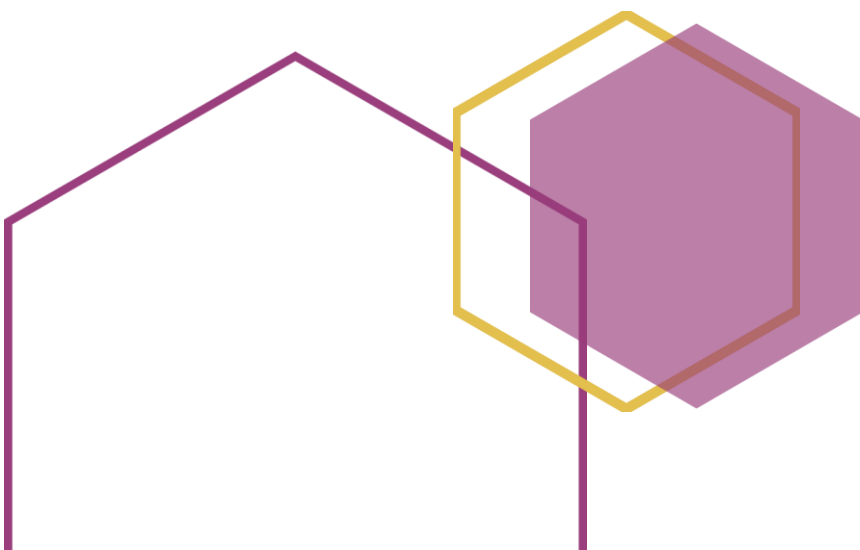




POLICY LAB FOR CIRCULAR ECONOMY

Industrial transition towards a green European economy

This publication is the first outcome of the “Policy Lab for a Europe made by Circular Regions” (SCREEN-Lab), a free platform where European Regions can co-design Circular Economy solutions for better policies



EXECUTIVE SUMMARY

This publication is the first outcome of the “Policy Lab for a Europe made by Circular Regions” (SCREEN-Lab), a free platform where European Regions dealing with Circular Economy projects can collaborate, explore possible scenarios and co-design solutions for better policies. It highlights three main challenges for a just transition process throughout the European Union’s regions. 1) creation of a common set of criteria, 2) development of experts on circular economy in each region, 3) to motivate companies to include circularity as part of their strategy. The publication is based on information gathered from experts, different stakeholders and a policy lab set up by Veltha. The policy lab consists of regions participating in a 3-month period of a dedicated workshop focusing on one main question (per policy lab) and one sub-question every month. Alongside with parallel meetings with experts and external stakeholders. The publication results in the observation of present and future challenges for the regions but also the possible solutions. The document emphasizes that the diversity of European regions results in hindering the process of creating a common criterion for how to adapt circularity in the regions. It also expresses the lack of expertise on circular economy in the regions and how it affects the probability to organize the assessment process. Last, it also presents the need of clear financial incentives for the companies, in order to motivate and create a path of changing their business model to include circularity in their strategy.

This publication has been issued in reference to the ‘Industrial transition towards a green European economy’ delivered by the European Economic and Social Committee INT/913-EESC-2020-03642

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SCREEN-Lab (www.screen-lab.eu) is the Policy Lab for a Europe made by Circular Regions, a think tank open to all those regional stakeholders willing to co-create and implement policies enabling EU industry, SMEs and citizens to adopt a circular sustainable approach.

It works through this free platform where European Regions dealing with Circular Economy can collaborate, explore possible scenarios and co-design solutions for better policies.

The international not-for-profit association Veltha (www.veltha.eu) manages the Policy Lab technical secretariat, coordinated in 2020 by Carlo Polidori.

The Policy-Lab 2.0 platform was set-up, launched and managed by Elisa Alonso and Luca Polidori; Contributions to this publication: Elisa Alonso, Gabriel Carlin, Carlo Polidori

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1. INTRODUCTION

Veltha and 17 European Regions worked together from 2016 up to 2018 in the H2020 **SCREEN** project (*Synergic Circular Economy across European Regions*¹) and defined a replicable systemic approach towards a transition to Circular Economy in EU regions within the context of their Smart Specialization Strategy. A “*Laboratory on Policies*” (Policy Lab) was established in order to ignite the analysis on circular economy projects, with a two-fold aim: first, it ensured that the analysis and the proposals developed within the project were discussed both with regional and EU-level policymakers, as well as with other key stakeholders. This was a crucial step in order to guarantee the feasibility, relevance and effectiveness of the proposals; second, it acted as a platform for **synergy creations**, triggering the regular exchange of information and feedback among the participants in order to take into account all the views during the actual implementation and allowing the **exploration of possible scenarios and the co-designing of solutions for better policies**.

Due to the results achieved, which went far beyond what was expected at the beginning, and the enthusiasm expressed by the partners, the Policy Lab continued after the end of the project as an informal cooperation network between European regions open to other regions and stakeholders in the field of circular economy.

