ALDERSGATE GROUP

LEADERS FOR A SUSTAINABLE ECONOMY

BEYOND THE CIRCULAR ECONOMY PACKAGE

MAINTAINING MOMENTUM ON RESOURCE EFFICIENCY

CONTENTS

DECEMBER 2017

AUTHORS

NICK MOLHO Executive Director, Aldersgate Group
VICTORIA FLEMING-WILLIAMS Policy Manager, Aldersgate Group

ALDERSGATE GROUP

The Aldersgate Group is an alliance of leaders from business, politics and civil society that drives action for a sustainable economy in the UK and EU.

Our members include some of the largest businesses in the UK, leading NGOs, key professional institutes and politicians of all parties. We believe that economic success, both now and in the future, depends upon a political and economic framework that delivers a healthy environment and sustainable use of resources, good environmental performance at the organisational level, growth, jobs and competitive advantage in rapidly growing environmental sectors.

Our policy proposals are formed collaboratively and benefit from the expertise of our members who span a wide range of industry sectors and public interests. Our breadth and collegiate approach allows us to formulate progressive policy positions to benefit all organisations and individuals.

ORGANISATION MEMBERS

While members support this publication and provided extensive input, individual recommendations cannot be attributed to any single member and the Aldersgate Group takes full responsibility for the views expressed.

EXECUTIVE SUMMARY

The EU is making steady progress in improving the resource efficiency of its economy.

Between 2000 and 2016, the EU-28's resource productivity went from €1.47/kg to €2.07/kg, an increase of 41%[1]. This is happening in a context where the EU is gradually moving towards a more export oriented economy. Its ratio of physical imports (mainly fossil energy materials and metal ores) to physical exports (mainly semi-manufactured and finished products) measured in tonnes per capita, dropped from 3.6 in 2000 to 2.5 in 2016[2], suggesting an improvement in productivity.

However, the job is far from done. In 2014, the total waste generated in the EU-28 by all economic activities and households amounted to 2,503 million tonnes, the highest amount recorded for the 2004–2014 period[3]. Whilst improving resource efficiency will generally make good business sense, businesses often face a number of barriers to taking greater action, ranging from regulatory obstacles and a lack of effective market signals to difficulties in obtaining finance or technical advice to drive innovation. Public policy therefore has a role in supporting greater business action on resource efficiency.

Meanwhile the economic and environmental case for accelerating action on resource efficiency in the EU is growing. This is particularly the case in a context where improving the competitiveness of the European economy, supporting the creation of good quality jobs and delivering on important global environmental commitments such as those under the Paris Agreement on climate change and the Sustainable Development Goals are all top of the agenda.

The European Commission has recognised the importance of making more rapid progress on resource efficiency. The Commission introduced its Circular Economy Package in December 2015 and made some important policy progress, for example by improving the definitions of "waste" under the draft Waste Directive, publishing an Ecodesign Working Plan[4] to incorporate resource efficient design criteria into product standards and encouraging greater focus on circular economy thinking in innovation support policies and public procurement.

1 Eurostat (June 2017), Material flow accounts and resource productivity: http://bit.ly/2hOBTHG

2 Eurostat (June 2017), Physical imports and exports: http://bit.ly/2zRgiW7

3 Eurostat (May 2017), Waste Statistics: http://bit.ly/2sl2EzT

4 European Commission (November 2016), Ecodesign Working Plan 2016–2019: http://bit.ly/2hHvJp9

However, as the Circular Economy Package and the initiatives set out in the accompanying Action Plan[5] near completion, EU institutions must acknowledge that the move to a more resource efficient or "circular" economy will take time. To invest in new business models, more resource efficient processes and new supply chains for good quality secondary materials, businesses need the assurance that the resource efficiency agenda will remain a priority for the EU in the long term.

Building on an Aldersgate Group report published in January 2017[6], this briefing sets out a range of policy recommendations that we believe EU institutions should continue to pursue beyond completion of the Circular Economy Package to scale up business action on resource efficiency. These recommendations are based on business case studies, including some developed as part of the EU LIFE+ funded REBus project, which began in 2013 and on which the Aldersgate Group is a partner. By the end of 2016, pilots taking part in the REBus project (many of which involved SMEs), had already delivered a financial benefit of €5.62m, material savings in excess of 62,000 tonnes and a reduction of greenhouse gas emissions of just under 2,000 tonnes. These benefits have continued to grow since.

