



Department  
for Environment  
Food & Rural Affairs

# Statutory Review

## **The Waste (England and Wales) Regulations 2011**

December 2018



© Crown copyright 2018

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.3. To view this licence visit

[www.nationalarchives.gov.uk/doc/open-government-licence/version/3/](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/) or email [PSI@nationalarchives.gsi.gov.uk](mailto:PSI@nationalarchives.gsi.gov.uk)

This publication is available at [www.legislation.gov.uk](http://www.legislation.gov.uk)

PB 14544

# Statutory Review of the Waste (England and Wales) Regulations 2011: Overview (December 2018)

## Context

The Waste (England and Wales) Regulations 2011 (from here on referred to as ‘the 2011 Waste Regulations’) transpose several aspects of the revised Directive 2008/98/EC on waste, known as the revised Waste Framework Directive (rWFD). A review clause was inserted when these Regulations were amended in 2012, requiring us to conduct and publish a review of these Regulations every five years from the 1 October 2012. A Post Implementation Review (PIR) was therefore carried out during 2016-7. This involved a review of the practical implementation of the regulations, desk-based research and interviews with external stakeholders. The PIR report below was submitted to the Regulatory Policy Committee for scrutiny on 29 September 2017. The RPC opined on 6 December 2017 that this Post Implementation Review (PIR) report is fit for purpose.

On 23 June 2016, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until 29 March 2019, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation.

## Key findings of the PIR

In the long term, the 2011 Waste Regulations aim to reduce the adverse impacts of waste generation and resource use on human health and the environment. In order to achieve this, the Regulations introduce a range of requirements in the more immediate term, relating to recycling; the waste hierarchy; the waste duty of care; waste infrastructure planning; waste management plans and waste prevention programmes. Annex B sets out how these requirements have been implemented.

This PIR exercise found that:

- Government has put processes in place to meet all the requirements of the 2011 Waste Regulations (see section entitled ‘Effectiveness of the Regulations: shorter term objectives’).
- The stakeholders we spoke with, however, felt that there was limited engagement from organisations with some of these processes – notably those associated with waste transfer notes, the waste hierarchy, and the registration of waste carriers, brokers and dealers – and that these regulations in their current format were impracticable to enforce.
- The England ‘waste from households’ recycling rate was 43.9 per cent in 2015; the respondents generally felt that further action would be needed to meet the 50% household waste recycling target by 2020.
- Although evidence shows that most Waste Collection Authorities (WCAs) have met the requirements of the regulations relating to separate recycling collections by carrying out TEEP and necessity assessments, few WCAs have changed to separate collections as a result. Some PIR respondents expected to see an increase in moves to separate

collections, regardless, as waste management contracts come up for renewal. Stakeholders had mixed views on the usefulness and robustness of the TEEP and necessity assessments; several highlighted the considerable resource required of local authorities to conduct the analysis; others underlined the associated benefits such as potential efficiency savings that could result. Many called for official Defra guidance setting a standard approach to these assessments, which could ease burdens and improve credibility in the conclusions.

- The recovery rate from non-hazardous construction and demolition (C&D) waste in England has been comfortably above the 2020 target of 70 per cent since the 2011 Waste Regulations were introduced (Defra, 2016c).
- There were mixed views on the self-sufficiency and proximity principles relating to waste infrastructure planning. Some stakeholders we spoke with welcomed the flexibility allowed for proportionate decisions based on the local situation and economies of scale; others felt that the principles are not being sufficiently adhered to, leading to some areas being disproportionately impacted by disposal and movement of waste.
- Overall, the review found that the running costs of the Regulations are not disproportionately high, especially compared to those predicted in the Impact Assessment (IA). This could be partially due to the above-mentioned perceived low engagement with some of the requirements, therefore meaning that the intended environmental and health benefits are not necessarily being achieved.

It would be difficult to conclusively identify the extent to which the Regulations are achieving their longer term objective, namely of 'reducing the adverse impacts of the generation of waste and resource use on human health and the environment', given the many other policies and external factors that can affect these outcomes. Stakeholders, though, were generally of the view that few environmental benefits had been realised to date as a direct result of the Regulations as they are currently applied.

Defra values hearing from its stakeholders, and we therefore asked those interviewed what changes they would like to see, that they believed could make a difference in the longer term. Please note that these are the opinions of some stakeholders and do not represent Government policy or views. As the Resources & Waste Strategy had not been announced at the time of the stakeholder interviews, stakeholder views should be considered in that context. Key messages are set out as follows:

- Government taking a more holistic view of waste in terms of resource efficiency and resource security, and ensuring integration of waste and resource-related plans with other Government plans and strategies.
- Increased collaboration between policy makers, local authorities, manufacturers, and the industry around policy, strategy, technology, services and infrastructure design. Including early communication from Government on policy direction to provide relevant parties with adequate time to develop infrastructure and services.
- Improved monitoring and evaluation, and consideration of alternative or additional targets to ensure efforts are focussed to achieve greatest environmental benefit, whilst also taking into account social and economic impacts. Ensure a common standard for reporting

internationally if meaningful comparisons are to be made, such as with the household recycling target.

- Identifying alternative ways to move waste up the hierarchy, by stimulating the market and shifting responsibility to the manufacturer for environmental impacts of their products over their lifetime.
- More action to reduce Construction & Demolition waste, due to resource scarcity of aggregates and C&D being the largest contributing sector to total waste generation – despite the recovery target being exceeded.
- Redesign of the Carriers, Brokers and Dealers (CBD) registration system in order to drive poor performance out of the industry and enable the EA to target compliance work at high risk operators, whilst ensuring burdens are kept to a minimum for lower risk operators
- Further developing the electronic duty of care (EDOC) platform and increasing uptake to improve data on the use and movement of materials and facilitate compliance work. In order to limit burdens, ensure that EDOC can be integrated with existing waste information management systems.

### Next Steps

The Regulations assessed in this PIR will remain in place as they form the UK's transposition of the EU revised Waste Framework Directive and there would be limited scope to change them without compromising our compliance with the Directive requirements.

Government has recently published a [Resources & Waste Strategy](#) for the longer term to look ahead at opportunities outside the EU. We are taking into account the evidence and stakeholder views generated by this PIR exercise in the development of that Strategy and other policy.

## RPC cover page

<b>Title:</b> The Waste (England and Wales) Regulations 2011	<b>Post Implementation Review</b>
<b>IA/PIR No:</b> 1889	<b>Source of intervention:</b> EU derived
<b>Lead department or agency:</b> Defra	<b>Type of regulation:</b> Primary legislation
	<b>Type of review:</b> Statutory
	<b>Date of implementation:</b> 28/03/2011
	<b>Date review due (if applicable):</b> 01/10/2017 <sup>1</sup>

### Questions covered in the Post Implementation Review

[Q1a.](#) What were the policy objectives and the intended effects?

[Q1b.](#) How far were these objectives and intended effects expected to have been delivered by the review date?

[Q2.](#) Describe the rationale for the evidence sought and the level of resources used to collect it.

[Q3.](#) Describe the principal data collection approaches that have been used to gathering evidence for this PIR.

[Q4.](#) To what extent has the regulation achieved its policy objectives? Have there been any unintended effects?

[Q5a.](#) Please provide a brief recap of the original assumptions about the costs and benefits of the regulation and its effects on business (e.g. as set out in the IA).

[Q5b.](#) What have been the actual costs and benefits of the regulation and its effects on business?

[Q6.](#) Assessment of risks or uncertainties in evidence base. What are the main limitations to the evidence base for the PIR? Are there any other issues which should be considered when this PIR is reviewed?

[Q7.](#) Lessons for future Impact Assessments: Are there any significant lessons for future IAs arising from this PIR?

[Q8.](#) What next steps are proposed for the regulation (e.g. remain/renewal, amendment, removal or replacement)?

[Q9.](#) Comparison with EU Member States.

**Sign-off** For Post Implementation Review:

***I have read the PIR and I am satisfied that it represents a fair and proportionate assessment of the impact of the policy.***

Signed:



---

<sup>1</sup> A review clause was inserted when the 2011 Waste Regulations were amended in 2012



Department  
for Environment  
Food & Rural Affairs

# Post Implementation Review

## The Waste (England and Wales) Regulations 2011

September 2017

# Contents

Introduction .....	1
Methodology .....	3
Findings: Effectiveness of the 2011 Waste Regulations.....	5
Effectiveness of the Regulations: shorter term objectives .....	5
Effectiveness of the Regulations: longer term objectives.....	14
Unintended effects .....	15
Findings: Costs and Benefits of the 2011 Waste Regulations .....	17
Limitations and lessons learned .....	24
Next steps for the 2011 Waste Regulations .....	26
Comparison with EU Member States .....	27
Annex A: Glossary .....	28
Annex B: Implementation of the 2011 Waste Regulations .....	29
1. Waste Management Plan .....	29
2. Waste Prevention Programme .....	29
3. Waste Hierarchy .....	30
4. Household recycling target.....	31
5. Separate recycling collections .....	31
6. Construction waste recovery target .....	33
7. Waste infrastructure.....	33
8. Carrier registration .....	34
9. Waste transfer information .....	35
Annex C: Evidence Gathering Methodology.....	37
Stage 1: Desk-based research.....	37



Stage 2: Key stakeholder interviews.....	37
Evidence on EU Member state transposition .....	38
Annex D: Effectiveness of Regulations in achieving long term objectives, and stakeholder suggestions for improvements.....	41
Annex E: Costs & Benefits.....	54
Annex F: Comparison of implementation of rWFD with other Member States .....	66
References .....	73

# Introduction

## 1a. What were the policy objectives and the intended effects? *(If policy objectives have changed, please explain how).*

The Waste (England and Wales) Regulations 2011 (from here on referred to as ‘the 2011 Waste Regulations’) transpose several aspects of the revised Directive 2008/98/EC on waste, known as the revised Waste Framework Directive (rWFD). Note, that this study reports the findings of a Post Implementation Review of the 2011 Waste Regulations, and not of the rWFD. Defra submitted its triennial report on the UK’s implementation of the revised Waste Framework Directive for the period 1 January 2013 to 31 December 2015 to the European Commission in September 2016.

The 2011 Waste Regulations also address one issue related to the interpretation of Article 12 in the previous version of the WFD, following a judgment made by the European Court of Justice (ECJ) in 2005. This relates to the registration of Carriers, Brokers and Dealers (CBDs), extending the requirement to all those who carry waste, even if it is not their sole or principle activity.

A review clause was inserted when the 2011 Waste Regulations were amended in 2012. In line with the review clause, this post implementation review (PIR) examines the implementation of the Regulations in England only.

The 2011 Waste Regulations also amended the Hazardous Waste (England and Wales) Regulations 2005 (from here on referred to as the 2005 Hazardous Waste Regulations). We have not reviewed these changes to hazardous waste management in this PIR, as any assessment of impacts would tie in closely with other aspects of the 2005 Hazardous Waste Regulations. It would therefore be more efficient to assess these as part of the Statutory Review of the 2005 Hazardous Waste Regulations due in 2021. This review does not cover minor requirements in the Regulations.<sup>2</sup>

The 2011 Waste Regulations have the following key objectives:

1. **Waste Management Plan:** For the Government to revise the scope and content of waste management plans;
2. **Waste Prevention Programme:** For the Government to establish waste prevention programmes;
3. **Waste Hierarchy:** For organisations to apply the waste hierarchy as a priority order at the point of waste transfer;
4. **Household recycling target:** For at least 50% by weight of waste from households to be prepared for re-use or recycled by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target;
5. **Separate recycling collections:** For waste collectors to collect paper, metal, plastic and glass separately from each other and other waste materials – where necessary for quality

---

<sup>2</sup> Note that ‘Regulations’ (with a capital R) refer to a set of Regulations; ‘regulation(s)’ (with a small r) refer(s) to one or more regulation(s) within a set of Regulations.

reasons to ensure recovery<sup>3</sup>, and where technically, environmentally and economically practicable (TEEP);

6. **Construction waste recovery target:** For at least 70% by weight of non-hazardous construction and demolition waste to be subjected to material recovery by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target;
7. **Waste infrastructure:** For local authorities to apply the self-sufficiency & proximity principles, to create an integrated and adequate network of installations for waste disposal and the recovery of mixed municipal waste from household waste;
8. **Carrier registration:** For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency (EA); and
9. **Waste transfer information:** For organisations to record and retain specific information about waste and its movement, upon its transfer.

Annex B describes how these objectives have been implemented.

Overall, the 2011 Waste Regulations have the longer term aim of reducing the adverse impacts of the generation of waste and resource use on human health and the environment.

**1b. How far were these objectives and intended effects expected to have been delivered by the review date? If not fully, please explain expected timescales.**

The 2011 Waste Regulations contain the following time-specific objectives, of which the first two were expected to have been met by the review date:

- For the Secretary of State, by 12 December 2013, to evaluate the usefulness of the waste prevention measures set out as examples in Annex IV of the revised Waste Framework Directive and any other such measures the authority thinks fit; and to establish one or more programmes of waste prevention measures (each a "waste prevention programme"), which could include existing waste prevention measures.
- From 1st January 2015, an establishment or undertaking which collects waste paper, metal, plastic or glass must do so by way of separate collection, where necessary and TEEP.
- At least 50 per cent by weight of waste from households to be prepared for re-use or recycled by 2020.
- At least 70 per cent by weight of non-hazardous construction and demolition waste to be subjected to material recovery by 2020.

The other objectives are ongoing and do not include time-specific targets. However, activity has commenced on all objectives, and some of the objectives have been fully achieved by the review date. Please see Table 1 for further details on the extent to which the objectives have been achieved to date.

---

<sup>3</sup> necessary to ensure that waste undergoes recovery operations in accordance with Article 4 and 13 of the WFD and to facilitate or improve recovery

## Methodology

**2. Describe the rationale for the evidence sought and the level of resources used to collect it, i.e. the assessment of proportionality.** *(The PIR guidance states that the strength of evidence sought for PIRs should be proportionate to the scale of the regulation and its expected impact).*

A relatively light-touch approach was deemed appropriate and proportionate for this Post Implementation Review, for a combination of reasons:

Prioritising reduction of continuing burdens:

- There is little scope to reduce burdens of the Regulations further, given that the 2011 Waste Regulations were transposed from the revised Waste Framework Directive in a way to keep burdens to a minimum.
- Whilst the 2011 Waste Regulations were predicted to impose a relatively large net cost on businesses<sup>4</sup> according to the Impact Assessment of the revised Waste Framework Directive transposition (Defra, 2010), the bulk of these costs were one-off transition spend. The ongoing costs were expected to be relatively low, as was the spend per individual business or organisation (see question 5a and Annex E on costs and benefits).
- These Regulations and their implementation have been reviewed and amended on an ongoing basis since they were introduced. This includes two red tape challenge programmes, one of which was focussed on the waste industry; the smarter guidance programme; and other Defra or EA reviews targeting high impact and high profile areas such as waste crime and separate recycling collections.
- Concerns raised by stakeholders as part of the more recent Red Tape Challenge<sup>5</sup> largely related to areas of waste management and policy outside the remit of the 2011 Waste Regulations. It therefore seems as if that the 2011 Waste Regulations are not of primary interest to these stakeholders from a red tape or burdens perspective.
- Some stakeholders also raised concerns about the burden associated with multiple consultations, and we are therefore mindful to prioritise our engagement with stakeholders to high impact areas where change is possible.

Timeliness:

- The EU Withdrawal Act will make sure the whole body of existing EU environmental law continues to have effect in UK law, providing businesses and stakeholders with maximum certainty as we leave the EU. We will then have the opportunity, over time and via Parliamentary scrutiny, to ensure our legislative framework delivers our aim. It would therefore not be timely to consult on the 2011 Waste Regulations in isolation.<sup>6</sup>
- EU circular economy package negotiations are currently underway. These will amend the 2008 EU revised Waste Framework Directive and possibly require further amendment to the 2011 Waste Regulations depending on whether the transposition deadline falls before or after EU exit and the details of any transitional agreement.

---

<sup>4</sup> Using the costs set out in the IA for the WFD as a proxy in the absence of a specific IA for the 2011 Waste Regulations.

<sup>5</sup> <https://cutting-red-tape.cabinetoffice.gov.uk/wp-content/uploads/2016/03/Waste-Findings.pdf>

<sup>6</sup> On 23 June 2016, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until 29 March 2019, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation.

Finally, due to the wide reaching remit of the Regulations, reviewing the impacts of each of the policy objectives even in a light touch way is time consuming; the task is comparable to nine small-scale post implementation reviews. Any further effort is not deemed proportionate due to the limited further benefit there is to gain from further examination.

We drew on BRE's guidance on proportionate approaches to light-touch PIRs to inform design of evidence-gathering activity for this review. Taking into account the factors above, we did not deem a wider stakeholder consultation proportionate. The evidence collection approach is described in more detail in question 3 and Annex C.

