RESOURCE EFFICIENT BUSINESS MODELS»
THE ROADMAP TO RESILIENCE AND PROSPERITY

ALDERSGATE GROUP
Leaders for a sustainable economy

CONTENTS

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ALDERSGATE GROUP

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

OUR MEMBERS

Our members include some of the largest businesses in the UK with a combined global turnover of over £300 billion, 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.

We are politically impartial and our policy proposals are formed collaboratively.

We benefit from the expertise of our members who span a wide range of industry sectors and public interests. Our collegiate approach allows us to formulate progressive policy positions to benefit all organisations and individuals in the UK.

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

ALDERSGATE GROUP

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FOREWORD AND SUMMARY

We have lived in a linear, take-make-use-dispose economy since the start of the industrial revolution, albeit with an increasing emphasis on end of life recycling.
Given the growing pressures on global resource use, it is clear that the time has come to do things differently and shift to a more resource efficient system based on the circular economy.

However, the challenge of breaking the habit of generations should not be underestimated. Confidence is going to be key because real money, jobs and businesses are at stake. The transition must be done in a way that is supported by investors, grows markets and maintains the viability of business.

Some leading businesses are already making the transition but if there is to be a real impact, resource efficiency must become mainstream and be adopted nationally. A circular economy cuts across many different policy areas that were never designed to work as a single coherent unit and unintended consequences abound. Goal setting policies (fiscal and environmental) backed up by reforms to the tax system should be adopted to deliver an integrated approach that creates real and stable incentives for change. Resource efficient business models must become the business-as-usual approach and not be reserved for the early adopters.

Central government and regional authorities have a vital role to play in stimulating these markets through their huge buying power by mandating resource efficiency requirements in their procurement activities, which could spur momentum for business to follow suit. A fitting approach would scale up public sector engagement with this area, taking action that looks beyond short-term budgetary concerns and seeks to secure long-term economic prosperity.

This report sets out the Aldersgate Group's views on how government and others can show real leadership in transforming the economy of the UK into one that is fit for our resource-constrained future.

Our recommendations for better-coordinated policy instruments, government leadership and business action, fall into six categories:

1. Leadership and prioritisation
2. Stability and consistency
3. Fiscal incentives
4. Rationalising environmental regulation
5. Valuing externalities
6. Design standards

This is an important moment. If we get this right, businesses and investors will seize the opportunity, enhancing domestic growth, creating job opportunities and leading to more prosperity for all. Get it wrong and others will reap the rewards.

Nick Molho
Executive Director
Aldersgate Group

Dr Steve Wallace
Director
Aldersgate Group

THE CIRCULAR ECONOMY AND REBUS PROJECT

Natural resources are being used and disposed of at a rate that cannot be sustained if future UK generations are to have equal access to the goods and services from which we benefit. With the global population predicted to reach nine billion by 2050[1], competition for access to resources will increase alongside the environmental constraints associated with achieving that access, such as water availability or habitat loss. These trends risk impacting the security of business models in the face of increasing demand.

Adaptation to these trends presents some stark choices. Either we must rely upon continual discovery of new sources of materials to answer our needs, or transition away from the traditional linear take-make-use-dispose model of material use that sees 177 million tonnes of waste thrown away annually in England alone[2]. Under either scenario, it makes sense for us to be more efficient with our limited resources and to ensure efficiency brings a net saving in environmental terms. If resources are used in a way that allows their recovery and reuse creating "closed loops" or "circularity", we can reduce our reliance on raw materials and build resilience at the company and national level.

But in shifting towards circularity, the limitations of current technology and processes must be remembered to ensure that higher targets do not result in greater use of energy and water (for example), to meet them. The move to circularity must be approached through the prism of system-wide efficiency.

The expectation that most materials will be used just once is already being challenged. UK recycling rates have shown steady improvement over the past decade and increasing numbers of businesses are considering how their products might be reused and redesigned after their first use. These trends could give rise to the next industrial revolution: the emergence of the circular economy that, by design or intention, is restorative and eliminates waste. This transition will have a profound effect on the way that we do business, changing market participants from being 'consumers' to 'temporary users' of resources. Research has shown there is strong interest from the public for new ways of interacting with products in key areas[3].

It will be impossible to make such a significant transition in one go and many feel grassroots efforts can only progress so far without government mandate. Near-term efforts must be prioritised for those areas where the most impact will be felt.

