

INNOVATIVE AND SUSTAINABLE: TRANSITIONING EUROPE TOWARDS A CIRCULAR ECONOMY

Executive Summary

Climate change, environmental pollution and resource scarcity are just a few of the many reasons why our society needs to transition towards a circular economy. Although the European Union is on the right track in that regard, there are still a lot of challenges to overcome. Operating 35 producer responsibility organization for waste electrical and electronic equipment, batteries and packaging in 15 countries, Landbell Group has contributed to the circular economy for over 20 years and is committed to maintain this role for the journey ahead. Based on this long-time experience we want to share some recommendations for a policy framework which paves the way towards an innovative and sustainable circular economy and strengthens the European Union's global leadership in this field.



“Landbell Group has contributed to the circular economy for over 20 years and is committed to maintain this role for the journey ahead.”

Recommendations for a better policy framework



Set smart targets for recycling and for phasing out landfill and incineration

- Clearly defined, stretch, and achievable targets
- Transparent, applicable and harmonised calculation methods
- Harmonised quality standards for secondary raw materials
- Acceleration and enforcement of the ban on landfill



Empower consumers

- Children education and awareness raising campaigns
- Transparent and verified information on products' recyclability and reusability
- Correct disposal of consumers' waste



Strengthen extended producer responsibility in a level playing field

- Clear and harmonised minimum requirements for EPR
- Reduced complexity of administrative requirements
- Sufficiently high and harmonised financial incentives for producers
- Extension of EPR to other material streams



Harmonise rules and increase competition in the waste and resource markets

- A stable pan-European policy framework
- Harmonised rules and processes
- Removal of monopolistic and protectionist structures as well as other barriers for competition
- Promotion of global waste and resource markets with harmonised rules



Set up clear, transparent and practical roles and responsibilities for all actors involved

- Policy makers: Ensuring a level playing field and investment security
- Producers: Joining an authorized collective EPR scheme or setting up an individual system
- Producer responsibility organisations: Management of waste stream(s) on producers' behalf
- Recyclers and waste operators: Treatment of waste, reporting of volumes



Ensure effective enforcement

- Effective enforcement of all legal provisions
- Independent national authorities
- Cross-border cooperation among Member States and between the EU and third countries



Promote research and development

- Regular public budgets for research and development
- Penalty payments as source for public research and development funds
- Support of innovative circular business ideas



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1. Introduction

Climate change, environmental pollution and resource scarcity are just a few of the many reasons why our society needs to transition towards a circular economy. Others relate to boosting innovation, creating jobs and helping Europe to maintain its economic prosperity. Landbell Group has contributed towards this transition for over 20 years and is committed to maintain this role for the journey ahead. As the only pan-European provider of take-back and environmental and chemical compliance solutions Landbell Group plays a crucial role at the interface between producers, consumers, recyclers and municipalities.

By implementing extended producer responsibility (EPR) in 15 European countries we already managed the collection of more than 3.5 million tons of waste electrical and electronic equipment (WEEE), more than 65,000 tons of waste batteries and more than 7.0 million tons of waste packaging. Landbell Group also takes an active role in promoting digitization and innovative circular economy solutions, e.g. by partnering in research projects within Horizon 2020¹ or by running the start-up competition Green Alley Award². We are committed to invest further in new technologies and innovations in order to increase efficiency, transparency and simplicity.

With this paper, Landbell Group wants to acknowledge the achievements made so far in the transition towards circularity, point out the challenges ahead, and – based on our long-time experience in this field – share some recommendations for a policy framework enabling all actors to contribute in the most effective manner and paving the way towards an innovative and sustainable circular economy.

Our current economic system functions in a rather linear way. Only 9 % of the resources used globally are being kept in the loop, i.e. re-used, re-manufactured or recycled. The rest is typically being landfilled or incinerated.

1 See <http://www.r2piproject.eu> and <http://www.retrace-itn.eu/partners>.

2 See <https://green-alley-award.com>.

2. Achievements and remaining challenges

Our current economic system functions in a rather linear way. Only 9% of the resources used globally are being kept in the loop, i.e. re-used, re-manufactured or recycled.³ The rest is typically being landfilled or incinerated.