**3. Describe the principal data collection approaches that have been used to gathering evidence for this PIR.** *What forms of monitoring data were collected? What evaluation approaches were used? (e.g. impact, process, economic). How have stakeholder views been collected? (e.g. feedback mechanisms, consultations, research)*

Please see details of evidence gathering methodology in Annex C. In summary:

Evidence from reports, reviews and admin data known to Defra and the Environment Agency (EA) was gathered and analysed. These reports include details on policy implementation and some, mainly qualitative, evidence on policy impacts, costs and benefits. Note that no new monetary, and very little quantitative, data, was identified to estimate the costs and benefits of the 2011 Waste Regulations as they are currently applied, or to help review the accuracy of the original IA's assessment of costs and benefits. In line with the guidance on light touch PIRs, we did not gather new primary data to quantify these impacts, but rather drew on qualitative data including stakeholder views, where possible.

We conducted 20 qualitative semi-structured depth interviews with key stakeholder organisations, identified by the relevant Defra and DCLG policy leads. These organisations were selected to represent a cross-selection of organisations and individuals affected by the Regulations. They include trade associations, local authority representatives, waste management companies and others in the waste industry, manufacturers, producers of waste, charitable reuse organisations, a small business membership organisation, and the regulator. A full list of interviewed organisations is in Annex C.

For each key objective of the 2011 Waste Regulations of interest to them, respondents were asked to give their reflections on the following aspects:

- Effectiveness of the Regulation(s) in meeting their objectives
- Unintended consequences
- Costs (burdens) and benefits – qualitative as well as quantitative
- Suggested improvements

## Findings: Effectiveness of the 2011 Waste Regulations

**4. To what extent has the regulation achieved its policy objectives? Have there been any unintended effects? Please set out conclusions and supporting evidence.**

We gathered documented evidence and stakeholder views on the extent to which the objectives of the 2011 Waste Regulations set out in the introduction are being met. In doing so we also explored any barriers to effectiveness, and unintended consequences. This section sets out the key findings.

### Effectiveness of the Regulations: shorter term objectives

Table 1 below summarises the evidence review and stakeholder interviews on the effectiveness of the 2011 Waste Regulations in achieving the shorter term objectives. Most of the policy objectives do not have deadlines or milestones, and the intended objectives may only be realised longer term. Note, that this report does not assess the UK's implementation of the revised Waste Framework Directive; Defra submitted its triennial report on the UK's implementation of the revised Waste Framework Directive for the period 1 January 2013 to 31 December 2015 to the European Commission in September 2016.

Please note that the views of stakeholders stated in this table do not represent Government policy or views.

**Table 1 Effectiveness of 2011 Waste Regulations in achieving shorter term policy objectives**

Objective	Documented evidence	Stakeholder views <sup>7</sup>	Progress summary
<b>1. Waste Management Plan:</b> For the Government to revise the scope and content of waste management plans	The Government published the Waste Management Plan for England in December 2013 (Defra, 2013c), having consulted on the Plan earlier that year (Defra, 2013b).		Achieved

<sup>7</sup> Note that some stakeholder views echoed findings from the documented evidence; these have not been duplicated in the table.

Objective	Documented evidence	Stakeholder views <sup>7</sup>	Progress summary
<p><b>2. Waste Prevention Programme:</b> For the Government to establish waste prevention programmes</p>	<p>The Waste Prevention Programme for England (WPP) was published on 11 December 2013 (HM Government, 2013), following consultation (Defra, 2013e)</p>		<p>Achieved</p>
<p><b>3. Waste Hierarchy:</b> For organisations to apply the waste hierarchy as a priority order at the point of waste transfer</p>	<p>Government published guidance on the Waste Hierarchy (Defra, 2011).</p>	<ul style="list-style-type: none"> <li>• Generally low awareness, understanding and engagement among producers of waste of this requirement, especially smaller businesses. Many make declaration on Waste Information Note without engaging with what it entails.</li> <li>• Some organisations, in particular larger companies, some local authorities, and the charity reuse sector move waste up the hierarchy regardless of this regulation.</li> <li>• Generally felt that this requirement is impracticable to enforce.</li> </ul>	<p>Government put process and guidance in place.</p> <p>Although legally required to do so, stakeholders were of the view that not all organisations take the waste hierarchy into account at the point of waste transfer.</p>

Objective	Documented evidence	Stakeholder views	Progress summary
<p><b>4. Household recycling target:</b> For at least 50% by weight of waste from households to be prepared for re-use or recycled by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target</p>	<ul style="list-style-type: none"> <li>Waste Management Plan for England published (Defra, 2013c).</li> <li>The England 'waste from households' recycling rate was 43.9 per cent in 2015, a decrease of 0.9 percentage points from 2014 (Defra, 2016c). Recycling rates had previously been increasing each year, but slowing in recent years.<sup>8</sup></li> <li>At Local Authority level, 'household waste' recycling rates ranged from 15 per cent to 67 per cent (Defra, 2016b).</li> <li>The Defra committee expressed concern that the target would not be met by 2020 without further action from Government (House of Commons, 2014).</li> <li>The 'Framework for Greater Consistency in Household Recycling for England' was published in 2016 with the aim of</li> </ul>	<p>General view: measures currently in place are not sufficient for England to meet the target by 2020. Key barriers:</p> <ul style="list-style-type: none"> <li>The low cost of some virgin materials limits the market for recycled materials;</li> <li>Some national level key economic drivers are no longer applied – including the landfill tax escalator and the Landfill Allowance Trading Scheme;</li> <li>The most cost effective measures have generally already been taken by local authorities;</li> <li>Pressure on local authority budgets diverts money from recycling; it can also lead to charging for some types of recycling services;</li> <li>Geographical variability in availability of up-to-date recycling infrastructure;</li> <li>Inflexibility of long term waste management contracts limits the materials that can be recycled in the short term;</li> <li>Reluctance among authorities and industry to plan ahead and invest, in a context of perceived uncertainty partially relating to EU Exit and without government communicating its strategic direction relating to resources and waste.<sup>10</sup></li> </ul>	<p>The England 'waste from households' recycling rate was 43.9 per cent in 2015 (Defra, 2016c). Deadline to reach the 50% target is 2020.</p> <p>Stakeholders strongly felt additional action needed to meet the target by 2020.</p>

<sup>8</sup> Since the time of writing this report, new statistics have been published, as follows: 'The official England waste from households recycling rate for 2017 was 45.2 per cent, up 0.3 percentage points from 44.9 per cent in 2016. [...] When IBA metal is excluded, the waste from households recycling rate is 44.4 per cent in 2017'. (Defra (2018). Statistics on waste managed by local authorities in England in 2017/18. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/763191/LACW\\_mgt\\_annual\\_Stats\\_Notice\\_Dec\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763191/LACW_mgt_annual_Stats_Notice_Dec_2018.pdf) [Accessed 18 Dec 2018].

<sup>10</sup> Government is currently producing a Resources & Waste Strategy for the longer term to look ahead at opportunities outside the EU. The Resources & Waste Strategy had not been announced at the time of the stakeholder interviews.



Objective	Documented evidence	Stakeholder views	Progress summary
	<p>improving recycling performance (WRAP, 2016b).</p> <ul style="list-style-type: none"> <li>An industry study claimed that materials included within the definition of Municipal Solid Waste (MSW) and the recycling rate calculation method could limit the reported recycling rate, compared with other Member States<sup>9</sup> (CIWM/SOENECS, 2015, LGA, 2015).</li> </ul>	<ul style="list-style-type: none"> <li>No perceived consequences locally of not reaching 50 per cent;</li> <li>Confusion and/or lack of engagement among householders as to what can and cannot be recycled (also see WRAP, 2016a). Awareness-raising campaigns are costly and are not necessarily effective or lasting, in particular in areas with a transient population;</li> <li>Lack of consistency between areas in what materials are collected for recycling undermines usefulness of labelling on packaging;</li> <li>There is strong evidence of a correlation between lower 'effective weekly residual containment capacity' and higher recycling rates (WRAP, 2015).</li> <li>Food waste collections not offered by all authorities; small proportion of food waste generated is collected.</li> <li>Generally lower recycling rates in urban areas due to: transient population; high density housing and flats; less garden waste.</li> </ul>	

<sup>9</sup>The LGA claims that including Incinerator Bottom Ash 'could contribute up to an additional seven percentage points by 2020. Based on an Environmental Services Association estimate of 3 million tonnes of incinerator bottom ash by 2020 and an assumption that overall waste levels remain at approximately the same level as 2013/14 LGA (2015). *Meeting EU recycling targets*. Available: <http://www.local.gov.uk/documents/10180/49956/150501+LGA+Recycling+targets+position+paper.pdf/0b496595-d7fe-4128-afc2-4d51f2eb6249>.

Objective	Documented evidence	Stakeholder views	Progress summary
<p><b>5. Separate recycling collections:</b> For waste collectors to collect paper, metal, plastic and glass separately from each other and other waste materials – where necessary for quality reasons to ensure recovery<sup>11</sup>, and where technically, environmentally and economically practicable (TEEP)</p>	<ul style="list-style-type: none"> <li>• Briefing note published by the EA (Environment Agency, 2014). Industry-led guidance commissioned and published by a working group comprising the Waste Network Chairs, the London Waste and Recycling Board (LWARB) and WRAP (WRAP, 2014).</li> <li>• The majority of Waste Collection Authorities<sup>12</sup> (WCAs) are adhering to the regulations by conducting the necessity and TEEP assessments (Environment Agency, 2016b).</li> <li>• Whilst the EA survey found a small number of WCAs had modified their recycling collection method, the majority concluded that no move to separate collections was needed.</li> <li>• This is supported by data on recycling performance which shows an increase in comingled and a fall in separate collections since 2009/10 (WRAP, 2017b).</li> </ul>	<ul style="list-style-type: none"> <li>• WCAs deemed generally aware of the requirement.</li> <li>• Split views on quality and robustness of the assessments carried out by WCAs; criticism of absence of official Defra guidance for the assessments.</li> <li>• Many WCAs are tied into long term and inflexible contracts with waste management companies; immediate change would have been unlikely.</li> <li>• Lower awareness of the requirement among private waste collectors, in particular smaller businesses.</li> <li>• Some Waste Management Companies produce generic assessments given the impracticability of conducting separate necessity and TEEP tests for every private customer. They can encourage but not force business customers to adopt separate collections.</li> <li>• Enforcement action is impracticable, given lack of statutory guidance and no direct offences attached to failing to carry out separate collection.</li> </ul>	<p>The majority of WCAs have completed necessity and TEEP analysis.</p> <p>Stakeholders believe there is variable engagement in the private sector.</p>

<sup>11</sup> Where necessary to ensure that waste undergoes recovery operations in accordance with Article 4 and 13 of the WFD and to facilitate or improve recovery

<sup>12</sup> A Waste Collection Authority (WCA) is a local authority charged with the collection of municipal waste. These include district and unitary authorities.

Objective	Documented evidence	Stakeholder views	Progress summary
<p><b>6. Construction waste recovery target:</b> For at least 70% by weight of non-hazardous construction and demolition waste to be subjected to material recovery by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target.<sup>13</sup></p>	<p>The recovery rate from non-hazardous construction and demolition (C&amp;D) waste in England in 2014 was 91.4 per cent, meeting the target in the Regulations (Defra, 2016c). The rate has remained at similar levels from 2010 to 2014 and has at all times been comfortably above the 2020 target of 70 per cent (Defra, 2016c).</p>	<p>Some stakeholders felt that a higher recovery rate than that being currently achieved is both feasible and important, for a number of reasons: resource scarcity of aggregates; C&amp;D being the largest contributing sector to total waste generation (Defra, 2016c); and in order to reduce flytipping.</p>	<p>Target reached early and maintained.</p>

---

<sup>13</sup> Although the C&D recovery rate in England was already comfortably above the 70% target, the target was introduced in the 2011 Waste Regulations in order to comply with the Waste Framework Directive.

Objective	Documented evidence	Stakeholder views	Progress summary
<p><b>7. Waste infrastructure:</b> For local authorities to apply the self-sufficiency &amp; proximity principles, to create an integrated and adequate network of installations for waste disposal and the recovery of mixed municipal waste from household waste;</p>	<p>Government published the National Planning Policy for Waste<sup>14</sup>, and Planning Practice Guidance on Waste in 2014.<sup>15</sup></p> <p>Implementation varies across the country. Examples where the principles are implemented include:</p> <ul style="list-style-type: none"> <li>• Cambridgeshire and Peterborough Minerals and Waste Development Plan (Cambridgeshire County Council and Peterborough City Council, 2011) which takes various steps to adhere to the principles, including via restricted catchment areas;</li> <li>• Kent Resource Partnership<sup>16</sup>, a collaboration between county and district councils.</li> </ul>	<p>Few stakeholders commented. General feeling that the planning policy and guidance rightly allow flexibility for logical and proportionate decisions according to the local situation and economies of scale. However, some felt the principles are not being sufficiently adhered to, e.g. waste transported further than appropriate – both nationally and internationally – leading to some areas being disproportionately impacted by disposal and movement of waste, and England not fully benefiting from the value of that resource. Barriers to take-up of the principles included:</p> <ul style="list-style-type: none"> <li>• Not always economically or commercially beneficial;</li> <li>• Not always possible, depending on where waste infrastructure has developed over time;</li> <li>• Competing interests between district and regional authorities in terms of waste planning, collection and disposal;</li> <li>• Some skill or knowledge gaps relating to waste planning among those developing and scrutinising the Local Plans.</li> </ul>	<p>National planning policy and guidance is in place, which provides the framework for local authorities to local plans, which cover waste plans.</p> <p>Some evidence that a small number of local authorities are applying the principles.</p>

<sup>14</sup> [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/364759/141015\\_National\\_Planning\\_Policy\\_for\\_Waste.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf)

<sup>15</sup> [www.gov.uk/guidance/waste](http://www.gov.uk/guidance/waste)

<sup>16</sup> [www.kent.gov.uk/about-the-council/partnerships/kent-resource-partnership/about-the-kent-resource-partnership](http://www.kent.gov.uk/about-the-council/partnerships/kent-resource-partnership/about-the-kent-resource-partnership)

Objective	Documented evidence	Stakeholder views	Progress summary
<p><b>8. Carrier registration:</b> For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency</p>	<ul style="list-style-type: none"> <li>• In December 2013, the Environment Agency introduced a process for lower tier CBDs to register; the process was already in place for upper tier CBDs</li> <li>• An online registration portal was launched in April 2015.</li> <li>• Since December 2013, 85,000 lower tier CBDs have registered in England.</li> <li>• There are currently around 107,000 registered upper tier carriers in England. These renew every three years so numbers are subject to fluctuations.</li> </ul>	<ul style="list-style-type: none"> <li>• Some stakeholders feel there is low awareness of the need to register among some smaller businesses, in particular those transporting their own waste.</li> <li>• The online registration portal was seen as simple and user friendly.</li> <li>• It was generally felt that this requirement is impracticable to enforce.</li> </ul>	<p>Process in place, supporting high number of registrations.</p> <p>Although legally required to do so, stakeholders felt that not all CBDs register with the EA; and that there is lower awareness among smaller businesses.</p>

Objective	Documented evidence	Stakeholder views	Progress summary
<p><b>9. Waste transfer information:</b> For organisations to record and retain specific information about waste and its movement, upon its transfer.</p>	<ul style="list-style-type: none"> <li>• It was estimated in 2010 that 23.5 million Waste Information Notes (WINs) were being produced per annum in the UK (Defra, 2014).</li> <li>• However, there is no data on the actual number of waste transfers taking place in England, or the proportion that are documented.</li> <li>• Since the introduction of an electronic platform (EDOC) for recording waste transfers in 2014 over 7,000 businesses have voluntarily registered to use it. Many organisations, however, still use paper-based or their own digital systems.</li> <li>• Evidence suggests that there is low awareness of this requirement, and consequently low compliance, among particular groups. A recent survey found that more than one third of SMEs were unsure as to whether they filled out or stored Waste Transfer Notes (Right Waste Right Place, 2016).</li> <li>• Targeted audits of WINs by the EA regularly highlight the low quality of the information recorded in terms of poor accuracy and missing information. Incorrectly labelled waste can end up being disposed of in an inappropriate way, with consequences for the environment and/or human health.</li> </ul>	<ul style="list-style-type: none"> <li>• Larger operators tend to use waste information notes; lower awareness among smaller outfits producing waste.</li> <li>• Inaccurate description of the waste is common – whether accidental or deliberate.</li> <li>• Impracticable to enforce the requirement in its current state, due to sheer number of notes, flexibility in format of notes, and lack of data to suggest which organisations and waste transfers are high risk.</li> <li>• EDOC was generally seen as a useful, or potentially useful, tool, but with current low take-up.</li> </ul>	<p>Process is in place – relies on self-assurance by waste holders.</p> <p>Although legally required to do so, stakeholders told us that not all organisations use waste information notes correctly or at all; and that there is lower awareness among smaller businesses.</p>

## Effectiveness of the Regulations: longer term objectives

The previous section set out the progress made in achieving the shorter term objectives of the 2011 Waste Regulations and the processes that Government put in place. Attempting to identify the extent to which the Regulations are achieving their longer term objective, namely of 'reducing the adverse impacts of the generation of waste and resource use on human health and the environment', would be extremely complex, and unlikely to produce findings that could be attributed to the regulations with any degree of confidence. A key difficulty would lie in disentangling the environmental impacts of these Regulations from the cumulative impacts of other policies and the wide range of external factors that affect the environment.<sup>17</sup>

Defra therefore asked stakeholders for their views. The stakeholders we spoke with were generally doubtful about the Regulations in their current format and implementation achieving much in the way of positive impacts on the environment and human health. An exception was the requirement relating to separate recycling collections, where some respondents saw potential for change depending on the outcome of contract renewals between WCAs and waste management companies over the coming years.