In March 2020, the European Union adopted the new Circular Economy Action Plan “*For a cleaner and more competitive Europe*”.² There is a pressing need for smooth communication and coordination between the regions in order to bring innovative proposals to Brussels. **The circular economy has to be the center of the development strategy** and the only way to tackle this challenge is to address it jointly. In order to facilitate these needed partnerships, Veltha has decided to set up the Policy Lab 2.0 “*Policy Lab for a Europe made by Circular Regions (SCREEN-Lab)*”³, a think-tank operating on a free platform open to all regional stakeholders willing to co-create and

¹ <http://www.screen-lab.eu/index2.html>

² A new Circular Economy Action Plan For a cleaner and more competitive Europe COM/2020/98 final

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN>

³ www.screen-lab.eu

implement policies enabling EU industry, SMEs and the public to adopt a circular sustainable approach.

This document explains the working methodology and the results raised from the first round of discussions within the Policy Lab.

2. HOW THE POLICY LAB WORKS

The new version of the Policy Lab works in 3-month periods in which a main research question is posed by Veltha to the participating regions, based on their needs. Inside each period, a sub-question is asked each month, followed by a dedicated workshop. After each meeting, Veltha merges all the information received from the internal discussions of the regions, its own research and from the three workshops. Furthermore, each month there is a parallel meeting with external stakeholders and experts, which will use the input of the Regions as a starting point to discuss the viability and effectiveness of policies. This dual nature ensures a multidisciplinary approach to the discussed issues.

2.1 The first main question

Circular Economy is an abstract term with many different definitions⁴, which causes different types of analysis depending on the institution involved. Thus, the way we understand circularity changes according to our specific needs: interventions and projects are designed and implemented to comply with such needs. Achieving a common set of criteria will facilitate collaboration on cross-regional projects, thus enhancing the “jointly approach” recommended in the Action Plan; therefore, the main question for the launching period of the Policy Lab was:

How to define common criteria to assess Circular Economy projects for the new programming period?

The first workshop was attended by public officers belonging to regions and municipalities of Italy, Romania, Finland, Croatia, Portugal, Slovenia, Norway, and Bulgaria.

⁴ J. Kirchherr et Al. - Conceptualizing the circular economy: An analysis of 114 definitions - Resources, Conservation and Recycling Volume 127, December 2017, Pages 221-232, - <https://doi.org/10.1016/j.resconrec.2017.09.005>

During the discussion, several participants underlined the issue of nudging industries and other stakeholders towards the circular economy, as well as other non-financial barriers. In the following sections, the main topics discussed are presented together with their policy implications.

3. PROBLEMS ENCOUNTERED BY REGIONS WHILE INTRODUCING CIRCULAR ECONOMY PROJECTS

3.1 Lack of a common set of circularity criteria

The diversity of the European Regions has hindered the creation of a common set of circularity criteria, since the assessment process must adapt to the regional circumstances. This poses several problems: 1) It hinders cross-regional cooperation since the projects are assessed differently between partners; 2) It multiplies the effort, research and resources needed to create a set of criteria and 3) regions who are currently starting to include Circular Economy as part their S3 strategy plan would benefit from using an already efficient established set of criteria.

3.2 Different competences

The multi-level administration of the European Union divides tasks between different bodies, which can cause administrations to work in silos. There is a need for collaboration among the different levels in order to correctly tackle the problems. The provision of regular and up-to-date information between the relevant stakeholders is needed.

Moreover, regulation promoting circular business models and eco-design has to be registered as a top-down approach. Several policy instruments escape the authority of Regions and thus must be established at national or European level.

3.3 Capacity-building

One of the main problems is the need for experts on Circular Economy in each Region. The Regions have stated that the personnel may lack the skills to organize a good assessment process, thus requiring further specific formation. Furthermore, the ability to

collect and analyze the data is crucial to inform the decision-making process. Capacity-building in this area is also needed, especially considering the difficulty of obtaining some circularity data which have not yet been disaggregated from the data usually presented by companies or official statistics.

The Policy lab supports the European Economic and Social Committee (EESC) goals of improving the human capital agenda, by emphasizing the necessity of increasing the educational and collaborative function. For example, in EESC's program (INT/913)⁵ article 10.3 and 10.4 the EESC's stress the need of developing key competences and mandatory education cycles, in order to increase the competence of young and adults. It also insists of a cross-cutting strategy in order to increase the strategic importance of education among different policy fields at a European level. This can be related to this publication's conclusion of not only a lack of expertise and education at a region level regarding circular economy transition, but also the need of a common set of work method.

3.4 Unsupportive corporate culture

Companies need clear financial incentives before deciding whether to include circularity as part of their firm's strategy. Their past investments create a path dependency for their industrial process that is costly to change, thus they might not see benefits in the short-term from adapting their business to the Circular Economy. There is also a different response from small than big enterprises, since for small enterprises it can be a not viable solution for their current stage of development.