INTRODUCING THE REBUS PROJECT

This is why the Aldersgate Group is part of the EU Life+ funded project REBus[4], formed to promote business models that will further the transition to a more circular economy. REBus (developing Resource Efficient Business models), was launched in July 2013 and is working in a range of market sectors worth €350 billion across the EU.

In the UK, REBus is working with businesses to build the financial case for a transition from a traditional to a more circular business model. This includes some innovative small- to medium-sized enterprises (SMEs), who have entered the market with circular business models and need support in refining their proposition to customers.

Meanwhile REBus partners in the Netherlands are driving the delivery of resource efficient business models (REBMs) through the public procurement process. This includes supporting both government and company procurers, developing new models with the market both before and within the tendering process.

This project builds on the Aldersgate Group's report, *Resilience in the Round*[5], which identified the challenges, opportunities, enablers and barriers to mainstreaming the circular economy. Three steps in the transition to a circular economy were identified:

1. Vision – define the concept and increase its traction
2. Exploration – pioneers undertake trials and create value
3. Scale – shift to mainstream

1 » UNFPA (June 2012) *Population Matters for Sustainable Development*.

2 » Environment, Food and Rural Affairs Committee (October 2014) *Waste Management in England.*

3 » WRAP (August 2013) *Evidence of consumer demand for retailer services on electrical products that offer alternatives to new product purchase.*

4 » REBus website: www.rebus.eu.com

5 » Aldersgate Group (June 2012) *Resilience in the Round: Seizing the growth opportunities of a circular economy.*

THE CIRCULAR ECONOMY AND REBUS PROJECT

REBUS SNAPSHOT

Scope » The UK and Netherlands

Partner » WRAP (lead), Aldersgate Group, Knowledge Transfer Network, Rijkswaterstaat, University of Northampton

Purpose » Investigate what businesses must do to achieve a 30% reduction in resource consumption by 2020

Function » Give businesses access to technical expertise in order to develop and employ resource efficient business models (REBMs)

Key sectors » electrical and electronic products, clothing, furniture and construction products. REBus works with large organisations and SMEs

Objective » Deliver 30 REBM pilots with the aim of achieving 15% resource savings in project lifetime

With REBus, Aldersgate Group is proud to be a part of Step 2, initial findings of which can be found in the Appendix[6]. The next steps to build on the REBus project will be to drive action at a national level, to make the shift to Step 3.

BENEFITS OF A CIRCULAR ECONOMY

The circular approach offers developed economies a pathway to resilient growth, a systemic answer to reducing dependency on resource markets and a means of reducing exposure to resource price shocks as well as societal and environmental 'externality' costs that are not being recognised[7]. Circularity could contribute £3 billion to the UK's economy alone[8] and savings could be considerable. Local councils currently spend 10% of their budgets on waste management, which is more than their planning or housing allocations[9]. Net job creation, if circular economy activities are mainstreamed, could reach 54,000 by 2030[10].

Making the transition to an economy based on the circular use of resources can embed resilience into all aspects of the UK economy, from a household to company, from local to national level. Failing to grasp this opportunity will leave the UK exposed to the vagaries of resource markets. UK businesses are already more exposed than some overseas competitors, such as those in China, the US, Germany, Japan and South Korea, whose governments have recognised the supply risks they face and responded with a comprehensive policy framework. The UK government is lagging behind these efforts both to tackle resource security and capture the opportunities of a circular economy[11].

EVIDENCE

This report sets out learnings from policy workshops convened by the Aldersgate Group and attended by a wide range of members, REBus partners and stakeholders. We outline what needs to happen within the UK's fiscal and regulatory landscape to ensure resources are viewed as assets, regardless of how many times they have been used. We describe a number of priority measures to be addressed if the transition to a circular economy is to be accelerated and our future prosperity assured.

6 » See page 17.

7 » World Economic Forum (2014) *Towards the Circular Economy: Accelerating the scale-up across global supply chains.*

8 » Environment, Food and Rural Affairs Committee (October 2014) *Waste Management in England.*

9 » Green Alliance (2014) *Wasted Opportunities: Smarter systems for resource recovery.*

10 » Green Alliance (January 2015) *Employment and the Circular Economy. Job creation in a more resource efficient Britain.*

11 » EEF (July 2014) *Materials for Manufacturing: Safeguarding Supply.*

POLICY RECOMMENDATIONS

Circularity pioneer, Interface, has replaced 43% of its raw materials since 1996 with bio-based or recycled content. Financial savings gained through resource efficiency measures like this are re-invested into the business, with the goal of creating new products and driving market share. Interface estimates that costs for its annual inputs are €7.5 million lower than they would be without employing circular models[12].