Stakeholder views on barriers to the 2011 Waste Regulations achieving their long term environmental objectives and their views on how the longer term environmental objectives could be achieved are set out in Annex D. To summarise, stakeholders called for:

- Taking a more holistic view of waste in terms of resource efficiency and resource security, and ensuring integration of waste and resource-related plans with other Government plans and strategies.
- Early communication from Government on policy direction to provide industry and local authorities with adequate time to develop infrastructure and services.
- More collaboration between policy makers, manufacturers, environmental companies, local authorities, reprocessors and the rest of the industry around policy, strategy, technology, services and infrastructure design.
- Improving monitoring and evaluation, and consideration of alternative or additional targets to ensure efforts are focussed to achieve greatest environmental benefit, whilst also taking into account social and economic impacts. Ensure a common standard for reporting internationally if comparisons are to be made, to create a level playing field.
- Identifying alternative ways to move waste up the hierarchy, by stimulating the market and shifting responsibility to the manufacturer for environmental impacts of their products over their lifetime.
- Redesign of the Carriers, Brokers and Dealers (CBD) registration system in order to drive poor performance out of the industry and enable the EA to target compliance work at high risk operators, whilst ensuring burdens are kept to a minimum for lower risk operators, by:
  - requiring additional information at registration to enable risk assessment by EA;
  - introducing tighter requirements for higher risk operators, for example

---

<sup>17</sup> These first two paragraphs have been added to the report following the RPC's review.

- a technical competence test at registration including on the waste hierarchy; and/or
  - mandating use of EDOC.
- Further developing the electronic duty of care (EDOC) platform and increasing uptake for a number of reasons: to increase efficiency and accuracy relating to Waste Information Notes; to generate data useful to organisations to improve performance and cut costs relating to waste management; to facilitate compliance work; and to generate monitoring data related to the waste hierarchy. In order to limit burdens, ensure that EDOC can be integrated with, rather than replace, existing waste information management systems, and that it is user friendly and as streamlined as possible.

Please note that the views of stakeholders do not represent Government policy or views.

### Unintended effects

There were few unintended consequences or wider impacts mentioned by stakeholders of the Regulations as they are currently applied. The key ones are described below. A number of potential wider impacts were highlighted that could materialise were the Regulations interpreted more tightly; these are outside the remit of this review.

A few instances were raised by stakeholders where they felt some private companies were exploiting opportunities to benefit from the requirements of the 2011 Waste Regulations. This was not the policy intention. Respondents alluded to the following examples where this can have a resultant negative impact on other organisations, financially or commercially:

- Stakeholders were concerned that the Carrier, Broker and Dealer register gives credibility to those who may be operating illegitimately, as no proof of competence is required in order to register.
- One respondent noted that there are some service provider websites that charge CBDs a fee, on top of the EA fee (if applicable), to register.
- A number noted a great variation in amounts charged by Waste Management Companies to include Waste Transfer Notes as part of their service; some were seen as overcharging customers considerably.
- A few stakeholders felt that some local authorities were being charged by consultants for poor quality TEEP assessments, in the absence of official government guidance. This could occur particularly in cases where local authorities may not have the technical knowledge necessary to carry out the assessment in house or to challenge the quality of what was produced.

Some stakeholders highlighted that some local authorities had received criticism and the threat of legal challenge from campaign groups and the media related to the recycling regulations. This was directed towards those authorities not moving to separate recycling collections and/or not achieving a 50 per cent household recycling rate, despite neither being mandatory for local authorities in the 2011 Waste Regulations. The amount of resources needed to refute a challenge and its other implications was a concern for local authorities.



A number of respondents felt that the recycling rate – both generally, and in terms of its measurement by weight – carries some perverse incentives. These include incentivising recycling over other routes higher up the waste hierarchy; and encouraging a focus on recycling of the heaviest materials rather than that bringing the most environmental benefit. There was, nevertheless, general support for having a recycling target.

Some respondents felt the charity shop and reuse sector's role in keeping waste out of landfill has been overlooked in the development of some programmes and interventions relating to waste prevention and reuse. They believed that achieving social outcomes, a key objective of the charity shop and reuse sector, were not being sufficiently considered in the design of these programmes.

## Findings: Costs and Benefits of the 2011 Waste Regulations

### 5a. Please provide a brief recap of the original assumptions about the costs and benefits of the regulation and its effects on business (e.g. as set out in the IA).

The Impact Assessment (IA) (Defra, 2010) estimated the Net Present Value (NPV) of the transposition of the revised Waste Framework Directive at -£60.9m (Defra, 2010) over 10 years. There were no monetised benefits; the figure therefore comprises present value costs only. A separate Impact Assessment was not produced specifically for the 2011 Waste Regulations; we have therefore attempted to extract the relevant analysis in this section.

According to the IA, the negative impact on business, charities or voluntary bodies was expected to be limited because there would be no additional costs associated with the re-enactment of a number of existing waste management controls. Any additional costs would arise from the new or revised provisions introduced in the revised Directive.

Two objectives relating to the 2011 Waste Regulations were predicted in the rWFD IA to incur costs<sup>18</sup>:

- **Waste Hierarchy:** For organisations to apply the waste hierarchy as a priority order at the point of waste transfer<sup>19</sup>. The requirement relating to the waste hierarchy was estimated in the IA to be most burdensome, with a one-off cost to businesses of up to £38.4m and ongoing costs of up to £4.6m for new businesses, due to the admin burden for organisations of reading the guidance.
- **Carrier registration:** For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency (EA). The IA had deemed the new registration process for lower tier CBDs to incur the second highest costs, at up to £11.5m in one-off costs to businesses and ongoing costs of up to £1.4m for new businesses.

There were no key monetised benefits in the Impact Assessment. Non-monetised benefits were described as potential reduction in damage to environment, health and disamenity costs owing to measures on CBD registration; and potentially a small increase in recycling (2-4%) and food

---

<sup>18</sup> The IA for the transposition of the WFD predicted costs in two others areas not covered in 2011 Waste Regulations and so the estimated costs are excluded from this review, for the following reasons:

- Local Waste Management Plans: the 2011 Waste Regulations cover the Waste Management Plan at a national, rather than local, level
- Hazardous Waste: As explained in the introduction, the 2011 Waste Regulations amended the 2005 Hazardous Waste Regulations. We have not reviewed these changes to hazardous waste management in this PIR, as any assessment of impacts would tie in closely with other aspects of the 2005 Hazardous Waste Regulations.

<sup>19</sup> The IA identified three 'stages' of action relating to the Waste Hierarchy, in order to transpose the WFD's Waste Hierarchy-related requirements. Stage 3 only is relevant to the 2011 Waste Regulations; the other two stages were implemented using other means. This review, therefore, has used figures and analysis from the IA on stage 3 only.

waste prevention (0.3-0.5%) over a 10 year period as a result of the measures relating to the Waste Hierarchy<sup>20</sup>.

These costs and benefits are set out in

Table 2.

**Table 2 Estimated costs and benefits of the 2011 Waste Regulations, extracted from the rWFD IA**

Objective	Impact Assessment estimates: over 10 years				
	Transition costs	Transition costs relate to:	Ongoing annual costs	Ongoing costs relate to:	Benefits (non-monetised)
<b>Waste Hierarchy</b> For organisations to apply the waste hierarchy as a priority order at the point of waste transfer <sup>21</sup>	£21.9m to £38.4m	Cost to all businesses not requiring a permit of reading and understanding the Waste Hierarchy guidance	£2.6m to £4.6m	Cost to all new businesses or reading and understanding the Waste Hierarchy guidance	2-4% increase in recycling  0.3-0.5% increase in waste prevention
<b>Carrier registration:</b> For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency (EA)	£5.5m to £11.5m	Cost to lower tier CBDs to register	£0.6m to £1.4m	Cost to new businesses to register	May reduce potential damage to environment, health and disamenity costs
	£140,000	IT costs to EA		(none identified in IA)	
<b>TOTAL</b>	<b>£27.54m to £50.04m</b>		<b>£3.2m to £6m</b>		
<b>Best estimate (mid-point)</b>	£38.65m		£4.6m <sup>22</sup>		

This breakdown in

<sup>20</sup> The IA's estimated benefit for increased recycling and food waste prevention related to all three stages of action for the Waste Hierarchy, and this figure has been taken in full as a proxy as it is unclear from the IA how it should be divided between the three stages.

<sup>21</sup> See footnote 19.

<sup>22</sup> This figure could be refined if the original IA had provided details on how ongoing costs were distributed across the ten year period; a mid-point has been used in the absence of these details.

Table 2 shows that whilst the overall costs estimated in the IA are high, the majority consist of one-off transition costs: in the range of £27.4m to £49.9m for businesses and £0.14m to the EA. Ongoing costs to business were estimated to be relatively low in comparison, at a maximum of £6m per annum over 10 years; the IA did not identify any ongoing costs for the public sector.

We have not been able to estimate an overall NPV for the 2011 Waste Regulations as annual costs were not distributed evenly over the 10 year period in the IA, and there is insufficient detail in the IA on how these have been split; it appears that not all ongoing costs were applied from year 1.

In summary, the best estimate for the one-off transition cost for the 2011 Waste Regulations, using data from the IA for the transposition of the rWFD, is £38.65 million<sup>23</sup>. The annual costs range from £3.2m to £6m per annum over 10 years, with a mid-point of £4.6m.

## **5b. What have been the actual costs and benefits of the regulation and its effects on business?**

*Please highlight how these differed from the original assumptions and any reasons which explain these differences.*

### Summary

Our analysis of existing studies, data and stakeholder interviews provided mainly qualitative, descriptive insight into costs and benefits of the 2011 Waste Regulations as they are currently applied. No new monetary, and very little quantitative, data was identified to inform new analysis of the costs and benefits, or to help revise the figures extracted from the IA in Table 2 above.

Key costs and benefits to businesses, organisations, local authorities, and people of each requirement are set out in Annex E, to the extent to which evidence is available. In summary:

Interviews with stakeholders and existing studies suggest that the public sector has been more affected by resultant costs and burdens than the private sector. The main affected parties appear to be:

- Local authorities as a result of the recycling-related requirements; and
- The Environment Agency in terms of administering processes and compliance-checking relating to Carriers, Brokers & Dealers and Waste Information Notes.

Householders are also affected to some extent, in particular as an indirect impact if costs to local authorities are passed on to the taxpayer.

### Comparison with Impact Assessment

In contrast to the predictions of the Impact Assessment, no individual regulation was highlighted by stakeholders as particularly burdensome to businesses.

---

<sup>23</sup> Calculated by taking the midpoint.

More specifically, evidence from this PIR suggests that the high costs predicted in the IA of the two objectives of the 2011 Waste Regulations outlined above have not materialised. These regulations relating to the waste hierarchy and to registration of CBDs were not seen by stakeholders as burdensome in the way they are currently applied; and the EA's registration process for CBDs was commended by some for its streamlined nature.

The IA had considered the one-off cost to the EA of setting up the CBD registration system; however, some stakeholders as part of this review also highlighted the ongoing costs to the EA of administering the system.

Looking more widely than the 2011 Waste Regulations, one respondent pointed to the cumulative burden for small businesses of many seemingly small requirements resulting from waste and other regulation more generally.

Table 3 compares the Impact Assessment estimates with the findings of this Post Implementation Review.

**Table 3 Comparison of Impact Assessment cost and benefit estimates with Post Implementation Review findings**

Objective	Impact Assessment estimates: over 10 years			PIR findings on costs and benefits
	Transition costs and description	Ongoing annual costs and description	Benefits (non-monetised)	
<p><b>Waste Hierarchy</b> For organisations to apply the waste hierarchy as a priority order at the point of waste transfer</p>	<p>£21.9m to £38.4m <i>Cost to all businesses not requiring a permit of reading and understanding the Waste Hierarchy guidance</i></p>	<p>£2.6m to £4.6m <i>Cost to all new businesses or reading and understanding the Waste Hierarchy guidance</i></p>	<p>2-4% increase in recycling  0.3-0.5% increase in waste prevention</p>	<p>Stakeholders generally felt that businesses rarely engaged with the guidance and the waste hierarchy as a result of this regulation as it is currently applied. They therefore didn't see particular costs or benefits associated with this regulation. Given that respondents felt there was low awareness of this regulation and engagement with the guidance among small businesses, this suggests that any costs associated with this regulation would fall more to larger businesses.</p> <p>It is not possible to determine attribution of any changes in recycling or waste prevention to this or any one policy or regulation. Interviews with stakeholders suggested that these benefits (and therefore any associated environmental benefits) have not necessarily yet materialised as a result of this regulation.</p>
<p><b>Carrier registration:</b> For all waste carriers, brokers and dealers (CBDs) to register with the</p>	<p>£5.5m to £11.5m <i>Cost to lower tier CBDs to register</i></p>	<p>£0.6m to £1.4m <i>Cost to new businesses to register</i></p>	<p>May reduce potential damage to environment, health and disamenity costs</p>	<p>The EA's registration process for lower tier CBDs was not seen as overly burdensome by those we spoke with; some commended it on its streamlined nature, although a number also expressed that it did not lead to environmental benefits.</p> <p>We estimate the actual annual costs for new lower tier CBDs at £0.26m in 2015/16 and £0.35m in 2016/17 (see annex E for more</p>

Environment Agency (EA)				<p>detail); these are significantly lower than the costs predicted in the IA. These costs are associated with registering as a CBD, which suggests that costs would fall more to start-ups than established operations. However, these costs associated with lower tier registrations, who would tend to those not profiting commercially from transporting waste (due to it generally being their own), are relatively low in comparison to the annual costs to new and renewing upper tier CBDs, who are generally operations whose commercial activity has a focus on transporting waste.<sup>24</sup></p> <p>It is not possible to determine attribution of any changes in ‘damage to environment, health and disamenity costs’ to this or any one policy or regulation. Interviews with stakeholders suggested that the potential benefits have not been fully realised to date; waste crime remains a significant problem, and a number of respondents highlighted that the current CBD system does not ensure competence or compliance with the Duty of Care regime.</p>
	£140,000 <i>IT costs to EA</i>			<p>The extension of the requirement to register those who carry small amounts of their own waste as lower tier CBDs was highlighted by some respondents as a burden for the EA, which bears the cost of setting up and running the system. The EA estimates the annual running cost of the CBD system at £140,000.</p>
<b>TOTAL</b>	<b>£27.54m to £50.04m</b>	<b>£3.2m to £6m</b>		

<sup>24</sup> We have not included costs to upper tier CBDs in this section, as these were not covered in the original IA due to not being new costs: the requirement for those organisations to register with the EA was already in place, and the 2011 Waste Regulations extended this requirement to include lower tier CBDs (see annex B for more background on implementation of this regulation). Annex E includes a description and estimates of costs to upper tier CBDs to provide a complete picture of costs associated with this requirement.

The key costs to the public sector emerging from interviews with stakeholders were not identified in the Impact Assessment. Respondents told us that:

- The requirement relating to separate collection of recyclate requires considerable resource of local authorities to either outsource, or conduct and write up, the necessity and TEEP assessments. Whilst some saw these costs as disproportionate; some felt there could be associated benefits e.g. identifying potential efficiency savings, and/or that the burden would fall with time.
- Stakeholders generally felt strongly that the effort to contribute to achieving the national recycling target put considerable burdens on local authorities in a context of strong budgetary pressures. Urban authorities tend to be affected disproportionately.
- There are on-going costs to the Environment Agency in terms of administering processes and compliance-checking, in particular relating to Carriers, Brokers & Dealers but also Waste Information Notes and TEEP & necessity assessments. Some felt the resource could be more usefully invested if the related requirements allowed a more targeted risk-based system and enforcement approach.

In general, it is too early to assess the long term benefits of the Regulations, particularly when it comes to environmental improvement. It would, in any case, be difficult to conclusively attribute any observed longer term improvements to the Regulations, given the many other policies and external factors that can affect outcomes. Stakeholders, though, were generally of the view that few environmental benefits had been realised to date as a direct result of the Regulations as they are currently applied.

Stakeholders raised a number of theoretical costs and some benefits, which could manifest themselves if the Regulations were interpreted to the letter and adhered to tightly. These were deemed outside the scope of this PIR.



## Limitations and lessons learned

### 6. Assessment of risks or uncertainties in evidence base / Other issues to note

- What are the main limitations to the evidence base for the PIR?
- Are there any other issues which should be considered when this PIR is reviewed?