Based on the progress that has been made to date by businesses and the Circular Economy Package and recognising the long-term challenge of moving towards a more resource efficient EU economy, the Commission and other EU institutions should:

1. Pursue work to include resource efficiency design criteria in product standards, by delivering on the commitment to publish an updated Ecodesign Working Plan once a year and rapidly broadening the range of products subject to resource efficient design criteria;

2. Promote business innovation on resource efficiency, through continuing to work with the European Investment Bank (EIB) on providing easily accessible funding for circular economy innovation and continuing to broaden the sectors and number of organisations receiving technical support through the new Innovation Deals;

3. Expand the use of circular economy criteria in public procurement policy, by continuing to develop criteria for the Commission's procurement of a broader range of product groups, encouraging their application across Commission departments, public bodies and Member States and supporting targeted training programmes;

4. Where it is environmentally effective to do so, encourage Member States to develop pricing mechanisms that support material re-use and promote take-up such as through fiscal incentives;

5. Improve the quantity and quality of information available to businesses and Member States on the benefits of different resource efficient approaches and policies;

6. Encourage a consistent implementation of the Circular Economy Package in different Member States, especially in terms of the improved definitions of "waste".

5 European Commission (December 2015), An EU Action Plan for the Circular Economy: http://bit.ly/1Q4RXxK

6 Aldersgate Group (2017) *Amplifying Action on Resource Efficiency, EU Edition:* http://bit.ly/2AfUrlo

RESOURCE EFFICIENCY

A strengthening business case.

To improve competitiveness, resilience to the volatility of key commodity prices and/or reduce overall environmental impacts, an increasing number of businesses across a growing range of sectors of the EU economy are piloting new, more resource efficient ways of doing business.

The REBus Project

In 2013, the Aldersgate Group became a partner on the REBus project (see Box 1), which has been working directly with businesses across the UK and the Netherlands in a range of market sectors (including electrical and electronic products, textiles, construction, furniture and ICT) that are worth an estimated €350bn across the EU.

BOX 1. WHAT IS REBUS?

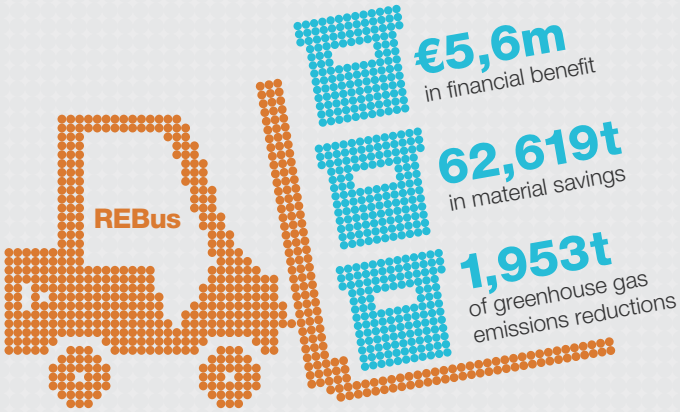
REBus, an EU LIFE+ funded partnership project, is pioneering and testing a methodology that enables companies to transform their strategies to be more profitable, resilient and resource efficient.

The project is led by WRAP, working in partnership with Rijkswaterstaat (Dutch Ministry of Infrastructure & Environment), Aldersgate Group, the Knowledge Transfer Network (KTN) and the University of Northampton. REBus secured €3.1m funding from the European Commission's LIFE+ fund, UK governments and project partners.

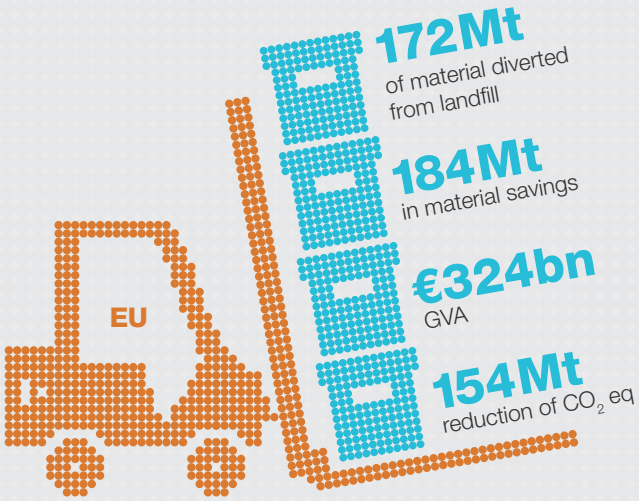
The project has launched pilots on supply (production and retail sale of goods and services) and demand (purchase and use of the goods and services) by providing technical expertise to businesses in developing business models and engaging with their customers and supply chains.