Other companies are investigating the potential of circularity, including Unilever[13], Kingfisher[14], Timberland[15] and Ecover through its Glocal initiative[16] in Mallorca.

These businesses are driving revenue through the commercialisation of resource and waste management systems, adopting new production models, increasing profitability through remanufacturing and reducing their exposure to resource security risks. This movement is undoubtedly being led by businesses, a process the REBus project seeks to support. In particular we believe companies should be encouraged to:

- Set ambitious, public, material reduction targets measured against units of production
- Engage with their supply chains for better lifecycle data on products and materials[17]
- Rethink the products that customers want and whether they could be better delivered in a more resource efficient way[18]

But many of these businesses are succeeding in spite of, rather than because of, the regulatory framework. To maximise the potential for long-term competitiveness and the resilience of UK plc, government must support the transition to more resource secure business models.

12 » Lavery/Pennell report for Interface (January 2014) *The New Industrial Model: Greater profits, jobs and reduced environmental impact.*

13 » See article reporting Unilever CEO, Paul Polman's comments, Guardian (29th January 2013) *"Davos 2013: taking the circular economy to scale."*

14 » See video interview with then CEO of Kingfisher, Sir Ian Cheshire: http://bit.ly/1K6TjCf

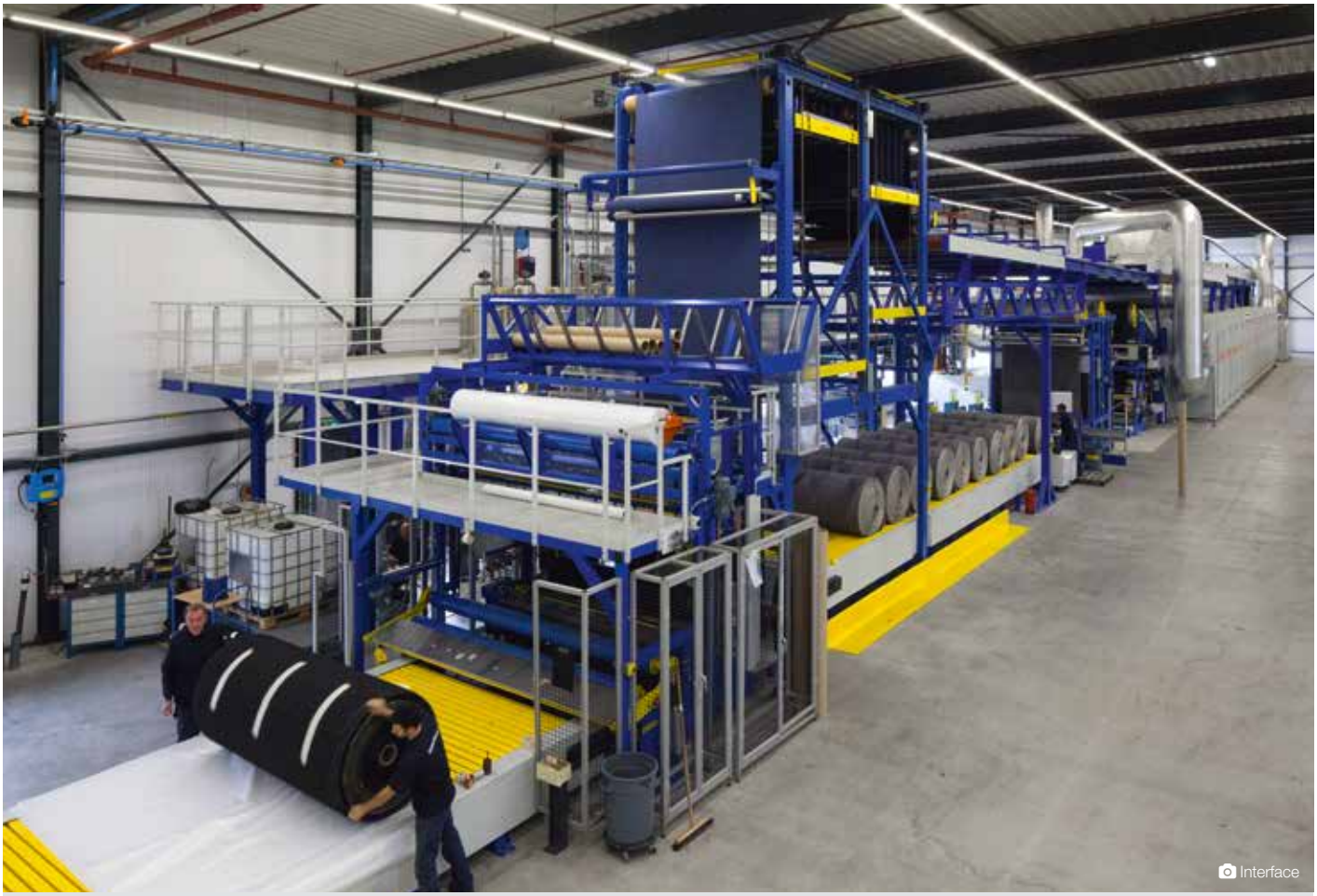
15 » See article detailing Timberland's partnership with Omni United to create "Timberland Tires": http://prn.to/1Knm7Vn