Carrying out a full evaluation was not deemed a proportionate approach for this Post Implementation Review (see 'Methodology' chapter above). There were no existing robust evaluations of the Regulations, or data on monetised costs and benefits or unintended consequences. Qualitative data has in our view provided sufficient evidence to inform this PIR, given the limited scope for immediate changes while continuing to comply with the revised Waste Framework Directive.

We feel relatively confident that our data gathering exercises outlined in question 3 and Annex C will have picked up any key issues with the 2011 Waste Regulations, in relation to the questions set out in the review clause. However, whilst effort was made to speak with a range of stakeholders, it should be noted that their views are not necessarily representative of all those affected by the 2011 Waste Regulations. In an exercise of limited size, we were not able to speak with representatives of all sectors.

Some regulations were commented on by relatively few stakeholders, and therefore findings should be treated with caution. Specifically, these include the 70 per cent recovery target for construction and demolition waste, and the application of the proximity and self-sufficiency principles.

### 7. Lessons for future Impact Assessments *Are there any significant lessons for future IAs arising from this PIR, e.g. were any costs or benefits substantially mis-estimated and, if so, how can better estimates be obtained in future?*

The Impact Assessment covered the transposition of the revised Directive 2008/98/EC on waste, known as the revised Waste Framework Directive (WFD).<sup>25</sup> A separate Impact Assessment was not produced specifically for the 2011 Waste Regulations. A number of issues stem from this:

- It would be helpful in the future if an Impact Assessment or another document could set out how each of the objectives of the Directive is to be transposed, and in what piece of legislation, to facilitate identifying which costs relate to which Regulations.
- The IA did not cover all of the key objectives of the 2011 Waste Regulations, such as Waste Transfer notes.

---

<sup>25</sup> The WFD was also transposed through multiple new or amendments to other regulations, most notably the 'Environmental Permitting (England and Wales) Regulations 2010' (as amended); 'Hazardous Waste (England and Wales) Regulations 2005'; 'List of Wastes (England) Regulations 2005'; and Environment Protection Act 1990'. The List of Wastes (England) Regulations 2005 have since been repealed and are now incorporated into the Hazardous Waste Regulations 2005 by means of the Hazardous Waste (Miscellaneous Amendments) Regulations 2015.

- For clarification and traceability purposes it would be helpful if any additional objectives (other than those in the Directive) could be mentioned in the Impact Assessment, if known at that point, and/or in the Explanatory Memorandum accompanying the legislation. On a similar note, where the IA included multiple options to meet one objective, it would be helpful to have an indication of which one was finally chosen.

More generally:

- Some regulations appeared not to have been assessed in the IA from the perspective of the administrative burden they would create for particular parties, in particular the public sector, including the regulator and local authorities (see q.5b above). Potential administrative burdens might have been more accurately assessed in the IA by consulting with stakeholders in advance.
- The estimates in the IA could have potentially been refined by attempting to identify the likelihood of organisations, or particular subgroups of organisations, engaging with the requirements of each regulation. It is not clear as to whether the IA assumed 100% uptake; our interviews with stakeholders suggested particular regulations were not adhered to by all, despite being a legal requirement, and that therefore costs in reality, in particular to businesses, may have been lower than predicted as are the associated benefits.
- It would have been useful if the IA had:
  - included a brief explanation of how ongoing costs were expected to be split across the ten years, given that these costs were not distributed evenly; and
  - stated in what year the costs associated with different requirements begin to apply (if not from year 1).
- The PIR plan in the Impact Assessment could have been more helpful, had it identified a proportionate approach for the review, and the key metrics needed to assess effectiveness, costs and benefits of the various regulations. Ideally, it would have put a proportionate process in place to collect this data on a regular basis, as well as the baseline data. Similarly, if possible, it would be beneficial if the IA and implementation process could involve a forward look to take advantage of any planned stakeholder engagement exercises to review the regulation.

## Next steps for the 2011 Waste Regulations

**8. What next steps are proposed for the regulation (e.g. remain/renewal, amendment, removal or replacement)?** *Please summarise rationale and provide evidence below.*

On 23 June 2016, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until 29 March 2019, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation.

The Regulations assessed in this Post Implementation Review will currently remain in place as they form the UK's transposition of the EU revised Waste Framework Directive and there would be limited scope to change them without compromising our compliance with the Directive requirements.

This PIR has found the running costs of the Regulations are not disproportionately high, especially compared to those predicted in the Impact Assessment, nor are they generally burdensome to businesses.

There are workstreams in place, focusing on reviewing and amending particular aspects of implementation. For instance, the commitments made following the Cutting Red Tape review of the waste sector are published [here](#).

The government is producing a Resources & Waste Strategy for the longer term to look ahead at opportunities outside the EU.<sup>26</sup> The findings of this review are informing the development of that strategy and other policy.

---

<sup>26</sup> Since time of writing, the Resources & Waste Strategy has been published:  
<https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

## Comparison with EU Member States

**9. Comparison with EU Member States** *‘In carrying out the review the Secretary of State must, so far as is reasonable, have regard to how the Waste Framework Directive (which is implemented in part by means of these Regulations) is implemented in other member States’*

The approach for data collection on EU Member States, and whether or not this was achieved, is set out in Annex C. In summary, as with the rest of the review, we adopted a light-touch approach to gathering data on how other EU Member States had implemented the rWFD. This entailed restricting some of the data collection exercises to focus on France and Germany, as key Member States with similar sized economies to the UK

Policy leads for the various areas covered by the 2011 Waste Regulations felt that there would be no or minimal ways to minimise burdens to businesses whilst continuing to comply with the revised Waste Framework Directive. Table 8 in Annex F sets out information on how other Member States have implemented each relevant area of the rWFD. The review found that there was little evidence of England going beyond the requirements of the Directive.

However, some stakeholders felt that the calculation method chosen by England for reporting the household recycling rate means that the national recycling rate is an underestimate compared to that of some other Member States who use different calculation methods.

## Annex A: Glossary

AD – Anaerobic Digestion

C&D – Construction and Demolition

CBDs – Carriers, Brokers and Dealers

EDOC – Electronic Duty of Care

EfW – Energy from Waste

GHG – Greenhouse Gases

IA – Impact Assessment

IBA – Incinerator Bottom Ash

MRF – Materials Recovery Facility

MS – Member States

NPV – Net Present Value

PIR – Post Implementation Review

TEEP – technically, environmentally and economically practicable

WCA – Waste Collection Authority (i.e. local authorities that collect municipal waste)

WDA – Waste Disposal Authority

rWFD – revised Waste Framework Directive

WIN – Waste Information Note

WMP – Waste Management Plan for England

WPP – Waste Prevention Programme for England

WTN – Waste Transfer Note

## Annex B: Implementation of the 2011 Waste Regulations

Annex B describes how the objectives of the 2011 Waste Regulations set out in the Introduction of the main report have been implemented.

### **1. Waste Management Plan:** *For the Government to revise the scope and content of waste management plans*

The 2011 Waste Regulations required the Secretary of State to ‘ensure that there are one or more plans containing policies in relation to waste management in England or Wales’. The Government published the Waste Management Plan for England in December 2013 (Defra, 2013c), having consulted on the Plan earlier that year (Defra, 2013c). The Plan follows the European Commission’s guidance on how to prepare a Waste Management Plan.

There were already comprehensive waste management policies in place in England, which, taken together, aimed to deliver the objectives of the revised Waste Framework Directive. Government did not intend to use the Plan to introduce new policies or change the landscape of how waste is managed in England. The core aim was to bring waste management policies under the umbrella of one national plan.

Note that Local Waste Management Plans are not a requirement under 2011 Waste Regulations; these fall under National Planning Policy for Waste, and have therefore not been included within this review.

### **2. Waste Prevention Programme:** *For the Government to establish waste prevention programmes*

The 2011 Waste Regulations required the Secretary of State, by 12 December 2013, to:

- ‘evaluate the usefulness of the waste prevention measures set out as examples in Annex IV of the Waste Framework Directive and any other such measures the authority thinks fit; and
- establish one or more programmes of waste prevention measures (each a “waste prevention programme”)', which could include existing waste prevention measures.

The Evaluation of Annex IV measures (Defra, 2013d) and the Waste Prevention Programme for England (WPP) (HM Government, 2013) were both published in December 2013, following consultation (Defra, 2013e).

The aim of the programme is to improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced, whilst promoting sustainable economic growth. The WPP sets out a range of actions for Government, businesses, public sector, civil society and consumers aimed at helping break the link between economic growth and environmental impacts.

The main elements of the Programme consist of voluntary agreements with waste prevention at their core, covering food and packaging, clothing and electrical products. These operate across

the UK and aim to enable organisations and individuals to reduce waste and become more resource efficient and competitive. In England, Defra funds WRAP to coordinate these projects.

Defra established the following set of national metrics to help us measure the impact of our waste prevention activities – set out in the ‘Digest of Waste and Resource Statistics’ (Defra, 2016a):

- Raw Material Consumption per unit of GDP
- Waste arisings by sector (construction and demolition, commerce, industry, household)
- Hazardous waste arisings by sector
- Waste arising per unit of gross value added for the commercial and industrial sector
- Gross value added of the repair and reuse sector
- GHG emissions from landfill

Specific programmes within the WPP such as the Courtauld agreement and the Sustainable Clothing Action Plan have their own set of metrics. Reviewing specific programmes included within the WPP is outside the scope of this PIR exercise.

**3. Waste Hierarchy:** *For organisations to apply the waste hierarchy as a priority order at the point of waste transfer*

Regulation 12 of the 2011 Waste Regulations states that *‘an establishment or undertaking which imports, produces, collects, transports, recovers or disposes of waste, or which as a dealer or broker has control of waste must, on the transfer of waste, take all such measures available to it as are reasonable in the circumstances to apply the following waste hierarchy as a priority order--*

- prevention;*
- preparing for re-use;*
- recycling;*
- other recovery (for example energy recovery);*
- disposal.*

*‘An establishment or undertaking may depart from the priority order in paragraph (1) so as to achieve the best overall environmental outcome where this is justified by life-cycle thinking on the overall impacts of the generation and management of the waste’.* This includes taking environmental, health, economic and social impacts into account, and is dependent on what is feasible from a technical perspective.

Defra has produced guidance on the waste hierarchy for waste handlers (Defra, 2011). This is complemented by a ‘route map’ produced by Eunomia on behalf of a working group comprising members of local authority waste networks (coordinated through the Waste Network Chairs), the London Waste and Recycling Board and WRAP. The route map sets out waste handlers’ duties in relation to the waste hierarchy (WRAP, 2014). An example of applying the Waste Hierarchy at the point of waste transfer, could be an estate agent undergoing an office

refurbishment, donating desks and chairs to a charity or charity shop / reuse network rather than disposing of them. Computers could also be donated for reuse, or to be dismantled, with some of the parts being prepared for reuse.

In order to comply with the regulation, on the transfer of waste, waste handlers must include a declaration on their Waste Information Notes or Hazardous Waste Consignment Notes confirming that they have complied with this duty. No other actions are required to demonstrate compliance.

**4. Household recycling target:** *For at least 50% by weight of waste from households to be prepared for re-use or recycled by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target*

The 2011 Waste Regulations require the Government to include ‘Measures to be taken to ensure that, by 2020, at least 50 per cent by weight of waste from households is prepared for re-use or recycled’ in the national Waste Management Plan(s). The Government published the Waste Management Plan for England in 2013 (Defra, 2013c).

The Plan sets out the range of initiatives in place to boost household recycling. This included financial support, regulatory measures, economic incentives, and information provision.

There are currently no centrally-imposed recycling targets for individual local authorities, or measures that the regulations require local authorities to take. Historically, national performance indicators were in place in England from 2007. These were removed by the Localism Act in 2011 to ‘allow councils to act on their own local priorities, while also improving recycling rates’.

The European Commission (2011) sets out details of the following four methods that Member States can use to calculate their recycling rate; England uses the third:

- Preparation for reuse and recycling of paper, metal, plastic and glass household waste;
- Preparation for reuse and recycling of paper, metal, plastic, glass household waste and other single types of household waste or similar waste;
- Preparation for reuse and recycling of household waste; and
- Preparation for reuse and recycling of municipal waste.

In practice, data are submitted by all Local Authorities through an on-line data reporting portal, WasteDataFlow ([WasteDataFlow](#)). This records the collection and treatment of waste from households. The tonnage of recyclate is recorded as the tonnage of waste accepted at the gate of the reprocessor.

**5. Separate recycling collections:** *For waste collectors to collect paper, metal, plastic and glass separately from each other and other waste materials – where necessary for quality*



*reasons to ensure recovery<sup>27</sup>, and where technically, environmentally and economically practicable (TEEP)*

The 'Waste (England and Wales) (Amendment) Regulations 2012' require waste collection authorities (WCAs) and establishments or undertakings that collect waste paper, metal, plastic or glass to do so by way of separate collection from 2015 onwards. This duty applies where separate collection is both:

- *'necessary to ensure that waste undergoes recovery operations in accordance with Article 4 and 13 of the WFD and to facilitate or improve recovery; and*
- *technically, environmentally and economically practicable (TEEP)'*.

This regulation applies to both the public and private sector.

In order to comply with these regulations, waste collection authorities and undertakings must conduct:

- a 'necessity' test to establish if separate collections are necessary in order to ensure an appropriate level of quality in recyclate for recovery; and
- a 'TEEP' test, to establish if it would be technically, environmentally and economically practicable (TEEP) to collect those dry materials separately.

The legislation does not state the frequency with which necessity and TEEP assessments should be conducted.

The European Commission guidance (2012) states that *'considering that the aim of separate collection is high-quality recycling, the introduction of a separate collection system is not necessary if the aim of high-quality recycling can be achieved just as well with a form of co-mingled collection'*.

*'Technically practicable' means that the separate collection may be implemented through a system which has been technically developed and proven to function in practice. 'Environmentally practicable' should be understood such that the added value of ecological benefits justify possible negative environmental effects of the separate collection (e. g. additional emissions from transport). 'Economically practicable' refers to a separate collection which does not cause excessive costs in comparison with the treatment of a non-separated waste stream, considering the added value of recovery and recycling and the principle of proportionality.*

If the necessity and TEEP tests establish that a move to a separate recycling collection service is necessary for recovery of those materials and TEEP, then the waste collection authority or undertaking must make this change. If a move to separate collections is either not necessary, or not TEEP, then no change is required.

A briefing note was published by the EA to 'provide information to help those affected to meet the requirements' (Environment Agency, 2014). Guidance was commissioned and published by a working group comprising the Waste Network Chairs, the London Waste and Recycling Board

---

<sup>27</sup> where necessary to ensure that waste undergoes recovery operations in accordance with Article 4 and 13 of the WFD and to facilitate or improve recovery.

(LWARB) and WRAP (WRAP, 2014). No statutory guidance for England has been published to date.

The regulation came into effect relatively recently in 2015. The Environment Agency carried out a survey of waste collection authorities to assess how they were implementing the regulations relating to separate recycling collections (2016). The Environment Agency is now increasing compliance activity, following the risk-based approach set out in its briefing note (2014).

**6. Construction waste recovery target:** *For at least 70% by weight of non-hazardous construction and demolition waste to be subjected to material recovery by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target*

The 2011 Waste Regulations require the national Waste Management Plan to include measures to be taken to ensure that the recovery rate of non-hazardous construction and demolition waste is at least 70 per cent by 2020.

In 2014, England generated an estimated 49.1 million tonnes of non-hazardous C&D waste, of which 44.9 million tonnes was recovered. This represents a recovery rate of 91.4 per cent, which is above the target of 70 per cent which the UK must meet in 2020 (Defra, 2016c).

The recovery rate from non-hazardous construction and demolition waste has remained at similar levels from 2010 to 2014 and has at all times been comfortably above the target of 70 per cent (Defra, 2016c).

Despite already meeting the target, it was introduced in the 2011 Waste Regulations in order to comply with the revised Waste Framework Directive.

Accurately quantifying C&D waste is challenging and whilst the absolute tonnage figures are subject to a relatively high level of uncertainty, there is not a significant impact on the final recovery rate.

As the construction and demolition industry is effectively self-regulating in this area, there are no active Government policies on construction and demolition recovery.

**7. Waste infrastructure:** *For local authorities to apply the self-sufficiency & proximity principles, to create an integrated and adequate network of installations for waste disposal and the recovery of mixed municipal waste from household waste*

Regulations 16-20 of the 2011 Waste Regulations include the requirement from the original Waste Framework Directive (WFD) for local authorities to create an integrated and adequate network of waste disposal installations. In response to Article 16 of the revised WFD, the requirement is extended to *'installations for the recovery of mixed municipal waste collected from private households, including, where such collection also covers such waste from other producers'*.

There were minimal changes to national planning guidance made as a result; the bulk of these requirements were already in place when the 2011 Waste Regulations were brought in. The

existing waste planning system in England in 2011 already required local authorities to plan for an adequate network of facilities for managing waste at all steps in the hierarchy. The proximity principle was recognised through an objective in waste planning guidance that communities take more responsibility for their own waste, and enable sufficient and timely provision waste management facilities to meet the needs of those communities.

