

European Commission Circular Economy Package

UK response to European Commission consultation of member states on the circular economy

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Introduction

The Commission will put forward a new initiative on the circular economy by the end of 2015. This initiative will comprise a revised proposal on waste, as well as an action plan addressing the circular economy throughout the value chain.

Public consultations on the review of EU waste targets and on the sustainability of the food system took place in 2013¹. A public consultation is ongoing until 20 August 2015 to cover other issues relating to the transition to a circular economy, including how to address the different parts of the economic cycle (e.g. production and consumption phases) as well as enabling framework conditions, such as innovation and investments. A separate consultation on waste market distortions is also ongoing until 4 September.

Member States are encouraged to participate to the ongoing public consultations in order to share their views regarding measures that could be taken at EU level to promote the circular economy. However, given the specific experience that many Member States have in implementing measures on their national territories, or encountering barriers to the circular economy, as well as their technical expertise regarding waste management, the Commission would like to specifically consult Member States on the questions set out below.

In light of the cross-cutting nature of the issues at stake, Member States are encouraged to develop their answers through an inclusive and coordinated approach, involving various departments and in particular those in charge of environmental and economic affairs.

Contributions should be sent before 10 September to ENV-GROW-CIRCULAR-ECONOMY@ec.europa.eu

¹ The results of these public consultations can be found here:
http://ec.europa.eu/environment/waste/target_review/consultation.htm

Part 1: Circular economy measures

Have you encountered specific barriers in your country to the establishment of a more circular economy? Can you describe these main barriers?

UK response: There are number of barriers to the establishment of a more circular economy. The main ones are:

- Regulatory
- Financial
- Information
- Systemic

Our response to Question 2 below describes some of the measures we are taking to address these barriers and then in our response to Question 3 we set out our view on the three most important measures to be adopted at EU level.

What are the most successful measures taken in your country, at national, regional, or local level to facilitate the transition to a circular economy? (These can include legislative initiatives, financial instruments such as taxation, support programmes, awareness campaigns, public procurement, etc.). Are there any particular lessons learned from these measures, and could they in your view be usefully replicated in other countries or regions?

UK response: A number of measures have been taken to facilitate the transition to a circular economy. We believe that a number of these could be replicated elsewhere.

We recognise the importance of moving to a more sustainable economy. A key priority for the Government is to provide the right policy frameworks and support, focusing on areas that only Government can and must do, i.e. where a clear market failure exists. Many UK businesses are leading the way and reducing their environmental impact through greater resource efficiency, productivity and innovation.

Improving business resource efficiency has a key role in delivering the benefits of a circular economy - saving money while reducing the impact on the environment. There are real opportunities to be had, for example through resource efficient production techniques which can reduce costs and increase competitiveness, and growth in new markets for technological or service solutions. Large businesses can work with their value chains to make savings for themselves as well as for SMEs with whom they do business.

There is a case for Government intervention to facilitate the transition towards a more circular economy, where the market alone does not produce the optimal situation. This includes encouraging collaborative and partnership working and promoting technological innovation and infrastructure that is needed to underpin and push the boundaries to deliver

real change. This will in turn provide certainty for investment and a level playing field that support legitimate businesses.

A good example of this is the landfill tax escalator, which created a strong incentive and provided long term certainty that drove industry action and diverted waste from landfill towards much greater reuse, recycling and recovery of waste materials.

The following are other examples of successful measures adopted across the UK or within UK regions which we believe could be usefully adopted in other countries or regions. This reflects the fact that in the UK environment policy, including on resource efficiency is devolved. This means that there can be, and are, different policies for resource efficiency, waste management and a more circular economy in the different administrations (i.e. the different countries that make-up the UK).

UK-wide examples

Working with and funding the Waste and Resources Action Programme (WRAP) to support businesses, civil society organisations, local authorities and households become more efficient in the way that they manage and use resources. Examples of action being delivered with this funding include:

- Food waste – Since 2007, The UK has had larger scale interventions in place aimed at reducing food waste across both supply chains and within households. This voluntary approach has been effective in the UK reducing household food waste by 1.3Mt from 2007 to 2012 (15%) and reducing supply chain food and packaging waste by 7.4% from 2009 to 2012.. The main delivery vehicles for business have been the Courtauld Commitments², the Hospitality and Food Service Agreement³ and for consumers the Love Food Hate Waste⁴ campaign.
- Electricals - By August 2015 70 organisations from across the UK electricals sector had signed up to the Electrical and Electronic Equipment Sustainability Action Plan (esap). Esap seeks to catalyse sector action, share evidence and bring together the many different stakeholders to provide tangible economic and environmental benefits. This work will help organisations that design, manufacture, sell, repair, re-use and recycle electrical and electronic products to work collaboratively across the product life-cycle. Esap will take specific actions, by product category, across five themes:
 - Extending product durability through design and customer information
 - Minimising product returns