RESOURCE EFFICIENCY
DELIVERING ON THE GROUND

Across its pilots, REBus has delivered:



When REBus results are scaled up across the EU economy, it shows that by 2030, the adoption of resource efficient business models could deliver:



Figures accurate to the end of 2016

Across its pilot projects, REBus had already delivered by the end of 2016 a total of €5.62m in financial benefit, whilst reducing materials consumption by 62,619 tonnes and reducing greenhouse gas emissions by 1,953 tonnes[7]. These results are significant when one considers that many of the business pilots were run by SMEs and have continued to grow since.

Building on the positive environmental and financial results emerging from these pilot projects, lead partner WRAP examined the extent to which a large-scale adoption of the business models that have been piloted through the REBus project could deliver economic and environmental benefits for the EU economy[8].

Under an ambitious transformational change scenario[9], WRAP estimated that if the resource efficiency models tested by these pilot projects were replicated throughout their respective economic sectors, they could deliver an increase in gross value added to the EU economy of up to €324bn by 2030, whilst also reducing material demand by up to 184 million tonnes, avoiding an additional 172 million tonnes of material use and reducing emissions of 154 million tonnes CO_2eq by that same date.

7 These figures are correct as of 30 November 2016. The gains from the pilot projects continue to be monitored.

8 WRAP (December 2016) *Extrapolating resource efficient business model potential across Europe.*

9 This scenario is really transformational, with substantial progress in recycling and remanufacturing, but also major development of the reuse, servitisation and biorefining sectors.

Learnings from the REBus Project

REBus pilot projects[10], of which a selection of new case studies is provided below, are continuing to deliver financial, material and greenhouse gas emission savings as well as providing better value to consumers. However, whilst the pilot projects are delivering important gains, they also clearly highlight that in the absence of public policy intervention, businesses often face a number of barriers to taking greater action on resource efficiency. These range from regulatory obstacles (such as around the narrow definitions of waste) and a lack of market signals (such as through product standards, public procurement and fiscal incentives) to difficulties in obtaining finance and technical advice to drive innovation (a difficulty often encountered by SMEs).

In the ICT sector, European communications giant **Sky** launched a new mobile. To improve the resource efficiency of its new offer, Sky is including a mobile "take-back" option for its consumers with technical assistance provided by REBus around market research and the selection of recycling and refurbishment partners (Box 2). It is expected that this take-back option will provide environmental and financial benefits in the shape of better value for consumers, material savings and Sky retaining the asset value of returned products. This project, which shares many characteristics with a similar REBus pilot being run by **Samsung**[11], is a timely reminder of the importance of businesses receiving adequate technical support when designing resource efficient business models as well as the need for a growing and high quality remanufacturing supply chain.

In the furniture sector, the SME, **Naturalmat** worked with the REBus team to adapt its mattress manufacturing processes to make them easier to disassemble at the end of their lives (Box 3). By adopting an ecodesign approach, Naturalmat now uses 50% less adhesives which means more materials can be reused, recycled or upcycled. Naturalmat has also developed a market-based incentive for customers to return old mattresses to their stores.

10 For a full list visit the REBus website: http://bit.ly/2izvfmp

11 To read the Samsung case study, visit the REBus website: http://bit.ly/2B6pC60

BOX 2 – SKY PRODUCT TAKE-BACK OPTION

– Sky is a pan-European communications giant, which has 30,000 employees and 22 million customers.

– Sky has launched a new mobile and was keen to include a resource efficient, product 'take-back' option.

– Sky turned to REBus for expert advice on current and future trends in secondary market values for mobile phones (and for wearable tech such as headphones) and data wiping.

– The scheme launched in March 2017. By allowing customers to trade in their mobile phones mid-contract, it is expected that this scheme will improve Sky's customer offer, allow Sky to retain the asset value of the returned products and contribute better environmental practices.

– If successful, Sky may also explore the 'take-back' potential with wearable technology and other gadgets.

BOX 3 – NATURALMAT

– Naturalmat is an SME that makes organic, natural, luxury mattresses, toppers and bedding, using 100% biodegradable material wherever possible. They have 7,000 mattresses currently in use.

– Naturalmat worked with REBus to redesign their mattresses to increase re-use at end of life, reduce their own waste to landfill and disrupt the market by proving that fewer mattresses needed to be sent to landfill.

– Mattress construction now uses 50% less adhesives which make the products easier to disassemble at end of life. This was paired with an incentivised return offer for customers, allowing returned mattresses to be deconstructed and the materials reused, recycled or upcycled.

– The new initiatives are estimated to generate additional income of £35,000, while delivering 81 tonnes of material for recycling and 89 tonnes for re-use (based on 1800 sales). Naturalmat has grown in output and business acquisition and is now expanding its circular thinking beyond the original scope of the scheme, by offering a closed loop service to hotels.

