3.5	-
Carpets	66.9	-	63.7	-	162.4	-	206.2	-	499.1	-
Incinerator Bottom Ash	12.8	-	22.8	-	127.0	-	120.0	-	282.6	-
Metals from Incinerator Ash	1.8	-	2.7	-	16.0	-	18.0	-	38.5	-

## How Collected Materials are Treated and Recycled

External Destinations 2013/14	Process	Destination / Company	Location
Asbestos	Landfill, Hazardous	Hills Waste Parkgate Farm	Swindon, Wiltshire
Batteries, Household	Recycled	G & P Batteries Ltd	Walsall, West Midlands
Batteries, Vehicle	Recycled	G & P Batteries Ltd	Walsall, West Midlands
Books	Reused/Recycled	BRITISH HEART FOUNDATION LONDON	Street, Somerset
Books	Reused/Recycled	OXFAM	Oxford, Oxfordshire
Bric-a-Brac	Reused	SOUTH GLOS RESALE - REVIVE SHOP	Thornbury, South Gloucestershire
Cans and Plastics, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol
Cans, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol
Cans, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol
Cans, Mixed	Recycled	SITA Mitcham MRF	Mitcham, Surrey
Cardboard	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol
Cardboard	Recycled	A C N - A C NMAN	Didsbury, Manchester
Cardboard	Recycled	CYCLE LINK UK LTD	Colchester, Essex
Cardboard	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol
Cardboard	Recycled	Vipa Lausanne SA	Lausanne, Switzerland
Cardboard (Low grade)	Recycled	A C N - A C NMAN	Didsbury, Manchester
Cardboard (Low grade)	Recycled	CYCLE LINK UK LTD	Colchester, Essex
Carpet	Recycled/RDF	MID UK RECYCLING	Ancaster, Lincolnshire
Chemicals	Recycling/Landfill/Incineration	WASTECARE TAUNTON	Taunton, Somerset
Clinical waste	Autoclave/RDF	TRADEBE (SOUTH WEST) LTD	Avonmouth, Bristol
Food	Anaerobic Digestion AD	CANNINGTON ENTERPRISES LIMITED	Yarnton, Oxfordshire
Food	Anaerobic Digestion AD	Agrivert Limited	Yarnton, Oxfordshire
Food	Anaerobic Digestion AD	Agrivert Ltd Chipping Norton	Yarnton, Oxfordshire
Gas Bottles	Reused	Synergy Asset Services	Canterbury, Kent
General Recyclable Waste	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol

General Waste	Mechanical Biological Treatment	NEW EARTH SOLUTIONS GROUP LTD BRISTOL	Avonmouth, Bristol
General Waste	Landfill	Hills Waste Landfill(Chapel Farm)	Swindon, Wiltshire
General Waste	Landfill	Viridor (Sands Farm L/Fill) - CALNE	Calne, Wiltshire
General Waste	Incineration	COVENTRY & SOLIHUL WASTE DISPOSAL CO LTD	Coventry
Glass, Clear Packaging	Recycled	O-I Manufacturing (Harlow)	Harlow, Essex
Glass, Clear Packaging	Recycled	A & P Falmouth Ltd	Berrymans, Doncaster, South Yorkshire
Glass, Green Packaging	Recycled	O-I Manufacturing (Harlow)	Harlow, Essex
Glass, Green Packaging	Recycled	A & P Falmouth Ltd	Berrymans, Doncaster, South Yorkshire
Glass, Mixed Packaging	Recycled	RECRESKO CWMBRAN	Cwmbran, Wales
Glass, Mixed Packaging	Recycled	Recresco (Midland Glass)	Avonmouth, Bristol
Green (Garden)Waste	Composted	Crapper & Sons	Wotton Bassett, Wiltshire
Hardcore	Recycled	M J Church Plant Ltd	Chippenham, Wiltshire
Metals, Mixed	Recycled	EMR Gloucester	Gloucester
Metals, Mixed	Recycled	SIMS METAL LTD BRISTOL	Avonmouth, Bristol
News and Pam	Recycled	UPM Kymme UK Ltd - Shotton	Shotton, Flintshire
News and Pam	Recycled	Aylesford Newsprint Ltd	Aylesford, Kent
Plasterboard	Recycled	New West Gypsum Recycling (uk) LTD	Avonmouth, Bristol
Plasterboard	Recycled	Smiths (Gloucester) Ltd	Moreton Valance, Gloucester
Plastic Bottles, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol
Plastic Bottles, Mixed	Recycled	Smiths (Gloucester) Ltd	Moreton Valance, Gloucester
Plastic Bottles, Mixed	Recycled	Regenthill Ltd (Sub Regions)	Andover, Hampshire
Plastic Bottles, Mixed	Recycled	ECO PLASTICS LTD	Hemswell, Lincolnshire
Plastic Bottles, Mixed	Recycled	Monoworld Ltd	Sharnbrook, Bedfordshire
Plastic Bottles, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol
Plastic Bottles, Mixed	Recycled	J & A YOUNG (LEICESTER) LTD	Loughborough, Leicestershire
Plastic Bottles, Mixed	Recycled	ROYDON RECYCLING UK LTD	Rochdale, Manchester
Plastic, Hard Mixed	Recycled	EMR Gloucester	Gloucester
Plastic, Hard Mixed	Recycled	EMR Ridham	Sittingbourne, Kent
Plastic, Hard Mixed	Recycled	LOVELL RECYCLING	Telford, West Midlands