² <http://www.wrap.org.uk/category/initiatives/courtauld-commitment>

³ <http://www.wrap.org.uk/content/hospitality-and-food-service-agreement-3>

⁴ <http://www.wrap.org.uk/sites/files/wrap/Love%20Food%20Hate%20Waste%20Retailer%20Introduction.pdf>

- Understanding and influencing consumer behaviour on product durability and reparability
 - Profitable, resilient and resource efficient business models
 - Gaining greater value from re-use and recycling
- o Textiles/clothing - WRAP is also co-ordinating the Sustainable Clothing Action Plan (SCAP) which had 76 signatories and supporters by the end of August 2015. The Plan aims to improve the sustainability of clothing sold in the UK. It brings together industry, government and the third sector to reduce resource use. The SCAP 2020 targets, which were launched in February 2014, include commitments on carbon, water and waste.

A separate project being led by WRAP is Developing resource efficient business models (REBus). This project involves a range of partners from the UK and the Netherlands – Rijkswaterstaat, the Knowledge Transfer Network, The University of Northampton and the Aldersgate Group. This LIFE+ funded project will demonstrate how businesses and their supply chains can implement resource efficient business models and will focus in four key markets of electrical and electronic products, clothing, furniture and construction products, working with both large organisations and SMEs. WRAP will match the LIFE+ funding to the resource efficient business models programme being delivered for Defra, the Scottish government and Welsh government.

The REBus project aims to:

- o Develop an evidence base of existing circular economy models
- o Provide innovation support to businesses
- o Assess the commercial feasibility of alternate, resource efficient business models
- o Deliver pilots of more resource efficient business models

An example of a REBus project is an innovative gadget trade-in service launched in July 2015 and being rolled out by the UK retailer Argos.

Single use bag carrier charge in Scotland, Wales and Northern Ireland and soon to be introduced in England.

English examples

Research - Funding and supporting Action Based Research projects to explore issues such as: innovative ways to encourage SMEs to be more resource efficient; product longevity for high impact products; reuse and repair systems for household appliances; and the benefits of new business models where the consumer purchases the use of a product rather than the materials.

Construction - The Built Environment Commitment was launched on 2 July 2014 at the Government Construction Summit. Developed in consultation with industry, this Commitment is a strategic priority of Construction 2025 – the industrial strategy for construction. It is focused on a simple statement of intent – each signatory (currently 16, including the UK Contractors' Group which has over 30 major construction contractors who

collectively account for a third of UK construction industry output) commits to take action that contributes to a more low carbon, resource efficient built environment.

Public Procurement - For example, by ensuring that whole life value for money is taken into account in central government procurement decisions for goods and services, which includes bringing waste prevention and reuse criteria within Government Buying Standards and Crown Commercial Service framework contracts; and piloting a cross-government scheme to enable exchange and reuse of goods across departments. The wider public sector will be encouraged to do the same through central government leading by example.

Great Recovery Project - The current economic and environmental challenges of take, make, dispose manufacturing are becoming apparent. Increasing supply risk and rising costs of materials is putting pressure on businesses to change. We need to shift towards more circular systems and good design thinking is pivotal to this transition. The Great Recovery is building new networks to explore the issues, investigate innovation gaps and incubate new partnerships. The project is a Royal Society of Arts and Manufacturing project, working in partnership with Innovate UK.

Innovate UK (previously Technology Strategy Board) is investing around £10m in projects to increase resource efficiency in manufacturing and in the food supply chain.

- As part of a 'resource efficiency action plan', up to £4m of this funding will be invested in a research and development competition focused on extracting value from waste, in particular by developing new supply chains that support a more circular economy.
- An additional £1m will be spent on feasibility studies to explore new circular business models.
- Up to £500,000 will go to knowledge-transfer partnerships to promote sharing models among manufacturing companies, using by-products from one as feedstock for another.
- In addition, as part of an agriculture and food action plan, up to £5m will be invested in a research and development competition to minimise waste generation in the food production supply chains

Scottish examples

The Scottish Government published a consultation on a Circular Economy Strategy for Scotland: Making Things Last in August 2015, following the social media #makethingslast campaign. The consultation focuses on the economic, environmental and social benefits from a more circular approach, and includes a number of proposals for action for a more circular economy on design, reuse, remanufacture, recycling and biological resources.