(C) Naturalmat

BOX 4 – WARP IT

– Complex organisations often have surplus resources in good condition, but the challenges of identifying varied and distributed unwanted assets and matching them to new users generally act as insurmountable barriers to re-use.

– Warp It is a software solution that simplifies the re-use of items within complex organisations. Whenever a member of staff needs to buy items such as furniture or office materials, they can search to find out whether the item is already available in a different department.

– For the original user, the platform makes posting an unwanted item quicker than a phone call to estates management. The new user reaps the benefits of costs saving by avoiding procuring new items, and the workload of procurement is reduced.

– Warp It has been adopted by a variety of mainly public sector clients such as health authorities, local councils and universities, saving for example Northumberland County Council nearly €77,000[12] on internal purchasing in the first four months of implementation.

– Since it was set up in 2011, Warp It has saved clients almost €9m[13] in unnecessary procurements costs and delivered significant environmental benefits by diverting 959,631kg of waste from landfill and delivering 2.7 million kg of CO_2 emission savings.

– Critically, Warp It automatically collects data from its application across its client base, meaning that the benefits of re-using furniture and office materials can be readily communicated and reported.

SAVINGS WARP IT HAS MADE FOR CLIENTS SO FAR

CO_2 (kg) saved	Staff Time Saved (days)	Waste (kg) diverted	Donation to Charity	Total Money Saved
2,774,258	**1,206**	**959,631**	**£863,112**	**€7,170,380**[14]

12, 13 & 14 Financial impact originally made in £ sterling, conversion made using xe.com on 7th November 2017

An exemplar case study for REBus highlights the promising potential of setting up supportive online platforms to help match unwanted assets with potential new users, thereby tackling a communication barrier which is often a significant obstacle to greater material re-use. **'Warp It'** (Box 4) is a new software platform which can be used within complex organisations to help members of staff to discover whether an item of furniture or office materials that they need is available and no longer wanted in another department. The use of this software has saved clients over €7m[15] since Warp It was set up in 2011. By reporting back on the benefits of its application in a range of different organisations, Warp It has also helped increase awareness around the benefits of resource efficient business models.

15 Financial impact originally made in £ sterling, conversion made using xe.com on 7th November 2017.

POLICY RECOMMENDATIONS

Tackling the barriers to implementation of circular business models.

As demonstrated by the REBus pilots and exemplar projects and actions taken by businesses in several sectors of the EU economy, the momentum behind resource efficiency is growing and the benefits of resource efficient business models are becoming better understood. However, there remain barriers and lack of incentives in some sectors, which are slowing innovation or preventing businesses from implementing resource efficient business models at scale.

Whilst the Circular Economy Package is achieving progress in many areas such as encouraging material re-use through its Green Public Procurement policy, simpler definitions of waste and its Ecodesign Working Plan, the work to improve the resource efficiency of the EU economy has just begun. To continue investing in new business models, more resource efficient processes and new supply chains, businesses need assurance that moving to a circular economy is a long-term priority for EU policy makers.

The Commission and other EU institutions should commit to continuing progress in six key areas.

1 Extending resource efficiency criteria in product standards

80% of a product's environmental impact is determined at the design stage[16]. As highlighted by the Naturalmat (Box 3) and States of Jersey Household Reuse and Recycling Centre (Box 6) case studies, designing products in a way that supports their durability, repairability, disassembly and recyclability is essential to improve the resource efficiency of the economy.

The EU's Ecodesign policy, which already sets energy efficiency criteria for a range of energy-related products, provides an effective tool by which to drive improvements in the resource efficiency of new products. By announcing an initial list of six products to be considered for resource efficiency standards[17] in its Ecodesign Working Plan in December 2016 and committing to broadening the application of resource efficient criteria through the periodic reviews of products already subject to energy efficiency ecodesign standards, the Commission sent an important market signal. However, given the increasing volume and complexity of waste in the EU, it will be essential for the Commission to accelerate action in this area. In particular, the Commission should:

16 Aldersgate Group (2017) *Amplifying Action on Resource Efficiency, EU Edition:* http://bit.ly/2AfUrIo

17 Building automation and control systems, lifts, electric kettles, solar panels and inverters, refrigerated containers and hand dryers.

