

## Key lessons for Circular Economy Policies

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### Introduction

The circular economy (CE) has become a cornerstone of the European Union's (EU) economic and environmental policy in the last decade. The first EU CE Action Plan was published in 2015 by the Juncker Commission. It included key policies to improve resource efficiency throughout the EU. It set ambitious recycling targets, banned certain single-use plastics, and expanded eco-design requirements for large electronic appliances to enhance their reparability and recyclability.

While many have criticized these policies for lacking stronger consumption reduction and social justice elements, they nonetheless placed the EU at the forefront of the global CE transition (Calisto Friant, Vermeulen, & Salomone, 2021). The second EU CE Action Plan was enacted in 2020 by the Von der Leyen Commission, as a key component of the European Green Deal. The new action plan takes a more holistic and integrated approach than its predecessor, by including many biodiversity conservation, social justice, consumer empowerment, and climate neutrality considerations. However, no concrete actions have been implemented thus far.

Moreover, countries within and beyond Europe, have also established national CE policies. However, these policies, their governance process, and their sustainability impacts have, so far, been less studied and understood. The implications of CE actions thus remain uncertain, especially considering the manyfold social and ecological implications of a CE transition.

Our research in Work package 1, as part of the [CRESTING](#) project, fills this gap by analyzing CE discourses, governance, and implementation within the EU, including the impacts of EU waste streams on other countries in the world. This policy brief resumes the core results from our research and presents key insights and recommendations obtained after 3 years of investigation.



## WP 1.1: Making sense of the discourse on CE

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CE has so far been a contested concept with a history going back some decades. Our research has mapped the discourse as a reframing of many related terms that existed previously. This can be seen in an interactive [Circularity TIMELINE](#) on the [CRESTING website](#). The CE can thus best be understood as an umbrella concept, regrouping different discourses and ideas which seek to create sustainable resource and energy loops. In fact, our research has found that the CE relates to 72 other sustainability concepts from the global North and South alike, such as buen vivir, industrial ecology, degrowth, doughnut economics and transition towns.

However, despite this conceptual diversity, our research has also found that most CE discourses focus on the business and technological aspects of circularity and thereby disregard many key social, political, and ecological implications, such as who controls CE patents, technologies and industries? how to fairly distribute the costs and benefits of a CE transition? and who creates and decides on key CE policies and regulations? While these questions are not yet at the forefront of the societal debate on CE, some social movements, NGOs, and governments are proposing a more socially inclusive, fair, and democratic transition to a circular future. To better understand and communicate the difference between various circularity visions, we propose the

distinction between “circular economy” and “circular society” discourses (see Figure 1). The former focus on business and technical aspects of circularity (sustainable material and energy flows) while the later include the many social and political implications of a circular future, such as the need to redistribute wealth, technology and political power (Calisto Friant, Vermeulen, & Salomone, 2020).

Our research has also found a high level of discrepancy between what governments are saying about the CE and what they are actually implementing. For instance, while the EU has a rather holistic discourse, which includes some key social implications of CE, its policies, have so far focused only on the technical and business aspects of circularity (Calisto Friant et al., 2021). To ensure a fair and sustainable and democratic transition to a circular future, it is key to have a more plural discussion on the topic, which includes a deeper discussion on the social and political implications of CE. Otherwise, the CE transition might simply replicate current patterns of global inequality, neocolonialism and exploitation; thereby becoming a “luxury” that benefits only a handful of people in a handful of countries. It is therefore key to not only think about CE policies that circulate material and energy resources in a sustainable manner but also “circular society” policies that circulate wealth, power, technology, and knowledge in fundamentally democratic and redistributive manners (see Figure 1).

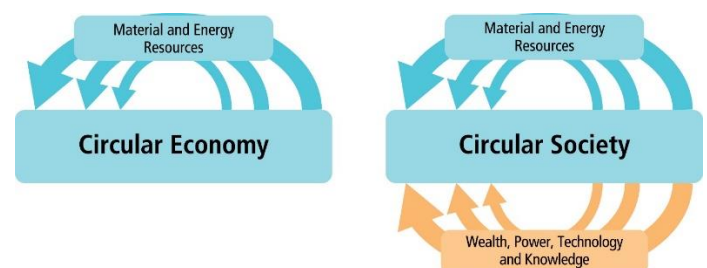


Figure 1: Difference between Circular Economy and Circular Society Discourses

See also our [video](#) about the diverse conceptions of CE.