Scottish Institute for Remanufacture - The Scottish Institute of Remanufacture is hosted by the University of Strathclyde and run in partnership with Heriot Watt University. The £1.3m funding is over three years, with £1m from the Scottish Funding Council and £300k from Zero Waste Scotland. Companies based in Scotland have already pledged over £800k of funding, or in-kind support, for potential research projects for the Institute.

Scottish Materials Brokerage Service - will see supply and demand for high value recycling matched up, providing certainty of supply for investors and certainty of demand for local authorities. Scotland's public sector handles almost 3 million tonnes of waste materials per year. The Brokerage Service will enable the resources collected by councils to be channelled into higher value use, while providing a good deal for the public sector and improving our recycling rates.

Welsh examples

Funding the Waste and Resources Action Programme Wales (since 2002) to help drive CE activities in Wales, including targeted sectorial work on waste prevention, reuse, recycling, composting, AD and creating markets for recyclate, compost and AD digestate. Key CE related initiatives include the EU funded ReMade/ReMake and Accelerating Reprocessing Infrastructure Development (ARID) programmes (<http://www.wrapcymru.org.uk/ARID>);

Funding the Waste Awareness Wales campaign since 2002 - Waste Awareness Wales (WAW) is a Welsh Government funded campaign that delivers communication and behaviour change projects which encourage the Welsh public to change their waste behaviours and contribute to meeting the Welsh Government's prevention, reuse and recycling targets set out in the Wales Waste policy 'Towards Zero Waste'. Through WAW, a programme of support has been provided to assist local authorities in their waste communications to help achieve waste targets by encouraging public behaviour change and increased participation in using local authority recycling and other waste services.

The Ecodesign Centre is a Welsh based knowledge-intensive organisation that develops and delivers collaborative multi-sectoral projects based around the concepts of ecodesign, lifecycle thinking and circular economy. The Eco Design Centre works with companies, industry associations, design agencies, educators, government policy-makers, government-funded organisations and social enterprises amongst others. The projects are underpinned by applied research, international best practice scanning, active participation in UK and international networks and a focus on capacity building.

Since its establishment, the Ecodesign Centre has worked in partnership with a large number of organisations including Capital Coated Steel, the Technology Strategy Board (TSB), the UK Business Council for Sustainable Development (BCSD-UK), Harman International, Orangebox, Global Laser, European Coil Coating Association (ECCA), European Commission, United Nations, SVID/Mistra (Swedish government-funded bodies), Higher Education Academy (HEA), Welsh Government, Chartered Institution of Wastes Management (CIWM), Constructing Excellence in Wales (CEW) and Odoni-Elwell.

Funding the Resource Efficiency Wales service to support resource efficiency in businesses, the public sector, the third sector and in communities. Resource Efficient Wales is the Welsh Government single point of contact for information on resource efficiency (i.e., energy, waste and water). The service is designed to provide support for users and organisations to become more efficient.

Northern Irish examples

Prosperity Agreements - The Northern Ireland Environment Agency (NIEA) has taken a new approach to help meet strategic goals on resource efficiency and environmental impact. Through its Prosperity Agreement programme, NIEA supports responsible businesses to move beyond minimum compliance and towards harnessing value from innovation, particularly in energy use and resource management. Prosperity Agreements are voluntary partnerships that seek to improve the relationship between the NI environmental regulator and key stakeholders whilst facilitating mutual gains in economic and environmental performance.

The Eco-Schools programme was developed in 1994 on the basis of the need for involving young people in finding solutions to environmental and sustainable development challenges at the local level, as identified at the UN Conference on Environment and Development of 1992. The Programme is operated by Keep Northern Ireland Beautiful, an environmental charity, and is supported by commercial sponsorship, the Department of the Environment and other organisations.

The programme aims to make environmental awareness and action an intrinsic part of the life and ethos of a school. Eco-Schools endeavours to extend learning beyond the classroom and develop responsible attitudes and commitment, both at home and in the wider community. The programme covers 10 topics: waste; litter; energy; water; transport; healthy living; biodiversity; climate change; school grounds; and global perspective.

