COMMERCIAL RECYCLING COLLECTIONS GUIDE

A guide for local authorities to help determine, implement and optimise efficient and effective commercial recycling collection services, including examples of good practice, an overview of relevant legislation and evidence-based approaches to assessing and improving performance. Updated 2018.

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About WRAP

WRAP is not-for-profit, working with governments, businesses and citizens to create a world in which we use resources sustainably. Our experts generate the evidence-based solutions we need to protect the environment, build stronger economies and support more sustainable societies. Our impact spans the entire life-cycle of the food we eat, the clothes we wear and the products we buy, from production to consumption and beyond.

Written by: WRAP and Ricardo-AEA

Front cover photography: [Commercial recycling collections in China Town, Central London. Westminster City Council.]

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Executive summary

According to a study commissioned by BIS (Department for Business Innovations and Skills) in 2011, the waste management industry employed 128,000 people and in 2010/11 generated a gross value added (GVA) of £7.5 billion, of which waste collection is estimated to have accounted for 27%. The report concludes that the industry is expected to enjoy positive growth during the next few years. In times of austerity, many local authorities have identified this and seized the opportunity to use revenue from providing waste services to commercial customers (hereafter referred to as “commercial waste services”) to offset those for their residents. Between 2007 and 2012 the number of local authorities offering a commercial residual waste collection service rose from 55% to 68%. Driven by a number of factors including cost, regulations and demand there has been a shift from waste management to resource recovery. Between 2007 and 2012 the proportion of authorities that offered a commercial residual waste and a recycling collection service rose from 40% to 72% and this trend is expected to continue.

With today’s discerning business customer, it has never been more important to ensure that commercial waste and recycling services are designed and delivered with customer needs at the heart of all decisions. Services which are easy to use, flexible (in terms of frequency and containment), reliable, cost effective and provide environmental benefits are all important factors.

While local authorities will have a number of drivers for providing a commercial waste and recycling service, WRAP research shows that local authorities are likely to achieve a higher recycling rate:

- Where recycling charges are cheaper than disposal;
- When recycling services are provided flexibly;
- Where collections are made more than once a week; or
- A larger number of materials are collected.

A well designed and delivered service will naturally retain customers and attract new ones, however, it is important to be proactive in promotion in order to ensure a critical mass of customers for operational efficiency.

Monitoring a number of aspects of the service and making adjustments and improvements as necessary will help to ensure a healthy operational and financial performance, and that the service continues to meets the changing needs of customers.

Local authorities should be aware that a judicial review was conducted by Mr Justin Warren in 2016 to consider the issue of VAT exemption for local authority commercial waste collection services. This case concluded that Local Authority collections will typically remain outside the scope of VAT where local authorities are conducting commercial waste collection in line with their statutory obligations. The Judicial Review did however highlight that there may be some cases
where local authorities operate outside of statutory obligations in a more commercial manner and in those cases, (as well as in certain other limited circumstances, in order to avoid distorting the market) it may be appropriate for there to be a requirement to add VAT to the service charge. Local authorities offering commercial trade waste services should seek advice from their tax and legal advisors when establishing their service to ensure they are working within the appropriate regulatory framework and applying the correct treatment of VAT.
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### Glossary

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<td>Bring bank</td>
<td>A non-staffed site with one or more containers to which a business or householder can take a (typically quite limited) range of recycling, as opposed to having it collected from their premises.</td>
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<tr>
<td>Co-collection</td>
<td>For the purpose of this guide the term ‘co-collection’ refers to the collection of household and commercial waste or household and commercial recyclables using the same vehicle.</td>
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<tr>
<td>Commercial waste</td>
<td>Commercial waste comes from a property used for the purposes of trade or business, such as offices, shops, showrooms, pubs, clubs, restaurants, hotels, government and local authority offices, royal palaces, caravan and camping parks, self-catering accommodation used in the course of a business, general medical practitioners, markets, fairs, charity shops and places of worship(^1). Waste collection authorities have a duty, if asked, to arrange for the collection of commercial waste from businesses in their area. The majority of commercial waste collected by local authorities is likely to be from Small and Medium Sized Enterprises (SMEs).</td>
</tr>
<tr>
<td>Composite hereditament</td>
<td>A property which is used for both domestic and commercial purposes e.g. shops with flats above them or a business which is adjoined/ contained within part of the owner’s dwelling.</td>
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<tr>
<td>Household waste</td>
<td>For the purpose of this guide, household waste or recycling is that which is collected from residential properties rather than at Household Waste &amp; Recycling Centres (HWRCs).</td>
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<tr>
<td>Household Waste Recycling Centre (HWRC)</td>
<td>A staffed site with one or more containers to which a business can take its waste and a range of recycling, as opposed to having it collected from its premises.</td>
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<tr>
<td>Industrial waste</td>
<td>Industrial waste means waste from:</td>
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Key term | Definition
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factories; premises used for the purposes of, or in connection with, the provision to the public of transport services by land, water or air; supply to the public of gas, water or electricity or the provision of sewerage services; provision to the public of postal or telecommunications services; any mine or quarry; or any premises used for agriculture within the meaning of the Agriculture Act 1947².

Kerbside collection | The collection of waste or recycling from the street (kerb) outside domestic properties or commercial premises.

Small & Medium Sized Enterprise (SME) | According to the European Commission SMEs are:
- Medium sized businesses with less than 250 staff, a turnover of less than €50 million, or a balance sheet total of less than €43 million;
- Small businesses with less than 50 staff, a turnover of less than €10 million, or a balance sheet total of less than €10 million; and
- Micro-businesses with less than 10 staff, a turnover of less than €2 million, or a balance sheet total of less than €2 million

Acknowledgements

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Bristol University, Canterbury City Council, City of London Corporation, East Ayrshire Council, Exeter City Council, London Borough of Bexley, London Borough of Richmond, North London Waste Authority, Northumberland Council, Oxford City Council, Oxfordshire County Council, Peterborough City Council, Ribble Valley Borough Council, South Hams District Council, Cardiff Council, Warwick District Council, Westminster City Council and Alan Cook of HCW.

1.0 Introduction

This guide provides information for local authorities (and their private and third sector partners) on the key steps involved in developing, managing, expanding and optimising a commercial recycling collection scheme. It is of use to those authorities that are considering implementing a new service as well as those who currently offer a service and are seeking to improve their service in terms of operational efficiency or expanding the service either through increased customer participation or the variety of materials collected.

The steps are provided in the logical sequence of planning, implementing and reviewing a service; however many of the decisions to be made will be co-dependent on other steps. It is therefore advisable to read the whole document in order to understand these co-dependencies before embarking on any major service related decisions. Most of the principles outlined apply to all materials, including food waste, but where there are differences, these are highlighted throughout the guide.

This guide is not prescriptive, and it is intended to enable the reader to make informed decisions and consider changes that may work in their own situation and circumstances. It has been written for local authorities across the UK (England, Northern Ireland, Scotland and Wales). Advice is provided specific to each nation where appropriate to ensure that local regulations and policies are followed. It is recommended however, that local authorities seek legal advice regarding their own circumstances and check with the relevant regulatory authority to ensure that positions have not changed since publication.

A number of mini-case studies are presented throughout the guide; these provide practical ideas, tips and hints, relevant to the topics being covered.

This guide does not cover the adaptation of Household Waste & Recycling Centres (HWRCs) or other municipal bring facilities to collect commercial wastes. This is available in another guide which can be found on the WRAP website along with other information that is relevant to the collection of commercial recycling:

http://www.wrap.org.uk/category/subject/business-collections
The guide follows a standard business planning cycle format of ‘plan - implement - review’, which is represented by the service cycle below:

*Figure 1: Service planning cycle*
2.0 Context – Needs and barriers

This chapter sets the context and provides the drivers for implementing and running a commercial recycling collection service. By the end of this stage in the service planning process you will understand:

- What the drivers are for collecting commercial recycling;
- Which key pieces of legislation are pertinent to your services;
- What the barriers are for SMEs to recycle and how to design your service to overcome them; and
- What the scale of the market is.

2.1 Developing the business case – drivers for collecting commercial recycling

Whilst readers of this guide are likely to know what key drivers they have for initiating/improving a commercial recycling service, it may be beneficial to consider other drivers too. This may be helpful when writing a business case and can help inform the overall service. The most common drivers for collecting commercial recycling identified by local authorities across the UK are outlined below³.

2.1.1 Income and income protection

Local authorities are able to recover all the costs associated with providing a commercial waste/recycling service should they wish to do so. In addition, under section 95 of the Local Government Act 2003⁴ an authority may set up a wholly council owned trading company to deliver waste and/or recycling services on a commercial basis. Offering a comprehensive recycling service will help protect income generated from residual waste customers who may demand recycling services as well and wish to use a single supplier. There are opportunities for authorities collecting dry recyclables from commercial customers to maximise income from the sale of these materials.

2.1.2 Avoiding costs and a thriving economy

Local authority strategies are likely to include economic aspirations and indicators which, in many cases, are linked to sustainable development. A thriving economy is very much linked with the profitability of its local businesses. With landfill tax and the cost of disposal rising, waste management is an increasing cost burden to small businesses, reducing their profits. They should be able to mitigate these costs through waste reduction and recycling strategies. In addition to this, another driver for a local authority to introduce commercial recycling services may be the desire to create or safeguard ‘green jobs’.

2.1.3 Reinforce household recycling and reputation

Providing a commercial recycling service could mean a local authority is seen to be leading by example. Enabling and encouraging businesses and their staff to recycle at work will reinforce the message that recycling is part of daily life which may, in turn, help increase household recycling rates.

2.1.4 Reduce mis-use of household services

A 2010 Defra survey\(^5\) revealed that 41\(^6\)% of English micro businesses use household services to dispose of and recycle their waste. This is through the use of both domestic collection services and HWRCs. Such practices, especially for residual commercial wastes, place a burden on local authorities where there is no cost recovery from businesses.

2.1.5 Demand for the service.

The Federation of Small Businesses reports that 95% of small businesses would recycle more if they had access to better facilities\(^7\). Providing a commercial recycling service that is accessible and provides value for money would support local SMEs.

\(^5\) Recycling activities in SMEs – a survey, Defra 2010
\(^7\) FSB, ‘Voice of Small Businesses’ Index November 2010
2.1.6 Optimising resources

It may be the case that many existing residual waste customers would be willing and able to adopt recycling services that are aligned with household configurations (or some variant of them) if the cost, service and environmental benefits of this approach could be demonstrated. The potential benefits to councils of introducing co-collection recycling schemes may include:

- Reduced operational costs by maximising existing vehicle capacity;
- Increased revenue generated;
- Positive effect on ‘municipal’ recycling performance; and
- Improved customer satisfaction with council waste collection services in general.

2.1.7 Policy in Scotland and Wales

Scotland

Scottish local authorities are encouraged to help businesses improve their recycling through the Scottish Government's Circular Economy Strategy - Making Things Last. This strategy takes the targets and ambitions set out in the Scottish Government's Zero Waste Plan and in Safeguarding Scotland's Resources, and places them firmly in the context of an action for a more circular economy. The strategy was developed, and will be delivered, in partnership with Zero Waste Scotland, the enterprise agencies and SEPA.

The strategy sets out the Scottish Government's priorities for moving towards a more circular economy – where products and materials are kept in high value use for as long as possible. It builds on Scotland's progress in the zero waste and resource efficiency agendas. A more circular economy will benefit:

- The environment – cutting waste and carbon emissions and reducing reliance on scarce resources;
- The economy – improving productivity, opening up new markets and improving resilience; and
- Communities – more, lower cost options to access the goods we need with opportunities for social enterprise.

Scotland has an overall target for 70% recycling/composting and preparing for re-use of all waste produced in Scotland (not just that which is managed by local authorities), and that no more than 5% of all waste is to go to landfill by 2025. For local authorities, this means they will need to take action to increase the quantity and quality of materials which they collect for recycling and composting from businesses.
Wales

The Waste (Wales) Measure 2010 was passed by the National Assembly on 2 November 2010 and received Royal Approval on 15 December 2010, giving the Welsh Government powers to restrict, or even ban certain wastes from landfill in Wales. The Measure:

- Enacts a provision about the destination of proceeds from charges for single use carrier bags;
- Makes provision for targets to be met by local authorities in relation to municipal waste;
- Makes provision for prohibiting or otherwise regulating the deposit of waste in a landfill; and
- Provides for site waste management plans for works involving construction or demolition and for connected purposes.

The Measure also sets out the recycling targets for municipal solid waste in Wales which are 58% from 2016-17, 64% from 2019/20 and 70% by 2024-25.

The Environment (Wales) Act 2016 received Royal Assent on 21 March 2016. It allows Welsh Government to require the segregation by businesses and other waste producers of certain materials. This is likely to include paper, card, plastics, metals, food and wood. In addition, it introduces the power to ban the incineration of specified kinds of waste. It is anticipated that regulations to implement the provisions of the Act will be set out in 2018.

In Wales, the overarching waste strategy document - Towards Zero Waste – provides a long term high level strategic framework, and describes the social, economic and environmental outcomes that resource efficiency and waste management will achieve and contribute towards in a sustainable future. It also details high level principles, policies and targets.

The strategy document is underpinned by a series of implementation or Sector Plans, including the Industrial and Commercial Sector Plan, describing the role and actions of each sector, the Welsh Government and others in delivering the outcomes, targets and policies in Towards Zero Waste.

Towards Zero Waste proposes a general waste reduction target of 1.4% every year to 2050 based on 2006/7 baseline for industrial waste, and 1.2% every year to 2050 based on 2006/7 baseline for commercial waste. The Welsh Government has decided to include “preparation for reuse” (that includes the composting and anaerobic digestion of waste) as counting towards the 2025 70% recycling targets set for industrial and commercial waste. Following consultation on the Collection, Infrastructure and Markets Sector Plan (that looks at what happens to the waste once it has been put out for collection and how Wales deals with its waste without sending it to landfill) the Welsh Government has set a cap on landfilling of industrial and commercial waste in Wales of 10% of waste produced in 2019-20, and just 5% in 2024-25.

In Wales, the National Strategic Indicators measuring the performance of local authorities in waste and recycling management are:
The percentage of municipal waste (from household and non-household sources) collected by local authorities sent to landfill;

The percentage of municipal waste (from household and non-household sources) collected by local authorities and prepared for reuse and/or recycled, including source segregated bio-wastes that are composted or treated biologically in another way; and

The percentage of reported fly tipping incidents cleared within 5 working days.

2.1.8 Planning policy

Another policy area where local authorities can influence the improvement in standards of commercial waste management and levels of recycling and resource efficiency is planning. All planning applications for change of use or new developments should include adequate provision for waste management e.g. storage capacity for residual waste, recycling and food waste. This will enable any businesses or residents within the development to recycle in the future without potential issues of space.

2.1.9 Legislation

Legislation is also a driver for the provision of C&I waste services and the segregation of materials for recycling. An overview of key relevant UK legislation is presented in the following table. Some of the key pieces of legislation are explained in appendix 1.

Table 1: Overview of relevant UK legislation

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<th>Wales</th>
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### 2.2 Understanding customers’ needs and barriers to recycling

Understanding both your customers’ needs and their barriers to implementing a recycling scheme is a high priority in order to develop a service that meets their requirements. This information should also help inform the promotion strategy for your service.

#### 2.2.1 Barriers for SMEs

Key barriers to SME recycling are outlined below, along with potential measures to overcome them.