In order to increase circularity, there are several policy instruments in place in the European Union and its Member States, especially with regard to WEEE, waste batteries and waste packaging. These include:

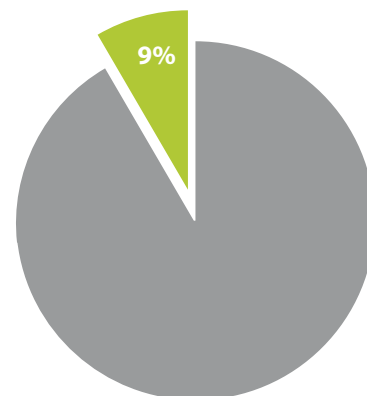
- Prohibitions to dispose these waste products and packaging in the mixed waste stream combined with mandatory markings and consumer education
- Extended Producer Responsibility under which producers of these products and packaging are being held responsible for financing or organising the collection and treatment of these products or packaging once they become waste
- Deposit refund schemes which introduce a fee that is charged on the product at the point of purchase and refunded once the product is returned, typically for beverage containers

These policies, implemented in legislation such as the Waste Framework Directive, the WEEE Directive, the Batteries Directive, the Packaging Directive, or the Single-use Plastic Directive, have considerably helped to increase collection and recycling rates and to significantly reduce landfilling and incineration. This is why many countries outside the EU follow the example and are implementing similar measures especially with regard to EPR, e.g. India, Singapore, South Africa and countries in Latin America.

Despite the implementation of these policies and the achievements made so far there are still a lot of challenges ahead which need to be tackled on the way towards a circular economy.

The main challenge is to further increase recycling rates, not only for the waste streams for which there are already policies in place, but for all kinds of resources used in products and services. This is closely connected to reducing landfill and incineration rates which are still way too high, and to restricting large volumes of end-of-life products and packaging which are illegally shipped to third countries.

Other challenges relate to the design of the waste and resource markets which are very fragmented, even within the EU, to unclear roles and responsibilities of relevant actors in product life cycle and to the insufficient enforcement of existing legislation, all hindering an effective and cost-efficient implementation of the circular economy.



Still a long way to go: Only 9% of global resources are re-used, re-manufactured, or recycled.

The main challenge is to further increase recycling rates for all kinds of resources.

³ See “Circularity Gap Report 2019” endorsed by the United Nations, the European Union and the World Business Council for Sustainable Development, published during the 2019 World Economic Forum in Davos: <https://www.circularity-gap.world>.

3. Recommendations for a better policy framework

Based on our extensive experience in operating at the interface between producers, consumers, recyclers and municipalities in the EU and beyond, we are convinced that the transition towards a circular economy is achieved best when taking into account some key principles. These principles are presented in following paragraphs. Having regard to them, we want to share some recommendations for a policy framework that will boost the EU's transition towards a circular economy and strengthen its global leadership in this matter.



Set smart targets for recycling and for phasing out landfill and incineration

Principle

Clear, stretch and reliable targets are essential to develop a more circular economy. All relevant actors need to know how to behave, e.g. how much waste to collect or to recycle within a given year and for a given waste stream. In order to be effective and to avoid stagnation, targets need to be smart: they need to be set in advance and adjusted over time based on both the progress made and the available technologies. In addition, they need to be clearly defined and the corresponding calculation methods need to be transparent and applicable. Only these

Set smart targets that are clearly defined, stretch, but also achievable for both collection and recycling of waste.

clear provisions combined with a stable policy framework provide the necessary security for fostering huge investments in changing product design, adapting new recycling technologies and pushing digitalization needed to achieve ambitious goals.