- review and publish its Ecodesign Working Plan once a year as it previously committed to doing;

- rapidly develop evidence-based resource efficient criteria (such as on durability, upgradeability, repairability and reusability) for a broadening range of energy-related products under its Ecodesign policy, both through periodic review of existing regulations and by incorporating new products. Over time, this will need to include white goods such as washing machines (already subject to Ecodesign Regulations) and complex ICT products such as smartphones (currently subject to an in-depth assessment);

- use the opportunity of the Plastics Strategy to develop ecodesign criteria for the use of plastics, including in relation to electronic products, to improve the efficiency with which plastics are used and facilitate their reuse;

- use its integrated product review in 2018 to start developing resource efficiency criteria for non-energy related products such as furniture, with a view to a possible future extension of the Ecodesign Directive to non-energy related products.

2 Promote business innovation on resource efficiency

The business pilots undertaken as part of the REBus project, which has been all about making the circular economy real for businesses, have provided valuable lessons for the future of the EU's innovation policy.

Although there is often a clear business case for adopting resource efficient business models and developing resource efficient products, understanding how to go about it can be challenging for some businesses, especially SMEs. The barriers are both technical and financial.

Most of the pilots delivered through REBus would not have happened without access to the expertise from the REBus delivery team. This support has included helping SMEs develop business models in a language that the companies understand, providing market research support, and helping with engagement with potential customers. Projects such as those undertaken by **Sky** (Box 2), **Samsung** and **Naturalmat** show the importance of technical advice and funding in developing a successful resource efficient business model. The Commission's Innovation Deals have huge potential to help here but they should be broadened over time beyond the two deals already agreed on water reuse and electric vehicles[18].

18 European Commission, Innovation Deals for a Circular Economy: http://bit.ly/1R179qE

When it comes to financing, the funding made available by the European Investment Bank and the Commission for circular economy innovation has been an important step forward and progress must continue as more businesses in more sectors of the economy tackle the challenge of resource efficiency. What businesses and in particular SMEs also need is technical support in accessing public funding. A common difficulty encountered by SMEs for example is how to fill in the complex application forms to access funding and how to present their project in a way that fits the scope of the funding being made available.

Finally, policy makers should remember that beyond supporting early stage innovation, businesses and especially SMEs can often struggle to take successful innovations through to the commercial stage, an area which the EU should consider carefully when developing its future circular economy innovation policy.

3 Expand the use of circular economy criteria in public procurement policy

Accounting for 14% of the EU's GDP[19], public procurement can be a powerful tool through which to send clear market signals. As exemplified by the sustainable concrete project carried out by **Rijkswaterstaat** (Box 5) and the savings delivered by the resource efficient procurement approach taken in the construction of the **States of Jersey Household Reuse and Recycling Centre** (Box 6), public procurement policy can help deliver greater resource efficiency in the way the private sector provides goods and services to public bodies.

The Commission recognised the potential of public procurement when publishing the Circular Economy Package in December 2015 and its handbook on public procurement a few months later. Importantly, it announced its intention to introduce resource efficiency criteria in its public procurement policy (covering issues such as durability, repairability and recyclability). It is now gradually implementing these across a range of different products such as furniture[20].

The Commission should continue this work going forward. However, in order for the new criteria to be effective, it will also be essential to raise awareness of their existence, encourage their application across different Commission departments and Member States and support training programmes on the circular economy. The recent announcement that the use of single-use plastic cups would be phased out across all Commission buildings in Brussels by the end of 2017[21] is a good example of measures that the Commission will need to take to ensure the new criteria are applied in practice.

19 Directorate-General for the Internal Market, Industry, Entrepreneurship and SMEs (April 2016) *Preventing corruption – new public procurement rules as of April 2016:* http://bit.ly/2cGTmcn

20 European Commission, EU GPP criteria: http://bit.ly/1hHx4X9

21 European Commission, Press Release, 5th October 2017: http://bit.ly/2kpnO3X

BOX 5 – DUTCH PUBLIC SECTOR BODIES DEVELOP CIRCULAR PROCUREMENT PROCESSES FOR CONCRETE

- Rijkswaterstaat, the Dutch ministry of infrastructure and the environment, partnered with the councils of Rotterdam, Amsterdam and Utrecht to run two pilots with the REBus project. They investigated ways in which procurement processes could support more efficient use of raw materials.
- Rijkswaterstaat's "multi-water works project" requires the replacement of 50 locks and dams, needing large amount of concrete. Rijkswaterstaat aims to take responsibility for the whole lifecycle of the project and identified new processes to embed in procurement. These included assessment criteria, evaluating bids, proof and monitoring. The potential savings from a single lock could be 36% of CO_2 and 21% of materials.
- Meanwhile the city councils held a workshop to encourage the concrete industry to consider their total environmental impact, from extraction to production, transport, use and end of life disposal.
- Rotterdam council's subsequent tender for concrete tiles delivered tiles that had halved their environmental cost.
- The pilots concluded that embedding a reduction in environmental impact as a primary aim of procurement can have a very positive impact on cost, time and reliability of the construction materials.
- They suggest that the measure of circularity should be the volume of primary raw materials used, as opposed to the volume of waste produced.