According to SMEs in the 2010 DEFRA survey, the top 5 drivers for a business to implement a recycling scheme include:

- Company’s environmental policy;
- Need to reduce carbon footprint;
- Government legislation;
- Cost (less money spent on residual waste collection); and
- Environmental reasons
### Table 2: Understanding and overcoming barriers to SME recycling

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Measures to overcome</th>
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| **Low volumes of materials**                    | - SMEs can generate relatively low volumes of recyclable materials and, therefore, it can be difficult to collect the materials on a commercial basis  
- Low volumes, or the perception of producing low volumes, were cited as the key reason for SMEs not recycling in Defra’s 2010 study of Recycling Activities in SMEs  
- Collect from a high number of businesses in as dense an area as possible or encourage a number of businesses to collaborate to purchase the service together  
- Where appropriate, co-collect household and commercial materials for maximum collection efficiency  
- Conduct waste audits to determine actual volumes. N.B. Defra’s 2010 study of Recycling Activities in SMEs questions whether low volumes are an actual barrier or whether low volumes are a perception  
- If the data is available, it may be useful to show the collective impact of the majority of SMEs within a certain area recycling i.e. while individual quantities of material may be low, collectively they may be high  
- Consider commercial recycling bring/drop-off centres  
- Because volumes can be relatively small, it can be difficult to demonstrate cost savings  
- As landfill tax escalates, the cost difference between landfill waste and recycling will grow, making recycling increasingly financially attractive  
- Work with businesses individually to work out their waste management needs with the aim of reducing residual waste collection and introducing recycling  
- Highlight the environmental and social benefits of recycling  
- Lack of service provision (this may be particularly pertinent to rural areas)  
- Survey businesses to understand demand and supply  
- Develop services where appropriate  
- SMEs unaware of existing/new recycling services  
- Better promotion of services  
- Difficulties in accessing information about  
- Better promotion of services  |

*Recycling Activities in SMEs, Defra survey, 2010 page 33*
### Context

**Barriers**

<table>
<thead>
<tr>
<th>Lack of time/ resources</th>
<th>Measures to overcome</th>
</tr>
</thead>
</table>
| SMEs will not usually have a dedicated member of staff responsible for environmental initiatives. There can therefore be a lack of internal resource to establish and manage a recycling scheme. There may also be concerns that staff will not participate | Engage with key decision-maker  
Encourage use of ‘green champions’  
Provide training/promotional materials for internal use e.g. bin signage and posters  
Ensure the service is as user friendly as possible  
Have a ‘walk round’ the business to identify where internal containers could be sited |

<table>
<thead>
<tr>
<th>Cost</th>
<th>Measures to overcome</th>
</tr>
</thead>
</table>
| Business perception that recycling should be free of charge and/or included in business rates  
Depending on the volume of material produced and whether the existing service configuration can be changed, then adding a recycling collection will be an additional cost | One to one engagement with businesses so they understand any relevant pricing structure and how it compares with residual waste and why  
Provide case studies of businesses that are saving money by recycling  
Reduce container capacity/frequency of collection of residual waste |

<table>
<thead>
<tr>
<th>Cost and mis-use of household services</th>
<th>Measures to overcome</th>
</tr>
</thead>
</table>
| Many SMEs – particularly micro businesses - use household services, both knowingly and unknowingly. If they are using this service ‘for free’ why would they pay for a service?  
SMEs that operate from their personal residence are able to dispose of waste/material within their household collection service. If the quantities of material produced are greater than their household containers the authority can charge for additional capacity under the Controlled Waste (England and Wales) Regulations 2012. | Introduce commercial waste/recycling to HWRCs/ transfer stations where appropriate  
Carefully explain the issues to mis-users – many of them will just be trying to do ‘the right thing’.  
Inform businesses of waste legislation – Duty of Care and Pre-treatment  
Introduce permit schemes at HWRCs to reduce mis-use  
Ask collection crews to be vigilant and report back suspected cases  
Inform trading standards and other officers who have contact with businesses e.g. Environmental Health about Duty of Care etc. and ask them to report back suspected cases |

<table>
<thead>
<tr>
<th>Tight cash flow</th>
<th>Measures to overcome</th>
</tr>
</thead>
</table>
| Cash flow can be problematic for businesses. Businesses may not want to procure any new services, particularly if long term contracts are required | Demonstrate potential cost savings through one-to-one support and case studies  
Consider various options such as:  
Payment monthly by direct debit  
‘Pre-paid’ sacks  
Shorter contract lengths e.g. 6 months |

<table>
<thead>
<tr>
<th>Cost/time</th>
<th>Measures to overcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Payment monthly by direct debit</td>
</tr>
</tbody>
</table>
### Barriers

| **Perception that any cost benefits may be outweighed by the administrative time in setting up new arrangements when business is focused on surviving and competing** | **One-to-one support**  
**Provide training materials/sessions**  
**Ensure service is easy and convenient** |
|---|---|
| **Space**  
**SMEs may lack space to collect and store materials for recycling. This can be a particular issue in urban areas** | **Provide flexibility in terms of containment options and/or more frequent collections** |
| **Contamination/staff unwilling**  
**Expectations from business owners/managers that staff will not be keen to participate in recycling schemes and that it will be difficult to ensure segregation of materials occurs** | **Provide training materials/sessions**  
**Encourage use of ‘green champions’ (in larger businesses)**  
**Provide case studies of successful SMEs**  
**Highlight social and environmental benefits of recycling as well as cost savings**  
**Provide internal containers** |
| **Contracts**  
**Businesses believe that they are ‘locked’ into a contract which they are unable to change to introduce recycling and/or change residual collections** | **Businesses to speak to contractors to find out what they can/can’t change**  
**Businesses to check their contracts, including when renewal dates are coming up as well as ensuring that they compare total costs e.g. private companies may include separate charges for Duty of Care** |
| **Centrally managed contracts**  
**Some businesses do not procure goods or services on site, but have these managed by Head Offices** | **Ensure contact with key decision-maker**  
**Encourage the business to discuss with their head office**  
**Inform businesses about Pre-treatment (Landfill regulations 2002) and Waste Regulations (2011/12) requirements** |
| **End use doubts**  
**Doubts as to whether materials are being sent to landfill regardless or ‘dumped’ in developing countries** | **Provide simple audit information**  
**Inform people of end-of-use**  
**Invite businesses to tour of MRF/sorting facilities (where possible)**  
**Feedback from MRFs on input/output/contamination/rejection levels and recycling rates** |
| **Hygiene and odour concerns**  
**Particularly relating to food waste** | **Clear communications and support**  
**Use of liners**  
**Frequent collections** |
| **Need for confidentiality** | **Provide information on security**  
**Provide service for shredded paper** |
2.3 Barriers for SMEs – food waste

A key barrier for some SMEs taking up food waste collection services is that they do not produce enough volumes of food waste to reduce their residual waste collection requirements and therefore make the addition of a food waste collection service cost neutral. The issue is highlighted through the figures below. Figure 4 highlights that the proportion of food waste in the hospitality sector is high in terms of weight (41%), however, by volume this equates to less than 10%. This means that the volume of residual waste may not be reduced enough to warrant reducing the residual waste bin size or reducing the frequency of collection. Because the vast majority of service providers charge for waste/recycling based on volumes, not weight, it means that separate food waste collections would be an additional cost. Typically, WRAP research\(^9\) shows that businesses need to be producing more than 40 kg of food waste per week for a collection to be viable.

\(^9\) Food waste collections to SMEs – Developing the Business Case
Other barriers include:

- Hygiene and smell concerns – therefore there may be a preference for collections to be early in the week in order to remove food waste generated over the weekend
- Lack of storage space
- ‘Hassle’ of additional segregation
3.0 Scoping your service

This chapter will help you to determine what the scope of your service will be. By the end of this chapter you will understand:

- What the benefits are of setting up a working group for your service development;
- The scale of the UK waste market, the composition of waste arisings, how much is being recycled and what services are currently provided by local authorities;
- How to find out about and understand your customers’ needs;
- What the opportunities and demands are for (new) services;
- The types of materials available for collection and the sectors they arise in; and
- The scope (size) of your service and the materials it will collect.

3.1 Develop a working group

In the initial stages of scoping your service it may be useful to establish a working group. Benefits include pooling resources, knowledge and ideas which should result in better planning and reduce the risk of issues and delays arising later in the process, as well as ensuring buy-in across the organisation. This group could include councillors, commercial and household waste collection and disposal staff, and representatives from communications, call centre, finance, health and safety, and enforcement teams (such as trading standards). At later stages, it is recommended to also consult with local businesses.

There should be a real benefit in involving a finance officer in the early stages to help to ensure that income from service charges and sales of recyclable materials along with savings through avoided disposal and landfill tax costs are balanced against the costs of providing the recycling service and potential loss in revenue from residual waste collection services.

Once you have a working group established you can use it to start to develop aims and objectives for your service. These can be refined over the course of your service scoping exercise as evidence is used to inform your decisions.

3.2 Optimum starting position

You may be in a good starting position to commence a recycling service if you already offer a residual waste service. Key reasons for this are:

- Promoting a recycling service will be easier if costs can be kept neutral for the SME. This may be easier to achieve if both the recycling and residual waste services are provided by the same operator;
There will be an existing customer base to promote the service to; The necessary back-office resources and processes will be in place e.g. invoicing system etc.;

In addition to the above, if you are looking to introduce a food waste recycling service, then you may be in an optimum position if you are already providing residual waste and dry recycling services as well as a household food waste collection service. This is because you will have access to a waste treatment facility as well as vehicles which may have spare capacity.

### 3.3 Scale of the UK waste market and waste arisings

According to a study commissioned by BIS in 2011, the waste management industry employed 128,000 people and in 2010/11 generated a gross value added (GVA) of £7.5 billion, of which waste collection is estimated to account for 27%.

Defra undertook a national survey of commercial waste arisings in England in 2009. The survey data provides an insight into the scale of commercial waste arisings produced by business sectors and sizes. Similar surveys have been conducted in Wales (2007), Scotland (2006) and in Northern Ireland (2009).

Focussing on England, Defra estimated that 47.9 million tonnes of C&I waste was produced in 2009, with the commercial sector accounting for 23.8 million tonnes (total waste arisings, of which 52.8% was sent for reuse or recycling).

#### Table 3: C&I waste by broad business sector, England, 2009

<table>
<thead>
<tr>
<th>Sector</th>
<th>Waste (000 tonnes)</th>
<th>Sector recycling &amp; reuse rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, drink &amp; tobacco</td>
<td>4,667</td>
<td>51.2</td>
</tr>
<tr>
<td>Textiles / wood / paper / publishing</td>
<td>3,450</td>
<td>58.9</td>
</tr>
<tr>
<td>Power &amp; utilities</td>
<td>5,720</td>
<td>46.3</td>
</tr>
<tr>
<td>Chemicals / non-metallic minerals manufacturing</td>
<td>3,847</td>
<td>42.0</td>
</tr>
<tr>
<td>Metal manufacturing</td>
<td>4,235</td>
<td>53.1</td>
</tr>
<tr>
<td>Machinery &amp; equipment (other manufacturing)</td>
<td>2,164</td>
<td>65.5</td>
</tr>
<tr>
<td>Subtotal – Industrial</td>
<td>24,084</td>
<td>51.3</td>
</tr>
<tr>
<td>Retail &amp; wholesale</td>
<td>9,212</td>
<td>59.6</td>
</tr>
<tr>
<td>Hotels &amp; catering</td>
<td>2,671</td>
<td>45.0</td>
</tr>
</tbody>
</table>

Surveys also suggest that an additional 7.6 and 3.6 million tonnes of C&I waste was produced in Scotland (2006 data) and Wales (2007 data).

10 Surveys also suggest that an additional 7.6 and 3.6 million tonnes of C&I waste was produced in Scotland (2006 data) and Wales (2007 data).
The figures show that the retail and wholesale sector produces the greatest amount of commercial waste (9.2 million tonnes). When looking at the arisings by material type, non-metallic and mixed ordinary wastes are the most significant materials (see table 5 below for definitions).

Table 4: C&I waste arisings by material type, England, 2009

<table>
<thead>
<tr>
<th>Material type</th>
<th>Summary of wastes included</th>
<th>Waste 2009 (000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal and vegetable</td>
<td>Food, manure, other animal and vegetable wastes</td>
<td>3,762</td>
</tr>
<tr>
<td>Chemical wastes</td>
<td>Solvents, acids/alkalis, used oil, catalysts, wastes from chemical preparation, residues and sludges</td>
<td>5,285</td>
</tr>
<tr>
<td>Common sludges</td>
<td>Sludges (common) and dredging wastes</td>
<td>896</td>
</tr>
<tr>
<td>Discarded equipment</td>
<td>End of life vehicles (ELVs), batteries, waste electronics (WEEE) other discarded equipment</td>
<td>759</td>
</tr>
<tr>
<td>Healthcare wastes</td>
<td>Healthcare wastes</td>
<td>1,855</td>
</tr>
<tr>
<td>Metallic wastes</td>
<td>Metallic wastes</td>
<td>2,613</td>
</tr>
<tr>
<td>Mineral wastes</td>
<td>Combustion residues, contaminated soils, solidified mineral wastes, other mineral wastes</td>
<td>8,896</td>
</tr>
<tr>
<td>Mixed (ordinary) wastes</td>
<td>Household, undifferentiated wastes and sorting residues</td>
<td>12,303</td>
</tr>
<tr>
<td>Non-metallic wastes</td>
<td>Glass, paper &amp; card, rubber, plastic, wood, textiles</td>
<td>11,554</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>47,928</td>
</tr>
</tbody>
</table>

Figure 5 below shows that small enterprises, with between 0 and 49 employees, produced 16.6 million tonnes of C&I waste in England, in 2009, or 34 per cent of total C&I waste.
3.3.1 Local authority commercial waste/recycling collections

Commercial recycling collections are increasing across the UK with more local authorities considering the benefits of either implementing a new service or expanding an existing one. In 2012 WRAP carried out a comprehensive survey of local authorities across the UK to understand where, why and how local authorities provide commercial waste and recycling services. Survey results for each of the nations are available here: [http://www.wrap.org.uk/content/local-authority-survey-business-waste-collections](http://www.wrap.org.uk/content/local-authority-survey-business-waste-collections).

In 2012 approximately 68% of local authorities in England offer a residual waste collection and 49% provide a recycling service to commercial premises.

Wales, Scotland and Northern Ireland all have very high proportions of local authorities offering commercial waste services. In 2012 Wales and Northern Ireland all authorities provide a residual waste collection and in Scotland, 31 out of 32 do. With regards commercial recycling services the proportions are 86% in Wales, 84% in Scotland and 62% in Northern Ireland.
Of the authorities delivering a commercial recycling service the range of materials collected varies. The table below shows the types of materials collected for recycling by UK local authorities. The most common materials are paper, card, cans and glass.

**Table 5:** Materials collected for recycling by UK local authorities offering a commercial recycling collection service, 2011/12

<table>
<thead>
<tr>
<th></th>
<th>% of total LAs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>England</td>
</tr>
<tr>
<td>Paper</td>
<td>94%</td>
</tr>
<tr>
<td>Cardboard</td>
<td>97%</td>
</tr>
<tr>
<td>Cans</td>
<td>72%</td>
</tr>
<tr>
<td>Other metals</td>
<td>17%</td>
</tr>
<tr>
<td>Mixed plastic (pots, tubs, trays and bottles)</td>
<td>43%</td>
</tr>
<tr>
<td>Plastic bottles</td>
<td>39%</td>
</tr>
<tr>
<td>Mixed glass</td>
<td>63%</td>
</tr>
<tr>
<td>Clear glass</td>
<td>15%</td>
</tr>
<tr>
<td>Green glass</td>
<td>15%</td>
</tr>
<tr>
<td>Brown glass</td>
<td>15%</td>
</tr>
<tr>
<td>Textiles</td>
<td>6%</td>
</tr>
<tr>
<td>Food waste</td>
<td>9%</td>
</tr>
<tr>
<td>Green waste</td>
<td>10%</td>
</tr>
<tr>
<td>Soil</td>
<td>2%</td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>1%</td>
</tr>
<tr>
<td>Batteries</td>
<td>3%</td>
</tr>
<tr>
<td>WEEE</td>
<td>4%</td>
</tr>
<tr>
<td>Bulky items</td>
<td>6%</td>
</tr>
<tr>
<td>Wood</td>
<td>5%</td>
</tr>
<tr>
<td>Hardcore</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total number of LAs</strong></td>
<td><strong>155</strong></td>
</tr>
</tbody>
</table>

* Numbers may not add to 100% as multiple answers could be given.

