

Friends of the Earth Scotland response to *Making Things Last* Circular Economy Consultation



**Friends of
the Earth
Scotland**

30th October 2015

Introduction

Friends of the Earth Scotland welcomes the *Making Things Last* consultation from the Scottish Government, as well as the Government's effort to make Scotland a leading region in Europe in circular economy.

Moving towards a circular economy is the next logical step in delivering a Zero Waste Scotland. It will help us use materials more efficiently, reduce climate emissions and create local jobs.

There are many welcome ideas in this consultation from better product design to encouraging new networks of repair businesses and from safeguarding the quality of materials collected for recycling to cracking down on the dumping of old mattresses.

Friends of the Earth Scotland believes that Scotland is very well placed to take a lead on the circular economy and should pursue this agenda vigorously.

PART A: GENERAL COMMENTS

Friends of the Earth Scotland agrees with the urgent need to transform the way we consume as well as generate and manage waste. However, we believe that the timings and concrete steps of the strategy are not always clear, nor are the roles different stakeholders will play in achieving the transformational change.

There is a very detailed economic analysis that makes a comprehensive and convincing case for reuse, repair and recycling, but more concrete actions that would deal with waste prevention measures that go beyond product design are missing. For example, there are no steps on having a refillable system for drinks' packaging or incentives for business to become packaging free.

The stronger environmental and social analysis is weaker. We believe that the Scottish Government should have an overall resources policy that *includes* waste, rather than having a fragmented approach that we see in other countries, such as Germany or Belgium, where there is separate waste and resources policies, sometimes creating challenges and avoidable tensions.

Scotland cannot face the challenges of a resource-constrained world unless our waste legislation becomes part of a wider strategy to reduce our resource use.

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Resource prices continue to fluctuate, global middle classes are growing, and the world is facing ever-higher demand for the dwindling quantity of natural resources, creating greater competition. Scotland is a small player when it comes to this global scenario and therefore smart policies are needed to increase the country's resource reliance, create jobs and keep national well-being high.

Reducing waste, making our economy circular and dealing with waste in a more socially and environmentally sustainable way is an important step, but a better use of resources requires a more comprehensive approach. It is estimated that on average each European citizen has a material footprint of 21 tonnes per year, making the European continent one of the highest consuming on the globe¹. Even if we were to recycle 100% of our waste, our high and growing consumption of goods in Europe means that demand for virgin resources would remain high. For example, despite high rates of aluminium recycling (62% to 95%), our demand is so great that it cannot be met by recycled aluminium alone—recycled aluminium supplied only 35% of consumption in Europe in 2008), creating a continuous demand for the virgin resource (the recycling rate of aluminium in Europe is high, ranging from 62% for beverage cans to 95% in building and transportation. The 2008 EU27 aluminium recycling from old scrap amounted to about 35% of the apparent consumption.²

Achieving a circular economy does not in itself deal with the fact that we are, collectively, living beyond our planetary boundaries. This has irreversible negative consequences for both planet and people, as our ecosystems are stretched beyond their capacity to renew themselves – biodiversity loss, soil erosion, climate change and resource degradation are all part of this picture. Although Scottish-only data is not available, the United Kingdom's land, water, carbon and material footprints are some of the highest in the world,³ making it a great contributor to these impacts for the functioning of its economy.

Creating a more circular economy is important but is not enough. The top 20 highest – consuming countries, many of which are European, are responsible for 75% of all materials consumed globally. This can be contrasted with the 100 countries with the lowest absolute material consumption which together use only around 1.5% of the world's materials.⁴ It is therefore both an imperative and an issue of justice that we introduce tools and policies that enable us to have a good quality of life while consuming less, in overall terms.