Plastic, Hard Mixed	Recycled	Monoworld Ltd	Sharnbrook, Bedfordshire
Plastic, Hard Mixed	Recycled	SITA Darwen MRF	Darwen, Lancashire
Plastic, Hard Mixed	Recycled	Van Werven UK Ltd	Selby, North Yorkshire
Printer Cartridges	Reused/Recycled	EMPTY CARTRIDGES	Milton Keynes
Shoes	Reused/Recycled	BRITISH HEART FOUNDATION LONDON	Street, Somerset
Shoes	Reused/Recycled	The European Recycling	Croydon, Surrey
Tetra Packs	Recycled	Smiths (Gloucester) Ltd	Moreton Valance, Gloucester
Textiles, Mixed	Recycled	GREEN WORLD RECYCLING LTD	Stourbridge, West Midlands
Textiles, Mixed	Recycled	The European Recycling	Croydon, Surrey
Textiles, Mixed	Recycled	OXFAM	Oxford, Oxfordshire
Textiles, Mixed	Recycled	JMP Wilcox & Co Ltd	Bilston, West Midlands
Toner Cartridges	Reused/Recycled	EMPTY CARTRIDGES	Milton Keynes
Tyres, Mixed	Recycled	Creigiau Tyres	Llantwit Fardre, Nr Pontypridd
Waste oil, Cooking	Recycled	LIVING FUELS LTD	Hockwold cum Wilton, Nr Thetford, Norfolk
Waste oil, Mineral	Recycled	Feakins Oil, Haulier to Augean	Avonmouth, Bristol
Waste oil, Mineral	Recycled	Augean Treatment Works Ltd	Avonmouth, Bristol
WEEE Fluorescent Tubes	Recycled	MERCURY RECYCLING LTD MANCHESTER	Trafford Park, Manchester
WEEE Fridges & Freezers	Recycled	SIMS Group UK Limited	Newport, Wales
WEEE Large Domestic Appliances	Recycled	EMR WEDNESBURY	Darlaston, West Midlands
WEEE Large Domestic Appliances	Recycled	SIMS Group UK Limited	Avonmouth, Bristol
WEEE Monitors / Crt or Tft	Recycled	MANN ORGANISATION LTD (changed to Metatek Ltd)	Ross-on-Wye, Hereford
WEEE Small Domestic Appliances	Recycled	EMR WEDNESBURY	Darlaston, West Midlands
WEEE Small Domestic Appliances	Recycled	SIMS Group UK Limited	Bristol
Wood, Mixed	Recycled / RDF	SITA BRYNN HILL	Roche, Cornwall
Wood, Mixed	Recycled / RDF	SITA FAREHAM	Fareham, Hampshire
Wood, Mixed	Recycled / RDF	SITA LONG PARISH	Barton Stacey, Winchester, Hampshire

Wood, Mixed	Recycled / RDF	Crapper & Sons	Wotton Bassett, Wiltshire
Wood, Mixed	Recycled / RDF	SITA Packington (Compost)	Meriden, Nr Coventry

**Whether the materials are recycled open or closed loop**

<b>External Destinations 2013/14</b>	<b>Process</b>	<b>Destination / Company</b>	<b>Location</b>	<b>Open/closed loop</b>
Cans and Plastics, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Cans, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Cans, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Cans, Mixed	Recycled	SITA Mitcham MRF	Mitcham, Surrey	Open
Cardboard	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Cardboard	Recycled	A C N - A C NMAN	Didsbury, Manchester	Open
Cardboard	Recycled	CYCLE LINK UK LTD	Colchester, Essex	Open
Cardboard	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Cardboard	Recycled	Vipa Lausanne SA	Lausanne, Switzerland	Open
Cardboard (Low grade)	Recycled	A C N - A C NMAN	Didsbury, Manchester	Open
Cardboard (Low grade)	Recycled	CYCLE LINK UK LTD	Colchester, Essex	Open
General Recyclable Waste	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Metals, Mixed	Recycled	EMR Gloucester	Gloucester	Open
Metals, Mixed	Recycled	SIMS METAL LTD BRISTOL	Avonmouth, Bristol	Open
News and Pam	Recycled	UPM Kymme UK Ltd - Shotton	Shotton, Flintshire	Closed
News and Pam	Recycled	Aylesford Newsprint Ltd	Aylesford, Kent	Closed
Plastic Bottles, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Plastic Bottles, Mixed	Recycled	Smiths (Gloucester) Ltd	Moreton Valance, Gloucester	Open
Plastic Bottles, Mixed	Recycled	Regenthill Ltd (Sub Regions)	Andover, Hampshire	Open
Plastic Bottles, Mixed	Recycled	ECO PLASTICS LTD	Hemswell, Lincolnshire	Open
Plastic Bottles, Mixed	Recycled	Monoworld Ltd	Sharnbrook, Bedfordshire	Open
Plastic Bottles, Mixed	Recycled	SITA AVONMOUTH MRF	Avonmouth, Bristol	Open
Plastic Bottles, Mixed	Recycled	J & A YOUNG (LEICESTER) LTD	Loughborough, Leicestershire	Open