In practice, planning guidance (DCLG, 2014) requires local authorities to include a '*plan for the disposal of waste and the recovery of mixed municipal waste in line with the proximity principle*' in their Local Plans. These Local Plans are revised on a 5-yearly basis, or sooner if necessary. Having been out to public consultation, the Plan is then scrutinised by the Planning Inspectorate – who are responsible for checking, amongst other things, that the Plan conforms with National Planning Policy.

### **8. Carrier registration:** *For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency*

Carriers, brokers and dealers (CBDs) are those people or businesses who transport, buy, sell or dispose of waste, or arrange for someone else to do so. Under the 2011 Waste Regulations, all CBDs in England must register with the Environment Agency.

The CBD registration system is in place to help ensure waste is transported and managed safely. A certification system for CBDs is critical to the Environmental Protection Act 1990 Waste Duty of Care regime (Defra, 2016d), which requires anyone dealing with waste to ensure it is only given to businesses authorised to take it. The registration system was first introduced under the 'Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991'; these Regulations were partially revoked by the 2011 Waste Regulations.

The 2011 Waste Regulations extended the requirement for registration of Carriers, Brokers & Dealers to include those who are dealing with their own waste. A two-tier registration system was introduced by the EA in December 2013, where the lower tier, free registration, applies to organisations carrying waste that they produce themselves (previously they were not required to register); and the upper tier (with a charge of £154 for 3-year registration, and £105 for subsequent renewals) includes commercial waste carriers. Failure to register could lead to a fine of up to £5,000.

More specifically, the lower and upper tiers are differentiated in the following way<sup>28</sup>:

A person or organisation will be lower tier if they:

- only carry waste they produced in the course of carrying out their business *unless* it is construction or demolition waste
- only carry (carrier), arrange (broker) or deal (dealer) in:
  - animal by-products
  - waste from mines and quarries

---

<sup>28</sup> <https://environment.data.gov.uk/public-register/view/search-waste-carriers-brokers>

- waste from agricultural premises
- are a charity or voluntary organisation

A lower tier CBD may also include a waste collection, disposal or regulation authority.

If none of the lower tier criteria apply, a person or organisation will be in the upper tier. Key examples are if a business:

- transports other people's waste, like a skip company
- carries construction and demolition waste
- arranges for waste from other businesses' to be transported, recovered or disposed of (broker)
- buys or sells waste, or uses an agent to do so (dealer).

The EA introduced an online registration portal in April 2015, for lower and upper tier CBDs<sup>29</sup>. Before adding applicants to the register, the Environment Agency checks those who have declared a conviction, and a proportion of those that do not declare a conviction<sup>30</sup>. Upper tier CBDs failing to renew after 3 years are removed from the register. The Environment Agency has the powers to revoke registered CBDs who receive a conviction post-registration.

The Environment Agency's operational teams provide y and guidance to organisations relating to the register, and carry out compliance work such as: roadside checks to ensure waste carriers are registered; site inspections or audits of registered Carriers, Brokers & Dealers (CBDs); and local campaigns to identify those that are unregistered.

Over 185,000 organisations have registered as CBDs, since the online portal was introduced in April 2015 (Environment Agency, 2017).

**9. Waste transfer information:** *For organisations to record and retain specific information about waste and its movement, upon its transfer.*

The 2011 Waste Regulations require all those who transfer and receive non-hazardous waste<sup>31</sup> to keep a record of the transfer – via a Waste Information Note (WIN), often referred to as a Waste Transfer Note (WTN). The requirement for handlers of waste to have WINs was introduced under 'The Environmental Protection (Duty of Care) Regulations 1991' and is now found in the 2011 Waste Regulations.

A Waste Information Note is a document that details the transfer of waste from one person to another. Every load of household, industrial or commercial waste (known as controlled waste) transferred from one establishment or person to another must be covered by a WIN (this does not apply to householders). The information recorded on the WIN provides the 'written

---

<sup>29</sup> <https://www.gov.uk/waste-carrier-or-broker-registration>

<sup>30</sup> Note that convictions relating to waste crime do not remain on criminal records indefinitely (Rehabilitation of Offenders Act).

<sup>31</sup> With the exception of householders

description' of waste required to meet the Waste Duty of Care provisions under section 34(1)(c) of the Environmental Protection Act 1990.

It is up to waste holder to self-assure that they have completed all the information required by law in handing over the WIN to another holder. Similarly, the person who receives the waste should self-assure that an accurate WIN has been provided, with the description matching the waste.<sup>32</sup>

WINs must be kept for two years. They create an auditable system that tracks waste and therefore reduces the opportunity for unlawful disposal. They also support the enforcement and prosecution by the EA in cases of illegal disposal. There is no duty on the EA or local authorities to check compliance relating to WINs.

It was estimated in 2010 that 23.5 million WINs were being produced in the UK each year; this was calculated as part of the Electronic Duty of Care (EDOC) pilot (Defra, 2013a).

WINs can be paper-based or in electronic form. The latter use the free Electronic Duty of Care (EDOC)<sup>33</sup> online service, launched in 2014.

---

<sup>32</sup> See <https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice> for more information.

<sup>33</sup> <https://www.edoconline.co.uk/>

## Annex C: Evidence Gathering Methodology

Annex 3 outlines the methodology we used to gather evidence to inform this Post Implementation Review of the 2011 Waste Regulations.

### Stage 1: Desk-based research

Stage 1 consisted of gathering relevant evidence from reports, reviews and admin data known to Defra and delivery bodies including the Environment Agency (EA) and the Waste & Resources Action Programme (WRAP). This includes studies and consultations by Defra (including the cutting red tape programme), agencies, industry, and the European Commission. A full reference list is included at the end of this report.

### Stage 2: Key stakeholder interviews

We conducted 20 qualitative semi-structured depth interviews with key stakeholder organisations<sup>34</sup>, identified by the relevant Defra and DCLG policy leads. A qualitative approach was chosen in order to generate rich detail on stakeholders' views on and experiences of the requirements and implementation of the 2011 Waste Regulations. The interviewees were selected to provide cross-cutting sample of the waste industry and other relevant organisations. Some industries, such as the chemicals industry, were chosen due to the specialist nature of waste produced.

Interviews took place between January and February 2017, lasted up to 2 hours, and were generally conducted by phone with one representative from each organisation.

Stakeholders from the organisations set out in Table 4 were interviewed:

**Table 4 Stakeholders interviewed for the 2017 review of the 2011 Waste Regulations**

<b>Organisation name</b>
Environment Agency (EA)
Waste & Resources Action Programme (WRAP)
Environmental Services Association (ESA)
Chartered Institution of Wastes Management (CIWM)
Resources & Waste UK
RWM Ambassadors (Resource & Waste Management Ambassadors)
SUEZ
Local Authority Recycling Advisory Committee (LARAC)

<sup>34</sup> Referred to as 'stakeholders' or 'respondents' henceforth.

National Association of Waste Disposal Officers (NAWDO)
Waste Network Chairs (representing LARAC, NAWDO, ADEPT, ICE)
Anaerobic Digestion & Bioresources Association (ADBA)
Charity Retail Association (CRA)
Furniture Reuse Network (FRN)
Chemicals Industry Association (CIA)
A manufacturer (anonymous)
United Resource Operators Confederation (UROC)
Building Research Establishment (BRE)
Independent consultant working with local authorities on waste planning
Federation of Small Businesses (FSB)

For each key objective of the 2011 Waste Regulations (set out in q.1a above) of interest to them, respondents were asked to give their reflections on the following four aspects:

- Effectiveness of the Regulation(s)
- Unintended consequences
- Costs (burdens) and benefits – qualitative as well as quantitative
- Options for improvement

Minor adjustments were made to interview questions and prompts throughout the fieldwork period based on previous responses. Responses were analysed thematically. The interviews with stakeholders were wide-ranging; some elements of the conversation were outside the remit of the Post Implementation Review, based on the questions set out in the review clause of the Regulations. Defra cares about the views of stakeholders, and where areas were outside the remit of this review, they have been communicated directly to the relevant policy colleague(s).

### Evidence on EU Member state transposition

As the 2011 Waste Regulations transposed a major part of the EU revised Waste Framework Directive, the review clause required us to explore how implementation in England compares with other Member States. Table 5 sets out the approach taken to gathering this evidence. The findings are described in annex F.

**Table 5 Approaches to gathering information on other Member States' implementation of the rWFD**

Data collection method	Achieved?
Consulting with policy colleagues in Defra, DCLG and the EA	Yes

Reviewing the 2012-2015 implementation reports from France and Germany submitted to the European Commission	No. France and Germany had not yet submitted their reports at the time of request (Dec 2016)
Requesting relevant information on implementation from policy officials in France and Germany	France provided a brief description of how most of the relevant rWFD requirements had been implemented.  Germany provided an English translation of the Circular Economy Act (Kreislaufwirtschaftsgesetz), and the Government draft of that law in German. It was not deemed proportionate to translate the German document. The Circular Economy Act provided little detail specifically on implementation of the regulations.
Reviewing relevant reports from the European Commission	Yes. Report on separate recycling collections (European Commission, 2015a); and study on Construction & Demolition Waste (European Commission, 2016) no other reports with sufficient detail on implementation.
Reviewing relevant reports from the European Environment Agency (EEA).	Yes. Reports on waste prevention (European Environment Agency, 2015) and some mention of recycling in other member states (European Commission, 2015c). No reports on other areas covered in the 2011 Waste Regulations – confirmed by the EEA.
Reviewing relevant reports from the Business Taskforce on cutting EU red tape	Yes (Business Taskforce, 2013).  Relevant areas referred to: The CBD regime.
Search engine (google) using relevant key terms	Not found any additional reports of use
Stakeholders	Evidence on some Member States was received from some stakeholders





## Annex D: Effectiveness of Regulations in achieving long term objectives, and stakeholder suggestions for improvements<sup>35</sup>

Stakeholders identified a number of areas where they felt that short or longer term objectives could be achieved with some changes to implementation or broader policy shift. **Table 6** sets out the barriers that stakeholders identified that could prevent or limit the regulations in terms of meeting their objectives; and changes they felt would increase the likelihood of achieving these objectives.

Please note that the views of stakeholders stated in this table do not represent Government policy or views.

**Table 6 Stakeholder suggestions for short and long term improvements to 2011 Waste Regulations**

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>1. Waste Management Plan:</b> For the Government to revise the scope and content of waste management plans</p>	<ul style="list-style-type: none"> <li>• Not strategic enough, or adequate detail on specific on policies and analysis supporting them.</li> <li>• Not sufficiently forward looking or clear on future needs for planning and infrastructure. Industry and local authorities need to be able to plan ahead and develop appropriate infrastructure</li> <li>• For this reason, not currently used much, and could be a more useful tool to help industry and authorities plan ahead, and for waste officers to make a clear argument for why waste infrastructure investment is necessary in planning discussions.</li> </ul>	<p><u>Short term objectives</u></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><u>Long term objectives</u></p> <ul style="list-style-type: none"> <li>• A more proactive and future-looking plan, with clear policies and assessment of needs to ensure effectiveness of the policies, e.g. related to local planning and infrastructure;</li> <li>• Increased integration with other Government strategies such as the industrial strategy, 25 year Environment Plan etc – accompanied by a general shift in thinking from ‘waste’ to ‘resource’<sup>36</sup>.</li> <li>• Include clear plan for monitoring, ongoing analysis and evaluation of a Waste Management Plan.</li> </ul>

<sup>35</sup> This annex has been added following RPC’s assessment of the report.

<sup>36</sup> The Clean Growth Plan was announced after stakeholder interviews had concluded, hence not being mentioned here.

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>2. Waste Prevention Programme</b> : For the Government to establish waste prevention programmes<sup>37</sup></p>	<ul style="list-style-type: none"> <li>• Whilst some stakeholders felt the WPP was useful and dynamic, others felt it was too high level and could have gone further. There were mixed feelings about voluntary agreements, with some viewing the WPP as overly reliant on these</li> <li>• Some criticism of the WPP for failing to recognise, support and build on waste prevention activities already taking place in various sectors, e.g. charity shops, industry innovation.</li> <li>• Focussing on opportunities for waste prevention in isolated sectors or materials by working groups, risks negative knock-on environmental impacts in other areas e.g. food waste and packaging.</li> </ul>	<p><u>Short term objectives</u></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><u>Long term objectives</u></p> <ul style="list-style-type: none"> <li>• Take a more holistic view of waste prevention in terms of resource efficiency and resource security, and linking a waste prevention programme more closely with other strategy such as the National Infrastructure Assessment and Industrial Strategy<sup>38</sup>.</li> <li>• Collaboration and dialogue on an ongoing basis – in the private, public and charity sectors and from policy makers to those in more ‘hands-on’ roles – in order to optimise design and delivery of a holistic waste prevention programme .</li> <li>• Include more detailed plans for monitoring, reviewing and reporting progress on the Waste Prevention Programme, including via ongoing stakeholder engagement. Identify social and economic indicators, in addition to environmental ones.</li> </ul>

<sup>37</sup> A number of the barriers and suggested changes highlighted by stakeholders on the waste hierarchy also apply to this objective.

<sup>38</sup> The Clean Growth Plan was announced after stakeholder interviews had concluded, hence not being mentioned here.

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>3. Waste Hierarchy:</b> For organisations to apply the waste hierarchy as a priority order at the point of waste transfer</p>	<ul style="list-style-type: none"> <li>• Currently little incentive for manufacturers to design products in a way that enables waste to be moved up the hierarchy, or design the waste out.</li> <li>• Responsibility for moving household waste up the hierarchy therefore depends heavily on householders – and it currently falls to local authorities to attempt to instigate behaviour change at household level, which some stakeholders saw as impractical and overly burdensome.</li> <li>• It is not always beneficial from an economic, environmental, or technical perspective to move waste up the hierarchy – in particular the choice between energy recovery and recycling is dependent on externalities, for example the price of crude oil and availability/proximity of infrastructure. Infrastructure and services often limit the materials and/or formats that are recycled.</li> </ul>	<p><u>Short term objectives</u></p> <ul style="list-style-type: none"> <li>• Raising awareness of the benefits – including financial – of moving waste up the hierarchy e.g. by disseminating this along with other information that businesses receive, for example, with business rates.</li> <li>• Introducing a waste hierarchy competence requirement as part of the Carriers, Brokers &amp; Dealers registration to encourage CBDs to challenge producers of waste to consider the hierarchy;</li> <li>• Developing a tool for organisations to consider waste options.</li> </ul> <p><u>Long term objectives</u></p> <p>A number of stakeholders felt that alternative ways to move waste up the hierarchy needed to be identified, in order to stimulate the market and shift responsibility to the manufacturer for environmental impacts of their products over their lifetime. France and Slovenia received positive mentions for their Extended Producer Responsibility (EPR) schemes. Some specific actions suggested by stakeholders included:</p> <ul style="list-style-type: none"> <li>• Government communication about policy direction, including post EU exit, to provide industry and authorities with sufficient lead-in time to develop appropriate services and infrastructure;</li> <li>• Incentivising manufacturers to use secondary rather than virgin materials, thereby creating demand for recycle and investment in recycling technology. This could be achieved via reward or penalty schemes; banning use of virgin materials where there is an alternative; setting reuse or prevention targets and/or leading by example e.g. via green public procurement.</li> <li>• Incentivising manufacturers to rethink the design and manufacture of products to enable waste to be moved up the hierarchy e.g. by</li> </ul>

<b>Policy objective</b>	<b>Stakeholder views on barriers to achieving long term objectives</b>	<b>Changes suggested by stakeholders to achieve objectives</b>
	<ul style="list-style-type: none"> <li>Difficulties for small and microbusinesses to apply as they often operate like domestic users but do not have access to household recycling centres.</li> </ul>	<p>increasing recyclability/reusability, extending life, and designing out waste as much as possible.</p> <ul style="list-style-type: none"> <li>For manufacturers to fund household recycling collections; some suggested a recycling target should apply to manufacturers rather than local authorities.</li> <li>Identifying a way to stimulate the design and implementation of new technologies and infrastructure to maximise the recycling of materials that are recyclable</li> <li>A collaborative approach between manufacturers, environmental companies, local authorities, reprocessors and the rest of the industry around technology, services and infrastructure design</li> <li>Developing and trialling more take-back schemes.</li> <li>Utilising other policies to support driving waste up the hierarchy where recovery options are available as alternatives to disposal, e.g. the regulator challenging on continued use of disposal permits where appropriate.</li> <li>Developing a waste management system and policies that make it easy for SMEs to move waste up the hierarchy</li> <li>Facilitating donation of items to charity shops</li> </ul>

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>4. Household recycling target:</b> For at least 50% by weight of waste from households to be prepared for re-use or recycled by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target<sup>39</sup></p>	<p>Basing the target on weight of recyclate was generally seen as a practical and relatively simple approach, but there were questions as to whether it creates a perverse incentive to prioritise collection of the heaviest materials over achieving greatest environmental benefits. In some cases, however, these are not mutually exclusive.</p>	<p><u>Short term objectives</u></p> <ul style="list-style-type: none"> <li>• Collaboration between industry, central and local government, to identify new policy measures to enable the step change needed to meet the 50% target by 2020, with the appropriate economic incentive(s). Considering what works well in devolved administrations and internationally. Some stakeholders saw an increase in, or mandating, food waste collection services and a reduction in frequency of refuse collection to be key.</li> <li>• Early communication from Government of any new measures is essential to provide industry and authorities with appropriate time to develop and deliver new infrastructure and services</li> <li>• Increase consistency across the country in what recyclables are collected – as is aimed for in the Defra-supported ‘Framework for Greater Consistency in Household Recycling for England’, developed by an advisory group of representatives across the sector (WRAP, 2016b, WRAP, 2016c). This was seen with potential for increasing participation among householders; and as an opportunity to stimulate investment in infrastructure and systems.</li> <li>• Reviewing the recycling rate calculation method and definition of Municipal Solid Waste, potentially to be able to include Incinerator Bottom Ash, could raise the reported rate.</li> <li>• Mixed views on reintroducing statutory recycling targets for local authorities. Some caveated that any new targets would need to be accompanied by appropriate funding, and tiered to reflect what is achievable depending on local constraints.</li> </ul> <p><u>Long term objectives:</u> Consideration of alternative or additional targets, such as a value- or carbon-based target, or applying a weight-based target to dry recyclates only, to ensure efforts are focussed to achieve greatest environmental benefit.</p>

<sup>39</sup> A number of the barriers and suggested changes highlighted by stakeholders on the waste hierarchy also apply to this objective.