Based on your national experience, what would be the three most important measures to be adopted at EU level in order to promote the circular economy? Please be specific

UK response: Any actions take on the Circular Economy should be in line with the below guiding principles:

- 1) Seek greater resource efficiency, reduce reliance on virgin materials and keep materials in circulation;
- 2) Reduce complexity and ensure that measures are complementary not contradictory or duplicative;
- 3) Adopt a holistic approach to developing the new circular economy package as a whole - the impact of waste prevention actions needs to be taken into account in considering the “waste part of the circle”;
- 4) Maintain the integrity of the EU single market and support measures to deliver growth and innovation, avoiding and where appropriate reducing burdens on business, especially SMEs;
- 5) Respect the principles of subsidiarity and proportionality but also recognise when EU action is needed, to provide long term visions, harmonise policy

frameworks where needed and ensure exchanges of best practice - essentially to create enablers at EU level, but to also;

6) Allow Member States freedom to act in the most economically and environmentally advantageous way

We would recommend that measures are taken which address all aspects of the circular economy. As the objective is to reduce the amount of material used linearly, we would suggest interlinking measures to encourage better use of materials. Firstly, adoption of Resource Efficient Business Models, and secondly adopting a systems approach.

Encourage the adoption of New, Resource Efficient Business Models.

Resource efficient business models (REBMs) extract the maximum value from products by using them more intensively, extending their lifetime or enabling them to be re-used - increasing business resilience and reducing resource dependency. *Growth Within: A circular economy vision for a competitive Europe*⁵ identifies that adopting circular economy principles, Europe can take advantage of the impending technology revolution to create a benefit of €0.9 trillion more than in the current linear development path by 2030. This would be accompanied by better societal outcomes including an increase of €3,000 in household income, and a halving of carbon dioxide emissions compared with current levels. Research from WRAP also identifies that the jobs created from adoption of New REBMs would be distributed across EU Member States.

Many of the enablers for adoption of REBMs already exist. Although fiscal levers are in the hands of Member States rather than the Commission, the EU has an important role in encouraging the transition to these business models and can take a number of steps to incentivise adoption of such models.

- i. **Enabling finance.** ING bank considers the circular economy the ultimate answer to economic scarcity of resources and planetary boundaries⁶. However, ING identify that different forms of capital are required to finance different REBMs, with the timing of cash flows a particular issue in leasing models for example⁷. The EU can **encourage financial institutions to provide the right finance** for circular business propositions by providing them with guidance through the European Banking Authority, and ensure that the right finance is promoted through the European Small Business Portal⁸.
- ii. **Green Public Procurement.** Encouraging the public sector to procure services rather than products can help develop markets, in conjunction with private sector

⁵ <http://www.ellenmacarthurfoundation.org/news/latest-research-reveals-more-growth-jobs-and-competitiveness-with-a-circular-economy>

⁶ ING Bank (2015) Rethinking finance in a circular economy <http://www.ing.com/About-us/Our-stories/Features/Circular-economy-challenges-financial-business-models.htm>

⁷ ING Bank (2015) Rethinking finance in a circular economy <http://www.ing.com/About-us/Our-stories/Features/Circular-economy-challenges-financial-business-models.htm>

⁸ http://ec.europa.eu/small-business/finance/index_en.htm

buyers where appropriate, for the circular economy and, in particular, reused/remanufactured and recycled content in specified goods. This should align with better economic outcomes for the public sector and be incorporated in the Life Cycle Costing tool due to be published in 2016⁹.

- iii. **R&D focussing on behavioural insights.** Use of EU R&D funding mechanisms to understand what would **motivate individuals to engage in REBMs** will enable the market to be understood, and in turn identify key opportunities for the private sector.

Adopt a Systems Approach – Make Better use of existing data.

For the Circular Economy to succeed, we need to take action at the appropriate economic scale and to ensure that we have the right economic indicators to measure success.

A whole-chain approach for key products and services will allow the most effective actions to be identified at the right point in a product life cycle. For example, ensuring that the design of a product is aligned with the requirements of REBMs, such as rental and repair, and enables consumers to reduce waste. A number of actions can be adopted at an EU level to support this.

- i. **Rethinking Extended Producer Responsibility (EPR).** EPR, either **voluntary or mandatory**, is widely implemented across Europe but tends to focus on recovering a certain proportion of products at the end of life. EPR should be broadened **beyond recovery** at end of life to include other areas such as a reduction in waste at significant points in the product life (e.g. consumer food waste), encouraging recycled content, a relative increase in minimum lifetime specifications (e.g. number of cycles / uses / hours service) or other design changes. Priorities for EPR could be informed by the EU research into the environmental impact of products¹⁰. Stronger links to other product policy measures could also strengthen this approach.
- ii. **Repackaging Existing Data.** To monitor progress in developing a more circular economy, it is necessary to compile data on products placed on the market and economic data for sectors associated with key products and services, and identify the **Gross Value Added per unit of primary raw material** entering that system. An increase in the ratio of GVA to the quantity of primary raw material will identify a system which is extracting more value from material resources, and together with the previous and following recommendation would encourage the adoption of a more circular economy.