The high environmental, social and economic costs of resource consumption mean that Scotland should lead with an ambitious and equitable strategy on resource use,

¹ In 2007, Europe's material footprint per capita was 21 tonnes, 8 tonnes per capita more than was extracted within Europe. Alongside Europe, Australia and North America are the three highest consuming areas in the world, with material footprints in 2007 of 48 and 29 tonnes per capita respectively. Tukker, A; Bulavskaya, T; Giljum, S, et al, The Global Resource Footprint of Nations: carbon, water, land and materials embodied in trade and final consumption.

http://creea.eu/index.php/documents2/cat_view/16-creea-booklet

² Data from the European Aluminium Association, 2010, in the European Commission, DG ENTR, Annex V to the Report of the Ad-hoc Working Group on defining critical raw materials, 2010, http://ec.europa.eu/enterprise/policies/raw-materials/files/docs/annex-v_en.pdf

³ Page 71 <http://exiobase.eu/index.php/publications/creea-booklet/73-creea-booklet-web-resolution/file>

⁴ Dittrich, M.; Gilium, S; Lutter, S; Polzin: Green economies around the world? Implications of resource use for development and the environment, 2012 http://seri.at/wp-content/uploads/2012/06/green_economies_around_the_world.pdf

starting by measuring our consumption of materials, land, and water, as well as our greenhouse gas emissions, via the Four Footprints:⁵

- Land use footprint, in hectares, including land outside the EU used to produce imported products;
- Materials footprint, in tonnes, including those used to make products that are imported into Europe;
- Water footprint, in litres, including water consumed outside the EU to produce imported products;
- Greenhouse gas emissions (GHGs) footprint, in CO₂ equivalent, including those emitted outside the EU to make products consumed in Europe.

These indicators have a life-cycle perspective, and so take into account the embodied resource use of imported and exported products, which makes it possible to capture possible shifts of environmental pressures related to domestic production or consumption elsewhere in the world. They also permit direct links with social and development issues, including resource poverty, and the need for a fair distribution of global resources

PART B: SPECIFIC ANSWERS

Question A – Design

We are looking for feedback on the ideas discussed above on influencing design of products, business models, services, and systems.

When it comes to the design of products, FoE Scotland believes that:

- Toxic Chemicals. We regret the lack of plans in the ‘areas for action’ to design toxic chemicals out of products at the design stage. The interaction between product, waste and chemicals is a key aspect of the circular economy and an important part of a successful transition to sound material loops, and to our protection from hazardous substances. If waste is to re-enter the economy, as recycled material incorporated in new products or as a secondary raw material to be traded, it needs to be ensured that it has been processed in such a way as to create a safe product. For example, the typical till receipt seems perfectly recyclable, but in fact it contains the chemical BPA, a known hormone disruptor; if this paper is recirculated into applications like food packaging, there are risks of contamination. Removing risks like these requires the removal of problematic substances from products at the *design* stage by having a stronger application of REACH, and more product-specific requirements, for example the ROHS directive, restricting substances used in electronic equipment. The Scottish Government should work with industry and SEPA to help design toxic chemicals out of products manufactured in Scotland.
- Durability. Friends of the Earth Scotland would also like a stronger emphasis on durability at the design stage. We believe that for Scotland to lead in Europe on circular economy it needs to have a robust and strong warranty policy that gets rid of the burden of proof and expands warranty periods to minimum 10 years for all products. A 10-year warranty is a realistic

⁵ <https://www.foe.co.uk/page/four-footprints>

possibility; some companies are already offering these for their products, especially in the sector of household white goods, and other companies offer even longer warranty periods.⁶