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>5. Separate recycling collections:</b> For waste collectors to collect paper, metal, plastic and glass separately from each other and other waste materials – where necessary for quality reasons to ensure recovery<sup>40</sup>, and where technically, environmentally and economically practicable (TEEP)<sup>41</sup></p>	<ul style="list-style-type: none"> <li>• Not economically viable for all waste collectors to change to separate collections.</li> <li>• Fluctuation in markets – in particular for plastics and paper – and MRF gate fees, means fluctuation in the cost effectiveness of different collection services. As a new collection service that appears cost effective at one point is not guaranteed to last, waste collectors may be hesitant to make a change.</li> <li>• Increase in quality of recyclate is not a guaranteed outcome of separate collections; quality still depends on householder understanding, attitudes and behaviour: contamination is still likely, and participation may reduce with increased complexity.</li> </ul>	<p><u>Short term objectives</u></p> <p>There was a general call for Government to provide standardised guidance and support tools for necessity and TEEP assessments. This included a definition of ‘quality’ in recyclate, rules of thumb / general assumptions where possible, and an outline of the scrutiny process. Stakeholders highlighted a number of associated benefits:</p> <ul style="list-style-type: none"> <li>• To assist waste collection authorities in planning for and conducting sufficiently robust assessments. This includes ensuring assessments are conducted on a regular and timely basis e.g. relating to renewal of waste management contracts</li> <li>• To enable the EA to judge the quality of assessments fairly, and to challenge conclusions where appropriate</li> <li>• To protect waste collection authorities from undue criticism from external parties.</li> </ul> <p>Identify a designated funding source for compliance work, given that it is a non-chargeable scheme.</p> <p><u>Long term objectives</u></p> <p>Suggestions included:</p> <ul style="list-style-type: none"> <li>• Improve technology at Material Recycling Facilities (MRFs) to sort recyclable materials. Simultaneously reduce complexity in household refuse collection services, simply requesting households to separate out</li> </ul>

<sup>40</sup> necessary to ensure that waste undergoes recovery operations in accordance with Article 4 and 13 of the WFD and to facilitate or improve recovery

<sup>41</sup> A number of the barriers and suggested changes highlighted by stakeholders on the waste hierarchy also apply to this objective.

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
	<ul style="list-style-type: none"> <li>• Inflexibility in waste management contracts; some last up to 20 years.</li> <li>• Potential reluctance among some WCAs to risk increasing confusion among householders with changes to collection systems</li> <li>• Low perceived threat of ramifications from the regulator, particularly in absence of standardised methodology for assessments.</li> </ul>	<p>the most contaminating and easiest-to-identify materials e.g. food waste and glass.</p> <ul style="list-style-type: none"> <li>• Extend the requirement to include biowaste. It was thought by some respondents that this would lead to more TEEP assessments recommending a change to separate materials collections.</li> <li>• A number underlined the importance of keeping the flexibility enabling authorities to design a service most appropriate to achieve quality recycle in their local area; comingled collections can work just as effectively depending on the circumstances.</li> <li>• One respondent felt there should be a greater focus on separate recycling collections of business waste.</li> </ul>



Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>6. Construction waste recovery target:</b> For at least 70% by weight of non-hazardous construction and demolition waste to be subjected to material recovery by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target.</p>	<ul style="list-style-type: none"> <li>Some stakeholders felt that a higher recovery rate than that being currently achieved is both feasible and important, for a number of reasons: resource scarcity of aggregates; C&amp;D being the largest contributing sector to total waste generation (Defra, 2016c); and in order to reduce flytipping.</li> <li>There is relatively high uncertainty in the data on C&amp;D waste, although it was recognised that options for improvement are limited given the burdens on businesses this could create.</li> </ul>	<p><u>Short term objectives</u></p> <ul style="list-style-type: none"> <li>n/a</li> </ul> <p><u>Long term objectives</u></p> <ul style="list-style-type: none"> <li>Some called for the return of risk-based Site Waste Management Plans, where they felt resultant savings would far outweigh the admin burden of producing these.</li> <li>Greater uptake of electronic duty of care could provide useful data to assess resource use and waste management, identify where savings can be made, and enable monitoring at a higher level.</li> <li>Higher use of Publically Available Specification (PAS) 402 could improve quality of data.</li> </ul>

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>7. Waste infrastructure:</b> For local authorities to apply the self-sufficiency &amp; proximity principles, to create an integrated and adequate network of installations for waste disposal and the recovery of mixed municipal waste from household waste;</p>	<ul style="list-style-type: none"> <li>• The proximity principle has an environmental objective, and is not always economically or commercially beneficial – therefore there is no incentive for businesses to adhere to them.</li> <li>• The externalities of transporting the waste, including air pollution and greenhouse gases, are not costed into waste contracts, so they do not become economic drivers for compliance</li> <li>• There are some practical barriers relating to cost and suitability of land, and availability of and access to appropriate infrastructure.</li> </ul>	<p><u>Short term objectives</u></p> <ul style="list-style-type: none"> <li>• Respondents generally underlined the importance of cooperation between collection and disposal authorities to plan waste infrastructure and services at a regional level. The Kent Resource Partnership was given as an effective example. Relatedly, some stakeholders called for the return of Regional Spatial Strategies (RSSs); the abolition of RSSs had been announced by Government in 2010, with no plan to reintroduce the policy.</li> <li>• Improve clarity in requirements and issues relating to waste infrastructure and planning, by developing guidance/support for waste planners and the Planning Inspectorate.</li> <li>• Including a statement in strategic documents, e.g. the Waste Management Plan for England, articulating why and under what condition waste facilities are essential.- to help ensure these factors are considered in planning decisions.</li> <li>• One stakeholder wanted to see more Energy from Waste plants built in England.</li> </ul> <p><u>Long term objectives</u></p> <ul style="list-style-type: none"> <li>• Consider differing requirements depending on the type of waste – for example it is uneconomic to move heavy loads such as organic waste and construction waste far, and therefore increasing these facilities could be more beneficial than, for example, incinerators which tend to be larger and need to bring in waste from a larger area.</li> </ul>

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>8. Carrier registration:</b> For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency</p>	<p>General support in principle for having a list of registered CBDs, to enable producers of waste to select an appropriate carrier for their needs, and to comply with the waste Duty of Care.</p> <p>However:</p> <ul style="list-style-type: none"> <li>• No experience, qualification or proof of competence is required for registration, meaning that registered CBDs may fail to adhere to the Duty of Care deliberately or due to lack of awareness. This results in a system where legitimate businesses are undermined by registered but non-compliant outfits.</li> <li>• Some with a prior conviction relating to waste crime are able to register as the conviction does not stay on their criminal record indefinitely (Rehabilitation of Offenders Act).</li> <li>• The ease and relatively low cost of registering were picked out by some respondents as failing to deter illegitimate businesses from registering.</li> <li>• There is little evidence to suggest that registering small businesses, in particular those carrying their own waste, has any positive environmental outcome.</li> <li>• The current design of the system fails to facilitate an assessment of risk associated with operators, meaning that the EA is unable to target its compliance work in a risk-based and proportionate way.</li> <li>• Evidence suggests a high proportion of small businesses are unaware of their responsibility under the Waste Duty of</li> </ul>	<p><u>Short term objectives</u></p> <p>Awareness raising of the Waste Duty of Care, in particular with smaller businesses and households:</p> <ul style="list-style-type: none"> <li>• Continue the <a href="#">‘Right Waste, Right Place’</a> information campaign – this is managed by the Environmental Services Association and funded by various sponsors.</li> <li>• One comment that some high profile prosecutions could help raise awareness of Duty of Care requirements.</li> </ul> <p><u>Long term objectives</u></p> <p>Redesign of the registration system to facilitate risk assessment and monitoring of operators:</p> <ul style="list-style-type: none"> <li>• Require information at point of registration to enable the EA to assess risk and better target compliance work.</li> <li>• Introduce tighter requirements for registration of higher risk operators, for example a competence requirement and/or mandatory use of EDOC (see WTN section below). Some also wanted to see a higher fee.</li> <li>• Keep burdens to a minimum for low risk operators, in particular those carrying their own waste, potentially introducing exemptions or removing requirement for them to register.</li> </ul>

<b>Policy objective</b>	<b>Stakeholder views on barriers to achieving long term objectives</b>	<b>Changes suggested by stakeholders to achieve objectives</b>
	<p>Care<sup>42</sup> to ensure they hand over the waste to a business authorised to take it. A recent study found that nearly half of SMEs said that they 'didn't know where all their waste goes when it leaves their site' (Right Waste Right Place, 2016).</p>	

---

<sup>42</sup> <https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice>

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
<p><b>9. Waste transfer information:</b> For organisations to record and retain specific information about waste and its movement, upon its transfer</p>	<p>General support of the principle of recording this information to ensure waste is handled and disposed of safely, to enable application of the waste hierarchy, and for wider monitoring and scrutiny purposes. However, issues raised included:</p> <ul style="list-style-type: none"> <li>• multitude of ‘types’ of paper-based notes – impracticable to enforce; low take-up of EDOC</li> <li>• sometimes low accuracy in info recorded on notes, due to lack of understanding or motivation</li> <li>• low awareness of duty of care requirements among SMEs</li> </ul>	<p><u>Short term objectives</u></p> <ul style="list-style-type: none"> <li>• Increase/promote use of EDOC to record and store waste transfer information, ensuring EDOC is designed to meet user needs and brings benefits where possible to users. Stakeholders highlighted that many waste management companies have existing systems tailored to meet their needs and that would be costly to replace. A case study of one company using EDOC effectively to manage WTNs is on the website.<sup>43</sup></li> <li>• Revise terminology and codes to ensure these are fit for purpose and clearly communicated.</li> <li>• Continue the ‘<a href="#">Right Waste, Right Place</a>’ information campaign, aiming to raise awareness of the Waste Duty of Care.</li> <li>• Identify alternative ways to raise awareness such as including information in packs with business rates.</li> </ul> <p><u>Long term objectives</u></p> <ul style="list-style-type: none"> <li>• Some stakeholders called for mandatory use of EDOC, provided that it can be adapted to integrate with existing waste management systems, be cost effective for users, and not apply to lower tier carriers transporting their own waste, in order to: increase efficiency and accuracy relating to Waste Information Notes; generate data useful to organisations for auditing, to improve performance and cut costs relating to waste management; facilitate compliance work; and generate data to analyse application of the waste hierarchy, and infrastructure use and needs.</li> <li>• Include hazardous waste in EDOC.</li> </ul>

<sup>43</sup> <https://www.edoconline.co.uk/case-study-valpak-recycling/>

Policy objective	Stakeholder views on barriers to achieving long term objectives	Changes suggested by stakeholders to achieve objectives
		<ul style="list-style-type: none"> <li>• Add in fields to record other useful information for the above purpose, such as all parties involved in waste transfer, for example brokers and dealers, and postcodes for the destination of the waste.</li> <li>• Effective communication to industry of benefits of using EDOC.</li> </ul>

As a more general point, one stakeholder highlighted that acceptability is higher and burdens are lower for smaller businesses when regulations are designed taking small businesses' way of operating into account, to facilitate compliance, and are proportionate in terms of the burdens created corresponding with what they will achieve.

## Annex E: Costs & Benefits

Table 7 sets out the Costs and Benefits of the 2011 Waste Regulations, as identified in the evidence gathering exercise. These are mainly based on stakeholder views rather than documented evidence, of which there was little offering insight in this area.

Please note that the views of stakeholders stated in this table do not represent Government policy or views.

In general, it is too early to assess the long term benefits of the Regulations, particularly when it comes to environmental improvement, for example reduced greenhouse gas emissions, reduced use of virgin materials, or reduction in contamination of recyclates. Stakeholders highlighted only a few benefits as a direct result of these Regulations as they are currently applied.

Stakeholders also raised a number of theoretical costs and some benefits, which could manifest themselves if the Regulations were interpreted to the letter and adhered to tightly. These were deemed outside the scope of this PIR and are therefore not covered in the table below.

**Table 7 Key non-environmental costs and benefits of the 2011 Waste Regulations identified by stakeholders and existing studies**

Objective	Costs	Benefits
<p><b>1. Waste Management Plan:</b> For the Government to revise the scope and content of waste management plans</p>	<ul style="list-style-type: none"> <li>• Defra admin costs<sup>44</sup></li> <li>• No direct business costs identified</li> </ul>	<p>The Waste Management Plan is one of the various ways that Government has stated its endorsement of the Anaerobic Digestion industry. The Plan may have therefore helped contribute to the growth of the Anaerobic Digestion industry (a 2014/15 ADBA survey of members found exports of over £100m including of AD equipment and expertise); however this is purely speculative.</p>

<sup>44</sup> These have not been quantified as part of this review, as a number of years have passed since this Plan was developed, and it is unknown how much staff time and other resources were used, but likely to be of relatively low impact.

Objective	Costs	Benefits
<p><b>2. Waste Prevention Programme:</b> For the Government to establish waste prevention programmes</p>	<ul style="list-style-type: none"> <li>• Defra admin costs<sup>45</sup></li> <li>• No direct business costs identified</li> </ul>	<ul style="list-style-type: none"> <li>• Benefits through voluntary agreements mainly felt by businesses, local authorities and households, with resultant environmental benefits relating to reduction in GHG emissions.</li> <li>• For example, the Courtauld Commitment 3 reported 219 thousand tonnes of food and packaging supply chain waste that have been saved in the period of 2012-2015, equivalent to the savings of 555 thousand tonnes of CO<sub>2</sub>e emissions (WRAP, 2017a). These savings are significantly higher than what the 2011 IA assumed to be needed in order to make the policies cost neutral.</li> </ul>

---

<sup>45</sup> These have not been quantified as part of this review, as a number of years have passed since the Programme was developed, and it is unknown how much staff time and other resources were used.



Objective	Costs	Benefits
<p><b>3. Waste Hierarchy:</b> For organisations to apply the waste hierarchy as a priority order at the point of waste transfer</p>	<p><u>Industry</u></p> <ul style="list-style-type: none"> <li>Costs to businesses are uncertain as it is unknown to what degree businesses currently separate waste. Few stakeholders felt there would be costs to industry relating to this regulation in the way it is currently applied – they felt that businesses rarely engaged with the guidance.</li> <li>One mention that it can be laborious for producers of waste to systematically work through each load of waste to ensure correct separation to apply the waste hierarchy. This implies some business costs, although the regulations allow diversion from the hierarchy where impractical or uneconomical.</li> <li>Although small businesses tend to operate like domestic users, they do not have access to household recycling centres. Having to pay for collection makes it less affordable for them to recycle.</li> </ul> <p><u>Local Authorities</u> Where action is taken, moving waste up the hierarchy was seen by some as particularly cost intensive for local authorities, being dependent on behaviour change among residents.</p> <p><u>Distribution of costs</u> Where discussed, stakeholders felt that larger businesses and local authorities were more likely to engage with this regulation and the guidance than smaller businesses.</p>	<p>It is not possible to determine attribution of any changes in recycling or waste prevention to this or any one policy or regulation, given the range of measures that could affect them.</p> <p>However, stakeholders generally felt there had been little change in behaviour as a result of this particular regulation, and that therefore the potential environmental<sup>46</sup> and financial<sup>47</sup> benefits had not necessarily been realised to date.</p>

<sup>46</sup> For example reduced use of virgin materials and reduction in GHG emissions.

<sup>47</sup> For example cost savings to producers of waste due to waste reduction.