BOX 6 – STATES OF JERSEY, NEW HOUSEHOLD REUSE AND RECYCLING CENTRE

– Engineering consulancy WSP advised the Department for Infrastructure (States of Jersey) in the strategic planning, design, procurement and construction of a new Household Reuse and Recycling Centre.

– In order to maximise resource efficiency practice on this project, WSP worked with Department for Infrastructure to identify opportunities for, and quantify the benefits of, re-using and recovering resources (for instance, by re-using materials from recently demolished local buildings), resource optimisation (minimising water consumption in operation through rainwater capture and using sustainably sourced materials) and offsite construction (for example, using pre-fabricated structural insulation panels that minimised embodied energy and water).

– WSP also advised the Department for Infrastructure on the development and use of resource efficiency requirements in its construction procurement contracts. This enabled the Department of Infrastructure to select a construction team able to deliver on the design intent for resource efficiency and to have full confidence in its ability to maximise re-use and recycling performance throughout the on-site phase of delivery.

– The resource efficient approaches to design, procurement and construction taken by the Department for Infrastructure resulted in (i) 20,000 tonnes of material being reclaimed, containing recycled content, or their use being avoided entirely, (ii) 10,000 tonnes of excavations being diverted from landfill by valuably re-using it as a base for a new access road, or by sending it for recycling and (iii) 90 tonnes of carbon emissions being avoided – the equivalent to driving a medium sized car 11 times around the earth.

The States of Jersey main Recycling Building (white, centre right) incorporates a Re-use Collection Area, which is run by a local salvage charity.

As discussed below, raising awareness and sharing the lessons learnt from the application of the Commission's new Green Public Procurement criteria with Member States as well as promoting the development of targeted training schemes on resource efficient procurement will help maximise the impact of the Commission's work in this area and help shift market behaviour throughout the Single Market.

4 Encourage Member States to develop pricing mechanisms that support material re-use where it is environmentally effective to do so

Whilst "using less" is an essential part of a resource efficient business model, increasing the use of secondary materials over primary raw materials is central to a more circular economy. However, unless secondary materials are cost-competitive, markets for their use simply will not take off.

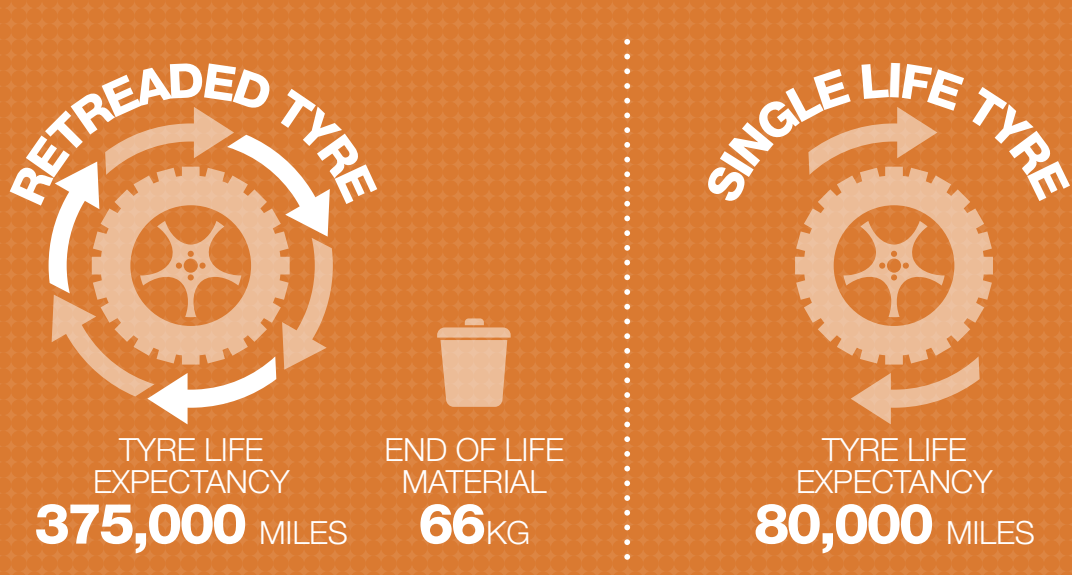
Companies developing circular business models may have difficulties competing solely on price. The purchasing price of long-lasting goods is indeed often higher than low-end imported products with a far worse environmental footprint. In recent years, the growing imports of cheap single-use tyres have reduced the market share of retreaded tyres in the UK by 30% (see Box 7). From a circular economy perspective, this is damaging given that, compared to a low-end single-use tyre, a retreaded tyre helps save 70% in natural resource extraction and 24% in CO_2 emissions whilst also supporting four times as many jobs in the local country.