16 » See Glocal website: http://glocal.ecover.com

17 » IEMA (June 2014) *From Waste to Resources—Implementing Sustainable Resource Management in Your Business.*

18 » Lavery/Pennell report for Interface (January 2014) *The New Industrial Model: Greater profits, jobs and reduced environmental impact.*

POLICY RECOMMENDATIONS



»Mission Zero is not just key to Interface: it's our Mission. In Europe we have reduced energy by 54% and water by 93% per m^2 of carpet. Renewable energy is 95% of our use and 45% of our raw materials are recycled or biobased. Through efficient manufacturing, we can tackle smart design that moves beyond reducing immediate impact but also thinks across entire product lifestyles«

Ramon Arratia, Sustainability Director, Interface EMEAI

ONE: LEADERSHIP AND PRIORITISATION

Government must conduct an urgent "Stern for Resources" review into the UK's exposure to resource security risk and its impact on the UK economy[19]. This should inform development of a Resource Efficiency Action Plan overseen by a new Office for Resource Management[20] that would deliver an integrated approach for real and stable incentives for change. Current efforts are spread too thinly and such an office would coordinate action whilst demonstrating that policy is about rationalising approaches and setting clear goals.

The Office for Resource Management should oversee a better regulation agenda that would remove red tape and ensure that resources of the same quality are treated in the same way, regardless of how many times they have already been used.

Government should drive and stimulate the market through its own procurement activities and specify products that are restorative by design and eliminate waste[21,22].

According to the 2014 Index of Economic Freedom, government spending accounts for 48.5% of the UK's GDP[23], approximately £722.81 billion annually. This represents a significant opportunity to drive demand for circularity, as well as demonstrating that sufficient markets exist to release more investment at lower risk. This would be a win-win as a resource efficiency-led approach to procurement would be more financially efficient, saving money for HM Treasury and demonstrating benefits to others.

Government should create a plan that sends clear signals to industry and is prioritised by sector. Priority areas could be selected on the basis of market size and resource impact. REBus partner Rijkswaterstaat has led sustainable procurement work for the Dutch government since 2006, moving towards a more circular approach. In the UK, WRAP has worked to drive more circular business models with the Home Office on the National Uniform Managed Service and with the National Procurement Service in Wales to include furniture re-use in their furniture solutions framework. Whilst these are great examples, there is much more that can be done.

KEY ASKS

1. Government must conduct an urgent 'Stern for Resources' review of the UK's exposure to resource security risk and its impact on the UK economy
2. The new parliament should establish an Office for Resource Management to develop a Resource Efficiency Action Plan and coordinate action on better regulation
3. Government should adopt a circular economy approach to procurement, with a clearly-signalled forward plan, prioritised by sector

19 » Business Statement coordinated by Aldersgate Group (July 2013) *"Resource security vital for growth and prosperity".* http://tinyurl.com/nzkbcdp

20 » Aldersgate Group (December 2014) *Aldersgate Group Manifesto: priorities for the next parliament.*

21 » Green Alliance (2013) *Resource resilient UK. A report from the Circular Economy Task Force* http://bit.ly/1toptiG

22 » Aldersgate Group (December 2014) *Aldersgate Group Manifesto: priorities for the next parliament.*

23 » The Heritage Foundation and The Wall Street Journal (2014) *Index of Economic Freedom* http://herit.ag/1irTyt3

TWO: STABILITY AND CONSISTENCY

A coherent and stable policy framework allows businesses and investors to develop the long-term strategies that will yield more REBMs and ultimately a more circular economy. Many businesses are currently tied to systems that have been locked into linear thinking and this has been a major stumbling block to sustainable innovation[24].

Policy makers must set a clear expectation that resource efficiency is the direction in which the entire economy should move to provide investors and businesses with the confidence to act. Having set topline goals, the government should leave the method of delivery to the market.