[17](http://www.wrap.org.uk/content/local-authority-survey-business-waste-collections)
3.4 Your local market - understanding demand and surveying businesses

Understanding your local market (and critically whether there is a market for you to enter) is a key step in the service scoping process. You will need to understand:

- How many businesses are located within your area;
- What type of businesses they are;
- What type of waste they produce;
- How much waste they produce;
- What they are currently doing with their waste/recycling;
- How much they are paying for waste/recycling services;
- What services and information they need or want;
- What services are being provided by other operators and any gaps that may exist; and
- The potential total local demand.

You will need to undertake research to fully understand your local market. This could be done by conducting a survey of local businesses. Depending on the information required and resources available, surveys could be conducted by letter, telephone, email, or face-to-face interviews.

3.5 Material type

When deciding what materials to collect, you will need to consider the following:

- The regulations regarding the separate collection of recyclables and how this will be met;
- What material streams originate from local businesses;
- What demand there is to recycle these materials;
- If demand is currently being met;
- How much material is available;
- Infrastructure and outlet constraints and issues; and
- Potential revenue from the sale of the material (as appropriate).

Gaining a local understanding will be important and this can be achieved by undertaking surveys, waste analyses and audits.
3.6 Understanding business types and their wastes

3.6.1 Surveys, waste analyses and audits

Waste compositional analysis and waste audits can provide accurate and detailed information about the nature and quantities of waste and recyclable material available.

Waste compositional analysis identifies the content and quantity of waste by material. Waste analyses can be undertaken by specialist companies, waste contractors, or it may be possible for an authority to undertake the work themselves so long as suitably qualified/trained personnel and adequate facilities are available. It would normally involve analysing a sample of waste e.g. a collection round.

Waste audits can be carried out at the single business level; however, if the goal is purely to identify overall types and quantities of waste generated, then this is not a cost effective approach. The benefit of a single waste audit is to the business waste producer to better understand its waste streams in order to help prevent waste and recycle most effectively. This could be a service offered - either charged for, or as a value added service.

On a much simpler scale, another option would be for questionnaire responses to be augmented by visits to premises to look at waste presented prior to collection, although the level of accuracy will be reduced.

Readers may find it useful to read WRAP’s guidance on sampling of household waste where the methodologies are transferrable.

http://www.wrap.org.uk/content/monitoring-and-evaluation-guidance-chapter-3-sampling

3.6.2 Compositional analysis

Business waste compositional analysis is undertaken by a number of organisations, including local authorities, and reveals trends in the types of wastes generated by different sectors. As well as assisting with the decision about which materials to collect, it can also be useful when deciding how to promote appropriate services to different businesses.

The data in the table below has been extracted from a WRAP study of compositional analysis of commercial waste collected by local authorities in Wales\(^1\). Not only does it highlight the proportion (by weight) of materials from the different sectors it also shows that by weight, food, paper and cardboard make up the largest proportion of waste in this case. ‘Other plastic’ includes plastic film and ‘other organics’ includes waste vegetable oil.

\(^1\) http://www.wrap.org.uk/sites/files/wrap/FINAL%20Wales%20compositional%20analysis%20report%20FOR%20PUBLICATION1.pdf
Understanding business types will help you to target different material streams and will help your staff members to focus their engagement with different business types during the promotion phase of your service development.

There are many benefits to collecting a range of materials from businesses including:

- Increasing recycling rates and diverting waste from disposal
- Maximising income from the sale of materials
- Reinforcing household messages – when people are able to recycle the same materials at work as at home
- Meeting customer demand and improving satisfaction rates with services.

Some materials may be best left to specialist collectors and it is useful to establish who these local service providers might be. Where there are sufficiently concentrated clusters of producers of individual materials in an authority’s area, there may be considerable merit in an authority actively facilitating the setting-up of arrangements between specialist companies and local businesses.

It is generally desirable to have a mix of businesses on a collection round. An established contract with a larger business may mean that collections from smaller businesses in the surrounding area are more viable as the bulk of the costs incurred are covered in the income from the main commercial client. This enables spare capacity to be used to increase coverage at no real extra cost.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Food &amp; Drink</th>
<th>Retail</th>
<th>Office</th>
<th>Leisure</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed paper</td>
<td>11.3</td>
<td>19.4</td>
<td>34.1</td>
<td>19.5</td>
<td>35.6</td>
</tr>
<tr>
<td>Cardboard</td>
<td>12.1</td>
<td>17.8</td>
<td>12.5</td>
<td>13.9</td>
<td>14</td>
</tr>
<tr>
<td>Food waste</td>
<td>41.3</td>
<td>13.8</td>
<td>16.3</td>
<td>20</td>
<td>11.2</td>
</tr>
<tr>
<td>Other organics</td>
<td>9.5</td>
<td>8.3</td>
<td>6.2</td>
<td>8.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Plastic film</td>
<td>5.9</td>
<td>9.6</td>
<td>8.5</td>
<td>6.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Plastic bottles</td>
<td>1.9</td>
<td>1.7</td>
<td>2.9</td>
<td>3.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Other dense plastic</td>
<td>0.5</td>
<td>3.6</td>
<td>2.1</td>
<td>1.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Other plastic</td>
<td>2.4</td>
<td>3.6</td>
<td>3.7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Packaging glass</td>
<td>5.5</td>
<td>1.6</td>
<td>1.3</td>
<td>9.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Other metal</td>
<td>1.4</td>
<td>2.9</td>
<td>3.7</td>
<td>3.3</td>
<td>4</td>
</tr>
<tr>
<td>Other glass</td>
<td>0.3</td>
<td>5.9</td>
<td>0.4</td>
<td>1.2</td>
<td>4.2</td>
</tr>
<tr>
<td>Metal cans</td>
<td>1.9</td>
<td>0.5</td>
<td>0.9</td>
<td>1.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>11.3</td>
<td>7.4</td>
<td>7.7</td>
<td>9.9</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 5: Waste composition of different business types (% by weight)
3.7 Material quantities

There is significant variation in the quantity of waste produced by businesses. WRAP studies have found that this variation exists across all sectors and sizes of businesses. For example, a business of the same size and in the same sector as another may produce twice the amount of waste.

**Exeter City Council** provides waste collections to just over 1,000 businesses and recycling services to around 450 businesses within the city boundaries. Collections are provided for paper, cardboard, mixed plastics (including film) and cans/tins. The charges are based on collections of 2 or 4 materials. All materials must be presented separately - paper, plastics and cans/tins in separate sacks and cardboard bound by tape. The provision of sacks and tape are included in the charge. 75% of the recyclables collected is cardboard, 20% paper and 5% plastics and tins/cans. The majority of customers have one collection per week but, if they produce more than a specified amount of waste then they have the option to sign up to additional collections. Customers’ segregating their materials in this way means the authority is able to keep sorting costs down, maximise income and provide a cost effective service for the customer. The tape has the council logo on it which visually/physically separates it from other private sector collection and helps promote the service the council offers.

Defra’s survey into commercial and industrial waste arisings (2009) provides a starting point. Table 7 below provides a breakdown of waste arisings per business size and sector. On the basis of the data collated, estimates of the average tonnages generated by the varying business types / sizes can be derived.
### Table 6: Waste arisings by sector type and size band (tonnes), England 2009

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-4</td>
</tr>
<tr>
<td>Food, drink &amp; tobacco</td>
<td>2,023</td>
</tr>
<tr>
<td>Textiles / wood / paper / publishing</td>
<td>24,494</td>
</tr>
<tr>
<td>Power &amp; utilities</td>
<td>1,205</td>
</tr>
<tr>
<td>Chemicals / non-metallic minerals manufacture</td>
<td>7,158</td>
</tr>
<tr>
<td>Metal manufacturing</td>
<td>106,022</td>
</tr>
<tr>
<td>Machinery &amp; equipment (other manufacture)</td>
<td>50,554</td>
</tr>
<tr>
<td>Retail &amp; wholesale</td>
<td>974,479</td>
</tr>
<tr>
<td>Hotels &amp; catering</td>
<td>137,570</td>
</tr>
<tr>
<td>Public administration &amp; social work</td>
<td>38,284</td>
</tr>
<tr>
<td>Education</td>
<td>26,009</td>
</tr>
<tr>
<td>Transport &amp; storage</td>
<td>16,959</td>
</tr>
<tr>
<td>Other services</td>
<td>901,350</td>
</tr>
<tr>
<td><strong>Total waste (tonnes)</strong></td>
<td>2,286,106</td>
</tr>
</tbody>
</table>
3.8 Food waste and the hospitality sector – quantities and composition

Comprehensive sector and material specific studies have produced the most robust data. For example, WRAP’s study of waste in the hospitality sector in 2011 which estimates that in the UK, just over 3.4 million tonnes of waste was produced by this sector with 47% being recycled. Of the waste being disposed of 41% was food, 14% glass, 13% paper and 9% card.

WRAP provided funding to 10 demonstration projects in 2013. The average weekly yields for different business types are shown in Table 7. These yields are the weight of food waste collected per location (collection point) per week, calculated across all the demonstration projects. These average yield figures need to be treated cautiously: the weekly yield varied considerably across the different demonstration projects, as shown by the minimum and maximum figures. The average number of locations collected from in the demonstration projects is also given in this table to show the variability across the different business types.

The large range of weekly yield figures across the demonstration projects reflects the wide variety and sizes of the establishments that produce the food waste. Restaurants and food manufacturers, in particular, can vary greatly in size and hence amount of food waste generated.

<table>
<thead>
<tr>
<th>Business type</th>
<th>Weekly averages (kgs)</th>
<th>Average number of locations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Min</td>
</tr>
<tr>
<td>Food manufacturers</td>
<td>153</td>
<td>17</td>
</tr>
<tr>
<td>Grocery stores</td>
<td>230</td>
<td>46</td>
</tr>
<tr>
<td>Higher education</td>
<td>177</td>
<td>56</td>
</tr>
<tr>
<td>Hotels</td>
<td>341</td>
<td>38</td>
</tr>
<tr>
<td>NHS</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>Offices with canteens</td>
<td>401</td>
<td>16</td>
</tr>
<tr>
<td>Offices without canteens</td>
<td>55</td>
<td>5</td>
</tr>
<tr>
<td>Pubs</td>
<td>276</td>
<td>24</td>
</tr>
<tr>
<td>Quick service restaurants</td>
<td>162</td>
<td>23</td>
</tr>
<tr>
<td>Restaurants</td>
<td>467</td>
<td>52</td>
</tr>
<tr>
<td>Schools</td>
<td>114</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: data derived from the collection demonstration projects. Notes:
1 The weekly average figures in the table are averages across the demonstration projects for collections made over eight months.
2 The table shows the minimum and maximum figures of average weekly yield for each trial.
3 The average number of locations that each trial collected from.

19 The Composition of Waste Disposed of by the UK Hospitality Industry, WRAP 2011
3.8.1 Capture rates

It may be difficult to divert 100% of a material from the residual waste into a recycling stream and so a capture rate figure is often used for estimations. Capture rates can vary between users of a service and can be affected by:

- Employee knowledge of the scheme;
- Willingness of individuals to recycle;
- Whether there are alternative routes available for the material in question within their business (e.g. food waste macerators);
- Whether there is sufficient space (footprint) to store and container capacity to segregate the material;
- Distance from where the waste arises to a disposal point; and
- Whether procurement routes and use of goods within the business changes frequently (e.g. changes from glass to plastic containers).

Capture rate for food waste from businesses could be relatively high at around 85%.

As new services are introduced authorities are advised to establish their own systems for capturing data on an on-going basis and to use the information obtained to inform future service planning.

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Capture rate = (quantity of a particular targeted material collected for recycling / composting) / (quantity of that targeted material collected for recycling / composting + quantity of targeted material collected for disposal) x100 (from Chapter 7: Monitoring capture rates of WRAP (revised 2010) Improving the Performance of Waste Diversion Schemes: A Good Practice Guide to Monitoring and Evaluation).
4.0 Service planning and delivery

By the end of this chapter you will understand:

- Options for service delivery including collection methods and resource requirements
- Operational considerations including vehicle types, containers and associated infrastructure/systems;
- How to prevent and manage contamination;
- Where to go for health and safety information; and
- Considerations for the launch of the service

4.1 Collection options

Once you have decided which material streams you would like to collect then it is time to begin more detailed service planning looking at the collections options that are available to you. Many of the options are interrelated, so it is important to consider the service holistically to ensure that a) you fully understand the impacts of one decision on another and b) that operational impacts are understood and addressed from customer collection through to final treatment transfer. For example, the decision to use existing fleet vehicles when launching a service may influence the types of materials you can collect from customers at first. The rural nature of your authority may mean that co-collection of materials with your household collection rounds is the only viable option, which in turn may limit the times of day when you can make collections. Involvement of your working group in this phase will assist in identifying and mitigating against any issues that may arise as a result of a particular decision.

Each issue on the spokes of the planning and delivery cycle diagram below should not be considered in isolation because of the interrelationships between them. You may also need to revisit each theme several times before your optimal service is developed.

WRAP analysis of local authority services indicates that the elements that appear to make a higher recycling performance more likely include:
- Where recycling is cheaper than disposal;
- When recycling services are provided flexibly where:
  - collections are made more than once a week; or
  - a larger number of materials are collected
Most importantly don’t forget your customer needs; if you’re not delivering what your customers require then you won’t maintain a viable customer base in the long term.

Figure 6: Planning and delivery considerations

4.2 Materials and collection method

Within your service scoping activities you should have established the type and quantities of materials available from within the local business market. You now need to start thinking about whether you need/would like to collect the materials separately (multi-stream) or together (co-mingled), or as a combination:

- Multi-stream collection: materials are separated by the SME or on collection at the kerbside into multiple material streams. The material streams may include a selected mix of some materials, typically cans and plastics, which are commonly separated using basic sorting facilities at the operating depot or sold to reprocessors as a mixed commodity;
- Single stream co-mingled collection: all materials are collected together in one compartment on the same vehicle and must be sorted at a Materials Recovery Facility (MRF);
Two stream, partially co-mingled collection: materials are collected as two material streams, typically fibres and containers, at least one of which requires sorting at a MRF.

Single material collection: only one material is collected and requires no sorting.

Considerations regarding which materials and collection method you use include:

- Customer requirements and storage constraints;
- Current and planned operations;
- Available staff resources and infrastructure;
- Gate fees and/or income for different mixes of materials
- Whether glass should be kept separate from other recyclables in order to maintain quality and ensure acceptance by potential end markets/reprocessors;
- Local and national drivers e.g. Waste (2012) Scotland Regulations and Waste (England and Wales) Regulations;
- Quantity and quality of materials available;
- Whether glass should be colour separated to attract greater income;
- MRF capabilities and acceptance criteria including levels of compaction; and
- If materials are being co-collected with household recycling, then if there are any interdependencies.

The MRF code of practice\(^{21}\) will help to increase transparency of data on quality of input and output at MRFs, and contamination levels.

The cost comparisons between source-segregated and co-mingled collections will need to take account of all of the above. It is up to local authorities to decide on the most suitable arrangements for their local area but it is advisable to seek input from business so as to increase customer take-up and satisfaction.

### 4.3 Service model options for a co-collection service

A co-collection service may be suitable for authorities: with very rural areas, those who are just launching their service and are trying to build a customer base prior to investment in a dedicated vehicle, those collecting from mixed hereditaments, and for city centre environments where a one pass approach makes operational sense. There are a number of service model options that are outlined below.

- **Fully aligned**: this is where the frequency and day of collection for all commercial waste collections are the same as those for household waste. An example is Limavady Borough Council which co-collects commercial and household refuse on a weekly basis.

- **More frequent collection for commercial than for household**: An example of this is where refuse is collected fortnightly from households and weekly from commercial customers. This can require a hybrid approach to be taken such as:

4.4 Establishing the scope (size) of the service

If your authority already has a commercial residual waste service in place then, initially, you may wish to consider restricting the recycling service to existing customers, a particular geographical area or a particular material.

Providing recycling services to existing residual waste customers only
If you are developing your existing residual waste service to introduce recycling you may want to consider the following:

- Whether there is spare capacity (vehicles and crews) within the existing commercial service to accommodate a new service;
- Administering new customer contracts and invoicing procedures and the resources needed to manage this process;
- Less residual waste needing collection and disposal (because recycling increases) and the implications for individual customer collection arrangements (e.g. smaller or fewer containers or less frequent collections);
- Potential for loss of income from the residual waste service balanced against income from charges for the new recycling service and income from sale of recyclables.