Recommendations

- Set targets that are clearly defined, stretch, but also achievable for both collection and recycling of waste, taking into account the specific challenges posed by each waste stream; avoid stagnation by regularly reviewing the targets according to the technical progress and the achievements made so far; define targets for all actors in the value chain, i.e. not only for recycling, reuse and collection, but also for quality
- Define transparent, applicable and harmonised methods for the calculation of target achievements and implement them in parallel with setting the targets; calculation methods have significant impact on the ability of all actors to achieve targets
- Define harmonized quality standards for secondary raw materials to foster the demand; align waste, products and chemicals legislation in order remove obstacles hindering the uptake of recycled materials
- Stop subsidies for linear materials and processes hindering the implementation of circular solutions
- Fully utilize design requirements such as harmonized criteria for EPR modulated fees, the Eco-Design Directive and packaging essential requirements to promote recyclability and the use of recycled materials when technically feasible
- Accelerate and enforce the ban on landfill of waste utilizing the pan-European infrastructure
- Restrict the incineration of recyclable waste



Strengthen extended producer responsibility in a level playing field

Principle

The principle of EPR has proven over the years to be a very effective means to ensure proper collection and recycling of waste. Only EPR creates the necessary level-playing field among producers by making all of them responsible for managing the take-back and treatment of their end-of-life products and packaging. Thereby, all producers have an inherent economic incentive to increase recyclability and reusability. This instrument becomes even more effective when linking producers' financial contribution to the recyclability of their products and packaging, e.g. via modulated fees. The principle of EPR functions best within a competitive environment with multiple EPR schemes respecting minimum requirements and releasing positive market forces for implementing the most innovative solutions.



Recommendations

- Set clear and harmonised minimum requirements for EPR to create a true level playing field which promotes entrepreneurship and competition in the waste market and among producer responsibility organisations (PROs)
- Combat free-riding on the EPR obligations by reducing the complexity of administrative requirements and allowing a straightforward implementation in particular for SME and importers
- Harmonise all provisions with regard to product design, such as criteria for modulated fees, the use of markings, consumer information delivered with the product, or design requirements, in order to avoid differences between Member States and to create a true internal market
- Impose sufficiently high and enforceable financial incentives (e.g. through modulated fees) based on a fair and EU-wide harmonized methodology and accepted evidence documentation, in order to increase the recyclability and reusability of products and packaging
- Promote cooperation between competing EPR schemes where reasonable, e.g. in the field of research and development, awareness raising campaigns, clearing mechanisms or modulated fees
- Extend the principle of EPR to other material streams, such as non-packaging plastic, metal products, shoes and clothing, other textiles, mattresses, carpets, tyres and pharmaceuticals

Combat free-riding on the EPR obligations by reducing the complexity of administrative requirements and allowing a straightforward implementation in particular for SME and importers.



Set up clear, transparent and practical roles and responsibilities for all actors involved⁴

Principle

The transition towards a circular economy requires all actors to fully understand their specific roles and responsibilities. This holds for producers, PROs, waste collectors and recyclers, but also for consumers, the civil society, and, of course, municipalities, enforcement bodies and regulatory authorities. All these actors need to understand how their individual actions fit into the overall picture and how important their actions are for the successful transition towards a circular economy. The legal definition of these specific roles and responsibilities needs to be as clear, fair, transparent and practical as possible.

Recommendations

- Policy makers and local authorities to set up an appropriate, ideally harmonized legal framework, governance and enforcement for a level playing field, and to ensure investment security enabling the desired impact
- Producers to comply with the legal requirements with regard to registration, reporting, joining an authorized collective EPR scheme or setting up an individual system, and product design
- Retailers to fulfil their waste collection obligations in shops and – in case being a producer – fulfil all producer obligations
- PROs to comply with legal obligations (e.g. following Article 8a of the EU Waste Framework Directive), to manage waste stream(s) on behalf of the represented producers, to incentivise them for a better design, and to raise public awareness
- Recyclers and waste operators to treat all waste according to legal obligations and quality standards, and to correctly report volumes treated on behalf of PROs to PROs
- Municipalities to cooperate with PROs on EPR waste streams managed by PROs, e.g. with regard to collection and awareness raising
- Consumers to contribute through correct separate waste collection (see below)



Empower consumers

Principle

Consumers play an important role in the transition towards a circular economy. Their consumption behaviour has a huge impact on the amount of resources used. The way they dispose of their waste products and packaging heavily influences both quantity and quality of recycling. Consumers are able to actively contribute to the circular economy only if they are fully aware of their actions' consequences.

Explain to consumers their power and how each individual can make a difference in the transition towards a circular economy.