Plastic Bottles, Mixed	Recycled	ROYDON RECYCLING UK LTD	Rochdale, Manchester	Open
Plastic, Hard Mixed	Recycled	EMR Gloucester	Gloucester	Open
Plastic, Hard Mixed	Recycled	EMR Ridham	Sittingbourne, Kent	Open
Plastic, Hard Mixed	Recycled	LOVELL RECYCLING	Telford, West Midlands	Open
Plastic, Hard Mixed	Recycled	Monoworld Ltd	Sharnbrook, Bedfordshire	Open
Plastic, Hard Mixed	Recycled	SITA Darwen MRF	Darwen, Lancashire	Open
Plastic, Hard Mixed	Recycled	Van Werven UK Ltd	Selby, North Yorkshire	Open

### Step 3

#### Applying the Waste Hierarchy - Regulation 12 r-WFD

The following tables outline the materials that are collected within South Gloucestershire and how they are treated in accordance to regulation 12 of the revised Waste Framework Directive.

Materials collected in the local area	Waste Hierarchy
Asbestos	Disposal
Batteries, Household	Recycled
Batteries, Vehicle	Recycled
Books	Reused/Recycled
Bric-a-Brac	Reused
Cans, Mixed	Recycled
Cardboard	Recycled
Cardboard (Low grade)	Recycled
Carpet	Recycled/Energy Recovery
Chemicals	Recycling/Energy Recovery/Disposal

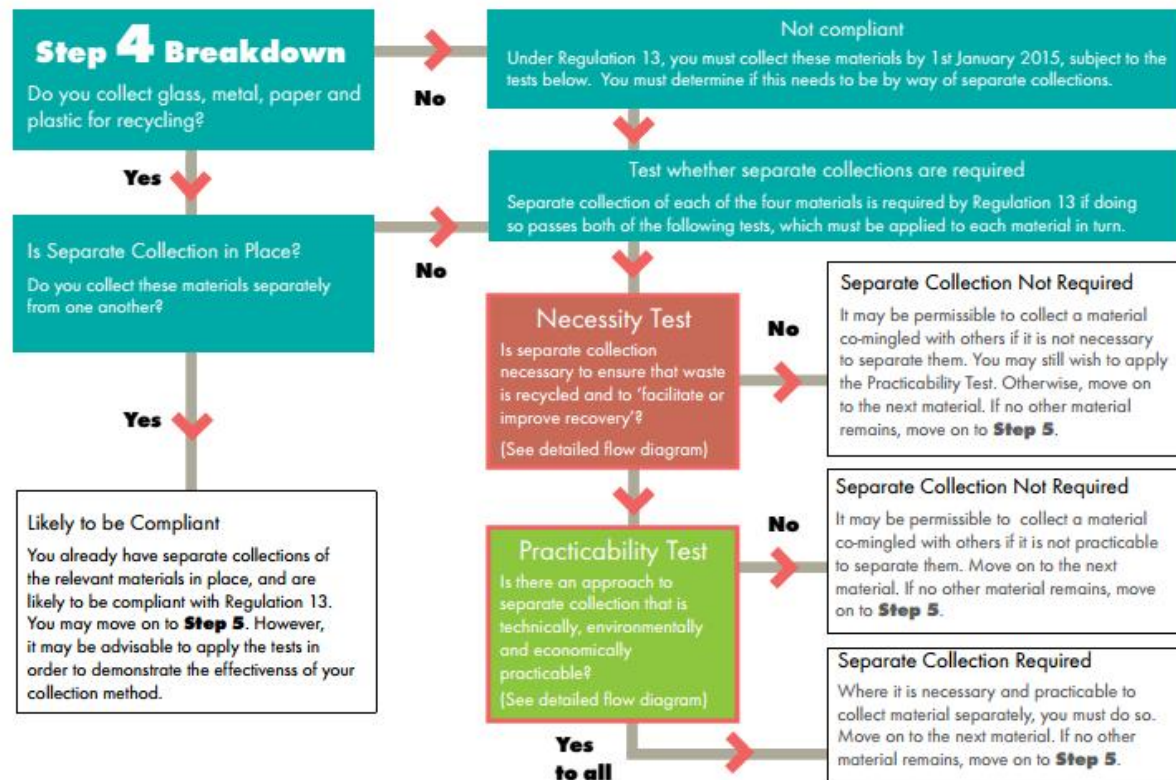
Clinical waste	Energy Recovery
Food	Recycled
Gas Bottles	Reused
General Waste	(MBT) Recycled/Energy Recovery
General Waste	Energy Recovery
General Waste	Disposal
Glass, Clear Packaging	Recycled
Glass, Green Packaging	Recycled
Glass, Mixed Packaging	Recycled
Green (Garden)Waste	Recycled
Hardcore	Recycled
Metals, Mixed	Recycled
News and Pam	Recycled
Plasterboard	Recycled
Plastic Bottles, Mixed	Recycled
Plastic, Hard Mixed	Recycled
Printer Cartridges	Reused/Recycled
Shoes	Reused/Recycled
Tetra Packs	Recycled
Textiles, Mixed	Recycled
Toner Cartridges	Reused/Recycled
Tyres, Mixed	Recycled
Waste oil, Cooking	Recycled
Waste oil, Mineral	Recycled
WEEE Fluorescent Tubes	Recycled
WEEE Fridges & Freezers	Recycled
WEEE Large Domestic Appliances	Recycled
WEEE Monitors / Crt or Tft	Recycled
WEEE Small Domestic Appliances	Recycled
Wood, Mixed	Recycled / Energy Recovery