Fiscal incentives can be a powerful tool to drive demand for resource efficient goods and services

It is therefore essential that where the upfront cost of secondary materials (or products using secondary materials) is higher than that of primary raw materials, pricing mechanisms are put in place to incentivise the use of resource efficient goods and services where it is environmentally effective to do so. This ultimately requires pricing policies to reflect the whole lifecycle cost better and the environmental benefits of using secondary materials. In its Action Plan, the Commission rightly encouraged Member States to use "economic tools" such as taxation to help better reflect the environmental impacts of different products and encourage the implementation of the waste hierarchy.

BOX 7 – BRITISH TYRE MANUFACTURERS ASSOCIATION CASE STUDY: RETREADING TRUCK TYRES

- Retreaded tyres have become increasingly used in the airline and heavy vehicle industry: 80% of civil airliners are fitted with retreaded tyres. 25,000 UK buses and 70% of the UK's supermarket delivery lorries also run on retreads.
- Environmentally, retreading offers significant benefits. A retreaded tyre uses 85% of the returned tyre casing and offers a similar life expectancy to the original tyre. Each time a truck tyre is retreaded, 30kg of rubber, up to 20kg of steel and 60kg of CO_2 emissions are saved.
- Economically, retreading has been beneficial as well: 95% of truck retreads used in the UK are produced in the UK.
- In 2012, retreads represented 50% of UK replacement truck tyre sales. In 2016, that figure had fallen to 35% due to a significant increase in the imports of single-life tyres from Asia, bought at dumping prices. The design and manufacturing quality of these imported tyres mean they cannot be retreaded.
- This surge in the import of single-life tyres has resulted in a significant increase in waste: compared to 2012, an estimated 500,000 additional end-of-life truck tyres now appear in the UK every year. With UK end-of-life tyre recovery infrastructure already saturated, these additional worn-out tyres are typically exported for incineration in developing countries, releasing 160,000 tonnes of CO_2 every year.
- Economically, these imports are undermining the growth of a resource efficient industry, with one major UK retreading facility closing in 2016.



Whilst pricing and especially fiscal incentives will generally be within the domain of Member State competence, the Commission should promote the development of supportive pricing policies across the EU and encourage the sharing of lessons learnt and best practice between Member States. Fiscal incentives, such as allowing Member States to reduce the rate of value added tax (VAT) on the provision of resource efficient goods and services, could be an important way forward in boosting demand for resource efficient goods and services. For example, within the flexibility currently provided by the EU VAT Directive, Sweden introduced in December 2016 a 50% reduction on VAT on the repair of items like bicycles, leather goods and white goods and is also enabling citizens to reclaim up to 50% of labour costs for fixing home appliances from their income tax.

Influencing pricing mechanism at the end of the product lifecycle: the role of fee modulation in EPR schemes

Supporting the continued roll-out of "fee modulation practices" across extended producer responsibility (EPR) schemes would also contribute to improving pricing signals at the end of product lifecycle stage, by ensuring that those producers that develop products with increased durability, reusability and recyclability pay lower waste management fees. However, as noted in a previous Aldersgate Group report, the Commission should support work to improve the governance, data collection and transparency of EPR schemes to ensure they become more effective.[22]

Elements of good governance – such as clear delineation of roles, systematic monitoring and data collection, transparency, enforcement, stakeholder consultation and adequate resources for oversight – are critical and lacking in many EPR systems[23]. It is important that these schemes are designed at least to ensure that the costs linked to the separate collection and the end-of-life treatment of products are fully covered[24]. They must also be developed in a way that is compatible with schemes that already exist in different localities to ensure that there are no unnecessary overlaps and added costs to business.

5 Better define waste and encourage a consistent implementation of the Circular Economy Package

As the Circular Economy Package comes to an end, the focus will now turn to its implementation. A consistent implementation of the Package will be important in helping drive resource efficiency and create a level playing field across the Single Market. This is particularly important in relation to the amendments to the definitions of "waste" under the draft Waste Directive that are currently being negotiated between all three EU institutions.