Retrospective or short-notice policy changes must be avoided, as this seriously derails market confidence. The Committee on Climate Change has commented, "introducing a policy and then fundamentally changing it a short time later is not conducive to providing the clear and consistent signals that investors require"[25]. For example, the sudden changes to the Energy Companies Obligation (ECO) were deeply damaging to the energy efficiency industry. The ECO was designed to tackle the UK's badly insulated housing stock and required energy companies to insulate vulnerable customers' homes. But in December 2013 the Chancellor relaxed the obligation despite strong opposition from the industry. This resulted in job losses within energy companies' supply chains and increased uncertainty for all businesses that must invest in their skills base and are exposed by short-notice policy changes[26]. Robust policy is essential and government must ensure that short- and medium-term business confidence is supported.

KEY ASKS

1. Policy instruments that define medium- and long-term resource efficiency goals should be developed, leaving the method of delivery to the market

2. Government must provide robust and stable policy to ensure that short- and medium-term business confidence is supported

24 » Foxon (November 2002) *Technological and institutional 'lock-in' as a barrier to sustainable innovation* http://bit.ly/1z7JFak

25 » Committee on Climate Change (31st March 2014) "The Budget freeze in Carbon Price Support" http://bit.ly/Qyr9tW

26 » IEMA (October 2014) *Preparing for the Perfect Storm—Skills for a Sustainable Economy.*

THREE: FISCAL INCENTIVES

> The consumption of resources, and embodied carbon, associated with new build dwellings and commercial properties is significantly greater than that of refurbished property, yet the current VAT regime offers little or no incentive to developers to retain and refurbish existing buildings; in many cases the current regime actually rewards new build

ROBERT LAMBE, MANAGING DIRECTOR, WILLMOTT DIXON ENERGY SERVICES

Given the financial constraints within which government must operate supplying subsidy to drive behaviour change is challenging, but taxation remains an effective lever to spur innovation. The government's review of England's waste policy in 2011 acknowledges:

» market-based instruments such as taxes and trading systems are an efficient and cost effective way of pricing in the value of environmental resources«[27].

Taking the landfill tax as an example, which has halved the amount of waste sent to landfill since its introduction in 1996[28], the Environmental Audit Committee (EAC) suggests that government should develop a range of VAT rates for products as determined by their varying degrees of environmental impact or recycled content[29]. Restrictions within EU law currently make this difficult, as:

» Member States are allowed to implement a reduced rate of VAT for certain goods and services, as listed in Annex 3 of the VAT Directive. However, there are no specific provisions that allow for actions to encourage the use of recyclable materials and therefore any changes would require amendments in EU law«[30].

However, government could take a leadership position in negotiations. WRAP suggests that re-used items should have zero VAT, since VAT will already have been paid on the new item. The EAC also suggests tax allowances for those businesses that help in the re-use or repair of goods[31]. There is certainly scope for rationalising the red tape on VAT reporting, which currently makes adoption of circular approaches more administratively difficult.

But alongside new fiscal instruments, the existing system must facilitate the transition towards greater efficiency in all sectors.

KEY ASKS

1. Government should instigate tax reforms that encourage and reward the most resource efficient businesses, for example simplifying the existing VAT system for remanufacturers and considering zero VAT for re-used items
2. Inconsistencies in the taxation system that penalise resource efficiency should be removed, such as rewarding new build over refurbishment in the construction industry

27 » Department for Environment, Food and Rural Affairs (2011) *Government review of waste policy in England 2011.*

28 » Defra and others, Joint written evidence on Circular Economy, April 2014 http://bit.ly/1zFhPJo

29 » Environmental Audit Committee (2014) *Growing a circular economy: Ending the throwaway society.*

30 » Environmental Audit Committee (November 2014) *Growing a circular economy: Ending the throwaway society: Government response to the Committee's Third Report of Session 2014–15.*

31 » Environmental Audit Committee (2014) *Growing a circular economy: Ending the throwaway society.*

FOUR: RATIONALISING ENVIRONMENTAL REGULATION

> There are laudable efforts across Europe to streamline regulation. Unfortunately, there remain huge differences between both the conception and application of different regimes. Better regulation does not necessarily mean less, but it does mean leaving their silos to become truly smart. Only when our regulations work in harmony will they foster the changes we need

ANGUS MIDDLETON, MANAGING DIRECTOR OF ECOSYSTEM SERVICES, LANDMARK INFORMATION GROUP

Current environmental legislation and regulations are either hazard based (eg in the case of waste), risk based (eg brownfield redevelopment) or defined by fixed standards (eg water quality). Each of these has been used to good effect in the sectors for which they were designed, but the different approaches have created silos of regulation and regulator attitude that now represent barriers to the efficient transition to a circular economy.