## Stage 4 - Are Separate Collections of the Four Materials Required - Regulation 13

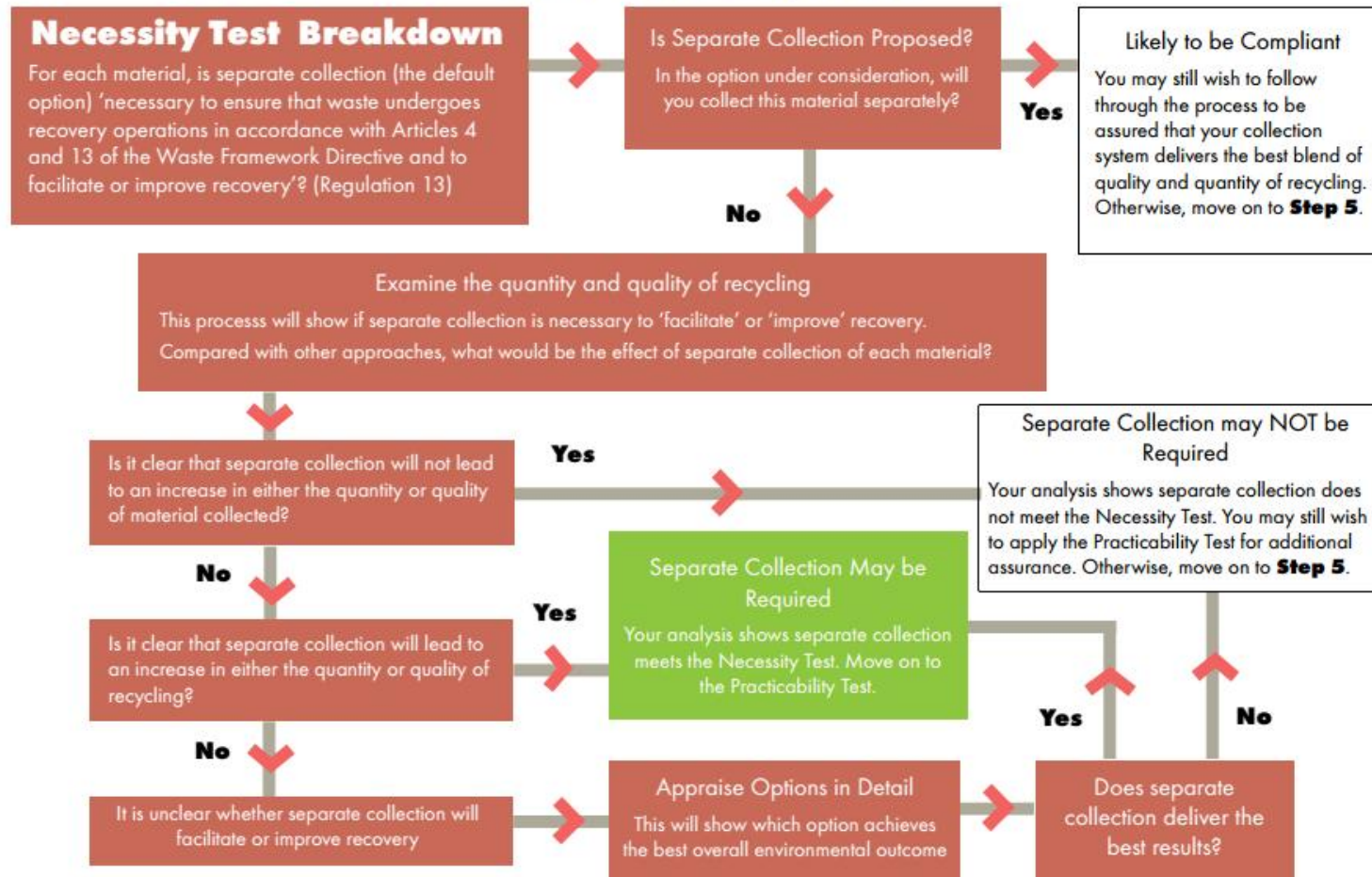
The following is the assessment of both the Necessity and Practicability assessments which includes TEEP as outlined in regulation 13 of the Revised Waste Framework Directive. The assessment will follow the flow diagram as set out below, taken from the WRAP route assessment.