- Material product policy. There have been significant efforts at EU level to improve the energy efficiency of products, but not material efficiency. Material efficiency measures include: designing products so that the least amount of material possible is used, and ensuring that as much recycled, reused or repaired materials and parts are included in the product. This is why measuring the material footprint in addition to the land, carbon and water footprint are essential steps for a resource use policy, and will help us understand our natural resource impact and find ways to reduce it. We believe that Scotland can lead by example on this area. The European Union institutions will be discussing product design in the coming few years; the European Commission will publish a Circular Economy Package this December and Scotland can play a strong role, within the UK, to push for material requirements in product design.
- The biobased economy and greenwashing. We are extremely concerned that certain packaging companies, as well as food and beverage companies, are greenwashing their products by dropping reusable options for others lower down in the waste hierarchy. For example, Carlsberg are developing a bottle for its beers made of wood fibres that can be composted. The waste hierarchy states that prevention and reuse are the preferred options when looking to minimize waste. We are concerned that with Carlsberg moving from reusable packaging (such as refillable glass bottles), they are marketing the change in their packaging as something innovative and better for the environment than the previous reusable glass bottles. This is not a unique example – other big companies such as Coca Cola are promoting their “PlantBottle” too.⁷ Such a big scale move to biobased packaging will result in a higher demand for water and land, two limited resources. This is a further reason to measure the four footprints. Scotland needs to make it a priority to set up a refillable system as a way to halt the greenwashing plans of companies.
- Design repair manuals for citizens. Better design of products implies that a company should also provide a clear repair manual for consumers. At the moment, most companies do not make the information on how to repair their product accessible to the public or to repair shops. By obliging companies to make repair manuals accessible, repair will be made easier for citizens to carry out themselves, and for repair shop staff.
- Scotland as a leader in Brussels. For Scotland to be seen as a leader on the circular economy, it means that in Brussels the voice of the UK should include the distinctive positions of Scotland in this area. Scotland should independently promote its work on the circular economy in European fora.

Question B – Reuse

⁶ Eastpak, for example offer 30 year warranties, <http://www.eastpak.com/skin/frontend/enterprise/eastpak/warranty/EN%20-%20Warranty%20Conditions%20-%2030%20Years.pdf>

⁷ <http://www.coca-colacompany.com/our-company/introducing-plantbottle>

We are looking for feedback on the ideas discussed in this section on extending the life of goods through reuse.

When it comes to Reuse, FoE Scotland believes that:

- Warranties Friends of the Earth Scotland welcome the *Revolve* standard, but would also like a stronger emphasis on durability by introducing minimum 2 year warranties in reused products sold by approved reuse centres. We believe that a 2 year warranty for reused products is a realistic possibility and a key stepping stone to increase consumer confidence.
- An extended producer responsibility (EPR) system that encourages reuse: EPR schemes need to promote the activities at the top of the waste hierarchy including reuse, waste prevention activities, and preparation for reuse. There are EPR systems in places such as France that have addressed the lack of reuse in textile waste, but to achieve a transformational change more needs to be done, from granting access for reuse centres and networks to the waste stream in order to separate what is reusable, to making producers disclose information relating to product repair. There is also an opportunity for EPR schemes to partner with social economy organisations, who bring strong benefits to often the most vulnerable sectors of the local community.
- Better collection of products and materials. According to recent estimates, one third of all material arriving at recycling centres and civic amenity sites can still be re-used⁸ and at least 25% of electronic waste still has significant re-use value.⁹ This situation is promoted by the current lack of legal support for preventing waste and reusing, which results in masses of reusable goods being prematurely recycled, landfilled or incinerated. Friends of the Earth Scotland believe that this is a missed opportunity. For these products to be used for longer, access to waste streams by re-use centres and networks, who could separate these items, is essential. This also has a significant employment creation opportunity.
- Green public procurement: We believe that there is great potential for business-to-business reuse. However, to take off, issues such as access to products and materials by reuse organisations, and warranties for reused products, need to be addressed.
- Refillable scheme: Friends of the Earth Scotland strongly believe in the need to introduce systems that would allow for the reuse of packaging, especially with a deposit return scheme. We see these schemes still working in some parts of Europe with great environmental and job benefits, and believe that the Scottish Government should take the necessary steps to introduce such a scheme as soon as possible. Our response to the Scottish Government's earlier consultation on deposit-return systems is here: <http://www.foe-scotland.org.uk/node/2029>

⁸ http://www.rx3.ie/MDGUploadedFiles/file/rx3publications/Bulky_Waste_Reuse_Study_website.pdf

⁹ <http://www.wrap.org.uk/content/facts-and-figures>

Question C – Repair

We are looking for feedback on extending the life of goods through stimulating greater levels of repair by businesses, community organisations and individuals.