**WP 1.2: Upgrading the toolbox: extended producer responsibility and cascading**

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Extended producer responsibility is a key policy approach to promote a more CE within EU and beyond. This policy instrument gives the producers greater financial or organizational responsibility for their products, usually through requiring them to collect and safely dispose of the products after disposal by the user. This policy approach is aimed to be strengthened in the European Green New Deal.

However, in examining how EU member states have currently organised and implemented these systems we identified several issues and propose various solutions to solve these.

Moreover, our research raises the broader point of how can this instrument better contribute to the development of the CE? First, there is limited data and transparency of the final destinations of collected waste (which is a potential resource). Waste is something demarked as unwanted and undesired, yet the lack of traceability of where waste goes is a large problem (see also below). Greater transparency of what is collected, how it is treated and where it goes is needed in the current extended producer responsibility policy. The current EPR systems do not manage this successfully, especially when recycling takes place in other countries than where it has been collected. Second, are the current targets built into the policy, which requires producers

to collect and recycle a certain percentage of the products they put on the market. A key issue that has emerged is the type of recycling that takes place, which emphasises quantity over the quality or types of specific materials that are recovered. For example, many scarce materials used for making green energy, cobalt, indium etc. are currently lost in the recycling process. Greater knowledge and priority for these scarce materials should be reflected in the extended producer responsibility targets. This links to a third observation: the practice of decision making about how to choose for the highest value retention options to be implemented, assuring the cascading principle, is not organised. Such decisions in practice are dominated by cost-efficiency considerations of market actors.

See also our [video](#) about missed opportunities for high value retention and our [video](#) on the future EPR.



### **WP 1.3: Circular economy in a globalized world: on leakages and fair collaboration**

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Despite the increasing discourse on closing the material cycles in the CE, the transboundary movement of European waste to different parts of the world creates a “leakage” in this CE. These legal, illicit, and illegal flows of these waste to low-income countries (like plastics, e-waste, textile, etc.) are hard to track or quantify. These flows and their final fate have directly impacted people and the environment, sometimes undermining the social and ecological values central to the European CE. Plastic, paper and textile wastes are traded as commodities. Other waste streams with clear export bans, like e-waste, still find loopholes to cross legal and physical boundaries. According to the European Commission, the average European waste generation (12.43 kg/per person per day) is 16.8 to 2.74 times higher than the global average estimated by the World Bank (0.74kg to 4.54kg/per person per day).

Clear estimates for the volume of transboundary waste flows outside the EU hardly exist at a European level. The fate of outgoing waste remains unclear. But it is clear that a part of the waste collected for recycling under Extended Producer Responsibility scheme finds its way to Asian and African countries. Following the waste streams, a more ethical and fairness driven consideration seems to be lacking in the circular economy practices. Waste reduction and value retention of waste as geographically close as possible while ensuring ecological and social sustainability is essential moving forward. To do this, the EU should

‘close the loop’ within Europe for greater resource sufficiency. And the exported waste should be limited to destinations where the highest value retention without socio-ecological harm is guaranteed, while the financial implications are included in the fee structures of Extended Producer Responsibility schemes.

Existing CE tools like the extended producer responsibility mentioned above can benefit from more data, transparency, and international collaboration. The new Circular Economy Action Plan has the potential to address some of the issues discussed above. Some ideas like waste reduction, value retention from waste, and international dimension are discussed. How these are operationalized are yet to be seen. A transformative change from the Circular Economy Action Plan is only possible if values like sustainability, fairness, equity, and collaboration are operationalized globally.

See also our [video](#) about the global cycle of e-waste.



## Concluding remarks

Currently CE policies focus on creating business opportunities in the current markets. In contrast to that there is a need for balancing these effort with a proper full system perspective, looking beyond the small scale wins of circular business cases, looking beyond the micro level activities and addressing the downcycling and still persisting large share of landfilling or low-quality energy recovery and leakages of to-be-recycled waste to low-income countries.

- CE policies need to take a more integrated understanding on how to approach CE strategies and the nature of their effects at national and global level.
- More pluralism, democracy, and inclusiveness in the development and implementation of CE policies is needed so that they better address the manifold perspectives on what a CE transition should look like and how to make it happen in a fair and sustainable manner.
- We must think of a circular society rather than simply a circular economy; otherwise, CE practices will focus only on business and technical aspects and thereby replicate current patterns of inequality, exploitation, and neo-colonialism.

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