The Council provides a collection of glass, metal, paper and plastic for recycling. These materials are also collected separately from one another. Therefore, according to the assessment South Gloucestershire Council is considered to be compliant with regulation 13 and no need to undertake the necessity or practicability test.



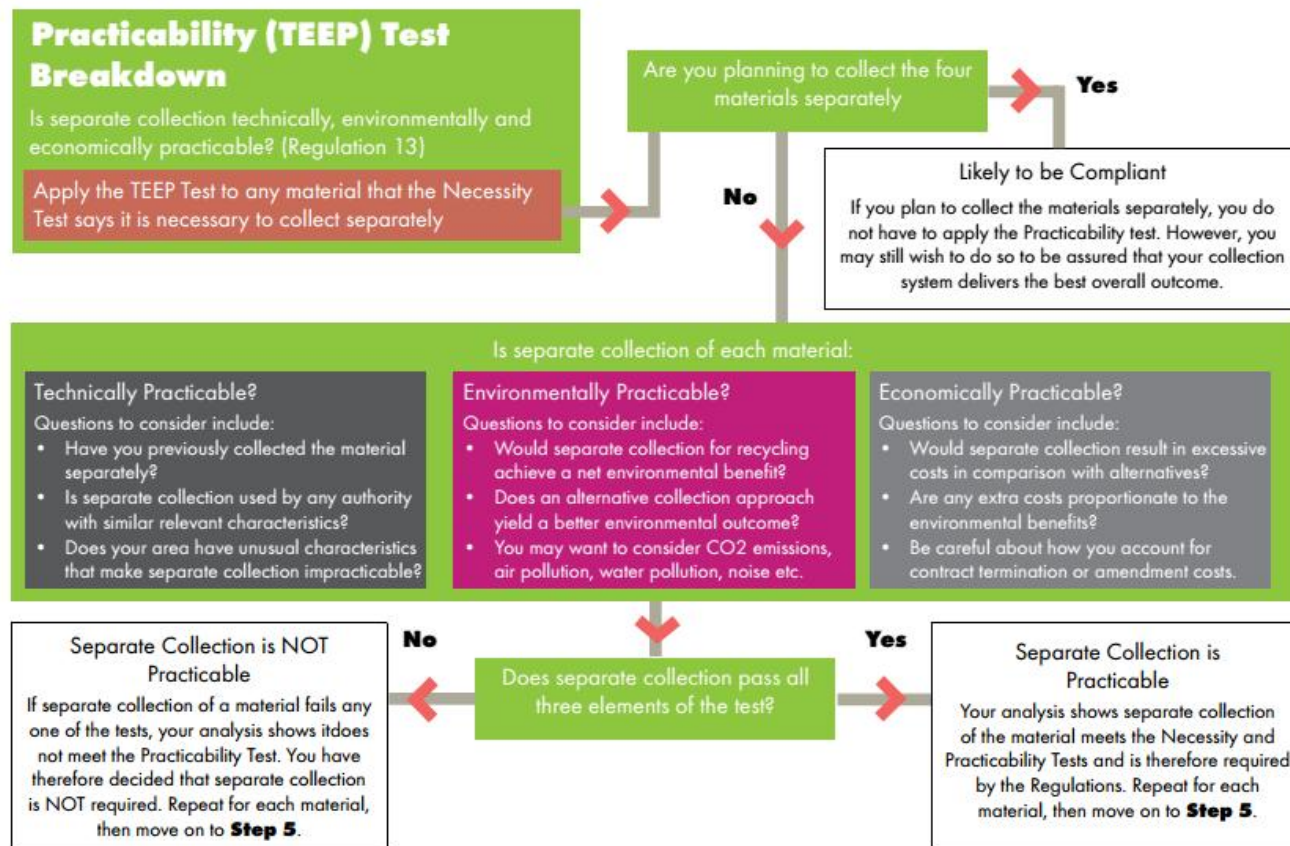
The Necessity test is outlined below. As South Gloucestershire provides a separate collection service we are considered to be compliant with the necessity test.

## The Necessity Test



The practicability test is outlined below. South Gloucestershire Council is collecting the four materials separately and therefore the assessment considers the council to be compliant with the regulations.

## The Practicability Test



## Conclusion

In line with the revised Waste Framework Directive South Gloucestershire Council is collecting paper, metal, glass and plastic separately and is considered to be compliant with the regulations.