Recent evidence has shown that consumer goods are now less durable and repairable than in the past. The German Federal Environment Agency released in February 2015 interim results of a study which show that a number of consumer products do not reach a lifetime of even 5 years. Moreover, the lifetime of large household appliances have been decreasing and over 10% of washing machines lasted 5 years or less in 2013 compared to only 6% in 2004.¹⁰ Friends of the Earth Scotland are concerned about this trend. The design of many products make them and/or their components impossible to repair without breaking or damaging part or the whole of the product. For example, the difference between a tablet that has a glued screen and one that has a screwed screen can be the difference between having to discard the product or being able to repair it.

Friends of the Earth Scotland see the decrease in repairable goods as a threat for local re-use and repair organisations and the local jobs that these support. Some specific areas of concern are:

- Lack of access to, and high costs of, spare parts: many manufacturers do not stock spare parts for their products for a long time. A requirement to keep these for at least 20 years would ensure that more products are repairable.
- Lack of appropriate repair information: It is essential that it is made compulsory for all manufacturers that they make all the repair manuals accessible for citizens and repair associations alike.
- No repair potential: to make designers and manufacturers open to increase the reparability of their products, we would like to see a tax for products that are not repairable so that these are made less attractive to the consumer.
- Warranties It is essential to introduce a minimum of 2-year warranties for all repaired products sold by approved centres in order to significantly increase the confidence in repaired products. We believe that a 2-year warranty for reused products is a realistic possibility and a key stepping stone to see repaired products as a viable alternative for many consumers.

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http://www.umweltbundesamt.de/sites/default/files/medien/378/publikationen/texte_10_2015_einfluss_der_nutzungsdauer_von_produkten_auf_ihre_umwelt_obsoleszenz_17.3.2015.pdf; Prakash, Siddharth; Stamminger Rainer & Ines Oehme (2015): Faktencheck Obsoleszenz: Analyse der Entwicklung der Lebens- und Nutzungsdauer von ausgewählten Elektro- und elektronikgeräten. In: Brönneke, Tobias und Andrea Wechsler: Obsoleszenz interdisziplinär. Vorzeitiger Verschleiß aus Sicht von Wissenschaft und Praxis, pp. 98-99; <https://www.umweltbundesamt.de/en/press/pressinformation/obsolescence-fact-check>

Question D – Remanufacture

We are looking for feedback on the ideas discussed in this section to promote remanufacturing in Scotland.

Remanufacturing is very linked to upgrading products and we would like to see this also a possibility for household items and not only items for industrial use. We therefore refer you to the previous points we have made on warranties, durability, making repair manuals available, leasing, public procurement and product design.

Question E – Recycling

We are looking for feedback on the proposed approaches to expand recycling among households and businesses and improve the quality of recycled materials.

Ban incineration to meet the landfill target: Friends of the Earth Scotland applaud the 70% recycling target, but highlight that the 5% landfill target needs to go hand in hand with a ban on incineration of waste, since 30% of incinerator input material still goes to landfill after incineration (the slag and ashes). Therefore, FoE Scotland would like to see the suggested ban in landfill accompanied by a ban on incineration.

Question F – Producer Responsibility for reuse and recycling

We welcome the proposals to explore extended producer responsibilities for problem wastes including mattresses and tyres. Friends of the Earth Scotland believe that an EPR system that encourages reuse should be a priority. EPR needs to propose the activities at the top of the hierarchy including reuse, a waste prevention activity, and preparation for reuse. There are EPR systems in places such as in France that have addressed the lack of reuse in textile waste, but to achieve a transformational change more needs to be done, from granting access for reuse centres and networks to the waste stream in order to separate what is reusable to making producers disclose information relating to product repair. There is also an opportunity for EPR schemes to partner with social economy organisations, who bring a strong benefits to often the most vulnerable sectors of the local community.

Question G – Recovering value from biological resources

We are looking for feedback on the proposed approaches to harnessing greater value from biological resources that would otherwise end up as waste.