Although labour and energy tend to be the primary focus of efforts to increase efficiency because of their high cost, the greatest opportunities for business efficiency gains for improvement are all in the way we use materials (DEFRA 2011¹¹).

⁹ http://ec.europa.eu/environment/gpp/index_en.htm

¹⁰ <http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=1429>

¹¹ DEFRA (2011) The Further Benefits of Resource Efficiency
<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=2&ProjectID=16943>

Data is already collected which will allow the Commission to highlight the benefits of taking a whole-chain approach to the circular economy. For example, sold production data is available for all EU Member States alongside import and export data. Standard Industrial Classification codes are available for the manufacture of electronic and electrical equipment, wholesale and specialised sale of such equipment, rental / leasing of such equipment, repair and dismantling. The relative size of activity in each subsector can be monitored to track changes in circularity, and the total GVA / employment can be monitored against primary raw material input to identify how effectively materials are being used across the economy.

Whilst this approach is imperfect and has limitations, it is nonetheless a potential step forward. This approach would also allow **benchmarking systems across European Union Member States**, identifying economies which make the most effective use of resources allowing for the different composition of different economies. The Commission should ask **Eurostat to compile data on product service systems and their associated resource use**. Key sectors could include food and drink, electrical and electronic equipment, construction etc.¹²

The EU should promote the use of voluntary agreements to address aspects of the Circular Economy. For example, the UK has had larger scale interventions in place aimed at reducing food waste across both supply chains and within households. This voluntary approach has been effective in the UK reducing household food waste by 1.3Mt from 2007 to 2012 (15%) and reducing supply chain food and packaging waste by 7.4% from 2009 to 2012. The main delivery vehicles for business have been the Courtauld Commitments, the Hospitality and Food Service Agreement and for consumers the Love Food Hate Waste campaign.

We have since expanded this approach to voluntary agreements on sustainable clothing and electrical and electronic products. Against that background, we believe that EU objectives to reduce food waste and other waste on a voluntary basis could be useful, work with existing and planned initiatives in individual Member States and take into account the early action already taken in each Member States.

The EU should review the current EU guidance on EU Competition Law and ensure that it does not create barriers to a more circular economy, in particular, by preventing cooperation between businesses and others needed to set up voluntary agreements. By providing more clarity through their guidance the EU would help businesses improve their confidence that they are not in breach of these Laws and inform businesses how they might be able to collaborate in a pre-competitive space without breaching competition rules.

¹² <http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=1429>

Part 2: Waste

Definition of municipal waste

Since the beginning of the 1990s Eurostat has been collecting annual data from MS on the generation and treatment of municipal solid waste on the basis of a questionnaire developed by the OECD and Eurostat. Member States report annually to Eurostat on MSW generated and on the type of treatment applied. Clear guidance is provided by Eurostat on how to report MSW generated and treatment.

In order to ensure a better harmonization of the calculation method and its alignment to the OECD/Eurostat approach, the Commission proposed in its previous legislative proposal to include in the Waste Framework Directive a definition of 'municipal waste' aligned with the existing OECD/Eurostat definition¹³ and covering "household waste and other waste from retail, trade, small businesses, office buildings and institutions similar in nature and composition".

Based on the input and reactions from both stakeholders and the Member States delegations during Council discussions, the following questions have arisen:

What are your views on these issues?

Should the definition remain neutral as to who is responsible for collection/management of the targeted waste stream (e.g. municipalities or private actors)?

UK response: It makes sense for all Member States to report in a consistent manner, but it must be recognised that any changes to definitions will have significant implications for some Member States, and adequate time is required for the changes to come into effect.

The UK thinks the definition of municipal waste should remain neutral as to who is responsible for collection and management of the targeted waste stream. As a point of principle, it should not matter who collects it, nor in which country it is subsequently recycled. Neutrality is the only way by which the definition can allow for variations in waste collection and management arrangements across (or even within) Member States, and to accommodate changes over time as the Circular Economy develops up to and beyond 2030.

A bottle discarded by a household and recycled should in principle be capable of being reported as recycled whether it is collected by a public body or a private business.

¹³ Only a minor change has been included in order to include waste of the same nature and composition collected under producer responsibility schemes and exclude waste collected by private companies to private business to avoid that large quantities of commercial waste are included in MSW, for data reliability reasons and also as it seems to correspond to what is reported by the vast majority of the Member States

To what extent should the definition include waste from retail, trade, small businesses, office buildings and institutions that is similar in nature and composition to household waste? Would a quantitative criterion be useful?