## Flats Comingled Service – March 2015 onwards

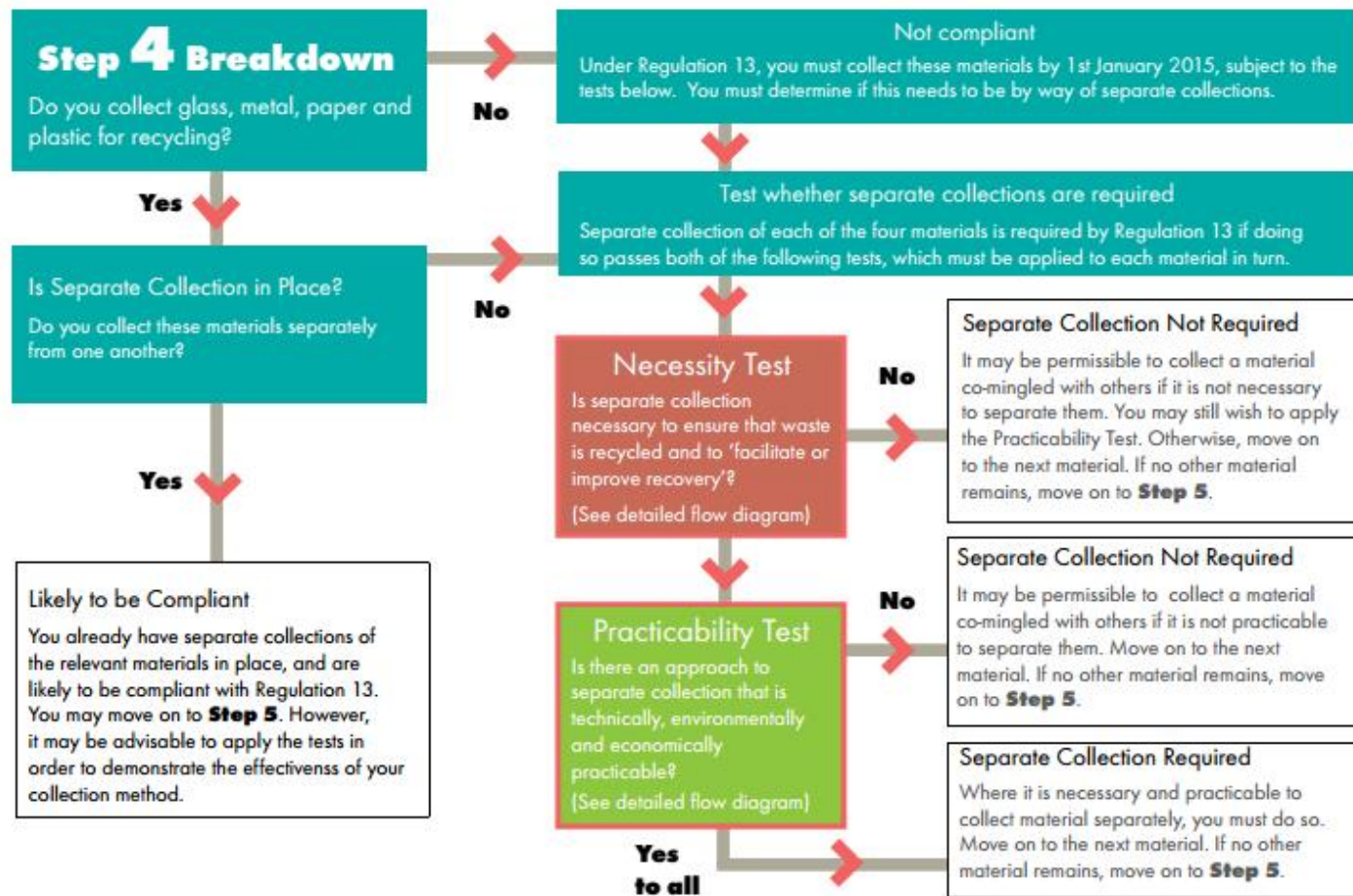
There are currently over around 9,300 flats within South Gloucestershire with varying levels of recycling facilities available to them. To ensure all flats receive a fair and comprehensive recycling service the council is introducing a two stream comingled service to all flats.

The service will comprise of a comingled container for paper, tins, cans, mixed plastics and a separate container for paper and cardboard and a separate container for the collection of mixed glass at each site. Mixed plastics will be a service that has not been offered to flats before but is possible under a comingled service.