Do not ignore prevention: Friends of the Earth is extremely concerned to have an industry that relies on the availability of abundant organic waste, putting a barrier for the reduction of this stream of waste in the first place. The analysis on this section of the paper is right in assuming that this sector can bring significant return for companies and provide energy, but again, we miss:

- A concrete plan on organic waste prevention: prevention sits at the top of the waste hierarchy, yet there is no plan in the organic waste section that would address this. Organic waste, as well as all biogenic waste, has significant land and water footprints, hence we take again the opportunity to emphasise that need for a comprehensive resource policy. For example, food is currently considered one of the most polluting sectors in the economy, most

of this pollution being outsourced elsewhere, since most of the food consumed in the UK comes from overseas. Indeed, most biogenic materials found in the residual waste stream, such as food, paper, card and natural textiles, are derived from intensive agriculture – monoculture forests, cotton fields, etc. It is imperative that the Scottish Government develops a strong prevention strategy.

- Separate collection: Friends of the Earth Scotland would like to stress that putting in place targets for separate collections clearly lead to dedicated investments in the composting and AD sector. Hence, we would like plans on separate organics collections.

Question H – Energy recovery

Phasing out incineration: Friends of the Earth Scotland welcome the observation of paragraph 161, highlighting how the existence of energy from waste infrastructure has been a barrier to developing a circular economy in many parts of the world. Incineration requires waste plastic, paper and card to produce energy but these materials are all eminently recyclable. Since waste incineration destroys resources, resulting in the opposite to a circular economy, it should be phased out. Therefore, we believe that the Scottish Government should include energy from waste operators in the transition to a circular economy, which by 2030 leads to an end to incineration in Scotland.

Incineration will make Scotland dependent on landfill. Incinerators produce on average 30% slag and ashes, most of which go to landfill, making the option of incineration clearly not suitable for a zero landfill strategy.¹¹ The only strategy that minimises reliance on landfilling is the continued commitment to redesigning the system for ever-reducing waste arisings and ever-increasing separate collection rates. For example, some zero waste regions and cities already produce less than 50 kgs/person/year residual waste, resulting in landfill rates of less than 10% of municipal solid waste. However, if an incinerator is built now in a region with 50% separate collection (as currently required in the Waste Framework Directive), slag and ashes from incinerated residual waste would be around 12-15% of municipal solid waste, hence **higher** than what is achievable with true zero waste strategy and practice.

Question I – Landfill

Incineration will make Scotland dependent on landfill. As in the section above, 30% of all input to an incinerator ends up as bottom ash and slags.

Question J – Communications

We would welcome views on the approaches to communication discussed in this section.

We believe the public is already very well informed on the environmental, social and economic benefits of moving to the top of the waste hierarchy, therefore, we believe that any information campaign targeting the public on circular economy should be to empower them to consume less, including by promoting the sharing economy and the leasing of products.

¹¹ http://www.esauk.org/energy_recovery/iba_-_incinerator_bottom_ash.html

We have highlight how concerned we are about the increasing amount of greenwashing from companies by promoting plant-based packaging and so we are very disappointed that this is included as an option for the publicly-funded #MakeThingsLast campaign.

Question K – Skills

- Twin with Zero Waste Municipalities and regions: Friends of the Earth Scotland welcomes the emphasis on getting new skills to make the transition to a circular economy a reality. However, as well as skills for business and employers, Friends of the Earth Scotland would strongly recommend Scottish local authorities staff to twin or team up with local authorities and regions that are truly leading in implementing circular economy strategies, such as Capannori, Argonona or Vrhnika.¹²

Question L – Measuring Progress

We are looking for feedback on the proposed approaches discussed in this section.

- Measure Scotland's land, water, material and carbon footprints. Although we see an emphasis on the measurement of carbon of material consumption and waste, we believe that this will provide an incomplete picture. Hence, the Government should measure Scotland's land, water, material and carbon footprint of consumption.
- Recycling statistics need to be robust: Friends of the Earth Scotland is concerned that there are currently 4 methodologies allowed by the Waste Framework Directive to measure recycling levels. This makes recycling levels variable depending on the methodology used, as each member state used the methodology the most convenient to have the highest recycling levels possible. Therefore, we treat all recycling statistics with caution.

¹² For more information on their success <http://www.zerowasteeurope.eu/zw-library/case-studies/>