Going Round in Circles



Developing a new approach to waste policy following Brexit

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Executive Summary

This report considers the future of waste policy following Brexit. It provides a summary and critique of European and UK policies towards waste and resource management, highlighting both the successes to date and the weaknesses.

Successive European Directives concerning waste and recycling have led to a step change in the way that we manage waste in the UK – with less waste going to landfill, and more being recycled. However, it is becoming less and less clear what European waste policies are trying to achieve: the objectives are muddled, and the proposed recycling targets are badly designed. The European Commission's own analysis shows that adopting the policies they are now proposing would place additional costs on UK businesses and households.

Brexit offers an opportunity for the UK to reconsider waste policy in the light of its new competence in this area, and identify the best way forward. We recommend that rather than adopting the EU's proposed "Circular Economy package", the UK Government should develop its own set of policies concerning waste and resources. This should be reframed around a much clearer set of objectives and policies, aimed at improving the UK's resource productivity whilst minimising the environmental impacts associated with waste.

Context

There are many areas of policy in which the UK has ceded some or all of its control to the EU. The EU and Member States have shared competence over environmental policies such as waste management. The vote to leave the EU has opened up questions about the future of environmental policy in the UK for the first time in decades – since the UK will regain full control of policy in this area.

The high level framework for waste policy is defined under a number of European Directives such as the Waste Framework Directive (2008) and the Landfill Directive (1999) which have been transposed into UK legislation. The Waste Framework Directive defines what we mean by 'waste', and the overall approach towards waste management. In theory at least, the approach is to move waste up the "waste hierarchy" – promoting waste prevention, reuse, and recycling; and minimising recovery and disposal/landfilling. The Waste Framework Directive sets targets for all Member States to achieve 50% recycling of municipal waste and 70% recycling of construction waste by 2020.

Since 2014, the European Commission has been developing the "Circular Economy" package of additional proposals concerning waste. The overall idea of the plan is to create a more "circular" economy in which resources are recirculated within the economy. The draft Circular Economy Action Plan included ambitious targets to increase municipal recycling to 65% by 2030, and limit landfilling to 10% of municipal waste. The European Parliament recently suggested increasing the recycling target further to 70%, and tightening the limit on landfilling to 5% of waste by 2030.

Current State of UK Waste Management

These policies have had a transformational impact on the way that we manage resources and waste in the UK:

- The UK is using fewer and fewer resources. Total Domestic Material Consumption decreased from 740 million tonnes in 2003 to 590 million tonnes in 2013. The UK produces 63% more economic output per kilogram of materials consumed than it did in 2000. The UK is far more productive in the use of resources than the European average.
- Total waste arisings (from all sectors including households) reduced by 16% over the period 2004-14, from around 300 million tonnes per annum to around 250 million tonnes per annum. There was a reduction in waste arisings of 76% in the manufacturing sector, and 60% in the services sector over this period. Conversely, construction waste increased by 21% and is now by far the largest source of waste (120 million tonnes per annum).
- The total amount of municipal waste¹ in England fell slightly from 28 million tonnes in 2000/01, to 26 million tonnes in 2015/16. This represents a 16% reduction in waste per household, given the growth in household numbers over this period.
- The way in which municipal waste is treated has changed dramatically. The municipal recycling rate in England increased from 12% in 2000/01, to 43% in 2014/15. However, this is still some way short of the European target to recycle 50% of municipal waste by 2020. The proportion of municipal waste sent to landfill fell dramatically from 80% in 2000/01, to less than 20% in 2014/15.
- Progress has also been made in the construction and demolition sector, where 90% of waste is recycled or recovered – well ahead of the European target of 70% by 2020.
- The UK now exports large quantities of waste and scrap materials overseas. In 2016, the UK had net exports of scrap materials worth £3.1 billion.
- However, there is also a burgeoning market for companies exporting residual
 waste overseas, where it is burned to produce energy. This has cost the UK
 over £900 million in gate fees since 2011 (including £280 million in 2016
 alone).

These changes have led to a significant improvement in the environmental impact of waste management activities in the UK. For example, direct greenhouse gas emissions from waste management have reduced by around 75% since 1990. Emissions of dioxins from waste incinerators fell by more than 99% since 1990, as did the emissions of several heavy metals (e.g. Arsenic, Cadmium, Lead, and Mercury). Evidence gathered for this report shows that energy from waste facilities are operating well within the Emissions Limit Values for regulated pollutants such as dust, Carbon Monoxide, and Sulphur Dioxide; despite these emission limits being tighter than for any other thermal process regulated in the EU.

^{1 &#}x27;Municipal waste' includes all waste collected by Local Authorities – including household waste and some non-household waste.

Critique of European Waste Policies

Despite the successes noted above, there are a number of significant weaknesses in the European approach towards waste:

- **Objectives are unclear:** The objectives of European waste policy have evolved over time, and have now become very unclear. This is particularly true of the proposed Circular Economy package, which appears to be justified as an end in itself, rather than a means to achieving a particular set of economic, environmental or social outcomes. The notion of a 'circular economy' is very open to interpretation for example, it is unclear whether the EU is trying to make the economy more circular at Member State, European or global level.
- Targets prescribe the means not the ends: The targets set under the Waste Framework Directive and Circular Economy package prescribe the methods of waste treatment, rather than environmental outcomes. There are a number of serious side-effects to the use of weight-based recycling targets, which in some cases may be leading to perverse outcomes.
- Fails to reflect UK context: Cost benefit analysis shows that the targets proposed by the European Commission under the Circular Economy package represent a poor choice from the UK's perspective. They would impose an additional cost on UK businesses of £1.9 billion (in the period 2015-35). The Commission's own analysis shows that it has failed to select the optimal set of policies either at EU or UK level.
- **Ignores the fundamentals:** European waste policies are focused on the achievement of ever higher levels of recycling, and fail to reflect the economic fundamentals. The economics of recycling have deteriorated in recent years due to the fall in commodity prices since the Great Recession. This has impacted on the value of secondary materials and the viability and profitability of recycling activity. It is difficult to see how the UK will achieve the even more ambitious recycling targets proposed by the EU without increasing the cost to businesses and households.
- Poor data and definitions: Waste policy suffers from some serious issues regarding definitions, measurement, and data quality. There is significant divergence within the UK and between European countries on how waste flows are defined and measured. Official recycling figures are likely to overstate the actual amount of recycling taking place, since they mask the amount of contamination in the materials handled by recycling firms. The data on non-municipal waste streams is generally very poor.

Developing a New Approach to Waste Policy

Given the shortcomings highlighted above, this report argues that the UK Government should not simply accept the Circular Economy package and transpose it into UK legislation. **Instead, following Brexit, the UK should define its own approach to waste and resource policy which better suits the UK context.** This needs to be reframed around a much clearer set of objectives, underpinned by a coherent set of targets and policies.

The overall aim of this policy framework should be to achieve a more sustainable pattern of resource use and waste management - economically, environmentally and socially. For too long, waste policy has been driven primarily by an environmental agenda, with a rather muddled set of overarching aims. It needs far greater clarity of purpose.

Equally, there is a sizeable opportunity for businesses to further improve their resource productivity, and in doing so improve their overall productivity and competitiveness. This potential is recognised in the Government's Industrial Strategy green paper, but needs to be considered further.

This report argues that Government should redefine its strategy and policies towards waste and resources, focusing on the following high level objectives:

- Maximise resource productivity by minimising resource use and maximising the value of materials through reuse, recycling and recovery. Improving resource productivity can significantly reduce costs to business, and thereby contribute towards the Government's emerging Industrial Strategy. Government should track the material consumption per unit of GDP - both at aggregate level for the UK economy, and for individual sectors.
- Minimise environmental impacts of resource use and waste management. Waste and resources policy should be consistent with and contribute towards the objectives defined in the Climate Change Act, the forthcoming Emissions Reduction Plan, and Defra's forthcoming 25 Year Plan for the Environment. The Government should implement a carbon-based metric to monitor the environmental impact of waste activities at UK and Local Authority level, similar to that already used by London Boroughs. Government should also refresh the 'waste hierarchy', based on analysis of the greenhouse gas impact of treatment options for individual waste streams.
- **Minimise the burden on society** by minimising the cost of municipal waste management (which cost a total of £3.5 billion in 2015 in England, or £130 per household) and ensuring a high level of consumer satisfaction.

Achieving this will require significant collaboration between Defra (which leads on waste and environment policy) and BEIS (which leads on industrial strategy, energy and climate change).

The report contains a number of detailed recommendations on how to better align policies with the objectives set out above:

Reduce, Reuse

- Shift the emphasis of waste policy towards waste prevention and reuse. This needs to happen at all levels including Central Government and Local Government.
- Government should remove the barriers and positively encourage the reuse of goods and materials at Household Waste Recycling Centres (HWRCs) either for resale or for distribution to local charities.
- Local Authorities should also do more to promote reuse opportunities within their local areas. This will ultimately reduce the amount they spend on waste collection, recycling and disposal.
- The UK Government should continue to engage with the EU on the development of product standards (such as the Eco-design Directive) both in the period until the UK leaves the EU, and beyond. The scope of Ecodesign should be extended to consider how to improve product durability, reparability, and recyclability.

- As part of the broader sector-based approach set out in the Industry Strategy green paper, Government and industry should work to improve resource productivity and reduce waste.
- The wider use of kite-marking should be explored as a way to communicate the advantages of better product design to the consumer.

Recycling

- Defra and DCLG should set a timetable for all Local Authorities in England to move to one of three standardised systems for the collection of waste and recycling (e.g. by 2025), simplifying the 400+ collection systems for waste and recycling across England.
- Local Authorities should use proactive marketing and 'nudges' to increase public awareness concerning waste and improve waste and recycling practices.
- Product manufacturers and retailers should work together with WRAP to define common standards for labelling of packaging to improve recycling behaviour.
- Government should reform the system of 'Packaging Recovery Notes' to remove distortions and put UK-based recyclers on an equal footing to overseas recyclers.
- Defra and WRAP should consider how to support the development of markets for secondary materials, building on the highly-successful National Industrial Symbiosis Programme which ran until 2013.
- Government should foster innovation in the recycling and reuse of goods and materials. This should include re-establishing and streamlining the process for obtaining 'End of Waste' status for products manufactured from waste.

(Energy) Recovery

- Government should prioritise energy from waste towards high efficiency technologies (producing 'green gas' or Combined Heat and Power). These technologies offer far higher levels of efficiency than electricity-only incineration facilities, and could play an important role in decarbonising heating and transport. Existing subsidy support schemes need to be amended to reflect this shift of focus.
- The Government needs to provide clarity about the future of the Renewable Heat Incentive scheme beyond 2020/21.
- The Government and waste management industry should work together to increase transparency about the efficiency and environmental impact of energy from waste facilities.
- The Government and the waste industry should explore the creation of community benefit schemes for communities which host energy from waste facilities.
- Government should tighten the definition of "Refuse Derived Fuel", such that operators are required to extract all economically-recoverable materials prior to export of materials for energy recovery abroad.