22 Aldersgate Group (January 2017) *Amplifying Action on Resource Efficiency.*

23 OECD (September 2016) *Extended Producer Responsibility: Updated Guidance for Efficient Waste Management.*

24 DG Environment (2014) *Development of guidance on extended producer responsibility.*

BOX 8 – SCREWFIX: CREATING VALUE FROM DISPOSED SEALANT PLASTIC CARTRIDGES

- Sealant and filler cartridges create approximately 100,000,000 used or part-used plastic cartridges per annum in the UK alone. This waste is virtually impossible to recycle in its original format as silicone is notoriously hard to separate from plastic.
- Sealant cartridges are manufactured from HDPE and the method of manufacture (high pressure heat injection moulding) demands high quality raw material. If this material can be recaptured and processed, the material can be remanufactured into further useful products such as shims, a solid gap filling piece of plastic that enables door and window frames to be correctly aligned.
- As Screwfix sells shims, it has developed a business model to collect and re-use sealant cartridges. A key part of the model is to incentivise trade customers to return empty cartridges by enabling trade customers to exchange six used sealant or caulk cartridges and in exchange to receive free of charge a new cartridge of decorators' caulk. The incentives for customers to return cartridges to a Screwfix store increases customer visits to a store, which in turn creates growth opportunity for Screwfix.
- After Screwfix has cut the collected cartridges and removed any residual silicone, Broadfix, its supplier of shims, collects the cartridges, grinds them into small pellets and uses them to manufacture shims. Broadfix therefore benefits from lower raw material costs.
- This model means that the customer is incentivised to return materials, Screwfix gets either a cheaper cost price or a payment from Broadfix and Broadfix spends less money on raw materials. In addition, the environmental impact is reduced. A win (customer), win (retailer), win (manufacturer), win (environmental) scenario.
- However, the current interpretation of the definitions of waste is proving to be a major barrier to this business model as trade customers are obliged to complete a waste transfer note (which must include personal details) when returning the old cartridges to Screwfix, which they then need to keep for a period of two years. This process can be time-consuming and acts as a disincentive to trade consumers who need a quick service.

As exemplified by the difficulties faced by **Screwfix** in developing a recovery scheme for sealant and filler cartridges (Box 8), the existing definitions of waste and the way they have been interpreted by regulators have often acted as a barrier to resource efficiency by classifying materials as "waste" once a product has been used. This has often resulted in recoverable, viable materials not being re-used. The amended definitions of waste that are currently under discussion are an improvement in that they are moving away from a rigid interpretation of waste to one where materials will not be classified as "waste" as long as they can be re-used safely.

Whether or not the improvements being made to the definitions of waste will be effective in practice and facilitate greater material re-use will depend on how well they are implemented across the EU. This is particularly key for construction projects where the increasing use of modular and offsite construction means construction companies need to be able to decommission rooms by "unplugging" them from a building and plugging them into a new building, which may be located in another country.

6 Improve the quantity and quality of information available to businesses and Member States

A key learning from all the REBus pilot or exemplar projects has been that lack of information is a major barrier to resource efficiency. This can be the case within an organisation where those wanting to dispose of unwanted assets are unaware of the demand for these assets from potential new users, as was the case in the **Warp It** case study (Box 4). It is also the case for many businesses who struggle to develop resource efficient business models because of a difficulty in accessing sufficiently granular information about how best to develop resource efficient practices and what the benefits can be.

Promoting better information sharing with businesses as well as between Member States should be a priority for the Commission in the years ahead. Whilst, for commercial confidentiality reasons, detailed company level information will remain difficult to access, the proposed drive to embed resource efficiency into public procurement could be used to provide businesses and Member States with better data on resource efficiency. Eurostat already reports on Member States' overall resource consumption. It should also start to report on resource efficient practices being rolled out in public procurement (starting with central government and Commission procurement) and the associated resource efficiency and financial benefits.

> It's very important that those materials can be transferred across borders – it's incredibly important that if we take something to pieces in Portugal, we can reuse some of that material in Spain, or in France, or Italy, or anywhere we want to move it to, without huge amounts of additional regulation, reclassification and overlook[25]

MAT ROBERTS
DIRECTOR OF SUSTAINABILITY STRATEGY
INTERSERVE

25 Intervention at Aldersgate Group event (February 2016): *Revving up resource efficiency in Europe: What next for the EU Circular Economy Package?*

Printed using paper containing 50% post consumer recycled fibre and made with 100% ECF (Elemental Chlorine Free) wood pulp, that is fully recyclable and sourced from carefully managed and renewed commercial forests.

WWW.ON-IDLE.COM

With the contribution of the LIFE+ financial instrument of the European Community

www.rebus.eu.com