Objective	Costs	Benefits
<p><b>4. Household recycling target:</b> For at least 50% by weight of waste from households to be prepared for re-use or recycled by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target</p>	<p><u>Local Authorities:</u></p> <ul style="list-style-type: none"> <li>Stakeholders generally felt strongly that the effort to contribute to achieving the national target put considerable burdens on local authorities in a context of strong budgetary pressures. Urban authorities tend to be affected disproportionately due to constraints including transient population, high density housing, and lower amounts of garden waste. Sparsely populated authorities also bear disproportionate collection costs.</li> <li>Defra analysis of LAs data shows that in some cases local authorities have fully offset costs of introducing recycling services via related measures such as reducing frequency of residual waste collection (DCLG, 2017). East Riding of Yorkshire is one example where the cost of introducing mixed food and garden waste collections have been offset by reducing the costs of residual waste collections by providing alternate weekly collections (Local Partnerships, 2015).</li> <li>A number of stakeholders felt that costs relating to recycling fall unfairly on local authorities rather than manufacturers.</li> <li>Some local authorities have experienced the burden of criticism from pressure groups or the public if recycling rates are perceived not to be high enough.</li> </ul>	<p>The Government supports comprehensive recycling and rubbish collections.</p> <p>It is not possible to determine attribution of any changes in recycling to any one policy or regulation, given the range of measures that could affect it.</p> <p>Stakeholders generally felt little change to recycling rates had come about as a result of this the introduction of the 50% target, and that therefore the potential environmental<sup>48</sup> and economic &amp; commercial<sup>49</sup> benefits had not necessarily been fully realised to date.</p>

<sup>48</sup> for example reduced use of virgin materials and reduction in GHG emissions.

<sup>49</sup> for example for waste management companies and reprocessors due to increased demand

Objective	Costs	Benefits
	<p><u>Taxpaying households</u> were also highlighted as experiencing costs, indirectly, via their contributions to council funds for recycling services. Some stakeholders felt that those with environmentally-friendly recycling and/or consumption behaviours were, in this way, being forced to subsidise those with less good behaviours.</p> <p>Overall, money spent on recycling can affect beneficiaries of other services offered by the council if funds are diverted away.</p>	

Objective	Costs	Benefits
<p><b>5. Separate recycling collections:</b> For waste collectors to collect paper, metal, plastic and glass separately from each other and other waste materials – where necessary for quality reasons to ensure recovery<sup>50</sup>, and where technically, environmentally and economically practicable (TEEP)</p>	<p><u>Waste Collection Authorities</u></p> <p><i>TEEP and necessity tests:</i> The resource intensive nature of gathering and analysing a large quantity of data for the TEEP and necessity tests, and the specialist skills this required, was mentioned by a number of respondents; some saw this as disproportionate, and that the outcome could be predicted without in-depth analysis; some felt that some authorities could be doing more than needed in the absence of official Defra guidance on the methodology.</p> <p>Assessments were generally outsourced, but some WCAs conduct them in-house. Cost estimates by respondents of contracting these out ranged from £5,000 to £40,000, however with some commenting that future assessments would be less burdensome than the initial one.</p> <p>In the case of legal challenge, there are costs to authorities on refuting the challenge. One case was mentioned in interviews.</p> <p><i>Change in collection system:</i> Any cost of making a change to a different collection system should be offset by the amount saved, given that a change would only be made if it was economic, as per the TEEP clause. However, a number of respondents commented on the transition costs of investing in new infrastructure, vehicles and communication campaigns for households.</p>	<p>With few changes to separate collections to date, it would be speculative to claim environmental<sup>51</sup> and economic and commercial<sup>52</sup> benefits that could potentially result from an expected improvement in quality of recycle.</p> <p>However, some stakeholders highlighted potential benefits associated with TEEP assessments:</p> <ul style="list-style-type: none"> <li>• Some Waste Collection Authorities may identify savings in their waste management services as a result of completing a TEEP assessment</li> </ul>

<sup>50</sup> necessary to ensure that waste undergoes recovery operations in accordance with Article 4 and 13 of the WFD and to facilitate or improve recovery.

<sup>51</sup> for example reduced use of virgin materials and reduction in GHG emissions.

<sup>52</sup> For example: better quality of recyclates associated with a change to separate collections should lead to better prices for local authorities; reprocessors could benefit due to improved quality of recyclates; suppliers of goods, e.g. vehicles and containers, benefit from sales associated with changes in recycling services.

Objective	Costs	Benefits
	<p><u>Households</u></p> <p>The inconvenience of separating and storing materials separately, and the potential number of receptacles inside and outside the property, was highlighted. This burden would fall disproportionately on those in urban areas with less available space.</p> <p><u>Businesses</u></p> <p>It was generally felt that businesses would conduct a number of broad-brush assessments for their private customers as it would be impracticable to produce a separate assessment in each case.</p>	<ul style="list-style-type: none"> <li>• Commercial opportunities for consultants in carrying out TEEP assessments on behalf of local authorities.</li> </ul>

Objective	Costs	Benefits
<p><b>6. Construction waste:</b> Introducing a target for at least 70% by weight of non-hazardous construction and demolition waste to be subjected to material recovery by 2020, and specifying measures in the Waste Management Plan to achieve this target</p>	<p>No direct business costs identified, based on how this regulation is currently applied.</p>	<p>It is not possible to determine attribution of any changes in construction and demolition waste prevention and recovery to this or any one policy or regulation, given the range of factors that could affect them.</p> <p>Stakeholders did not necessarily feel that associated environmental<sup>53</sup> or economic<sup>54</sup> benefits had materialised as a direct result of the introduction of this target.</p>
<p><b>7. Waste infrastructure:</b> For local authorities to apply the self-sufficiency &amp; proximity principles, to create an integrated and adequate network of installations for waste disposal and the recovery of mixed municipal waste from household waste</p>	<p>No key costs or benefits identified associated with the regulations as currently applied, as decisions weighted more heavily towards economic rather than proximity and self sufficiency principles.</p>	

<sup>53</sup> For example reduced use of virgin materials and reduction in GHG emissions.

<sup>54</sup> Reduction in construction and demolition waste should bring financial benefits. For instance, Defra research shows that there are net savings from landfill diversion of construction waste of £10.8 per tonne and the amount of construction waste landfilled fell from 13 million tonnes to 5.4 million tonnes in the period of 2011-2014, resulting in financial savings of £83 million. Defra (2017). Business Resource Efficiency: Quantification of the no cost / low cost resource efficiency opportunities in the UK economy in 2014. A final report by Oakdene Hollins: Research & Consulting. Available: [http://randd.defra.gov.uk/Document.aspx?Document=14112\\_BusinessResourceEfficiency.pdf](http://randd.defra.gov.uk/Document.aspx?Document=14112_BusinessResourceEfficiency.pdf) [Accessed 15 September 2017].

Objective	Costs	Benefits
<p><b>8. Carrier registration:</b> For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency</p>	<p><u>Environment Agency:</u> The extension of the requirement to register those who carry small amounts of their own waste as lower tier CBDs was highlighted by stakeholders as a burden for the EA, which who bears the cost of setting up and running the system. The EA estimates the operational costs for the CBD system at £140k per year. The lower tier register makes no provision for renewal, so all registered remain on the list. It was felt by some that the EA's resource could be more usefully invested in targeting higher risk CBDs.</p> <p><u>Businesses:</u></p> <p>Lower tier CBDs:</p> <ul style="list-style-type: none"> <li>• Although the requirement for all CBDs to register with the EA, including those purely carrying their own waste, was judged by the Business Taskforce to be an unnecessary burden to those organisations (Business Taskforce, 2013), this was not seen as an issue by most stakeholders we spoke with.</li> <li>• The registration process was commended by a number of respondents on being extremely streamlined – quick and easy to use. Following an EA review and simplification of the online system in 2015, the EA found high user satisfaction and a reduction of number of phone calls to the contact centre reduced from 120 to 5 per 100 transactions.</li> <li>• Lower tier registrations amounted to 16479 in 2015/16, and 21329 in 2016/17.</li> <li>• Based on an estimated cost in terms of time taken for online registration,<sup>55</sup> we estimate the cost of registration for new lower tier CBDs was £0.26m in 2015/16 and £0.35m in 2016/17.</li> </ul>	<p>It is not possible to determine attribution of any changes in 'damage to environment, health and disamenity costs' to this or any one policy or regulation.</p> <p>Interviews with stakeholders suggested that the potential benefits have not been fully realised to date; waste crime remains a significant problem, and a</p>

<sup>55</sup> We have applied [ONS published nominal wage growth](#) to the EA's estimate in the original IA of £15 for cost to lower tier carriers of online registration in terms of time taken, to convert this cost to 2015/16 and 2016/17.

Objective	Costs	Benefits
	<p>Upper tier CBDs:</p> <ul style="list-style-type: none"> <li>• Fee of £154 for registration, and £105 for three-yearly renewal.</li> <li>• Upper tier registrations amounted to 17433 and 20572 in 2015/2016 and 2016/2017 respectively; and there were 16846 and 19646 upper tier renewals in those years.</li> <li>• Taking into account the registration/renewal fee and an estimated cost in terms of time taken for online registration/renewal,<sup>56</sup> we estimate the cost to new and renewing upper tier CBDs was £5m in 2015/16 and £5.88m in 2016/17.<sup>57</sup></li> <li>• Stakeholders felt the registration and renewal cost for upper tier CBDs could be earned back very quickly.</li> </ul> <p><u>Distribution of costs</u></p> <ul style="list-style-type: none"> <li>• Businesses whose commercial activity centres around transporting other people's waste (or arranging for this to happen) face more of the costs associated with registering and renewing as CBDs, as they tend to be upper tier CBDs and are therefore charged a fee to register and renew; however stakeholders generally felt this fee would be earned back quickly. Conversely, lower tier CBDs, generally comprising organisations who only carry waste produced in the course of carrying out their business rather than for commercial gain (including charities and may include local authorities), are not charged a fee and therefore face lower costs.</li> <li>• We estimate that the costs associated with new registrations (for upper and lower tier combined) was £3.23m in 2015/16 and £3.85m in 2016/17, compared with £2.04m and</li> </ul>	<p>number of respondents highlighted that the current CBD system does not ensure competence or compliance with the Duty of Care regime.</p> <p>Some stakeholders highlighted that a register of (in theory) credible CBDs can benefit producers of waste in providing them with a quick way</p>

<sup>56</sup> In the absence of admin cost estimates for upper tier CBDs in the IA, this figure is based on our estimate below of costs in time to lower tier carriers (see above and footnote 55).

<sup>57</sup> NB There was an existing requirement for these types of organisations to register with the EA, before the 2011 Waste Regulations were introduced. These were therefore not new annual costs, and were not included in the original IA.



Objective	Costs	Benefits
	£2.38m for renewals in those years. This suggests starts-ups or relatively new operations might face greater costs than more established businesses; however a large proportion of these costs are faced by upper tier CBDs (see above).	of meeting the Duty of Care.

Objective	Costs	Benefits
<p><b>9. Waste transfer information:</b> For organisations to record and retain specific information about waste and its movement, upon its transfer</p>	<p><u>Environment Agency</u> Flexibility in format of Waste Information Notes (WINs), introduced with the aim of reducing burdens on waste producers, conversely requires more resource from the EA in terms of processing non-standardised records of waste information in compliance-checking activity.</p> <p><u>Businesses and local authorities</u></p> <ul style="list-style-type: none"> <li>Although the 2011 environmental red tape challenge found it was burdensome for small businesses to fill in Waste Transfer Notes (Defra, 2012), stakeholders we spoke with as part of this exercise did not highlight it as overly burdensome. Some described it as taking a matter of seconds or minutes to complete a WIN, and others highlighted the possibility of using annual notes for repeat transfers, to save time. Admin costs would hit smaller organisations disproportionately harder in terms of time taken or cost of paying someone else to record the information.</li> <li>A number of stakeholders felt the flexibility in formats introduced following that Red Tape Challenge could have had the opposite of</li> </ul>	<p>It is not possible to determine attribution of any changes in ‘damage to environment, health and disamenity costs’ to this or any one policy or regulation.</p> <p>Waste crime remains a significant problem, and interviews with stakeholders suggested that the potential environmental benefits of this regulation have not been fully borne out to date. Several respondents cited low awareness of this regulation among smaller businesses, and more generally that inaccurate information is a common problem.</p> <p>However, a number noted financial benefits that had materialised in some cases, namely that recording waste information on EDOC,</p>

Objective	Costs	Benefits
	<p>the intended effect, in requiring more time for the recipient to check and understand the information due to the non-standard format.</p> <ul style="list-style-type: none"> <li>• The non-mandatory online EDOC system for producing and storing WINs was generally seen by those who commented as a quick and easy system to use, and a convenient way of storing the information for free for the required time.<sup>58</sup> It can be costly for (generally larger) businesses to adopt EDOC, where they have an existing database tailored to their needs; however one case study highlights the efficiencies that can be made.<sup>59</sup></li> <li>• Those not using EDOC may need to pay store paper notes; notes must be kept for two years.</li> <li>• Some companies were seen as overcharging to include Waste Transfer Notes as part of their service.</li> </ul>	<p>or their own waste management system, can generate useful data to help companies improve performance and cut costs.</p>

<sup>58</sup> Also see [www.edoconline.co.uk/case-study-valpak-recycling/](http://www.edoconline.co.uk/case-study-valpak-recycling/)

<sup>59</sup> <https://www.edoconline.co.uk/case-study-valpak-recycling/>

## Annex F: Comparison of implementation of rWFD with other Member States

Table 8 sets out the findings from the evidence we gathered on how the 2011 Waste Regulations compare with the implementation of the revised Waste Framework Directive in other EU Member States. The approach taken was described in Annex C.

**Table 8 Implementation of the rWFD in other Member States and assessment of over-implementation of rWFD in England**

Objective	Evidence found of over-implementation in England?	Comparison with other EU Member States / Assessment of any over-implementation of the rWFD in England
<b>1. Waste Management Plan:</b> For the Government to revise the scope and content of waste management plans	No	No over-implementation – no additional requirements
<b>2. Waste Prevention Programme:</b> For the Government to establish waste prevention programmes	No	The EEA’s assessment of Waste Prevention Programmes in each member state (European Environment Agency, 2015) suggests that England has not gone beyond the requirements of the rWFD, nor is it putting more burden on business than other Member States. The WPP for England mainly consists of voluntary agreements, financial instruments, and information instruments. The Programme refers to (but did not introduce) two sets of Regulations: the 5p Single-Use Carrier Bag charge, and the revised Waste Electronic and Electrical Equipment (WEEE) Regulations; these both had a separate impact assessment, and will be reviewed in due course.

Objective	Evidence found of over-implementation in England?	Comparison with other EU Member States / Assessment of any over-implementation of the rWFD in England
<p><b>3. Waste Hierarchy:</b> For organisations to apply the waste hierarchy as a priority order at the point of waste transfer</p>	No	<p>We can conclude from the general stakeholder views (under questions 4 and 5 in the main report) that there is no over-implementation in England in terms of how this regulation is currently applied.</p> <p>A direct comparison with other Member States is not possible, given the wide range of policies that can relate to moving waste up the hierarchy. However, we give examples of two countries that provided information. Italy's regulations appear to apply more widely than in England – not restricted to the point of waste transfer; they also require a specific lifecycle assessment where there is diversion from the waste hierarchy. France's Extended Producer Responsibility (EPR) scheme (including on packaging, WEEE, batteries, furniture's, papers, textiles, hazardous waste) covers a wider variety of materials than the Producer Responsibility schemes in England.</p>

Objective	Evidence found of over-implementation in England?	Comparison with other EU Member States / Assessment of any over-implementation of the rWFD in England
<p><b>4. Household recycling target:</b> For at least 50% by weight of waste from households to be prepared for re-use or recycled by 2020; and for the Government to specify measures in the Waste Management Plan to achieve this target</p>	<p>Some, potentially – regarding the calculation methodology</p>	<p><u>Calculation methodology and definition of MSW</u></p> <ul style="list-style-type: none"> <li>Some stakeholders felt that the recycling rate calculation method chosen by England from the four options allowed by the European Commission, and the definition of MSW used in England could make it harder to meet the 50% target. There are 4 methods available and it was thought that method 3 was less favourable than others. There was also a view that incinerator bottom ash was included by some other Member States (Germany was named as one) and that this could make a significant difference to the figures: an LGA report claims it ‘could contribute up to an additional seven percentage points by 2020<sup>60</sup>’ (LGA, 2015).</li> <li>Many stakeholders called for a consistent reporting system on recycling rates across the EU and the UK in order to level the playing field and enable meaningful comparisons. This is supported by the EEA (European Environment Agency, 2016a). An industry study claimed the different outcomes resulting from the four recycling calculation methods used across Europe, by applying these methods to data for nine municipalities. They report ‘an average variance of 8.6% between the highest and lowest recycling rates calculated for individual municipalities, with the highest variance being 14.9% and the lowest 5.9%. (CIWM/SOENECS, 2015)</li> </ul> <p><u>Recycling policies</u></p> <ul style="list-style-type: none"> <li>In terms of the specific policies to increase recycling however, both France and Germany go beyond the requirements of the rWFD; although note that these may have been introduced irrespective of the requirements of the rWFD. Germany has more regulation related to increasing recycling, including a ban on landfilling un-pre-treated MSW, producer</li> </ul>

<sup>60</sup> Based on an Environmental Services Association estimate of 3 million tonnes of incinerator bottom ash by 2020 and an assumption that overall waste levels remain at approximately the same level as 2013/14.