Recommendations

- Explain to consumers their power and how each individual can make a difference in the transition towards a circular economy, e.g. via children education and awareness raising campaigns
- Provide transparent and verified information on the recyclability and reusability of products and packaging, in order to increase consumers' trust and allowing them to make informed consumption choices
- Empower consumers to correctly dispose of their waste products and packaging
- Foster new ways of consumption which are based on the principle of sharing rather than on the principle of ownership

⁴ See <https://erp-recycling.org/wp-content/uploads/2017/11/ERP-Circular-Economy-Roles-and-Responsibilities.pdf>.



Harmonise rules and increase competition in the waste and resource markets

Principle

In a globalised world, the transition towards a circular economy can only be successful if implemented in a cost-effective way. A European single market with clear and harmonised rules that respect the principles of competition, open markets and a fair level-playing field is the foundation of this cost-effective implementation. The significant size of the EU single market multiplies the impact of EU policies within and beyond its boundaries, provides economies of scale, and reduces complexity for producers as well as prices for consumers. In addition, such an environment fosters innovation and facilitates investments for improving product design and implementing better recycling technologies.

Recommendations

- Assure a stable pan-European policy framework to guarantee investment security
- Reduce legal complexity and administrative burden through harmonisation of rules and processes
- Facilitate entrepreneurship and enable businesses to develop and implement innovative ideas
- Remove monopolistic and protectionist structures as well as other legislative and non-legislative barriers for competition in the waste and resource markets
- Take the European single market as best practice to promote the development of global waste and resource markets with internationally harmonised rules and processes in order to increase market efficiency and to better utilise economies of scale



Ensure effective enforcement

Principle

No matter how ambitious legal provisions are: they are worthless if not followed correctly. Therefore, it is of utmost importance that all legal provisions are properly and actively enforced. This is a pre-requisite for any cultural change in business practises and can only be achieved if all relevant authorities on both national and EU levels are equipped with the necessary means and resources, taking advantage of the possibilities provided by digitalisation. In a globalised world, international cooperation between EU Member States, but also between the EU and third countries is growing in importance as well, in particular with regard to e-commerce, reliability of EPR schemes, and informal international waste flows.

Recommendations

- Implement effective enforcement of already existing and new legal provisions in the Member States, especially with regard to compliance with and of EPR schemes, collection quality from consumers and municipalities, recycling quality, treatment standards and uncontrolled waste flows
- Assure enforceability of targets and obligations
- Set up independent national authorities in all Member States which operate producer registries, monitor compliance of all actors, and ensure proper implementation of EPR
- Intensify cross-border cooperation and mutual support among Member States and between the EU and third countries, e.g. through global “enforcement networks”, to combat free-riders and other non-compliant actors and to control cross-border sales

Set up independent national authorities in all Member States which operate producer registries, monitor compliance of all actors, and ensure proper implementation of EPR.



Promote research and development

Principle

In the circular economy as in many other fields, innovation is key: products need to become more durable and better recyclable; collection, separation and recycling of waste products and packaging need to be significantly improved; and consumption behaviour needs to become more resource-efficient. Innovation in these fields require – besides a competitive environment – continuous research and development, both in publicly financed research institutions and in privately financed business projects. This contributes not only to the transition towards a circular economy but also to the EU becoming a global front-runner and role model for a global challenge.

Recommendations

- Regularly assign sufficient public budgets for research and development, e.g. under Horizon 2020, in order to foster innovation with regard to waste prevention, recycling technologies, digitalization or new business models
- Use penalty payments obtained through non-compliance with existing rules and provisions as source for public research and development funds
- Redirect state subsidies from linear businesses to innovative circular businesses and research and development
- Support start-ups to incubate new ideas and “out of the box” thinking and facilitate the communication around them to get attention and engagement of potential applicants

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About Landbell Group

Landbell Group is the leading supplier of service and consulting for global environmental and chemical compliance. It offers take-back/collection schemes for various waste flows, comprehensive services and consulting as well as respective software solutions from a single source. Established as a packaging scheme in Germany in the year of 1995 Landbell Group operates 35 take-back/collection schemes worldwide and, up to now, has managed the collection of more than 3.5 million tons of waste electrical and electronic equipment, more than 7.0 million tons of packaging and more than 65,000 tons of used batteries towards environmental recycling.

For more information on Landbell Group, please visit www.landbell-group.com.