UK response: A definition of municipal waste which includes waste from businesses and institutions that is similar to household waste would help to minimise impacts that might arise from transfers of responsibility for the collection of waste. Flexibility to allow this wider definition may also be helpful for Member States where the nature of the collection or data recording approach (perhaps based on list of wastes codes) means that it is difficult to distinguish household/municipal waste from similar retail, trade, small businesses, offices and institutions. However, such a change might place new burdens on business and institutions to make arrangements to gather and submit data on waste collection and management if there was the expectation that it was to include **all** such waste. Already there is a challenge resulting from the fact that the UK has a good system for recording and reporting local authority-collected municipal waste, but a less robust system for reporting non local authority-collected municipal waste, dependent on expensive and time-consuming surveys.

We do not think that a quantitative criterion would be useful. Distinctions would be required on which types and sizes of premises to include or exclude and these would introduce arbitrary cut-off points. The burden of providing data would fall on waste collectors who service one side of the cut-off point but not the other. Such a move would introduce inequalities into the waste collecting industry, and could make contracts to collect waste from those businesses whose material is included as municipal waste unattractive because of the data-provision burden.

Is there a need to establish a clearer link between the OECD/Eurostat definition and the list of waste codes as specified in Commission Regulation (EU) 849/2010?

UK response: The term 'similar in nature and composition to household waste' is a vague and very imprecise term. Establishing a clearer link between the OECD/Eurostat definition and the list of waste codes specified in Commission Regulation (EU) 849/2010 would create a common basis for the definition and calculation of waste which could be helpful in describing and defining the type of waste that should be reported as municipal (or other) waste, and support consistent and transparent reporting of data. However, use of list of waste codes is not without its challenges and the waste codes might need revision to ensure consistent application.

The UK does not currently report data against the list of waste codes. Such a change would require us to map the broad material descriptions we use to the list of waste codes and we would not be able to separate packaging and non-packaging uses where dual uses exist.

Do you have any additional technical suggestions to improve the definition proposed by the Commission in 2014?

UK response: We would find EC clarification helpful on whether particular materials can be reported as re-use/recycling, as we think there may be inconsistencies in how these materials are reported across Member States. These materials include:

- Metals recovered from waste that has been treated by incineration (with/without energy recovery) and which are subsequently recycled.
- Incinerator bottom ash (IBA) or incinerator residue from waste that has been treated by incineration where the incinerator ash is used to make cinder blocks or aggregate which are used in construction in place of other materials.

The UK does not include materials such as the above in recycling tonnage, but we understand that a number of Member States do report either or both of these materials as recycled.

Calculation method

According to existing rules¹⁴, the amount of recycled waste -to be reported with a view of compliance with the targets for municipal and packaging waste is defined as the "input into a final recycling process" (WFD) or an 'effective' recycling process (Packaging and Packaging Waste Directive - PPWD). Member States may also report as "recycled" what is separately collected (in the case of the WFD) or the output from the sorting plants (in the case of both the WFD and the PPWD) as long as there are no "significant losses".

In the Commission's view, these rules need to be further clarified in order to ensure a more uniform implementation and comparability across the EU, while avoiding potential misinterpretation, or abuses (e.g. waste that is landfilled or incinerated being reported as recycled).

In this context, the Commission would like to enquire with the Member States on the following:

¹⁴ Commission Decision 2005/270/EC establishing the formats relating to the database system pursuant to Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste and Commission Decision 2011/753/EU 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

At what stage in the waste management process do you measure quantities to be reported as recycled / prepared for re-use? Does this measurement point vary depending on the waste fraction or material stream? If the measurement takes place before waste reaches the final recycler, how do you ensure that "significant losses" do not occur after measurement?

UK response: The UK operates a range of collection, sorting and treatment systems for different types of dry and organic garden and food waste streams. The point at which recyclate is quantified varies, depending on the type of material and the point at which the recyclate is obtained from the waste collection and treatment system. The point at which the recyclate is quantified is summarised in the table below. This relates to all Local Authority collected and treated waste which forms the basis of our reporting (see <http://www.wastedataflow.org>).