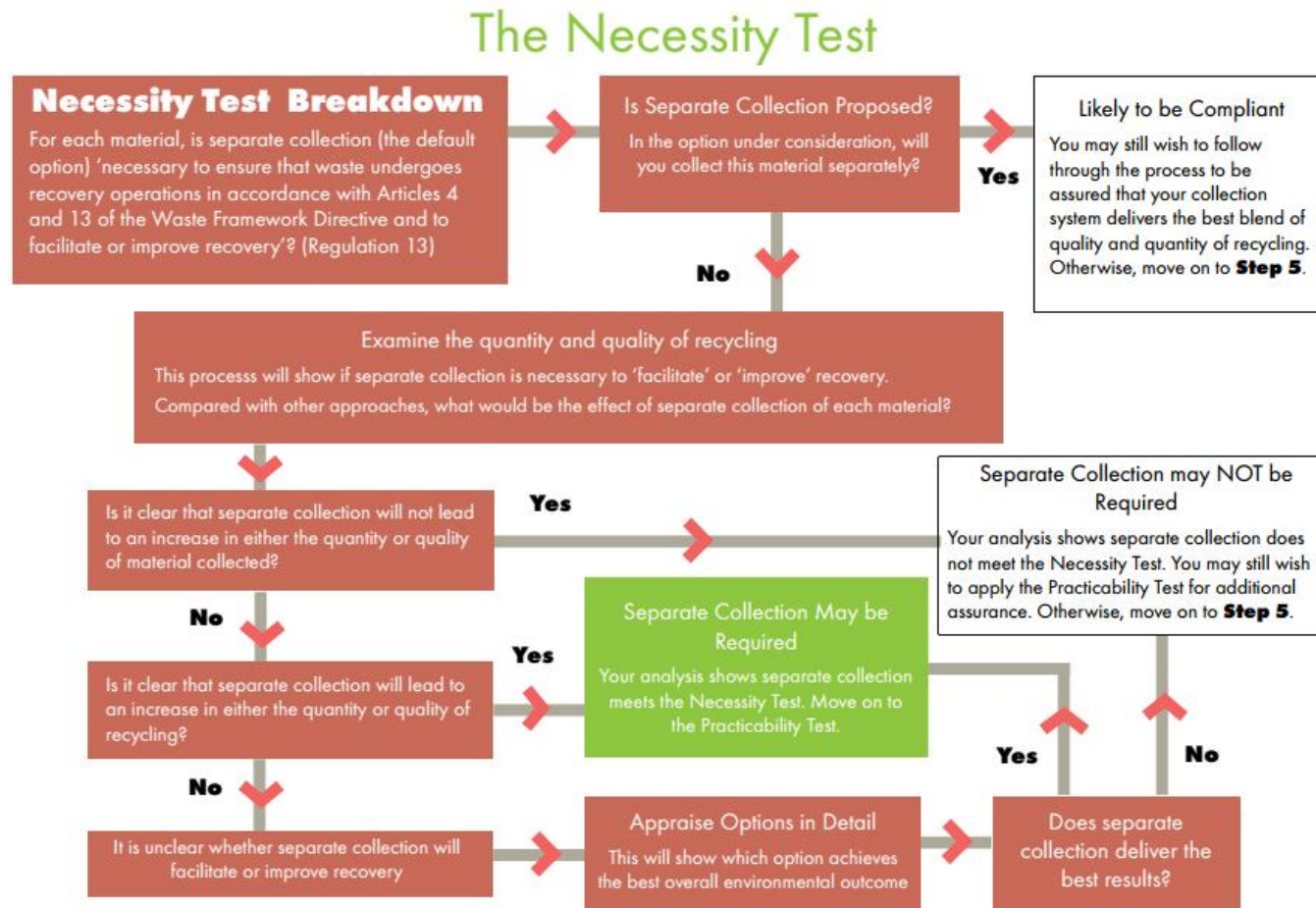
Comingled material will be sent to SITA's Materials Recycling Facility in Avonmouth where mixed materials will be separated out into the individual waste stream and then sold onto re-processors. Glass will be kept separate at SITA's South Glos transfer stations and then sold onto re-processors. In order for the council to be compliant with current legislation it has to demonstrate that the collection of materials using a comingled service would overall be more beneficial than collecting the materials separately based on the tests outlined under TEEP, which can be found below.

Following the WRAP regulations route map breakdown the flats comingled service has been assessed below against the WRAP regulations flow diagram.

The council is not proposing to collect paper, metal, glass and plastic separately therefore the necessity test needs to be undertaken.



## The Necessity Test



In order to meet this test the council must demonstrate that where a separate collection does not take place the alternative approach will see an improvement on the quantity and quality of material collected.