For example, once a substance or material has been designated as waste, it falls under the remit of hazard-based regulation, where its intrinsic properties govern what can be done with it. The same material when supplied new does not come with these restrictions, or the "stigma" of being waste. Whilst it is clearly important to establish that the secondary material is fit for purpose, current regulation creates an inbuilt bias towards using new, rather than previously used, feedstock.

Business to business certification within the supply chain would mean that materials and recovered components could be used 'as new', with the product that is presented to the consumer being, to all intents and purposes, no different in terms of function and reliability than the same product made from virgin materials. Recycled materials already exist in some products, with customers making choices based on form and function rather than the source of material. Where required for confidence or because it may incur a market advantage, visible certification at a consumer level could be a useful signal of the implications of more circular products.

It has been noted that a key barrier in certification is the diversity of methods across regions and sectors[32]. A trusted scheme would help to unlock more investment and inspire confidence within the shift towards circularity. Certification, where required, should be nationally recognised and independently administered.

KEY ASKS

1. National regulatory positions, codes of practice and certified standards should be rationalised to allow appropriate quality secondary materials and components to be handled in the same way as primary materials

2. Government should support the harmonisation of standards, through existing national and international standards organisations, that reflect circularity in products at a consumer level

32 » Preston (March 2012) *A Global Redesign? Shaping the Circular Economy* http://bit.ly/1DjlRn0

FIVE: VALUING EXTERNALITIES

> Working with environment and sustainability professionals we have established that GHG reporting is an effective and supportive driver for carbon reduction, energy efficiency and associated financial savings. The benefits often arise over the medium term, with annual disclosure helping businesses to share and to communicate narratives on their transition towards a low carbon future

NICK BLYTH, CLIMATE CHANGE LEAD, INSTITUTE OF ENVIRONMENTAL MANAGEMENT AND ASSESSMENT (IEMA)

Progress towards a circular economy would be significantly accelerated if cradle-to-cradle externalities were fully incorporated into the value of goods and services. Ideally, full pass-through of the real costs of materials including those externalities associated with the exploitation of primary resources is needed in order to create a level playing field when comparing the costs of primary and secondary feedstocks. However, lessons from the example of international greenhouse gas (GHG) emissions negotiations have taught that it would be unrealistic to expect full externality pricing to be adopted at an international trade level, and damaging for the UK to include it unilaterally in the goods that we buy and sell.

But the GHG example has shown that what gets measured gets managed. Companies have identified benefits in reporting their carbon emissions in line with their annual financial accounts. This same lesson should now be applied to materials through extension of existing integrated reporting schemes.

Companies operating in the UK should be required to report their resource use and impacts and the breakdown between primary and secondary materials used. The Companies Act already requires businesses to report critical environmental issues but this should be strengthened to apply specifically to critical resources. Such an approach could be introduced gradually to ensure the process does not become burdensome to business, starting first with the resources critical to the national economy as defined by the new Office of Resource Management recommended above.

KEY ASKS

1. Government should phase in a mandatory corporate reporting scheme to identify use, recycling/recovery rates and impacts of critical resources by UK businesses. A best value regulatory approach should be used to ensure this process does not become burdensome to business

SIX: DESIGN STANDARDS

The better regulation agenda must support businesses that are already taking the lead in a circular economy, by promoting design that enhances reparability, durability, re-use, recyclability, collection and disassembly, with landfill bans for selected materials with a high potential reuse value or projected scarcity risk[33,34]. Design serves as both a catalyst and barrier for moving towards circularity. Standards should facilitate innovation, focusing on creation of the right outcome and ensuring light touch, best value regulation.

Mandatory standards, sufficiently well signalled in advance, have played a major role in improving resource efficiency. The ratchet on automotive engine emissions standards through EU vehicle type approval regulations[35], coupled with the UK government's approach to a sliding scale of vehicle excise duty linked to GHG emissions standards has led engine manufacturers and car designers to invest billions in research and development (R&D) to deliver much more fuel efficient, lower emission vehicles that reduce costs to the end user and improve air quality[36]. The end of life vehicle directive has been instrumental in ensuring that most of a car is recycled[37]. The government, working with industry and wider stakeholders, should identify minimum standards and allow the market to meet them.