Type/source of recyclate	Handling/treatment	Point of quantification of recyclate	Other comments
Source segregated organic and dry recyclate	Minimal handling between the point of collection and receipt by the final reprocessor	Input tonnage to the final reprocessor minus rejects at the gate of the reprocessor.	For organic garden/food waste the tonnage reported is the input tonnage including process/ moisture loss which may occur during composting, rather than the tonnage of the final compost produced.
Co-mingled recyclate	Mixed recyclate which is often sorted at a materials recovery facility (MRF).	Output from the MRF minus any further rejects at the gate of the reprocessor.	
Recyclate from residual waste	Residual waste stream typically goes through a residual MRF, mechanical heat treatment (MHT) or a mechanical biological (MBT) treatment system.	Output from treatment (MRF, MHT or MBT) and minus any further rejects at the gate of the re-processor.	Typically a relatively small tonnage of recyclate is recovered from the residual waste stream; the majority is disposed of via incineration or landfill.

Local Authorities are required to report, via UK's data recording system for local authority-collected waste from households (<http://www.wastedataflow.org/>) all rejects at primary, secondary and tertiary MRFs, and also at the gates of a reprocessing facility. We don't take into account any rejects or process losses (for example, short fibres extracted from pulp at paper mills) that occur beyond this point.

The data reported is quality-assured to ensure that tonnages correlate, the treatment process is appropriate to the type of waste stream and the outputs are appropriate. We check that rejects and process loss are recorded at relevant points and that the levels and rates are within typical and previously reported ranges so any outliers are identified for further investigation. The facilities used to process the waste (linked to their permit) are also recorded.

On a related matter, the UK would like further clarification on whether a waste must meet end of waste criteria before it be counted as a recycled product, material or substance. This causes some confusion and clarification would be helpful in resolving our thinking on a number of related issues.

What is the approximate share of municipal and packaging waste generated in your country sent to a final recycler located in another MS? What is the approximate share sent to a final recycler located in another MS outside the EU?

UK response: UK trade statistics on the amount of waste which the UK imports and exports to the EU and non-EU are broken down by com code (type of waste/waste material typically). This data is sourced from HM Revenue and Customs and is based on VAT returns (EU) and customs declarations (non-EU) for all waste in the UK. It is not possible to identify the source of the waste to distinguish whether this is municipal waste or from another source such as commercial and industrial waste.

Data on packaging waste accepted by reprocessors operates through producer responsibility legislation and the associated scheme.

This demonstrates that in 2014, 54% of packaging waste sent to a reprocessing facility was sent to a UK-based reprocessor, 9% to a reprocessor in another EU Member States and 37% to a reprocessor in a country outside the EU. However, this data is not specific to the source of the waste either and so does not allow us to distinguish packaging waste from household/municipal sources. Likewise, data on shipments is available under waste shipment obligations but does not record the original source.

The main types of wastes that we export are metal (8.1 Mt), paper (4.4Mt), plastics (0.8Mt) and textiles (.03 Mt). The figures in brackets are the average exports from the UK between 2009 and 2013 for each material.

In your view, what would be the most appropriate single point of measurement to obtain reliable and comparable data while limiting administrative burden (e.g. output of first sorting operation, output of last sorting operation, input to the final recycler, etc.)? Please motivate your choice.

UK response: Our preference is to have a single point of measurement at the point of input to the final reprocessor, which provides a clearly defined point in the process and balances accuracy of reporting of the final recycled tonnage and considerations of reliable and comparable data with practicalities and burdens.

The further down the waste treatment and recycling system that reporting is required, the more difficult it is to ensure reliability and consistency of data, and the greater the burden. We do not think it is practicable to report recyclate which is exported for reprocessing beyond the last UK destination.

Incentivising re-use

Some Member States as well as some stakeholders called for concrete actions to incentivise/reward Member States' efforts on re-use. While a specific target for re-use would be difficult to set at this stage due to unavailability of data and methodological gaps, alternative ways of incentivising/rewarding re-use might be considered as long as reliable data is available.

Would you agree that additional actions are needed to favour re-use? If yes, what actions do you see as most appropriate at EU level?

UK response: We agree that there should be a greater focus at EU level on action at the top of the waste hierarchy (waste prevention and re-use) given their vital contribution to promoting resource efficiency and contributing to the circular economy. Some potential actions to facilitate more re-use could include:

- Action to promote innovative business models which incentivise businesses to achieve higher levels of reuse, such as businesses built around leasing rather than selling products;
- Support for wider application of the voluntary agreement approach - waste prevention is central to the UK's voluntary agreements, and SCAP and esap in particular have a strong focus on extending product life and encouraging reuse.
- Use of public procurement as a tool to incentivise higher standards of reusability in certain product categories.
- Examining other opportunities to promote greater reusability and reparability in product design and support trade in second hand products while continuing to ensure effective regulation, including product standards for reuse and repair.