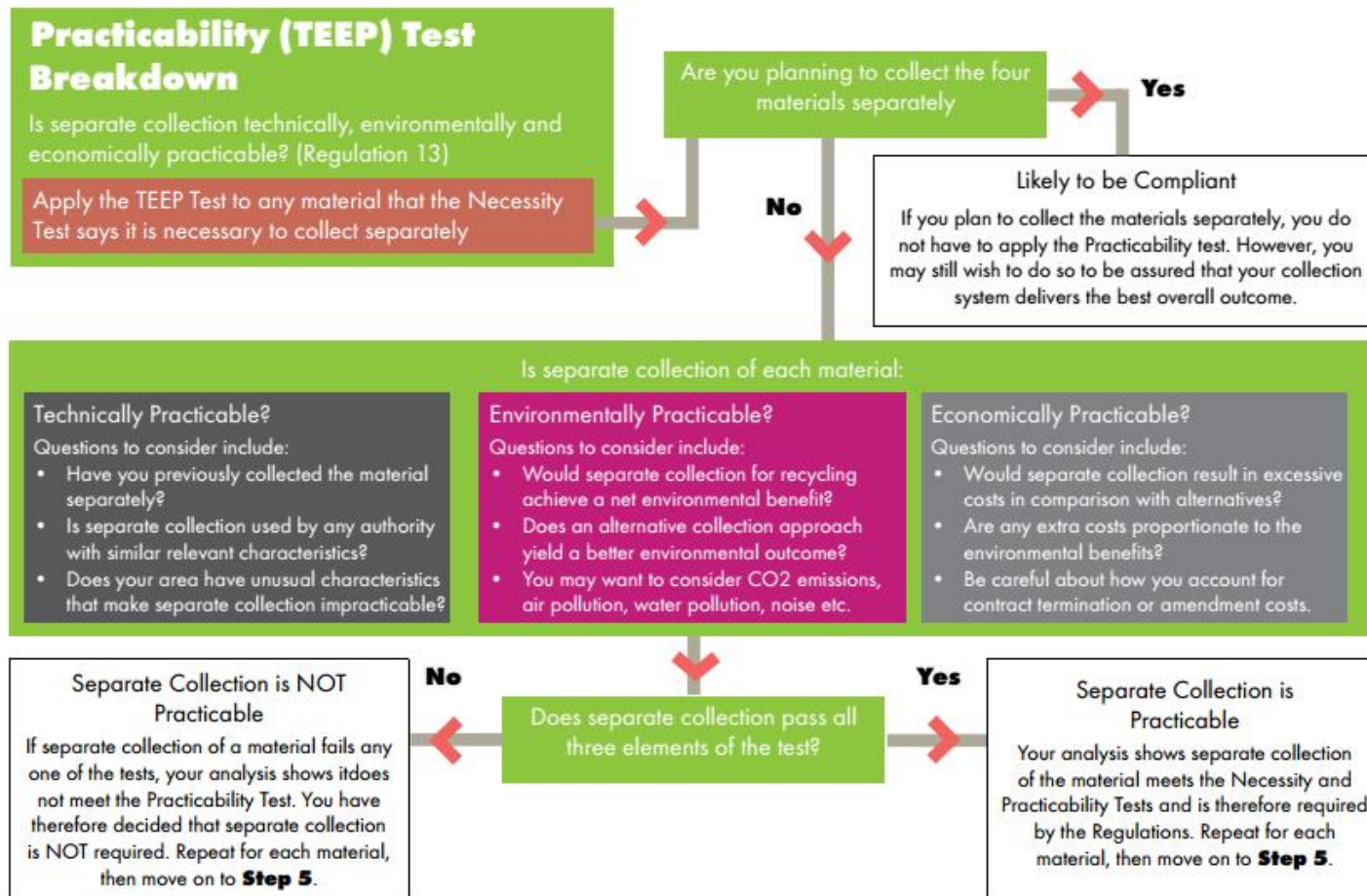
A comingled service will provide a recycling collection to all flats within the district. Currently only a number of flats receive a full service with the majority only receiving partial or no services at all. The increased number of flats participating with the proposed

comingled service along with a more comprehensive range of materials being collected (mixed plastic) will increase the quantity of materials collected compared to the current separate collections. The separate collection of glass will maintain the quality of materials.

Therefore a provision of a comingled recycling service to flats within South Gloucestershire will meet the Necessity Test

## The Practicability Test

### The Practicability Test



### **Technically Practicable**

In order to meet this test a comingled collection service must demonstrate that it is more practical to collect this way rather than having a separate collection.

Many of the flats within the district have limited space for the provision of containers to facilitate separate collections. This means that many flats do not have space for the full recycling service. Most flats receive a partial recycling service or nothing at all. The provision of a comingled service will address these problems by minimising the footprint needed to recycle a full range of materials. This will ensure all flats have a recycling service consisting of paper, cans, glass, cardboard, mixed plastic and glass

It is therefore impractical to continue with a separate collection of materials and a comingled service will meet the technically practicable test.

### **Environmentally Practicable**

In order to meet this test it must be demonstrated that not collecting materials separately will achieve a net benefit on the environment

A comingled collection service will increase the number of flats that will be able to recycle their waste. Mixed plastics will also be introduced to all flats for the first time. The increase participation and range of materials collected is anticipated to deliver and overall increase in materials that can be recycled diverted waste from being disposed which will have an environmental benefit.

Overall a comingled service will be more environmentally beneficial compared to separate collections and meets the Environmentally Practicable test.

### **Economically Practicable**

In order to meet this test it must be demonstrated that comingled collections would result in reduced costs compared with providing a separate collection service to all households.

Provided all flats with a separate collection that is comparable to the proposed comingled service would require purchasing additional collection vehicles to increase collection capacity and additional recycling containers to store individual materials. The comingled service will utilise an existing vehicle, which currently collects from bring banks, to service comingled bins and garden waste bins from non subscribing households will be provided to flats to store and collect the mixed materials.

It is therefore more economically practicable to provide a comingled collection to all flats than it is to provide a separate collection service and therefore meets the Economically Practicable test.



## **Conclusion**

After considering the proposed comingled service for flats in South Gloucestershire against the TEEP tests we are confident that the introduction of a comingled service will overall be compliant with the above waste legislation. The comingled service will increase the quantity of recycled material collected and diverted from disposal whilst maintaining quality compared to a separate collection service.