**Gradual/staggered service provision**

It is worth considering restricting service provision particularly where a phased approach would be of benefit, for instance:

- Targeting a specific material e.g. cardboard
- Targeting a specific geographical area
- A pilot, to enable accurate resources and costs to be established with roll out of the service being planned over time.

Considerations for this situation include:

- It would allow for a steady development of the service;
- Depending on available resources, it may utilise existing spare capacity amongst crews, vehicles and other infrastructure;
- It can be easier to monitor for contamination;
- It may be easier to manage costs and any initial cash flow problems;
- It can inform the development of a detailed longer-term business model;
- It provides a mechanism for a council to cap the service e.g. in terms of customer numbers in the event of the need to manage costs. In this case a waiting list could be created for customers to be brought on board as capacity becomes available - although a business is perhaps unlikely to ‘wait’ if they have the option of a different service provider;

*If the service is open to all businesses in the authority’s area there are a different range of considerations which include:*

- Potential increases in the total amount of residual waste collected if new customers are offered a service for both recycling and residual waste;
- What capacity is there to accept increases in customer numbers;
- The need for a high level of planning, investment and management, depending on the scope of the service. E.g. if a very specific geographical area is targeted
4.5 Health and safety

Health and safety should be considered in all aspects of the service. Comprehensive risk assessment is essential to ensure that services are delivered with risks controlled so far as is reasonably practicable. Considerations include:

- Manual handling
- Safe systems of work
- Safe movement of vehicles
- Noise
- Access to bins by the public including issues with arson and people seeking refuge in larger bins.


4.6 Vehicles

There are a number of points to consider when deciding which vehicles would be suitable for your commercial recycling collection including to what extent existing vehicle capacity could absorb additional demand for commercial collections. Ideally any spare capacity from existing fleets would be utilised in the first instance but consideration could be given to short-term hire of a vehicle for pilots/trials. Leasing options could be considered over outright purchase. Points to consider include:

- What vehicles will be best suited for collections?
- Are suitable vehicles available in the current fleet or will vehicles need to be bought or hired?
- Is there scope to share vehicles with another authority either through cost-sharing or using any joint spare capacity?
- Are there opportunities for working with other service providers (private/civil society organisations) including neighbouring authorities?
- How will the type of vehicles affect the containment options to be provided?
- Where household recyclables are collected on kerbsider/stillage vehicles, can these accommodate commercial recyclables, and if so, how should the materials be presented for collection?
- Bulk density and compaction of collected materials - consider the volume of the materials that would be collected in relation to the fill rate of, and compaction rates applied to, each vehicle compartment. Many businesses produce large volumes of cardboard; ensure, if you use a MRF, that it can handle the additional materials being collected (quantity and type) and check if they have limits on compaction levels;
- Area restrictions e.g. street width and access points;
- Weight, volume and type of materials being collected;
• Collection method – source segregated or co-mingled;
• Containers – any co-dependencies on vehicles e.g. lifting mechanisms and rave height; and
• Health and safety.

4.6.1 Food waste collection vehicles

The design and style of commercial food waste collection vehicles should primarily be influenced by the yields generated from the collection rounds, site or area access issues and travel distances to unload. They will also be influenced by the demands of the delivery arrangements at the location where collected loads are deposited and this should be checked.

RCVs should ideally turn down the compaction to avoid spilling food wastes and reduce risk of overloading the vehicle.

If selecting co-collection options you should consider the relative volumes of the high density food waste and low density packaging recyclables and their subsequent space requirements in vehicle compartments from likely yields.

The vehicle types that could be used for commercial food waste collections include:

• Rear Load
• RCV with Pod
• Twin Pack (split body) RCV
• Toploader
• Flatbed 7.5t with tail lift for bin swap model

The London Borough of Bexley collects commercial food waste on its household rounds using Rotopress RCVs. The commercial food is accounted for using a ready reckoner system that converts the known number of bin lifts on a round to an estimated weight.
4.7 On board vehicle weighing and GIS systems

These systems require bins to have a chip installed which is used to identify the customer and the individual bin. The bin chip is read whilst the bin lift registers the weight of each bin during emptying. The vehicle is fitted with a transponder which then communicates the weights of the bins collected to a central database. GIS mapping is incorporated into the system, which provides information on the last known location of the bin and its weight.

The GIS system enables collection rounds to be optimised by creating the shortest route between customers with the benefits of reducing fuel usage and carbon emissions (although carbon from collections themselves is only a small proportion of the significant savings in carbon from recycling). The ability to record the time and locations also provides greater customer service, preventing non pick-ups escalating into complaints or disputes.

Key benefits of on-board vehicle weighing and GIS systems include:

- Accuracy for recording weights;
- Ability to analyse individual customer bin weights;
- Transparency of billing;
- Route optimisation (because the software can plan the most efficient route);
- Prevents bins being missed by crews (because the software can check bins off as they are lifted);
- Can help check that businesses are using the correct sized bin for the amount of waste they are producing;
- No unidentified bins are lifted;
- Provides a means to identify businesses who are producing heavier bins than average for example for food waste services
- Provides the option to introduce pay per weight as a method of charging;

The key considerations if proposing to use on-vehicle weighing systems are outlined below.

<table>
<thead>
<tr>
<th>Potential Issues</th>
<th>Cost / resource factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upfront capital costs of equipment and supporting software; on-going maintenance costs.</td>
<td>Weighing equipment.</td>
</tr>
<tr>
<td>Practicalities of fitting radio frequency identification (RFID) tags may depend on who owns the bins – the council or the customer.</td>
<td>RFID tags.</td>
</tr>
<tr>
<td></td>
<td>Installation of tags.</td>
</tr>
<tr>
<td></td>
<td>Annual maintenance and calibration.</td>
</tr>
<tr>
<td></td>
<td>IT system and supporting software.</td>
</tr>
<tr>
<td></td>
<td>Establishing and maintaining the customer database that links tag and</td>
</tr>
</tbody>
</table>
• Additional IT interface requirements.
• Can only work with sack/box collections where the use of ‘slave bins’ is practical and if the information from RFID tags can be split per customer.

After implementing a GIS bin weighing system, Oxford City Council identified potential customers who may be interested in food waste collections by looking at the weights of the residual waste bins which the council collected. The Council calculated that the average weight of a residual waste bin was 150kg per lift (based on an 1100 litres residual waste bin); they then targeted those businesses that exceeded this weight. The council identified one customer, a chain of hotel and restaurants with three sites in Oxford that was producing over 200kg per lift (residual waste bin) and was only recycling glass. The council approached the business to discuss food waste. As a result of them implementing food recycling the customer significantly reduced their residual waste and benefitted from cost savings.
Peterborough City Council, in partnership with its waste contractor, implemented a GIS/ bin weighing system. All businesses received a letter informing them of the new system which required the fitting of a chip to the bin and would be recording and analysing the weights of all bin lifts. There were very few objections to the new system. Those that did object received a courtesy call, explaining the need and benefits of the new system, resulting in no further concern. The council reported seeing a number of the benefits outlined previously including:

- Transparency of service;
- Transparency of billing;
- Provides greater emphasis on the polluter pays principal;
- No more missed bins (because the software also acted as a route planner and checks the bins off as they are lifted);
- Ensures that businesses are using the correct sized bin for the amount of waste they produce;
- No “unidentified” bins could be lifted;
- Provided an inventory of bins to the council.

A key issue reported by the Council when implementing the system was difficulties in retro-fitting RFID tags to the bins, in particular, the time it took

### 4.8 Transfer and treatment

Expanding an existing service or launching a new service will mean that you need to consider whether there is capacity for additional vehicles, staff, containers and material at your current site(s).

Considerations include:

- Can you direct deliver to a facility?
- Do depots and sorting facilities have enough capacity, space, personnel and equipment to accommodate the tipping, handling, sorting and bulking of additional waste/materials? Or will they need transporting/delivering to an alternative facility?
- Are there contractual or licensing constraints associated with handling commercial waste at existing facilities?
If you intend sorting and/or bulking up in-house then issues to consider include:

- Is there sufficient space within existing depots or the ability to expand or develop them to provide the additional space?
- The range and quantities of materials and how much space is needed to store them;
- How materials would be sorted/handled and what equipment and staff resources would be required including any requirements for baling / compaction;
- Whether netting or roofing is needed;
- Any necessary re-engineering of the site;
- Planning permission for change or use or quantity/range of materials handled and the potential increase in vehicle movements;
- Any need for a weighbridge; and
- If collections are made on bank holidays, there will need to be access to facilities for the delivery of materials.

If sending the material straight to a MRF:

- Assess capacity available at the MRF;
- Ensure that any agreements regarding minimum and maximum quantities, are appropriate and deliverable;
- Agree material quality specifications and protocols for assessing quality against them, how arrangements are communicated and to whom? Dispute resolution arrangements will also need to be agreed. Ensure that the issue of vehicle compaction levels is discussed and agreed;
- Where appropriate compare gate fees at different MRFs and check the differences for delivering separated streams and co-mingled streams – prior to designing/offering the service. It is also important when obtaining prices to find out how long they will be maintained;
- Consider options for income (from sale of recyclables) sharing; and
- Access to facilities may be required if collections are made on bank holidays.

4.9 Collection frequency and timing

Some commercial customers are likely to have specific collection requirements, for example the need for additional collections due to seasonal shifts in their business activities, such as at Christmas or other holiday periods. Local authorities will need to consider how to accommodate any specific requirements.

It is commonplace for some businesses to want collections within certain time windows and at times which may fall outside the normal household collection round timings. This may prevent efficient co-collection arrangements. In addition, and in order to work their assets more efficiently, many local authorities are considering the benefits that four-day working (and other shift patterns) can offer. Such changes, which commonly involve collections being made over more
hours in the working day, and potentially at weekends, may cause some issues with co-collecting
but could offer greater flexibility in collecting from commercial properties at their desired times.

Any intended move to co-collections, based on a four-day, or other extended day shift pattern,
should be accompanied by a review of relevant legislation such as the EU Driving rules (regulation
(EC) 561/2006). Where commercial waste is collected, these regulations take precedent over
domestic requirements and place more stringent limits on daily hours of work and periods of
rest.

In seeking to maintain high standards of customer service to households and businesses alike,
some element of operational flexibility is required. It may be that, by freeing up resource through
a move to co-collections and standardising the service to households and businesses as far as
possible, the spare resource can be used to respond to the inevitable ad hoc requests for
additional collections.

In April 2012, City of London (CoL) introduced time-banded commercial waste
and recycling collections. The policy ensures businesses are restricted from
putting waste out between the hours of
8am-6pm; between 6pm-midnight waste
can only be on street for a maximum of 2
hours before it is collected; and from
midnight-8am, there is no restriction as
long as it is collected before 8am. Nine
enforcement officers work 24 hours a day,
seven days per week to enforce the policy.
If waste is out during the restriction or for
longer than it should be, an enforcement
officer visits to assess the waste, identify
where it came from and serve a Section 47
notice under the Environmental Protection
Act 1990. In advance of the time banding
policy, Enterprise Managed Services (the
contractor that purchased CoL’s
commercial waste portfolio) and CoL
conducted an in-depth consultation to
inform businesses and third party
contractors of the new policy.
4.10 Collection round optimisation

It is important that vehicles are fully deployed and collection time is maximised if collections are to be optimised for maximum efficiency. It is essential, therefore, to ensure that routes are effective and frequency of collection is adequate, taking into account the varying demands of businesses and the market. Key issues include the following:

- It is important to optimise available resources. If there is spare capacity on existing household waste and recycling rounds it could be used to accommodate collections from business customers. Equally, in areas where commercial premises predominate, spare capacity on commercial waste rounds could be used for household waste.

- If co-collections of household and C&I materials are made, then consideration will need to be given to ensure that tonnages are recorded separately for the purposes of obtaining recycling credit payments (where relevant), Waste Data Flow reporting, gate fees and budgeting. On-vehicle bin weighing is the most accurate means; however, an assessment can also be achieved by using WRAPs ‘apportionment tool’ which works simply by inputting the number of containers lifted and the tool calculates the tonnage.

- In general it is cheaper and easier to collect on scheduled rounds and at regular frequencies as opposed to collecting on-demand. However, some smaller SMEs may believe that they do not have sufficient recyclables to warrant regular scheduled collections and would prefer an ‘on demand service’. If such a service is to be offered, it is important to have a minimum collection agreement, for example a minimum of four full sacks per collection as well as a bookings policy e.g. requiring the service to be booked before 15:00 hrs. for a next day collection.

- In addition, it is important to remember that some businesses may need one off collections in addition to scheduled collections. At particular times of the year (e.g. Christmas, office clear-outs, restocking) businesses may have extra volumes of recyclables. Consideration needs to be given to how the service will respond to these demands for additional or one-off services, whether there will be a bookings policy and how extra services will be charged e.g. local authorities may apply an hourly rate plus a rate for each container/ material type.

4.11 Containers

Different types of containers should be provided to customers depending on their individual needs, material streams and the frequency of collection. As businesses vary so much in terms of size, storage space, waste arisings, etc. it is common for a range of containment options to be offered. It should not be assumed that containment needs to be the same as for household waste/recyclables. Considerations for containers include:
4.11.1 Container type and capacity:

- Type, weight and volume of materials produced and the potential need for a variety of containers;
- Glass, paper and food are dense and heavy materials and it is important that consideration is given both to mechanical and manual handling restrictions. Bins cannot simply be filled to the brim as this risks them being too heavy to move and/or lift;
- Provision of reusable containers such as wheeled bins and/or single use containment such as polypropylene sacks or food waste liners;
- Whether the authority will provide internal containers e.g. caddies for food waste;
- Any co-dependency on a vehicle e.g. lifting mechanisms;
- In urban areas where storage space can be limited, it may be necessary to offer sack or bundled collections for dry recyclables, the charges for which are recoverable through customer purchase of sacks, tape or stickers. The latter is covered in greater detail in the section on charging. Where co-mingled collections are proposed, can the MRF/sorting plant handle single use sacks if these are used?
- When introducing a recycling service, part of the promotion strategy may be to reduce the size (capacity) of bins and/or frequency of collection for non-recyclable, residual waste. Some businesses may be nervous about reducing capacity for their residual waste and initially resist so it may take some time to achieve the right balance between the number and size of containers and frequency of collections. It would be advisable to seek continuous feedback from customers to ensure the service is working well for them;
- Branding.

4.11.2 Logistics

- Available storage space by customers to accommodate containers;
- Container pick-up point(s) i.e. where will the container(s) be presented for collection?
- Where materials are presented on-street for collection it is important to ensure that collections comply with any time bands in force during which waste is permitted to be put out. Avoiding waste being left out overnight is particularly important in order to prevent arson and discourage vandalism, litter and vermin;
- Proximity of pick-up and/or presentation points to sensitive locations e.g. busy thoroughfares, schools, places of worship, hospitals, sheltered accommodation – health and safety needs to be considered in terms of blocking traffic and mixing of pedestrians with vehicles;
- Proximity of pick-up and/or presentation points to residential accommodation;
- Health and safety i.e. risk assessments by customer and service provider. This might include consideration for arson and bin theft as well as manual handling, including reference to bin manufacturer’s weight safety limits etc.;
- Times of collection – for example a glass collection may be considered to be too noisy for an evening collection if it is close to residential properties;
- Frequency of collection;
- Access to premises – will a key or access code be required or will access only permitted during working hours?
- Ability for the authority to store containers at their own premises or arrangements for call off and delivery from the manufacturers (potentially at short notice);
- Number of suitable containers available in-stock for start-up or scheme expansion demand.
- Whether containers will be charged for separately e.g. bin rental or sold to the customer, or whether costs will be included in an overall charge.

4.11.3 Internal bins

Internal bins are likely to increase the capture rate of materials e.g. siting food waste caddies in kitchens and paper recycling bins inside offices. Good practice would be to have a ‘walk around’ (particularly in larger business premises) to suggest where containers could be located.