However, as part of this care also needs to be taken to ensure that these and other related environmental measures do not cause unintended consequences. For example, by putting in place inappropriately strict technical requirements on materials which limit innovation (including re-use), or by mandating the reuse of a material when there is little or no environmental benefit from doing so.

What would be the key waste streams for which it would make sense to incentivise re-use? Are national data available on these streams? If yes, please provide recent statistics on the re-use streams in your Member State.

UK response: The areas where there would appear to be greatest potential for incentivising re-use include electrical items (it is estimated that 25% of electrical items discarded at household recycling centres in the UK could be reused), clothing/textiles and furniture. Reuse of these items is prioritised in many MSs' waste prevention programmes, and both electricals and textiles are subject to voluntary agreements in the UK.

Examples of other materials identified as having potential for increased re-use include:

- Laboratory equipment
- Cutlery / crockery / glassware
- Toys
- Refillable / multiple use containers for household cleaning fluids (hand wash, liquid soap) and cooking consumables (e.g. cooking oil) and some food purchases (e.g. buffet salads)

Within UK Official Statistics, there is data on preparation for re-use for *local authority* managed waste. In England and Wales the data comes from 'WasteDataFlow' which records "preparing for re-use", but does not record 'direct' re-use of material which has not become waste. WRAP have produced estimates of the Gross Value Added of various repair, reuse and leasing sectors, which can be found at

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/422618/Digest_of_waste_England_-_finalv2.pdf.

In your view, should re-use streams for which reliable data is available be accounted for and rewarded under the existing recycling and preparation for re-use targets?

UK response: It would currently be very challenging to collect reliable data on re-use of items which have not previously been categorised as waste. This would require systematic monitoring of some of the common re-use routes such as charity shops (which already collect some data on clothing and other materials) and online exchange sites. In both cases new items are sold alongside re-used items, so would require differentiation. Such data would obviously not cover informal re-use, such as between family members and friends. There would also be very significant challenges in capturing this kind of data on a consistent basis across Member States.

In addition to these practical concerns over data, care would need to be taken to ensure that any proposed change of approach did not risk creating perverse incentives (e.g. by encouraging some direct re-use activities to be reclassified as waste).

Minimum requirements on Extended Producer Responsibility (EPR)

In the withdrawn proposal, the Commission also proposed to include a new annex (Annex 7) with a list of minimum mandatory requirements on EPR. The aim of this proposal was to improve the cost efficiency and transparency of EPR systems which currently differ significantly across the EU. However, some Member States and stakeholders expressed concerns as to the level of detail of these requirements and the need to adapt existing schemes.

Based on your national experience, what are the key conditions to improve the cost efficiency and functioning of the EPR schemes?

UK response: It is our view that a rigorous level of common requirement setting does not comply with the subsidiarity principle. The decision to apply EPR in relation to local problems is best taken at a national level. The UK would like to see any reprisal of a new EPR annex provided as guidance to Member States and not as mandatory requirements. However, in response to the question, the UK operates a market based system which provides a financial pull through of material, and when working properly is very cost efficient. However, to operate properly, it needs good flow of information (transparency), transparent costs, no artificial barriers to trade (i.e. end year deadlines), effective planning by compliance schemes on how they plan to deliver and adequate enforcement by enforcement agencies. Other measures which have been beneficial in the UK include exemptions for low-volume producers and SMEs and de-minimis limits for technical requirements.

Finally, it is useful to note that a European Commission study in 2014 (http://ec.europa.eu/environment/waste/pdf/target_review/Guidance%20on%20EPR%20-%20Final%20Report.pdf) found no single EPR model was the “best”, indicating that different schemes may be more or less efficiency in different circumstances. This implies that, whilst sharing best practice is welcome, mandatory requirements may not be practicable across all Member States.

Do you see the need for a differentiated approach depending on the waste stream concerned?

UK response: Consideration could be given to a differentiated approach depending on the waste stream. For example, in the UK, paper recycling is very established, and the intrinsically high value of materials such as aluminium means that these materials are recycled. In both instances, our market based system adds limited value. There is a need for further consideration by the EU on how to pull plastic (particularly household) waste out, especially in the current economic climate (oil prices). More consideration could also be given to a possible differentiation between waste recycled in the EU and outside of the

EU, because the UK finds the current requirements of the PPWD (i.e. Broadly Equivalent) very difficult to enforce. This is also the case for waste electrical and electronic equipment, particularly as a Commission delegated act on 'equivalent standards' for treatment of WEEE outside the EU is still to be adopted.

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