Similar challenges must be set for the circular economy, based upon recycled content and reused components. The government, working with industry and wider stakeholders, should identify minimum standards and allow the market to decide how to meet them. Developing products with the intention of prolonging their life and enabling their reuse and refurbishment is key[38]; the current shortfalls of designing for the future are a major limit to remanufacturing growth[39] and the government can match manufacturers' Waste Electrical and Electronic Equipment (WEEE) obligations according to the reparability or recyclability of their products[40].

The government must collaborate with the EU to formulate clear eco-design standards across products[41], working with standards bodies such as ISO. Cross-border collaboration and competition between sectors must be encouraged to improve designs and propel innovation. More effective WEEE targets are required that recognise value as well as weight.

KEY ASKS

1. Government, working with industry and wider stakeholders, should establish minimum standards in key sectors that support the transition to a circular economy
2. Government must work with the EU to formulate clear eco-design standards across products, working with standards bodies such as ISO to spur collaboration, competition and innovation
3. Government must work to devise more effective WEEE targets that recognise value as well as weight

33 » European Parliament, Council of the European Union (September 2000) Directive 2000/53/EC See blog by Ramon Arratia, Interface: http://bit.ly/1yj09zb

34 » Aldersgate Group (December 2014) *Aldersgate Group Manifesto: priorities for the next parliament.*

35 » European Parliament, Council of the European Union (June 2007) *Regulation (EC) No 715/2007.*

36 » See article by SMMT: http://bit.ly/1zJbL0R

37 » European Parliament, Council of the European Union (September 2000) *Directive 2000/53/EC.*

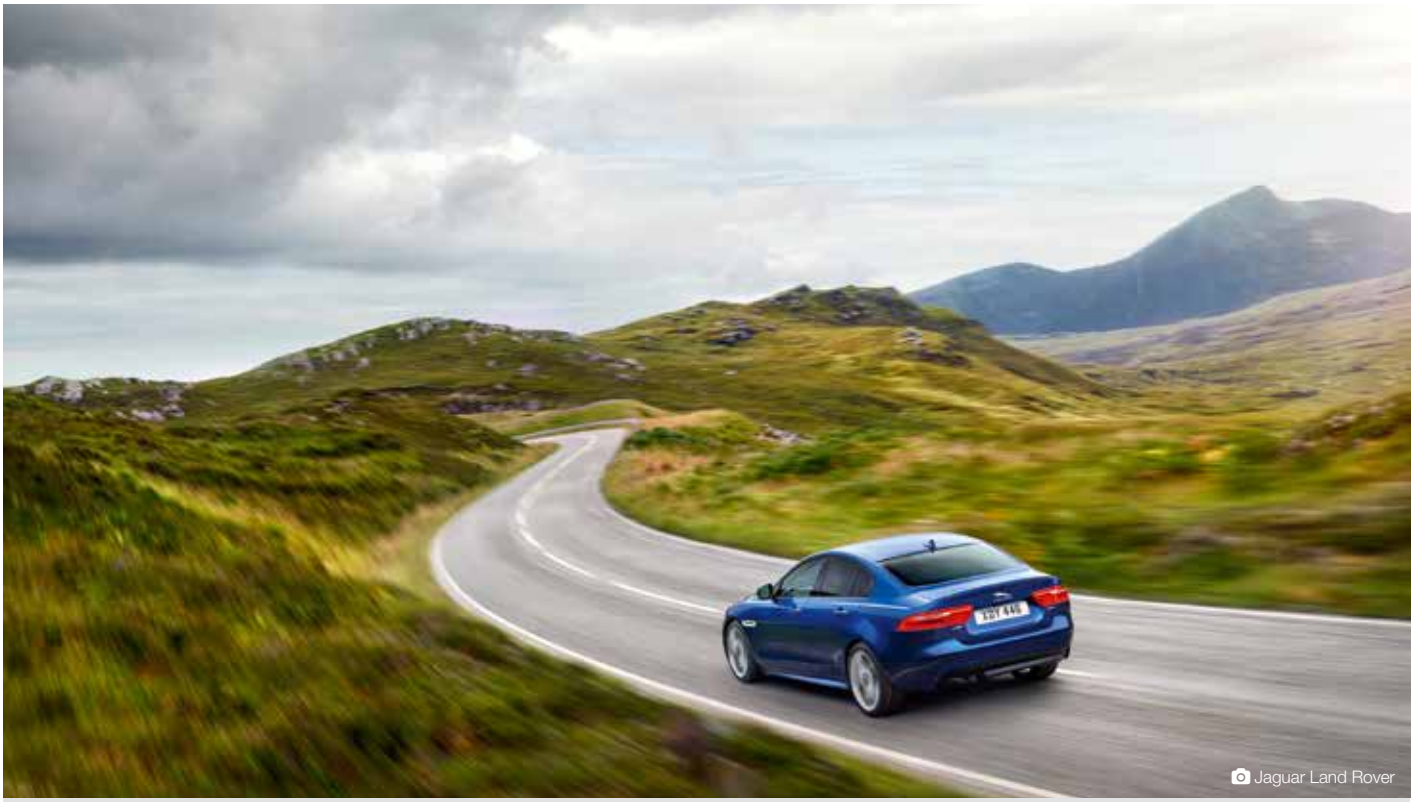
38 » APRSRF (2014) *Remanufacturing: Towards a Resource Efficient Economy.*