It could be considered whether or not internal bins are hired to customers – this could be a potential source of additional income.

In choosing/recommending the internal containers, the following issues should be taken into consideration:
- Type and number of recyclable material to be collected;
- Any requirement to keep materials separate;
- Use of signs or labels on the container(s) indicating what types of material can be deposited for the purposes of recycling;
- Availability of space in chosen locations to host containers;
- Manual handling; Quantity of material to be collected and emptying/storage arrangements;
- Width of doorways and corridors;
- The presence of any stairs or other impediments to wheeled containers; and
- Availability of any service lifts to transfer materials.

Removing some internal residual waste bins and providing additional recycling bins is an effective means of increasing participation by making it easier to recycle and making people think twice before throwing something away. It is important that the service is explained to staff prior to implementation to encourage their support and participation, and to prevent contamination of the recycling materials.
4.12 Food waste containers

Due to the high density of food waste, care should be taken when deciding on the size of containers to issue to customers. This is often overlooked resulting in bins that are too heavy for operatives or customers to move and too heavy for bin-lifting equipment on vehicles. For example, a 240 litre wheeled bin of food waste could weigh more than 100kg when close to being filled. Such a mass of material in one wheeled container potentially has serious implications for the safe manual handling of the container (by waste collection operative or customer).

Although a range of container sizes are being used by organisations running food waste collections it is advised that containers of 140 litres or less are provided. 140 litre bins, if completely full, will be still very heavy and could pose a serious problem for both operatives and kitchen staff. Hence, for the average customer, it may be worth considering either more than one 140 litre bin for a weekly collection, or alternatively, if the service can accommodate it, more frequent collections. Only where more than one operative is available to handle containers should larger containers be considered (and even then a thorough risk assessment would need to be undertaken). Internal caddies should be no larger than 35 litres. For smaller premises such as offices and schools, household food waste containers (~20-25l) or ‘household kitchen caddies’ (5-10l) may be more suitable.

Learn from experience...

A WRAP telephone survey identified two situations where changes had to be made as a direct result of using containers which were too large, and therefore too heavy, when filled with food waste:

- One company initially used 1100l bins but changed to 240l bins because the wheels broke on the 1100l bins due to the weight of the contents; and

- One local authority reduced the size of the bins issued from 240l to 140l because the lift on the collection vehicle was too weak to lift the 240l bins.

In addition, a trial scheme using compostable collection boxes for food waste in schools was unsuccessful as the boxes were both inappropriate in terms of a collection method and in terms of buy-in from pupils and canteen staff.
Liners are considered by many organisations running food waste collection services to be a key factor influencing the uptake of, and continued participation by customers, in the service, as well as helping to improve the capture of wetter food waste. Liners help keep containers clean and reassure customers that the service is hygienic. In addition, encouraging the use of liners has been found to help reduce contamination as customers are not tempted to use plastic bin liners as a substitute.

The above photographs show wheeled food waste containers with liners in the external storage area at Bristol University. There is a separate aperture opening in the integral lid to allow for the easy deposit of food waste and to minimise nuisance.

There are approximately 5,000 businesses in the London Borough of Bexley; a third of which have contracts with LB Bexley. 76% of these receive a dry recycling service and 15% also recycle food waste. For the collection of food waste, businesses receive a 140 litre bin and an internal caddy (plus liners) The service is integrated with the household service and businesses receive two visits; one to agree the contract and a second, when the bins, caddy and liners are delivered, to set up the service. This allows the Commercial Waste officer to develop a good working relationship with each business. When the business runs out of liners for the 50litre caddy, they either contact the Commercial Waste officer, or the generic council contact centre to request more, which are delivered by the crew at the next collection.
4.13 Contamination

It is important to have processes in place for identifying and managing contamination. Recyclables will not be accepted by reprocessors unless they meet their quality threshold and an entire load of material can be rejected because of contaminated material from a single customer on the round. Tips to address contamination include:

- Explain to customers why contamination is such an important issue;
- Provide brief training sessions to the customers’ staff;
- Provide bin stickers and posters to customers to explain what materials can/can’t be placed in recycling containers. This may include pictorial signs and/or signs in appropriate languages in order to overcome language barriers
- Train collection crews to check bins/bags as they are emptied;
- Use transparent sacks for bag collections;
- Arrange for supervisors to undertake spot checks;
- Speak to customers who contaminate to understand if there are any underlying issues e.g. incorrect balance of residual/recycling services;
- Explain the contract requirements;
- Develop procedures for managing the issue and build these into contracts (including charging customers for disposal of contaminated loads).

It may be worth considering whether any of your existing policies and practices for identifying and dealing with contamination of household recyclables could be adapted for commercial recycling.

Westminster City Council uses a ‘three strikes’ system, where customers are provided with three warnings prior to the removal of services due to contamination. Photographs are taken of the contaminated recycling to show the customer and contamination stickers or tags are left on the containers.
4.14 Monitoring/reporting tonnage and allocating costs: Co-collection

Any decision to integrate household and commercial collections needs to be underpinned by a robust method for determining, and subsequently monitoring, the tonnage of each waste stream (sometimes referred to as Household / non Household split).

There are several key reasons for monitoring and reporting tonnages separately:

- **Statutory reporting** – Waste Data Flow quarterly and annual returns require councils to separately report household and 'other municipal' waste tonnages;
- **Service improvements** – information to inform how the commercial service is performing and any action to improve performance;
- **Apportioning costs** – the monitoring of co-collected waste tonnages will help in assessing the relative costs of the household and commercial waste services. As well as top level budgeting, this information will be needed to determine charges and ensure that the commercial operation is covering its costs;
- **Recharge** - for waste collection authorities operating under a two-tier structure, a further consideration is the mechanism for reimbursing the waste disposal authority for the cost of disposing of the commercial waste collected. This will need to be underpinned by accurate information on the quantities collected;
- **Recycling credit payments** - where recycling credit payments are made for household recyclables, it is important for waste collection and disposal authorities to have in place procedures to assure themselves that:
  - The relevant materials originate from the household waste stream;
  - The tonnage of materials on which credits is claimed is as stated; and
  - The materials on which credits are claimed is being recycled or reused.
- **General good practice** – maintaining accurate and transparent information on local authority services and their performance. This is particularly pertinent as more SMEs require data on the percentage of material they have recycled for their own environmental reporting purposes.

WRAP, in conjunction with the LARAC, NAWDO, Defra, the Environment Agency and Natural Resources Wales has developed a tool to assist local authorities with the apportionment of household and commercial waste/recycling. In order to use the tool you simply need to know how many lifts you are making by container type. The tool can be accessed on the WRAP website: www.wrap.org.uk/la-apportionment
Ribble Valley Borough Council is a semi-rural waste collection authority in Lancashire. The council operates in-house collections of weekly refuse, and fortnightly recycling and garden waste collections from households. The council’s vehicles are split bodied and used on a fortnightly cycle to collect refuse and recycling in week one, followed by refuse and garden waste in week two. The council also collects residual waste from approximately 414 commercial customers; this is co-collected on the household waste rounds. The Council is investigating options for the provision of recycling collection service to its commercial customers. The council must provide payment to the Waste Disposal Authority (WDA) for the disposal of the commercial waste it collects. Ribble Valley and the other Lancashire Waste Collection Authorities (WCAs) have agreed with the WDA a formula to calculate the proportion of commercial waste collected. The formula used is based upon average weight of collection containers, multiplied by the number of lifts. The calculated total tonnage is used to inform the disposal charge payable to the WDA. The average container weights were agreed following a waste analysis undertaken across the Lancashire Waste Partnership by independent consultants.
4.15 Resource requirements

Whatever the scope of the service that you are delivering it’s important to understand what the potential impact will be on existing staff and what new staff you may need to bring into the service. Resources for promotion are covered in the Promotion chapter.

4.15.1 Management resources

Setting up alternative collection schemes/rounds will require staff time to plan and manage. Identifying a suitable person within the authority/contractor team with the capacity, knowledge and skills to do this is key to the success of the project’s initial set up and its on-going deliverability.

4.15.2 Administrative resources

- Are there adequate resources to handle any additional clerical/ administrative tasks such as invoicing?
- Does the call centre have capacity to deal with any additional enquiries?
• Changing collection arrangements and rounds might require some changes and this needs to be carefully thought through, for example, are there adequate resources to handle any additional administration/reporting requirements, such as:
  
  • Additional auditing of material flows through the collection system and associated infrastructure in order to comply with reporting requirements; and
  
  • Allocating costs between the household and commercial services where appropriate.

• It may be advisable to check your data handling systems to ensure that they support a co-collection approach if this is to be adopted. There may be value in integrating all customer data sets across household and commercial operations, for example, to consider methods for:
  
  • Maintaining the Local Land and Property Gazetteer;
  
  • Developing bespoke reports within the Customer Relationship Management system;
  
  • Developing a common billing approach, e.g. by integrating bulky waste collections, commercial and other subscription-based services.

• If materials are co-collected with household it may makes sense to integrate the supporting management systems, although it is important to be able to report separately on household and commercial services.

4.15.3 Rounds and crew sizes

Rounds and crew sizes may need to be adjusted if commercial recycling services are introduced to make best use of spare capacity across a number of crews. Adding another collection operative to a crew may increase efficiency when servicing a variety of properties with different access arrangements and bin types. Local authorities should consider:

• Is there capacity within existing crews?
• How many more crew members or crews would be needed to operate the service?
• Could crews be re-organised to optimise efficiency?
• What additional training would they need?
• Could current services be reviewed and reorganised to release vehicles and crews to deliver the new service?
• Could routes be optimised across authorities to use joint spare capacity?
• Are there opportunities for working with other service providers (private/civil society organisations, including contractors, merchants, and Business Improvement Districts)?
• Any intended move to co-collections, based on a four-day, or other extended day shift pattern should be accompanied by a review of relevant legislation such as the EU Driving rules (regulation (EC) 561/2006). Where commercial waste is collected, these regulations take precedent over domestic requirements and place more stringent limits on daily hours of work and periods of rest.
• Staffing needs at depots or other facilities (to deal with any additional sorting and handling of materials)

4.16 Customer records/database

It is important to communicate with crews at all stages of developing the service through to the operation of the service itself. They are ambassadors of the service and should be able to help deal with and report on issues such as contamination and bin storage as well as providing initial advice and support. They are also very likely to have good suggestions for the overall service design and the best ways to collect the materials from specific locations, particularly if they already collect residual waste from those businesses.

Fareham Borough Council found that collection crews were best placed to provide market intelligence for their service. The crew are able to report on new businesses and developments on existing collection.

It is important to set up a robust system for customer records. Involvement of your working group will help identify the full scope of the system. Consider what analysis you might want to do using the database for monitoring and improvement purposes as well as day-to-day needs. If accounting information is held on a separate system then consider how the two can be linked for analysis purposes e.g. customer reference numbers. Keeping these records up-to-date is critical and should be built into the job description of appropriate personnel.

4.17 Launching your service

The timing for the launch of a new service depends on a range of factors, both operational and communications. The obvious time to launch a new service is when everything is in place and ready to go, although there are some other considerations. If the Project Manager uses a ‘traffic light’ system to record the progress against all the elements of the project plan, then it will become apparent when it is time to sign off a final checklist and launch. Assuming that everything to do with the planning phase has been completed, the main points of a final checklist should include:

• Customers recruited, supplied with containers, and notified of schedule;
• Vehicles and crews available, round sheets issued, operatives briefed and trained;
• Administration complete - agreements signed, waste transfer notes issued, accounts on system, payments confirmed for prepaid elements etc.;
• Call centre staff notified and fully briefed – although this will need to be done prior to the recruitment of customers and the issuing of containers;
• Street-based public realm staff, Business Improvement Districts, and other third parties as appropriate notified and briefed;
• Transfer and bulking facilities or MRF (and relevant staff) notified and briefed as appropriate e.g. collection vehicle registration numbers supplied to weighbridges;
• Communications group fully briefed e.g. for any publicity of launch, cabinet member and chief officer briefed; and
• WDA informed of start of scheme.

Other issues to consider when launching a new service may include avoiding:

• Key holiday periods as staff availability, both within the authority and the businesses being invited to subscribe, may be limited, and key contacts unavailable;
• Peak sales times – particularly Christmas, when businesses may not have time to consider an additional service/operation;
• Launching a service at the same time as major changes to other services are due to be implemented e.g. new household waste collection schedules; and
• The winter months when extreme weather may lead to temporary disruptions to services.
5.0 Costs and income

This chapter covers the important issue of costs and income. By the end of this chapter you will understand:

- What costs you may wish to consider taking into account;
- Common types of potential charging mechanisms; and
- What key aspects should be included in contracts.

5.1 Cost items

A firm handle on the costs of running your service is essential in order to understand what charges should be made, ensure that the service is recovering costs and for general business planning purposes. The checklist below sets out some examples of costs that can arise in commercial waste collection services and that you may wish to consider. Use the list as a guide to help you.

*Table 8: Typical collection service costs guide*

<table>
<thead>
<tr>
<th>Cost item</th>
<th>Could include</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection vehicle/s</td>
<td>Hire charges, capital repayment costs, maintenance costs, fuel costs, insurance, road fund allowance, allowance for accident repairs, sign writing, allowance for “spare vehicle” cover for routine maintenance and breakdowns.</td>
</tr>
<tr>
<td>Collection crews (labour)</td>
<td>The cost of drivers and loaders, including on costs, pension costs, sickness and holiday cover.</td>
</tr>
<tr>
<td>Supervision &amp; management</td>
<td>The cost of supervision and management, including on costs, pension costs, sickness and holiday cover.</td>
</tr>
<tr>
<td>Depot overheads</td>
<td>A reasonable share of the costs of the collection depot, potentially allocated according to the number of vehicles based at the facility (or a proportion of this if the vehicle(s) is also used on other services).</td>
</tr>
<tr>
<td>Container costs</td>
<td>The cost of purchasing all containers (and liners for food waste as necessary) as well as refurbishment and repair. A method of spreading these costs over a number of years should be determined.</td>
</tr>
<tr>
<td>Cost item</td>
<td>Could include</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Material handling, bulking and transport costs</td>
<td>It may be appropriate to include storage costs for the period before they can be issued to customers.</td>
</tr>
<tr>
<td>Material treatment costs</td>
<td>If materials (in particular food waste) cannot be directly tipped at a treatment facility then there may be costs associated with bulking and onward transport of this waste.</td>
</tr>
<tr>
<td>Contamination</td>
<td>The type of material collected, method of treatment and location within the UK are some of the factors that will determine whether you may wish to charge a gate fee or receive an income for the material collected.</td>
</tr>
<tr>
<td>Service administration</td>
<td>Costs arising from rejection of load due to contamination/failure to meet reprocessor’s material quality specification including ‘lost’ recyclate sales income, transfer, disposal and landfill tax costs.</td>
</tr>
<tr>
<td>Additional charges</td>
<td>The cost of maintaining customers lists, billing customers, processing payments, dealing with service requests etc.</td>
</tr>
<tr>
<td></td>
<td>Other overheads/costs that may be relevant</td>
</tr>
</tbody>
</table>

In situations where collections from businesses are possible on both an existing household pass and a separate pass it may be helpful for both options to be costed in order that they can be fully compared. This should also give an indication as to how costs might change if the service evolves from one based around existing household collections (co-collection) to one based (wholly or partially) on a separate pass.

5.2 Impact on residual waste income

Adding recycling services to a residual commercial waste service is likely to reduce income generated by the latter but this shortfall could be offset by other factors such as:
- Charges levied for the additional recycling service;
- Income generated from the sale of recyclate;
- Avoided disposal and landfill tax costs; and
- Wider efficiency considerations - offering a comprehensive recycling service may help protect income generated from residual waste services and help an authority to retain its existing customers.
Avoided costs are valuable, and a major incentive for providing a commercial recycling service, but lack the certainty of direct income from charging for the services and income levels may fluctuate over time. Surplus income could be reinvested in the service; however, this may need to be agreed with your finance officer in advance. In order for the benefits of the whole waste and recycling service to be understood, early involvement from your finance officer is crucial.