Objective	Evidence found of over-implementation in England?	Comparison with other EU Member States / Assessment of any over-implementation of the rWFD in England
		<p>responsibility, and the mandatory separate collection of bio-waste from 2015 (European Environment Agency, 2016b). In France, most of the recoverable municipal waste is covered by an Extended Producer Responsibility (EPR) scheme (including on packaging, WEEE, batteries, furniture's, papers, textiles, hazardous waste) – covering a wider variety of materials than the Producer Responsibility schemes in England.</p> <ul style="list-style-type: none"> <li>• In addition, Germany has set itself a higher recycling target than the rWFD requirement – of 65% by 2020; it has already met the 50% target (European Environment Agency, 2016b).</li> </ul>

Objective	Evidence found of over-implementation in England?	Comparison with other EU Member States / Assessment of any over-implementation of the rWFD in England
<p><b>5. Separate recycling collections:</b> For waste collectors to collect paper, metal, plastic and glass separately from each other and other waste materials – where necessary for quality reasons to ensure recovery<sup>61</sup>, and where technically, environmentally and economically practicable (TEEP)</p>	No	<p>An assessment by the European Commission of separate collection schemes in the 28 capitals of the EU (European Commission, 2015a) found that the 2011 Waste Regulations had a one to one correlation with the requirements in the rWFD. A number of other areas were reported as going beyond the requirements, including Italy and (within the United Kingdom) Scotland, whilst some member states had failed to include particular aspects or were deviating from requirements – including France and Germany.</p>
<p><b>6. Construction waste:</b> Introducing a target for at least 70% by weight of non-hazardous construction and demolition waste to be subjected to material recovery by 2020, and specifying measures in the Waste Management Plan to achieve this target</p>	No	<p>There is no over-implementation of this regulation in England because there are currently no requirements specific to it that are imposed on businesses or other organisations.</p> <p>France, in contrast, has related requirements on businesses, including: a mandatory take-back system of construction and demolition waste that applies to undertakings selling construction products; and a mandatory source separation for wood, glass, paper, cardboard, plastic, and metal waste in order to ensure their recovery. Construction and Demolition Waste management plans are mandatory at a ‘département’ level (European Commission, 2015b).</p>

<sup>61</sup> necessary to ensure that waste undergoes recovery operations in accordance with Article 4 and 13 of the WFD and to facilitate or improve recovery

Objective	Evidence found of over-implementation in England?	Comparison with other EU Member States / Assessment of any over-implementation of the rWFD in England
<p><b>7. Waste infrastructure:</b> For local authorities to apply the self-sufficiency &amp; proximity principles, to create an integrated and adequate network of installations for waste disposal and the recovery of mixed municipal waste from household waste</p>	<p>No</p>	<p>The stakeholders who gave their views on this regulation did not feel that it was being over-implemented in England, and therefore not creating burdens for businesses or other organisations.</p> <p>France appears to have transposed the requirement in a fairly similar way – via waste management plans – although actions relating to the prevention and management of waste are coordinated at a regional level.</p>



Objective	Evidence found of over-implementation in England?	Comparison with other EU Member States / Assessment of any over-implementation of the rWFD in England
<p><b>8. Carrier registration:</b> For all waste carriers, brokers and dealers (CBDs) to register with the Environment Agency</p>	No	<p>In a 2005 judgment, the European Court of Justice found that the registration of professional waste carriers must include all those who “normally and regularly transport waste, whether that waste is produced by them or others”. The 2011 Waste Regulations give effect to this judgment, by bringing into the system a range of businesses not previously registered with the EA, in particular those who carry their own waste. By introducing a new free one-off registration process for these ‘lower tier’ operators, England complies with, but does not exceed, the minimum requirements of the rWFD.</p> <p>France and Germany appear to have broadly comparable requirements, although the German ‘Circular Economy Act’ goes further in that the competent authority ‘may demand documents proving the reliability and the knowledge and expertise’ of the CBD.</p>
<p><b>9. Waste transfer information:</b> For organisations to record and retain specific information about waste and its movement, upon its transfer</p>	No	<p>There is no evidence of over-implementation.</p> <p>France and Germany appear to have broadly comparable requirements; however, in Germany, the Government has the power to make electronic submission of waste information mandatory.</p>

## References

- Business Taskforce (2013). Cut EU red tape: Report from the Business Taskforce. Available: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/249969/TaskForce-report-15-October.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/249969/TaskForce-report-15-October.pdf) [Accessed 28 September 2016].
- Cambridgeshire County Council and Peterborough City Council (2011). Cambridgeshire and Peterborough Minerals and Waste Development Plan: Core Strategy Development Plan Document. Available: [https://ccc-live.storage.googleapis.com/upload/www.cambridgeshire.gov.uk/business/planning-and-development/Core\\_Strategy\\_Adopted\\_19July\\_2011.pdf?inline=true](https://ccc-live.storage.googleapis.com/upload/www.cambridgeshire.gov.uk/business/planning-and-development/Core_Strategy_Adopted_19July_2011.pdf?inline=true) [Accessed August 2017].
- CIWM/SOENECS (2015). EU Recycling rate harmonisation project: National Definitions and Accounting Methods. Available: <http://www.ciwm.co.uk/Custom/BSIDocumentSelector/Pages/DocumentViewer.aspx?id=QoR7FzWBtisamYEcWSfL6SxAJRLAPT9vt6uxsHjHU7ByWOEysllctad7OZaPM7fU%252fxM46wVw%252bYA%252bHKKESzcQzSWI9o7Hb%252fdN%252fu5HymgvSsk686sGxFrGOKK6SnNaS99IVIm%252f66R8v%252fJjCr87Np6h5YY7aw1O8fJ1q3QS0Q561wNoh0fAZ2hWvQ%253d%253d> [Accessed 16 January 2017].
- DCLG (2014). National Planning Policy for Waste. Available: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/364759/141015\\_National\\_Planning\\_Policy\\_for\\_Waste.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf) [Accessed 8 March 2017].
- DCLG (2017). Local authority revenue expenditure and financing. Available: <https://www.gov.uk/government/collections/local-authority-revenue-expenditure-and-financing> [Accessed Sept 2017].
- Defra (2010). Impact Assessment of the Transposition of the Revised Waste Framework Directive (Directive 2008/98/EC). Available: [http://www.legislation.gov.uk/ukia/2011/661/pdfs/ukia\\_20110661\\_en.pdf](http://www.legislation.gov.uk/ukia/2011/661/pdfs/ukia_20110661_en.pdf) [Accessed 7 March 2017].
- Defra (2011). Guidance on applying the Waste Hierarchy. Available: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69403/pb13530-waste-hierarchy-guidance.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf) [Accessed 12 October 2016].
- Defra (2012). Red Tape Challenge - Environment Theme proposals. Available: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69584/pb13728-red-tape-environment.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69584/pb13728-red-tape-environment.pdf) [Accessed 16 September 2016].
- Defra (2013a). Consultation on alternatives to Waste Transfer Notes arising from the Red Tape Challenge and other aspects of waste regulation. Available: [http://www.legislation.gov.uk/ukia/2014/88/pdfs/ukia\\_20140088\\_en.pdf](http://www.legislation.gov.uk/ukia/2014/88/pdfs/ukia_20140088_en.pdf) [Accessed 24 July 2017].
- Defra (2013b). Defra Public Consultations: Waste Management Plan for England. Summary of Responses and Government Response. Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/265523/waste-manage-sum-resp-20131212.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265523/waste-manage-sum-resp-20131212.pdf).

Defra (2013c). Waste Management Plan for England. Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/265810/pb14100-waste-management-plan-20131213.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265810/pb14100-waste-management-plan-20131213.pdf) [Accessed 30 September 2016].

Defra (2013d). Waste Prevention Programme for England: Evaluation of Annex IV measures. Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/264902/pb14092-wpp-measures-evaluation-20131211.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/264902/pb14092-wpp-measures-evaluation-20131211.pdf).

Defra (2013e). Waste prevention programme for England: Summary of responses and government response. Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/264886/wpp-consult-sum-gov-resp-20131211.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/264886/wpp-consult-sum-gov-resp-20131211.pdf).

Defra (2014). Alternatives to Waste Transfer Notes and other aspects of waste regulation. Summary of responses and Government response. Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/311564/waste-transfer-notes-sum-resp-201405.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/311564/waste-transfer-notes-sum-resp-201405.pdf) [Accessed 16 September 2016].

Defra (2016a). Digest of Waste and Resource Statistics - 2016 Edition (revised). Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/508787/Digest\\_of\\_Waste\\_and\\_Resource\\_Statistics\\_rev.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/508787/Digest_of_Waste_and_Resource_Statistics_rev.pdf) [Accessed 15 September 2016].

Defra (2016b). Statistics on waste managed by local authorities in England in 2015/16 (National Statistics). Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/577716/FINAL\\_Stats\\_Notice\\_Nov\\_2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/577716/FINAL_Stats_Notice_Nov_2016.pdf).

Defra (2016c). UK Statistics on Waste. Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/577752/UK\\_Statistics\\_on\\_Waste\\_statistical\\_notice\\_Dec\\_2016\\_FINAL.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/577752/UK_Statistics_on_Waste_statistical_notice_Dec_2016_FINAL.pdf) [Accessed 20 December 2016].

Defra (2016d). Waste Duty of Care Code of Practice. Available:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/506917/waste-duty-care-code-practice-2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/506917/waste-duty-care-code-practice-2016.pdf).

Defra (2017). Business Resource Efficiency: Quantification of the no cost / low cost resource efficiency opportunities in the UK economy in 2014. A final report by Oakdene Hollins: Research & Consulting. Available:

[http://randd.defra.gov.uk/Document.aspx?Document=14112\\_BusinessResourceEfficiency.pdf](http://randd.defra.gov.uk/Document.aspx?Document=14112_BusinessResourceEfficiency.pdf) [Accessed 15 September 2017].

Defra (2018). Statistics on waste managed by local authorities in England in 2017/18. Available:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/763191/LACW\\_mgt\\_annual\\_Stats\\_Notice\\_Dec\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763191/LACW_mgt_annual_Stats_Notice_Dec_2018.pdf) [Accessed 18 Dec 2018].

- Environment Agency (2014). Separate Collection of Recyclables: Briefing Note. Available: <http://www.wrap.org.uk/sites/files/wrap/Environment%20Agency%20Seperate%20collection%20of%20recyclables%20briefing%20note.pdf> [Accessed 3 October 2016].
- Environment Agency (2016). Waste collection authority separate collection arrangements: survey results. Available: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/493192/WCA\\_separate\\_collection\\_arrangements\\_-\\_survey\\_results.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/493192/WCA_separate_collection_arrangements_-_survey_results.pdf) [Accessed 16 September 2016].
- Environment Agency 2017. *Registrations of waste carriers, brokers and dealers: Dashboard* [Online]. gov.uk website. Available: <https://www.gov.uk/performance/waste-carrier-or-broker-registration> [Accessed 4 October 2016].
- European Commission (2011). 2011/753/EU: Commission Decision of 18 November 2011 establishing rules and calculation methods for verifying compliance with the targets set in Article 11(2) of Directive 2008/98/EC of the European Parliament and of the Council (notified under document C(2011) 8165). Available: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011D0753&from=EN> [Accessed 21 July 2017].
- European Commission (2012). Guidance on the interpretation of key provisions of Directive 2008/98/EC on waste. Available: [http://ec.europa.eu/environment/waste/framework/pdf/guidance\\_doc.pdf](http://ec.europa.eu/environment/waste/framework/pdf/guidance_doc.pdf) [Accessed 21 July 2017].
- European Commission (2015a). Assessment of separate collection schemes in the 28 capitals of the EU. Available: [http://ec.europa.eu/environment/waste/studies/pdf/Separate%20collection\\_Final%20Report.pdf](http://ec.europa.eu/environment/waste/studies/pdf/Separate%20collection_Final%20Report.pdf) [Accessed 3 October 2016].
- European Commission (2015b). Construction and Demolition Waste management in France. Available: [http://ec.europa.eu/environment/waste/studies/deliverables/CDW\\_France\\_Factsheet\\_Final.pdf](http://ec.europa.eu/environment/waste/studies/deliverables/CDW_France_Factsheet_Final.pdf) [Accessed July 2017].
- European Commission (2015c). Construction and Demolition Waste management in United Kingdom. V3 - December 2015. Available: [http://ec.europa.eu/environment/waste/studies/deliverables/CDW\\_UK\\_Factsheet\\_Final.pdf](http://ec.europa.eu/environment/waste/studies/deliverables/CDW_UK_Factsheet_Final.pdf) [Accessed 3 October 2016].
- European Commission 2016. *Resource Efficient Use of Mixed Wastes* [Online]. Available: [http://ec.europa.eu/environment/waste/studies/mixed\\_waste.htm](http://ec.europa.eu/environment/waste/studies/mixed_waste.htm) [Accessed July 2017].
- European Environment Agency (2015). Waste prevention in Europe - the status in 2014: EEA Report no. 6/2015. Available: [http://www.eea.europa.eu/publications/waste-prevention-in-europe-2015/at\\_download/file](http://www.eea.europa.eu/publications/waste-prevention-in-europe-2015/at_download/file) [Accessed 28 November 2016].
- European Environment Agency (2016a). Municipal waste management across European countries. Available: <https://www.eea.europa.eu/themes/waste/municipal-waste/municipal-waste-management-across-european-countries#tab-related-interactive-charts> [Accessed 4 May 2017].

- European Environment Agency (2016b). Municipal waste management. Country fact sheet: Germany. Available: [http://wmge.eionet.europa.eu/sites/etc-wmge.vito.be/files/Germany\\_MSW\\_2016.pdf](http://wmge.eionet.europa.eu/sites/etc-wmge.vito.be/files/Germany_MSW_2016.pdf).
- HM Government (2013). Prevention is better than cure: The role of waste prevention in moving to a more resource efficient economy. Available: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/265022/pb14091-waste-prevention-20131211.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265022/pb14091-waste-prevention-20131211.pdf) [Accessed 30 September 2016].
- House of Commons (2014). Waste management in England: Fourth Report of Session 2014-15. Environment, Food and Rural Affairs Committee. Available: <https://publications.parliament.uk/pa/cm201415/cmselect/cmenvfru/241/241.pdf> [Accessed Jan 2017].
- LGA (2015). Meeting EU recycling targets. Available: <http://www.local.gov.uk/documents/10180/49956/150501+LGA+Recycling+targets+position+paper.pdf/0b496595-d7fe-4128-afc2-4d51f2eb6249>.
- Local Partnerships (2015). Delivering Waste Efficiencies in Yorkshire and the Humber. Available: <http://localpartnerships.org.uk/wp-content/uploads/2016/08/LP-delivering-waste-efficiencies-yorkshire-the-humber-0649.pdf>.
- Right Waste Right Place (2016). Research Report For Your Waste. Available: [http://www.rightwasterightplace.com/s/ESA-RWRP-research-doc\\_FINAL.pdf](http://www.rightwasterightplace.com/s/ESA-RWRP-research-doc_FINAL.pdf) [Accessed 26 September 2016].
- WRAP (2014). Waste Regulations Route Map. Available: <http://www.wrap.org.uk/sites/files/wrap/Route%20Map%20Revised%20Dec%202014.pdf> [Accessed 10 October 2016].
- WRAP (2015). Analysis of recycling performance and waste arisings in the UK 2012/13. Available: <http://www.wrap.org.uk/content/factors-influencing-recycling-performance> [Accessed 9 March 2017].
- WRAP (2016a). 3Rs recycling knowledge, attitudes and reported behaviour survey 2015. Key highlights about recycling from the 3Rs tracking survey (Recycling, Re-use and Repair consumer behaviour, knowledge and attitudes survey), Spring 2015. Available: <http://www.wrap.org.uk/sites/files/wrap/3Rs%20Recycling%20Highlights%202015%20FINAL%20FOR%20PUBLICATION.pdf> [Accessed 16 September 2016].
- WRAP 2016b. *A framework for greater consistency in household recycling in England* [Online]. Available: <http://www.wrap.org.uk/content/consistency> [Accessed 16 September 2016].
- WRAP (2016c). New industry framework set to help increase recycling. Available: <http://www.wrap.org.uk/ConsistentRecyclingPR> [Accessed 16 September 2016].
- WRAP (2017a). Courtauld Commitment 3: Delivering action on waste. Available: [http://www.wrap.org.uk/sites/files/wrap/Courtauld\\_Ccommitment\\_3\\_final\\_report\\_0.pdf](http://www.wrap.org.uk/sites/files/wrap/Courtauld_Ccommitment_3_final_report_0.pdf) [Accessed September 2017].

WRAP (2017b). Kerbside recycling and residual waste collection schemes statistics. Available: <http://portal.wrap.org.uk/Statistics.aspx> [Accessed September 2017].