39 » PSRG and APMG (2014) *Triple Win: The Economic, social and environmental case for remanufacturing.*

40 » Department for Business, Innovation and Skills (2012) *Waste Electrical and Electronic Equipment (WEEE) Regulations: individual producer responsibility (IPR) in a UK context.*

41 » Environmental Audit Committee (2014) *Growing a circular economy: Ending the throwaway society.*

SIX: DESIGN STANDARDS



» The latest Jaguar XE is our most fuel efficient model to date with CO_2 emissions down to 99g/km. We are on track to meet our EU target of a 25% reduction in fleet average tailpipe CO_2 emissions by 2015. We have embedded circularity into the design and assembly process by developing an advanced aluminium sheet alloy and investing in scrap segregation technologies in our press shops to achieve a recycled content of up to 50% in our vehicle bodies. Research continues on increasing the recycled content to 75% through the use of post-consumer, non-automotive aluminium scrap «

Jonathan Garrett, Director of CSR, Jaguar Land Rover

APPENDIX: THE REBUS PROJECT

The REBus project aims to deliver 30 pilot projects trialling circular initiatives within a range of businesses and organisations of all sizes. The REBus team provides technical expertise and guidance to businesses wishing to engage. There will be annual updates to the end of the project in 2017.

Several companies have already joined the project, including Aldersgate Group member National Union of Students[42]. The most popular business models to date relate to incentivised return and hire/lease.

WHAT IS INCENTIVISED RETURN?

Incentivised return is a model that offers an incentive, often financial, for the return of used products that can then be dissembled and/or refurbished for re-sale.

INCENTIVISED RETURN

It is estimated that the average household has approximately £1,200 worth of electrical and electronic equipment, which is aggregated to approximately £3 billion across the UK[43]. This significant untapped value could be prevented from being sent to landfill through reuse or repair. Incentivised return business models offer access to resources that would otherwise be thrown away.

Companies trialling this business model through REBus have reported the following benefits:

- Increased revenue from selling traded-in products and from boosting new product sales
- Possible increases to in-store footfall, website traffic, new purchases, plus development of better relationships down the supply chain, increasing touch points with customers and ultimately increasing cash flow
- Better control of products' value and all refurbishment undertaken
- Greater value gained from durable or easily repairable products

42 » REBus website: http://rebus.eu.com/news/whoweworkwith

43 » WRAP (December 2013) *Switched on to value* http://bit.ly/1cZM1BH

APPENDIX: THE REBUS PROJECT

HIRE/LEASE

Hire, or renting, is a familiar model of paying for the temporary use of a good or service. This differs from leasing which allows for extended use of the good or service over a longer period of time.

There have been early adopters of this approach, including Mud Jeans[44]. The company, whose products are made exclusively of recycled content and organic cotton, responded to the peak in cotton prices in 2010 by aiming to increase recovery rates by leasing their jeans on a monthly fee, giving consumers the option of swapping or returning the product after one year. The scheme allows Mud Jeans to maintain ownership of their raw material.

Companies trialling this business model through REBus have reported the following benefits:

- Development of a leadership stance in the circular economy setting organisations apart from their competitors
- Greater market opportunities through offering more durable and efficient products, including accessing customers that may not have been able to buy the product outright
- Increased customer contact with the opportunity to offer discounts or highlight other products.
- Greater access to household spend of an estimated £800 per annum on new electrical and electronic equipment and over £1,000 per annum on clothing, plus offering their customer base peace of mind on service maintenance, upgrades and repair.

44 » See case study by Ellen Macarthur Foundation: http://bit.ly/1f1YLEl

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