5.3 Charging

Local authorities are allowed to make a reasonable charge under the Environmental Protection Act 1990, Part II Section 47.

Charges should:

- **Reflect the costs of providing the services** - commercial recycling services should be charged-for as; in general, the income from the sale of recyclates alone will not cover the costs of providing the service. Common feedback from SMEs to local authorities is that they believe recycling services should be free. The reasons why this is not feasible need to be communicated to SMEs in promotion materials and via other routes e.g. on the website, during face-to-face meetings, on site visits etc.;
- **Reflect revenues from the sale of materials**;
- **Be proportionate** - some flat costs should be applied per lift regardless of the size of the container on site e.g. to cover the cost of driving to and from the premises. Other costs should be reflective of the number and size of container on site and the amount of material that is being collected;
- **Be reasonable and clear** – for example, you may wish to outline what proportion of the price relates to disposal costs or state how much landfill tax is on invoices;
- **Incentivise recycling** by setting charges in a way which incentivises businesses to recycle; and
- **Be reviewed at least once per year** in line with the budgeting process and to ensure local market relevance.
5.4 Arrangements in two tier areas

Councils in two-tier areas are subject to Section 52(9) of the Environmental Protection Act 1990, which states that a WDA is entitled to receive from a WCA “such sums as are needed to reimburse the waste disposal authority the reasonable cost of making arrangements for the disposal of C&I waste collected in the area of the waste disposal authority.”

In most cases, a WDA recharges its constituent authorities annually, based on either the existing council tax base or on actual derived tonnages. The basis of the payment system is agreed between the WDA and WCAs.

For local authorities that co-collect household and commercial materials, the only difference is that quantity collected may be estimated (Household / non-household split) rather than actual.

5.5 Price Lists

Consideration should be given as to how and where price lists are published. While these charges will be publicly available (e.g. due to freedom of information), there may be a variety of considerations as to how local authorities wish to make the price list available (e.g. it could be through the commercial waste/recycling pages of a local authority website or only provided to customers upon request).

Benefits of advertising charges e.g. publishing on website include:

- Transparency and reassurance to the customer;
Provides businesses with a benchmark so when they get quotes from other companies they can be assured that they are not being ‘ripped off’; and

Convenience for businesses, many of whom are used to reviewing charges for products and services via company/organisation websites.

However, there are also benefits to not advertising charges. These include:

- If businesses need to enquire, then it might provide additional opportunity to explain the benefits and other aspects of your particular service as well as capturing their contact details so you can follow-up with them later; and
- Enabling staff to offer a tailored service with prices that more accurately reflect the customer’s needs.

If price lists are advertised, then they could perhaps be caveated to allow the authority some flexibility and provide a signal to customers that discounts may be available, or they could be positioned as “prices start from as low as £xx” by quoting the cheapest service price (if appropriate).

### 5.5.1 Value added tax (VAT)

On 9th February 2011, HM Revenue and Customs wrote to all local authorities to confirm that commercial waste collection services provided by local authorities are outside the scope of VAT. The 2016 judicial review did not alter this position however it did highlight that VAT may apply in cases where the authority starts to operate commercially (i.e. going beyond meeting their statutory obligations and/or in circumstances where it is otherwise determined that to avoid distortions of competition it is appropriate for VAT to be charged). Local Authorities should seek advice from their tax and legal advisors to ensure they apply the correct treatment of VAT when establishing a commercial waste service.

### 5.6 Charging mechanisms

There are a number of methods of charging for commercial recycling collection services. Examples, together with associated benefits and considerations, are outlined below:

<table>
<thead>
<tr>
<th>Charging method</th>
<th>Benefits</th>
<th>Issues/considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment in advance</td>
<td>• Reduced risk of bad debt</td>
<td>• How to charge for ad hoc / additional collections – could either be agreed in advance, or payment could be taken in arrears</td>
</tr>
<tr>
<td></td>
<td>• Assists with budgeting</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Benefits and considerations involved with charging for commercial recycling collection services
### Charging method

<table>
<thead>
<tr>
<th>Payment in arrears</th>
<th><strong>Benefits</strong></th>
<th><strong>Issues/considerations</strong></th>
</tr>
</thead>
</table>
|                     | • Businesses are likely to prefer this option | • Greater risk of bad debt  
• Local authority will have fronted all the costs before receiving payment to cover them |

<table>
<thead>
<tr>
<th>Pay for a fixed number of regular lifts over a given period e.g. quarterly</th>
<th><strong>Benefits</strong></th>
<th><strong>Issues/considerations</strong></th>
</tr>
</thead>
</table>
|                                                                           | • Potential for maximum operational efficiency | • Customers may be paying for more lifts that they need  
• Little incentive for businesses to reduce their waste |

<table>
<thead>
<tr>
<th>Pay per lift</th>
<th><strong>Benefits</strong></th>
<th><strong>Issues/considerations</strong></th>
</tr>
</thead>
</table>
|              | • Suitable for ad hoc or ‘on demand’ collections  
• Businesses pay for the service they actually need  
• Incentivises businesses to reduce waste as bins lifted on an ‘as needed’ basis | • Payment is likely to be needed to be taken in arrears  
• If businesses don’t have regular lifts then this can cause inefficiency as well as loss of guaranteed income  
• Care would need to be taken to ensure customers are accurately charged |

<table>
<thead>
<tr>
<th>Charge for additional services that may be provided (e.g. Bin rental and/or Duty of Care administration)</th>
<th><strong>Benefits</strong></th>
<th><strong>Issues/considerations</strong></th>
</tr>
</thead>
</table>
|                                                                                               | • Additional income | • May be negative perception from businesses that there are extra costs  
• Businesses have the freedom to choose what services to take (for example providing their own Waste Transfer Notes)  
• If additional services are not charged for separately e.g. Duty of Care administration then this could be used as a promotion message |

<table>
<thead>
<tr>
<th>Pay by weight</th>
<th><strong>Benefits</strong></th>
<th><strong>Issues/considerations</strong></th>
</tr>
</thead>
</table>
|               | • Fair pricing  
• Incentivises businesses to reduce waste  
• Increases customer satisfaction due to reduced risk of missed collections and transparency of service | • Requires on-vehicle bin weighing equipment and chipped bins  
• May be some resistance from existing customers  
• Payment options e.g. payment could be taken in arrears (although risks bad debt) or payment could be taken in advance and then adjusted based on actual weight in a similar way to utilities but this would require additional administration  
• Would need to be modelled before |
## Charging method

<table>
<thead>
<tr>
<th>Pre-paid systems: sacks and tape and stickers for cardboard</th>
<th>Benefits</th>
<th>Issues/considerations</th>
</tr>
</thead>
</table>
|                                                           | - Potential benefits to businesses from a cash flow perspective  
|                                                           | - Easy to administer  
|                                                           | - Useful for customers that have limited storage space | - Lack of guaranteed income  
|                                                           |                      | - Consider where customers can purchase the sacks/tape/stickers  
|                                                           |                      | - May need a minimum collection policy and/or only use this method in urban areas on frequent collection rounds  
|                                                           |                      | - Need to ensure that the sacks/tape/stickers are not easily forged  
|                                                           |                      | - Need for stock control  
|                                                           |                      | - Clear communication of what sized bundles are acceptable for tape and stickers to avoid unmanageable loads  
|                                                           |                      | - Need to monitor sales to verify regular purchases of tape and stickers (temptation to throw cardboard into vehicle untapped). |
| Tape                                                      | - Encourages flat packing for increased operational efficiency |                      |
| Stickers                                                  | - Allows smaller pieces of cardboard to go inside cardboard boxes which are easier to pick up | - More effort required by businesses – need to tape/string cardboard |
| Sacks                                                     |                      | - Sorting considerations including bag splitting |
| Material-based pricing e.g. separate charge for different material streams like food, cardboard, glass etc. | - Charges reflective of the costs/income from materials and therefore may be deemed as being fairer to the customer and enhance relationships between SMEs and the local authority | - Administration |
5.6.1 Distance-based charging

Some authorities have ‘flat’ charging policies while others have distance-based charging policies to reflect the additional costs of reduced route densities and travelling greater distances to service customers.

Oxford City Council provides a mixed dry collection and a food waste collection service to city centre customers. For dry recycling, sacks are available to those who have no room for bins and cardboard is collected in ‘manageable bundles’ identified with stickers. Recycling sacks come in rolls of 25 and have been strengthened in order to hold glass. Food waste is collected in bins with a selection of liner sizes supplied at cost. The waste and recycling collections are carried out in the morning and evening and food waste is collected every morning 6 days per week.
South Hams District Council, Devon A commercial collection service for general waste, paper and card, plastic and cans, glass and food waste is available to businesses district-wide. In support of the local economy the council offers collections to businesses in rural areas where other waste management contractors do not offer a service. The Council has mapped out two charging zones for refuse collections. Zone 1 is classed as the main town centre / economic areas of the district, with Zone 2 located further away from town centres in more rural areas. The price for refuse collections for businesses in Zone 2 is higher than for businesses in Zone 1 to reflect the additional costs of vehicle fuel, maintenance and time to collect from business in more rural locations. The price of the commercial recycling service is the same throughout the District. Businesses have a choice of using either recycling bins or recycling sacks depending on individual business needs. Bins are charged per lift one month in arrears, while sacks are charged at the point of purchase. Businesses can also purchase food bin liners at an additional cost to the service with the benefit of a clean bin and minimising odours. These sacks are sold at cost price to encourage their use.

5.6.2 Weight based charging

While disposal costs/gate fees/income from material sales are calculated by weight, the majority of service providers charge by volume. As outlined in table 11, there are a number of benefits with weight based charging, although it clearly relies on a robust weighing system and (particularly for customers that produce ‘heavy’ bins) it may be perceived as potentially expensive and ‘risky’ (businesses may prefer to know what the cost will be).

5.7 Material sales and quality

There are a number of ways that income potential from material sales can be maximised. This is often linked with ensuring high quality materials. As with all considerations, it is important to ensure that the service is designed with the needs of the customer at the heart of your decision-
making. The following figure indicates how the potential income from material sales could be maximised.

Figure 7: Considerations for maintaining material quality and maximising income

1. Disposal by customer
   - Source segregated collections
   - Separation of glass from other materials
   - Colour separation of glass
   - Collect higher value material e.g. metals
   - Work with customers to prevent contamination and provide clean materials

2. Collection
   - Compaction levels to ensure material quality
   - Crews to check for contamination

3. Transfer
   - Storage – materials kept clean and dry
   - Bulking – arrangements to consider material quality

4. Processing / material delivery
   - Getting the best deal possible for your materials

5.8 Contracts

Contracts are legally enforceable agreements between two or more parties. Commercial waste and recycling contracts provide details of the service to be provided to the customer and any charges that apply. Key aspects to cover in the contract are:

- Addresses and contact details of both parties (in the case of an SME it should be the address of the owner);
- Agreed service level;
- Provision of collection containers and food waste liners (depending on the service provided);
- Collection frequency;
- Collection procedures e.g. where the container is to be placed;
- Contamination policy and costs;
- Fill limits (of containers) – side waste policy and costs;
- Contract length e.g. minimum six months;
- Termination policy and costs (including notice periods for both the customer and the council and amendment terms);
- Price of service and service charging structure; and
- Invoicing and payment terms.

It is important to ensure that there isn't a time lag between contracts starting and finishing and collections being made e.g. customers start paying for a service before collections commence, and/or customers still receiving collections after the contract has ended.

Example contracts can be found here for:

- Broxtowe Borough Council
- London Borough of Richmond
- Walsall Council
6.0 Service Promotion

This chapter focusses on the options available to promote your service and the relative merits of each of them. By the end of this chapter you will understand:

- The different options for promoting your service and their relative impact and cost;
- What tools are available to assist you;
- Ideas for promoting the service to colleagues;
- How to ensure that messaging on promotional material used is easy to understand and engaging;
- The key ingredients for service literature; and
- How else you might support customers to reduce waste and recycle/re-use more.

Communications and promotion are key promotion components of a successful commercial recycling collection service because they can:

- Create awareness of and interest in your service;
- Overcome barriers to customer uptake/participation; and
- Enable you to address contamination issues.

A service that is affordable, convenient, reliable, and flexible will attract new customers and retain existing ones. Retention of existing customers and successful recruitment of new ones to an existing or new service depends on their perception of the extent to which the service meets their needs and budget.

While some new custom will be self-generating e.g. through enquiries and word of mouth, it is important to be proactive in promotion, especially when launching a new service. Investing resources in communications to recruit businesses and provide on-going support is crucial but should be proportionate to the size of the collection business i.e. you should only spend what you think you can recover through customer fees.

A useful starting point is to understand the barriers to SME recycling in order to:

- Ensure the service is developed in accordance with business's needs; and
- Assist in promotion of the service in order to overcome any perceived issues, especially those which can be overcome with minimal effort.

6.1 Promotion Strategy

Key elements of a promotion strategy are outlined in the following table.
### Table 10: Key elements of a promotion strategy

<table>
<thead>
<tr>
<th>Elements</th>
<th>Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals and measures</td>
<td>Developing specific, measurable, achievable, realistic and time bound (SMART) aims and objectives;</td>
</tr>
<tr>
<td></td>
<td>Having arrangements in place to monitor and evaluate the impact of the strategy;</td>
</tr>
<tr>
<td>Key messages</td>
<td>Using a few key messages e.g. why recycle, how to recycle;</td>
</tr>
<tr>
<td></td>
<td>Promoting new services as part of a package of your service offering</td>
</tr>
<tr>
<td></td>
<td>Unique selling points</td>
</tr>
<tr>
<td>Target market</td>
<td>Identifying the target audience e.g. sectors and materials, geographical area, existing customers, new potential customers etc.</td>
</tr>
<tr>
<td>Promotion methods</td>
<td>Consider which promotion methods will yield the highest number of customers in the most cost effective way</td>
</tr>
<tr>
<td></td>
<td>How and where will you reach potential customers</td>
</tr>
<tr>
<td></td>
<td>Developing communications materials;</td>
</tr>
<tr>
<td>Who will do it?</td>
<td>Having the right officer with appropriate training and experience to manage the promotion function;</td>
</tr>
<tr>
<td></td>
<td>Role of other departments and organisations to help disseminate messages.</td>
</tr>
<tr>
<td>When/how frequently will it be promoted?</td>
<td>Having a robust timetable for launch including the promotion activities; N.B it is recommended to commence promotion activities two months before service launch</td>
</tr>
<tr>
<td></td>
<td>Plan for on-going promotion</td>
</tr>
<tr>
<td>Budget</td>
<td>Ensure that costs are proportionate to the forecasted returns</td>
</tr>
</tbody>
</table>

There are a number of business recycling case studies on the WRAP website detailing the benefits which individual businesses have found from introducing the collection of recyclables in the workplace. These could be useful to help develop key messages as well as using them as an example for potential customers.
6.2 Promotion Activities

There are several different methods that can be used to recruit businesses, some examples of which, with tips based on the experiences of other local authorities, are listed in this section.

To build up a customer base, a proactive promotion strategy is needed which communicates information about the service in a clear and concise manner to the appropriate target audience.

There are two main target audiences:
- **External - existing and potential customers**
  - Can be engaged via a variety of approaches as outlined in the sections below
- **Internal – council staff e.g. telesales and helpline staff etc. and partner organisations**
  - Engaged via internal information provision including newsletter's, team meetings, briefing notes and via the staff intranet

The success rates of different promotional methods in generating new customers will be dependent on many factors such as the rapport between the customer and sales staff, quality of promotional materials and the perceived quality/value of the service by potential customers. Typical success rates for different approaches, based on the experiences of a number of local authorities, are outlined below.

**Table 11: Promotional activity vs. success rate, resource intensity and return on investment**

<table>
<thead>
<tr>
<th>Promotion method</th>
<th>Approximate success rate</th>
<th>Resource intensity</th>
<th>Return on investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face (existing customers)</td>
<td>50%</td>
<td>High</td>
<td>£</td>
</tr>
<tr>
<td>Phone call</td>
<td>20%</td>
<td></td>
<td>£</td>
</tr>
<tr>
<td>Targeted leaflets</td>
<td>5%</td>
<td></td>
<td>£</td>
</tr>
<tr>
<td>Blind mail shots i.e. mail shots to non-customers</td>
<td>&lt;1%</td>
<td></td>
<td>£</td>
</tr>
</tbody>
</table>

Two key factors to bear in mind when planning activities are:
- The level of resource intensity required i.e. how much of people’s time activities take to plan and deliver; and
- The cost per converted business.

The level of resource required decreases moving down this list but so does the rate of return on the investment.
Blanket promotion to all potential customers using telesales, leaflets, advertising and information packs can be expensive. Sales and promotion efforts should be focussed on a targeted selection of businesses. Evidence from [WRAP SME trials](#) showed that blanket approaches are unlikely to be effective in terms of resultant uptake and showed very low success rates. Although some blanket methods are not necessarily costly e.g. leafleting, the low take up means that the cost per converted business can be quite high.

The more resource intensive, direct approaches e.g. face to face are likely to be more appropriate for targeted customer groups, existing customers, or once other methods have ‘opened the door’ for further discussion e.g. mailshot followed by a telesales call to arrange a face to face visit.

### 6.2.1 Face-to-face

This method of promotion is the most time consuming but will generate the largest number of customers. It has the following benefits:

- It provides the opportunity to raise awareness and work out a plan with the businesses, demonstrating how they can reduce or maintain their costs by getting bin sizes, numbers and frequency of collection correct;
- It can help to initiate actions that businesses intend to carry out but never get round to, e.g. signing contracts or ordering recycling containers;
- It provides an opportunity to talk about the problems of contamination in order to address it from the outset;
- It helps businesses to work out internal processes to increase staff participation;
- It helps businesses to work out practical bin storage solutions to increase capture rates;
- It ensures that waste is dealt with legally and reduces the chance of any enforcement action being taken against the business;
- It fosters better working relationships with the business community; and
- It helps in evaluating the effect on collection rounds and obtains feedback on the service and promotional activities.

To increase the success rate of face-to-face visits it may be useful to:

- Pre-warn businesses that you will visiting e.g. through mail shots and/or arranging appointments by telephone;
- Avoid visiting at peak times e.g. lunch time for hospitality sector;
- Arrange appointments with key decision makers; and
- Promote the service at targeted business events e.g. pub-watch, industrial estate and business group meetings, chamber of commerce forums.
6.2.2 Mail Shots

In order to increase the success of mail shots it may be useful to:

- Concentrate on particular districts or postcode areas where there is a concentration of your target audience e.g. office based businesses for a paper recycling service and hospitality businesses for food and glass recycling services;
- Customise literature to specific sectors where possible;
- Follow up mail shots with a phone call, face-to-face visit or both i.e. arrange a time over the phone and then visit the business; and
- Distribute mail shots in batches to allow sufficient time to carry out follow-up telephone calls. Batch size will depend on the size and availability of your sales team. If one of the aims of the follow-up is to set up a face-to-face appointment then smaller batches would be suitable in order to undertake timely visits.

6.2.3 Promotional literature

Ideas include:

- Focussing on a few key messages;
- Ensure contact details are included on literature;
- Using plain English and clearly state what the business benefits are;
- Avoid using terminology like “new”, which will make literature out-of-date quickly
- Providing case studies of local businesses that are adopting more resource efficient practices and have saved money through recycling and/or using the WRAP SME case studies. Click here
- Include customer testimonials;
- Use the opportunity to raise awareness of environmental legislation;
- Use the opportunity to promote resource efficient actions - provide tips with clear actions on how to reduce, re-use and recycle;
- Provide bin labels to help increase yield and prevent contamination. This may be particularly useful to overcome potential language barriers amongst the customers staff;
- Mimicking householder/consumer campaigns may be beneficial because many SMEs are owned by or employ local residents and messages will therefore be familiar and consistent. Research\(^2\) suggests that SMEs respond to environmental communications in the same way that consumers do.

\(^2\) Engaging SMEs – Implications for communications, Brook Lyndhurst May 2010
Template materials are available on the WRAP Recycle Now Partners website. You just need to register (which takes two minutes) by providing your e-mail address. Materials include yes please / no thanks bin labels, promotional posters and service leaflets.

Example signage from Westminster City Council:
6.2.4 Advertising and promoting

Other tips for advertising and promoting the service are:

- Update the authority’s website with details of the new service and if appropriate provide the means to register for it / further information online;
- Use the sides of vehicles to promote the service. An additional benefit to this is it presents a professional image of the service.

6.2.5 Website / Social Media

Passive approaches, such as relying on information available on the authority’s website, are not advisable as a sole means of promoting a service. Only the more ‘environmentally-conscious’ organisations are likely to actively investigate the available options for recycling collections, and even these may find that websites provide limited information. Service information however should also be available on the authority’s website.

It is recommended to have website information peer reviewed to ensure it is easy to navigate and to understand. There are opportunities on websites to provide businesses with additional information, for example tips to prevent waste and signposting to specialist service providers for materials that you do not collect, as well as re-use and third sector organisations.

6.2.6 Networks

To gain the most from using existing networks it is likely to be beneficial to:

- Ensure that all members of the waste/helpline/customer services teams are aware of the new service – a survey of all English local authorities in February 2010 revealed that a number of staff within waste departments were not aware of the waste services their authority provided to businesses;
- Inform other council departments, officers and partners of the new service – particularly those who are concerned with ensuring Duty of Care legislation is followed e.g. Customer Care, Environmental Health, Trading Standards, Waste Disposal Authority and the Environment Agency;
- Engage existing business networks/organisations such as Chambers of Commerce, Business Links, Business Improvement Districts, Local Enterprise Partnerships, industrial estates etc. to raise awareness of the new service; and
- Establish links with community sector organisations and others who may be able to provide specialist recycling activities such as paper shredding (confidential waste), or office furniture reuse.
6.2.7 Promotional staff

It is most effective to have dedicated full-time members of staff to undertake sales and promotion activities. **Staff should be motivated and enthusiastic, ideally with strong sales experience combined with knowledge of waste/recycling collections.** The cost and environmental benefits of recycling for SMEs should be emphasised as a key selling point. In addition, it is important for staff to be fully aware of key waste legislation including Duty of Care and the Waste Regulations 2011 / 2012.

The number of staff needed will vary depending on the scope and the size of the service e.g. whether it is being provided to some or all of the authority’s customers, or to all SMEs in the area. Whatever strategy is adopted, staff will need to receive adequate training to be confident and professional in dealing with enquiries.

6.3 Messaging

The core elements of your service which need to be communicated to customers are **price, convenience, reliability** and **flexibility**. Other issues which customers may find important include:

- Final destination of material – to provide reassurance that materials are being recycled and, if residual waste is being treated, then some councils can (and are) using ‘zero waste to landfill’ as part of their promotion strategy.
- Environmental indicators such as percentage recycled or carbon footprint etc. - some larger organisations are now looking at what environmental data can be provided by a service provider so that they can meet their internal Key Performance Indicators.

6.4 Branding

As mentioned previously, mimicking householder/consumer campaigns may be beneficial because many SMEs are owned by or employ local residents and the branding and messages will therefore be familiar and consistent. Research suggests that SMEs respond to environmental communications in the same way that consumers do.

There are recycling campaigns in all four UK nations and it is advisable for local authorities to use the appropriate national recycling campaign branding. There is a wide range of logos, material stream icons and fully editable artwork available to download from [http://partners.wrap.org.uk/](http://partners.wrap.org.uk/).

An example of the template material for business recycling collectors and their customers available on Recycle Now Partners:

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23 Engaging SMEs – Implications for communications, Brook Lyndhurst May 2010
6.5 Business resource efficiency

A survey conducted in 2009 by Netregs\(^\text{24}\) highlights that waste management providers and local authorities are the most likely organisations to be contacted by SMEs about environmental queries.

In addition to these “proactive” enquiries, waste management service providers are in a prime position to encourage businesses to be more resource efficient when talking to them about their waste management needs. A number of options and tools are available including:

- Providing waste audits/analysis to understand where and why particular wastes are arising and how they might prevent and reduce them e.g. [Birmingham City Council](https://www.birmingham.gov.uk/citybizservices/waste).
- Signposting to the Recycle Now website where there are a number of tools and guides for small businesses [www.recyclenow.org.uk](http://www.recyclenow.org.uk);
- Providing localised information and tips on how to reduce, reuse and recycle e.g. [City of London](https://www.cityoflondon.gov.uk) runs a Clean City awards scheme and has environmental best practice meetings for businesses in their area.
- Template materials such as a business resource efficiency pack which your organisation can download, adapt and brand as you like e.g. [Belfast City Council](https://www.belfastcity.gov.uk) has adapted these template materials;
- Considering re-use of business resources. This may include partnering with third sector organisations or simply signposting to local re-use schemes e.g. The Oxfordshire Waste Partnership developed an [online waste exchange for local businesses](https://www.bbc.co.uk/programmes/p018xagw) and the London Borough of Haringey and the Somerset Waste Partnership signpost businesses to local re-use organisations.

\(^{24}\) Netregs SME-environment Survey 2009: England
7.0 Monitoring and improvement

This chapter of the guide looks at how your service is performing. By the end of this chapter you will understand:

✓ Why it’s important to monitor and evaluate your service;
✓ What and how to monitor; and
✓ The importance of monitoring and evaluation to continuous improvement and developing your service further.

Monitoring performance and evaluating the data collected should be an integral part of your service. The figure below provides an overview of the steps required to develop a monitoring system.

Readers may find it useful to view WRAP’s guidance on monitoring and evaluating household recycling services, much of which is applicable to commercial recycling services.
The following table provides a summary of the elements of the service that should be monitored and evaluated so that progress and performance can be measured.

**Table 12: Service areas for monitoring and evaluation**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit and loss</td>
<td>Ensure service is breaking even at minimum</td>
<td>Clear accounting</td>
<td>Monthly</td>
</tr>
<tr>
<td>Costs of delivering the service</td>
<td>Ensure debt is managed</td>
<td>Debtors list</td>
<td></td>
</tr>
<tr>
<td>Charges</td>
<td>Ensure you are getting best deal possible for the sale of materials</td>
<td>Consider material sales approach</td>
<td></td>
</tr>
<tr>
<td>Material sales prices/income and gate fees</td>
<td></td>
<td>Budget forecasting/</td>
<td></td>
</tr>
<tr>
<td>Debtors</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Contents

**Context**

**Scope**

**Planning & Delivery**

**Costs & Income**

**Promotion**

**Monitoring & Improvement**

### What?

**Residual waste and recycling material tonnages**

- Better understand performance
- Budgetary information
- Calculate recycling rate
- Monitor fluctuations e.g. seasonality
- Changes to quantities of the various materials being collected

**Residual waste composition**

- Identify new materials to target
- Work with customers to increase staff participation

**Quality / contamination**

- Financial

**Customer numbers – absolute and relative to residual**

- Check if the business is growing or shrinking

**Customer satisfaction**

- To ensure service remains competitive
  - Protect reputation

### Why?

- If the profit and loss account is showing a negative trend it will be necessary to undertake a service review.

### How?

- Weighbridge
  - **Commercial waste apportionment tool** if co-collecting household and commercial waste/recycling

- Compositional analysis
  - Crews observations

- Feedback from re-processors
  - Visual

- Contracts database

### When? (frequency)

- Monthly

- Annual / every two years

- On-going

- Quarterly
  - Before and after promotion campaigns

- Quarterly
  - On-going
### COMMERCIAL RECYCLING COLLECTIONS GUIDE

<table>
<thead>
<tr>
<th>Why?</th>
<th>How?</th>
<th>When? (frequency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>compliments and complaints system e.g. form on website, capture feedback from crews etc.</td>
<td>Contracts</td>
<td>On-going</td>
</tr>
<tr>
<td>Understand where business model might need to be changed / sales/promotion adjusted</td>
<td>Customer follow-up survey – telephone</td>
<td></td>
</tr>
<tr>
<td>Reasons for lost customers</td>
<td>On-going</td>
<td></td>
</tr>
<tr>
<td>On-going</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer sector</td>
<td>Customer sign up process</td>
<td></td>
</tr>
<tr>
<td>Promotion purposes</td>
<td>On-going</td>
<td></td>
</tr>
<tr>
<td>Individual customer needs</td>
<td>Ask for feedback from customers</td>
<td>On-going</td>
</tr>
<tr>
<td>Maximise income</td>
<td>Crews</td>
<td></td>
</tr>
<tr>
<td>Customer retention</td>
<td>On-going</td>
<td></td>
</tr>
<tr>
<td>Health and safety / street scene</td>
<td>Sales and Promotion</td>
<td></td>
</tr>
<tr>
<td>Tonnages and customer numbers</td>
<td>Impact of campaigns</td>
<td>Pre and post campaigns</td>
</tr>
<tr>
<td>Sales and Promotion</td>
<td>Customer sign up process i.e. asking where they have heard about the service</td>
<td></td>
</tr>
<tr>
<td>Impact of campaigns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and safety</td>
<td>Statutory</td>
<td>Monthly</td>
</tr>
<tr>
<td>Health and safety</td>
<td>Health and safety process</td>
<td></td>
</tr>
<tr>
<td>Fly tipping</td>
<td>Impact on fly tipping</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Fly tipping</td>
<td>Flycapture</td>
<td></td>
</tr>
<tr>
<td>Impact on your commercial waste/recycling drop off services</td>
<td>Income projection</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Pricing strategy</td>
<td>Tonnages and income for those services</td>
<td></td>
</tr>
<tr>
<td>Impact on your commercial waste/recycling drop off services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.1 Continual improvement

With stiff competition in the commercial marketplace and pressures to deliver efficiencies it is important that authorities strive to continually improve their service performance.

Keeping abreast of your customers' needs will allow you to adapt your service to meet market demands. It will also allow you to provide a flexible offering and consider added value low cost services e.g. ink cartridge recycling and business resource efficiency advice.

Should you detect major changes in the market or there is a negative trend in your financial profile then it's worth reviewing the entire business plan loop again and follow the assessment for each stage. This may be considered a lengthy approach but it will allow you to explore all the service options available to you before making substantial service changes.

A commercial recycling service needs to remain flexible to be able to adapt to a rapidly changing market and ensure that the service continually meets the demands of its business customers.
8.0 The Business Recycling and Waste Services Commitment

The Business Recycling and Waste Services Commitment was developed by Defra in conjunction with the Local Government Association and the Federation of Small Businesses. The commitment sets out in plain English 12 principles which should underlie a business recycling and waste service. It offers the opportunity to demonstrate to customers your commitment to:

- Making recycling easy;
- Providing value for money;
- Consulting on and clearly communicating services;
- Reducing waste to landfill.

You can sign up to all or some of the principles, and can do so even if you don't directly provide recycling and waste services. You can edit the commitment and adopt a bespoke version that reflects your local circumstances. The principles are about:

- Reliable and regular collections;
- Collection services tailored to meet the needs of your customers;
- Clear information about your recycling service;
- Providing access to household waste and recycling centres for businesses;
- Contracts managed by following the principles of best practice;
- Reasonable and clear fees;
- Guidance for businesses on responsibilities for waste management;
- Providing a directory of local waste and recycling services;
- Helping businesses to donate unwanted items for reuse or buying quality second-hand products;
- Sensible approaches to enforcement;
- Providing easy ways to gather feedback; and
- A commitment to continuous improvement.

If you would like more information and for details on how to sign up, please visit: www.wrap.org.uk/labusinesscommitment
## 9.0 Project Plan Checklist

Below is a non-exhausted list, of things you might want to include on a checklist.

<table>
<thead>
<tr>
<th>Commercial recycling collections service project plan</th>
<th>Yes/No/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Business case developed (drivers outlined)</td>
<td></td>
</tr>
<tr>
<td>✓ Initial political and Director sign off</td>
<td></td>
</tr>
<tr>
<td>✓ Working group established (financial and health and safety team involvement)</td>
<td></td>
</tr>
<tr>
<td>✓ Opportunities for (new services) identified</td>
<td></td>
</tr>
<tr>
<td>✓ Threats/risks outlined. And plan for mitigation made</td>
<td></td>
</tr>
<tr>
<td>✓ Local demand identified</td>
<td></td>
</tr>
<tr>
<td>✓ Materials to be collected decided</td>
<td></td>
</tr>
<tr>
<td>✓ Scope (size) of service identified</td>
<td></td>
</tr>
<tr>
<td>✓ Materials quantity estimated</td>
<td></td>
</tr>
<tr>
<td>✓ Health and safety reviewed (throughout the process)</td>
<td></td>
</tr>
<tr>
<td>✓ Collection rounds identified (e.g. co-collected, dedicated rounds)</td>
<td></td>
</tr>
<tr>
<td>✓ Collection frequency and timing decided</td>
<td></td>
</tr>
<tr>
<td>✓ Material transfer and treatment considered including profits from sale of materials</td>
<td></td>
</tr>
<tr>
<td>✓ Containment considered and orders placed</td>
<td></td>
</tr>
<tr>
<td>✓ Vehicles confirmed (existing / trial / new / retrofit of any equipment – on board weighing)</td>
<td></td>
</tr>
<tr>
<td>✓ Resource requirement considered for each job role in the service (administration and call centre to sales team and operations)</td>
<td></td>
</tr>
<tr>
<td>✓ Staff training needs identified and actioned</td>
<td></td>
</tr>
<tr>
<td>✓ Costs understood and accounting system in place</td>
<td></td>
</tr>
<tr>
<td>✓ Estimated income calculated</td>
<td></td>
</tr>
<tr>
<td>✓ Charging structures agreed</td>
<td></td>
</tr>
<tr>
<td>✓ Debt management and contracts developed</td>
<td></td>
</tr>
<tr>
<td>✓ Promotion strategy developed</td>
<td></td>
</tr>
<tr>
<td>✓ Promotion materials developed and website updated</td>
<td></td>
</tr>
<tr>
<td>✓ Monitoring and evaluation key performance indicators developed</td>
<td></td>
</tr>
<tr>
<td>✓ Scheme launch checklist finalised and timetable confirmed</td>
<td></td>
</tr>
<tr>
<td>✓ Meeting dates set for service review meetings</td>
<td></td>
</tr>
</tbody>
</table>
10.0 Appendix 1 – Key legislation

10.1.1 England and Wales

*Environmental Permitting Regulations 2010 - as amended in 2011 and 2012*

The Environmental Permitting Regulations 2010\(^{25}\) replaced the amended 2007 Regulations, which combined several different permitting regimes into one set of regulations. These include the Pre-treatment Regulations. The 2007 Regulations imposed the requirement that all waste must be pre-treated before it is disposed of in landfill. According to the Environment Agency, a process can be deemed as treatment if it meets the ‘three point test’:

- It must be a physical, chemical, thermal or biological process;
- It must alter the nature or characteristics of the waste; and
- It must result in reducing its volume, hazardous nature, facilitate its handling or enhancing its recovery.

Segregating materials for recycling is deemed as ‘treatment’, however compaction is not. It will be natural for businesses to look to providers of residual waste services, including local authorities, for support to meet the pre-treatment requirements.

The Environmental Permitting (England and Wales) (Amendment) Regulations 2011\(^{26}\) and 2012\(^{27}\) amended some of the requirements for environmental permits and exemptions.

*The Waste (England and Wales) Regulations 2011 - as amended in 2012*

The Waste (England and Wales) Regulations 2011\(^{28}\) implement requirements of the revised Waste Framework Directive (2008/98/EC) into English and Welsh law. The following requirements are included:

- According to Part 5 of the Regulations, anyone who produces, collects, transports, recovers or disposes of waste must implement the waste hierarchy. Regulation 12 states that producers of waste and collectors of that waste must take all reasonable measures to apply the waste hierarchy. Businesses will, as part of their Duty of Care, need to include a declaration on waste transfer notes to confirm that they have applied the waste hierarchy. Guidance is available to businesses at http://wastehierarchy.wrap.org.uk/.

\(^{26}\) http://www.legislation.gov.uk/uksi/2011/2043/made
\(^{27}\) http://www.legislation.gov.uk/uksi/2012/630/made
From 1 January 2015, anyone who collects paper, metal, plastic or glass waste must ensure that those materials are collected separately from the rest of the waste stream and that they remain separate from other waste and material with different properties.

Under Part 8 of the Regulations, the waste carrier registration system is divided into two tiers. Upper tier carriers include collection and disposal authorities, professional carriers and construction and demolition waste carriers, while the lower tier includes waste producers that regularly transport their own waste.

Under Part 9 of the Regulations – Any waste transfer must be accompanied by a waste transfer note. According to these regulations, the note has to include a declaration that the previous holder has implemented the waste hierarchy. The Standard Industrial Classification (SIC) code for the waste producer must also be included. A list of codes can be found here: [www.ons.gov.uk](http://www.ons.gov.uk).

The Waste (England and Wales) (Amendment) Regulations 2012 strengthened and clarified the requirement for separate collection of paper, metal, glass and plastic. Local authorities collecting those materials must, where technically, environmentally and economically practicable, ensure that they make arrangements for the separate collection of those materials.

**Waste (Wales) Measure 2010**

The Waste (Wales) Measure 2010 sets out the recycling targets for municipal solid waste in Wales at 52% by 2012-13 and 70% by 2024-25.

**The Controlled Waste (England and Wales) Regulations 2012**

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These Regulations\textsuperscript{31} replace the 1992 Regulations in England and Wales. Local authorities may charge for the collection and disposal of waste from certain commercial activities, as listed in Schedule 1. This includes composite hereditament properties.

**The Hazardous Waste (England and Wales) Regulations 2005**

The Hazardous Waste Regulations 2005\textsuperscript{32} cover the handling, movement and disposal of hazardous waste in England and Wales. Wastes defined as hazardous are marked with an asterisk in the List of Wastes/European Waste Catalogue. These can include wastes that occur as part of regular business activities such as fluorescent tubes, LCD screens and laptops and mineral oils. The List of Wastes (LOW) Regulations 2005 transpose the European Waste Catalogue (EWC) into English legislation and provide codes for all hazardous and non-hazardous wastes, while the Environment Agency’s Technical Guidance WM2 provides detailed information on whether a waste should be classed as hazardous.

Hazardous waste producers of more than 500Kg per year are required to register their premises with the Environment Agency. Once registered, producers will receive a premises code that should be used on all waste consignment notes. Consignment notes are required for all movements of hazardous waste even from exempt premises. The applicable hazard codes, EWC codes and description of the waste, along with the details of the waste producer, SIC and premises codes, carrier and consignee details should be included in the consignment note. Consignees must submit quarterly returns to the Environment Agency and waste producers.

The mixing of hazardous wastes with non-hazardous waste or hazardous waste of a different category is banned without an environmental permit or a registered exemption. The ban includes mixing by waste producers.

The Waste (England and Wales) Regulations 2011 amended the Hazardous Waste 2005 Regulations to include the waste hierarchy declaration in consignment notes and the new hazardous properties from Annex III of the rWFD. They also made some changes to the multiple collection rounds system.

**WEEE Regulations 2006**

The Waste Electrical and Electronic Equipment (WEEE) Regulations 2006\textsuperscript{33} cover the whole of the UK. Producers of electrical and electronic equipment (including manufacturers, importers and sellers) are responsible for the cost associated with collecting, treating and recycling or disposing of this equipment when it becomes waste (WEEE). Distributor take-back schemes can be used to comply with these requirements. Approved treatment or reprocessing facilities must provide evidence to producers on the amount of WEEE received for processing. WEEE recovery and

\textsuperscript{31}http://www.legislation.gov.uk/uksi/2012/811/pdfs/uksi_20120811_en.pdf
\textsuperscript{32}http://www.legislation.gov.uk/uksi/2005/894/contents/made
\textsuperscript{33}http://www.legislation.gov.uk/uksi/2006/3289/contents/made
recycling targets ranging from 50% to 80% are also included in these regulations but only apply to
the fraction of WEEE collected separately. They were amended by the 2009 regulations.\textsuperscript{34}

**The Animal By-Products Regulations 2005**

The Animal By-Products Regulations 2005\textsuperscript{35} cover all businesses generating, handling and
disposing of animal by-products such as raw meat not intended for human consumption,
including food manufacturers and retailers. However, catering wastes (such as waste from
kitchens and restaurants) are only subject to these regulations if they are destined for
composting, AD or for feeding to animals. Recycling facilities such as composting, AD and pet food
plants can only accept Category 3 ABPs or Category 2 under very specific conditions. The 2011
Regulations for England\textsuperscript{36} and Wales\textsuperscript{37} introduced a more risk-proportionate approach to controls
on ABPs.

**10.1.2 Scotland**

**Special Waste Regulations 2004 - as amended by the Waste (Scotland) Regulations 2011**

The Special Waste Scotland (Amendment) Regulations 2004\textsuperscript{38} introduced the requirement for
special waste producers to notify the appropriate authorities and pay a fee for the removal of
their special waste. Consignment notes are required for the transport of any such waste.

**Animal By-Products (Scotland) Regulations 2003 – as amended in 2009**

The Animal By-Products (Enforcement) (Scotland) Regulations 2011\textsuperscript{39} cover the enforcement of
the ABP Regulations 2003\textsuperscript{40} in Scotland.

**Waste Management Licensing Regulations 2011**

The Waste Management Licencing Regulations\textsuperscript{41} impose the revised Waste Framework Directive's
requirement for waste disposal and recovery activities to operate under a permit into Scottish
law. Exemptions to facilitate the recovery or recycling of waste are also provided.

**The Waste (Scotland) Regulations 2011**

These regulations\textsuperscript{42} introduced the requirement to include a declaration that the previous holder
has abided by the waste hierarchy in waste transfer notes, while they also amended the Special
Waste Regulations to include the new hazardous properties from Annex III of the rWFD.

\textsuperscript{34} http://www.legislation.gov.uk/uksi/2009/2957/pdfs/uksi_20092957_en.pdf
\textsuperscript{35} http://www.legislation.gov.uk/uksi/2005/2347/contents/made
\textsuperscript{38} http://www.legislation.gov.uk/ssi/2004/112/contents/made
\textsuperscript{39} http://www.legislation.gov.uk/ssi/2011/171/contents/made
\textsuperscript{40} http://www.legislation.gov.uk/ssi/2003/411/contents/made
\textsuperscript{41} http://www.legislation.gov.uk/ssi/2011/228/pdfs/ssi_20110228_en.pdf
\textsuperscript{42} http://www.legislation.gov.uk/sdsi/2011/9780111012185/contents
The Waste (Scotland) Regulations 2012

Also known as the Zero Waste Regulations[^43], these impose bans on the types of wastes permitted into landfills. They also introduce the requirement for separate collections of key recyclables, including food waste. Moreover, they require that only wastes that cannot be recovered in another way are sent to Energy from Waste facilities.

**Table 13: Timetable for the different provisions of the regulations**

<table>
<thead>
<tr>
<th>Source segregation</th>
<th>January 2014</th>
<th>January 2016</th>
<th>January 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• All businesses to present their dry recyclables separately for collection.</td>
<td>• Businesses producing over 5kg of food waste per week to present those separately for collection (except those in rural areas).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Businesses producing over 50kg of food waste per week to present those separately for collection (except those in rural areas).</td>
<td>• Businesses undertaking the preparation and serving of food (including canteens and schools) to ensure the separate collection of food waste.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Local authorities to offer a dry recyclables collection service and begin roll out of food waste collections.</td>
<td>• Local authorities to finalise roll out of food waste collections.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Landfill and other bans</th>
<th>• Ban on mixing source segregated materials.</th>
<th>• Requirement to remove dense plastics and metals from residual waste prior to incineration (existing facilities).</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Ban on any metal, plastic, glass, paper, card and food collected separately for recycling from going to incineration or landfill.</td>
<td>• Ban on the use of macerators to discharge food waste into the public sewer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ban on biodegradable municipal waste to landfill.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10.1.3 Northern Ireland

_The Waste Contaminated Land (Northern Ireland) Order 1997_

These regulations outline the obligation for district councils to arrange for the collection of commercial waste if requested to do so. It also includes provisions around waste management licenses, containment and fixed penalty notices.

_The Waste Regulations (Northern Ireland) 2011_

The requirements of rWFD are transposed into Northern Ireland’s law by the Waste Regulations (Northern Ireland) 2011. They introduce a duty on waste operators to comply with the waste hierarchy. They also introduce the requirement, from January 2015, for separate collections of plastic, paper, metal and glass, where technically, environmentally and economically practicable. Co-mingled collections are regarded as separate. The Regulation also encourages the separate collection of waste oils.

The Hazardous Waste Regulations (Northern Ireland) 2005

These regulations\(^{45}\) implement the Hazardous Waste Directive (Directive 91/689/EC) in Northern Ireland. Hazardous wastes are defined as those set out in the List of Wastes (Northern Ireland) Regulations 2005. Consignment notes must accompany any movement of hazardous waste and consignees are required to provide producers, holders or consignors with a return or a copy of the consignment note.

The Regulations were amended by the Waste Regulations (Northern Ireland) 2011 to: ban the mixing of hazardous waste without a permit; introduce a new hazardous property (H13 sensitizing); and amend consignment notes to include a declaration that the waste hierarchy has been applied.

Animal By-Products (Northern Ireland) Regulations 2003

These Regulations\(^{46}\) control the collection, handling, transport and disposal in Northern Ireland of animal by-products not intended for human consumption. They are enforced by the Animal By-Products (Enforcement) Regulations (Northern Ireland) 2011\(^{47}\).
11.0 Appendix 2 – Example promotional literature

11.1.1 Leaflet from Bexley Council

![Leaflet from Bexley Council](image-url)
11.1.2 Reading Borough Council leaflet

This leaflet used by Reading Borough Council provides potential customers with an easy to use visual guide to the size of container they might need compared to how many sacks of waste they currently produce. On the front cover it emphasises some of the benefits to business (e.g. no VAT, no hidden costs etc.).
11.1.3 Northumberland County Council

Because the geographic area of Northumberland is so large, the service is ‘zoned’ with the map provided in their literature making this easy to understand. Owing to many tourist businesses, they have targeted caravan parks and holiday accommodation.

We provide a waste collection service to a wide range of businesses including:

- Caravan parks
- Shops
- Offices
- Holiday accommodation
- Small to medium sized enterprises
- Pubs, hotels, clubs and cafes

The service we offer includes:

- Tailored service to suit your needs
- Value for money with no hidden costs
- Reliable
- Fitting
- Negotiable collection frequency (weekly, fortnightly, etc.)
- Seasonal options available
- Controlled waste transfer note included
- Many materials recycled
- Disposal of non-recyclables at Energy from Waste plant
- Landfill avoidance wherever possible
- Advice on waste audits
- Advice on how to segregate waste and reduce waste disposal fees
- Help in providing evidence for Green Flag awards and similar
- Advice on waste electrical and electronic item disposal

Bulky waste / one-off clearouts

As a valued contracted trade customer we can offer you a collection service for larger items which do not fit into your standard wheeled bins and for occasional ‘spring-clean’ clearouts.

Please complete and return the following form or contact your local representative (see back page) for advice and competitive prices.

Find out more
To find out more, without obligation, complete and return the following form, or complete it online at www.northumberland.gov.uk/waste

Business/company name
Expiry date of current contract
Contact name
Address
Postcode
Telephone
Email
Location of waste (if different from address above)

Return form to: Central Waste Team, Northumberland County Council, Local Services, Freepost NEA3728, Morpeth, Northumberland, NE61 1BR
11.1.4 Cardiff Council Food Waste Poster

The poster below highlights to customer’s staff what should and should not go in food waste collection containers. The poster on the right is downloadable from the Cardiff Council website and accompanies useful information on the services available to businesses.
WRAP’s vision is a world in which resources are used sustainably.

Our mission is to accelerate the move to a sustainable resource-efficient economy through re-inventing how we design, produce and sell products; re-thinking how we use and consume products; and re-defining what is possible through re-use and recycling.

Find out more at www.wrap.org.uk