Furthermore, many companies do not wish to reveal their material streams due to fear of competitors. They state that "knowing our waste means to know our process". This lack of high-level commitment limits the planning and assessment carried out by Regions.

⁵ European Economic and Social Committee (EESC) Industrial transition towards a green and digital European economy INT/913 15/09/2020 [Industrial transition towards a green and digital European economy: regulatory requirements and the role of social partners and civil society \(exploratory opinion requested by the Parliament\) | European Economic and Social Committee \(europa.eu\)](#)

The lack of demand for circular products constitutes a further challenge in the transition. In this case, public procurement could lead the start of this new market until awareness around the issue is raised.

Advice and support regarding regulatory and financial aspects, as well as on accounting for natural capital and resources should be provided to companies. These include information on direct subsidies, provision of capital, financial guarantees, circular procurement, product and design regulations and extended warranties.

Article 1.3, 1.7, 2.3, 2.4, 2.5 and 2.6 (INT/913) point out the requirements of developing a favourable business environment for promoting the shift of a circular economy-based business model, by not only being funded by the EU but also from national capital. This relates to the difficulties issued in this publication. For example, the companies stress the need for clear financial incentives before making the shift of including circularity in their business model and strategies. They emphasize the need of beneficial proof of adapting in a short-term aspect.

An issue to be further discussed is how to adapt the business environment to be more reactive and what institutional support and incentives are needed in order to encourage the Circular Economy among companies. The real business benefits and the scalability of circular business models should be clearly outlined and more pilot projects and best practices should be showcased.

4. CREATING A COMMON SET OF CRITERIA

Each Region has a specific evaluation scheme which can also vary depending on the type of call. An exhaustive set of criteria is needed in order to assess the performance of the projects and helps to decide the eligibility of the proposals and the allocation of the funds available for circular projects. Furthermore, each sector may focus on a particular aspect of the circular economy, thus the set of criteria must show some flexibility to better capture the exact impact. Moreover, quantifying the impact is important in order to ensure a transparent monitoring process.

The set of criteria built during the fore-mentioned SCREEN project has been expanded with more indicators proposed by the Circular Transition Indicators (CTI), the Material Circularity Indicator (MCI) and the SUMMA Circular Economy report by the Region of Flanders. The need to combine indicators from different sources comes to the aforementioned diversity of projects. The indicators used must address circular economy at the micro-level and include relevant measures for different categories.

Table 1 shows the proposed indicators discussed in the Policy Lab. There are 5 broad categories: production, consumption, disposal, environmental criteria and a social criterion. These categories are based on the Circular Economy Indicators proposed by the European Commission on the document issued on the 16th of January 2018 Communication “on a monitoring framework for the Circular Economy”⁶.

4.1 Usage

The criteria are designed to be additional to the assessment criteria for general projects already used by each Region. Their sole purpose is evaluating the “circularity” of one project. For the use of the indicators, the projects must choose one category and criterion from 1-6 based on their proposal’s area of action. In this way, the common set of criteria can be adapted to the needs of diverse projects. The criterion 7-11 must be always included, since they explore the general environmental and social impact of the project, which is important no matter the nature of the proposal. Furthermore, if the project focuses on green public procurement its weight will be increased.

⁶ <http://ec.europa.eu/environment/circular-economy/pdf/monitoring-framework.pdf>

Table 1: *Proposed indicators discussed in the first Policy Lab*

	Category	Criterion	Assessment
1	Production	Circular design	<i>Kg/year of virgin material avoided</i>
2	Production	New production process accepting secondary raw material	<i>Kg/year of virgin material avoided</i>
3	Consumption	Re-use, re-manufacturing, refurbishment	<i>Kg/year of virgin material avoided</i>
4	Consumption	Waste reduction	<i>Kg/year</i>
5	Disposal	Industrial symbiosis- Mass of waste resources recovered and re-introduced in production cycles	<i>Kg/year</i>
6	Disposal	Projects promoting waste recycling	<i>Waste produced by the target - Kg/year</i>
7	Environmental criterion	Amount of energy saved	<i>Ratio of energy (KWh) used per unit of product</i>
8	Environmental criterion	Reduction of emissions	<i>Ratio of emissions of CO2 generated per unit of product</i>
9	Environmental criterion	Use of renewable energy	<i>% of renewable energy used</i>
10	Environmental criterion	Water circularity	<i>% of water circularity</i>
11	Social criterion	Net balance of jobs	<i>Jobs created - jobs lost</i>

The reduced version of this table created during the SCREEN project has been tested and put in place by the 8 Regional Partners of the INTERREG REPLACE⁷ project, which have successfully merged the circularity criteria with their regions'-specific indicators for evaluating projects.

We want to emphasize that the table can be adapted to each Region's particular circumstances, including its maturity in Circular Economy. For this reason, the indicators do not aim to be exhaustive but to be the required standards. If a Region has the capability to measure further areas, some criteria recommended by the stakeholders of the Policy Lab are:

⁷ <http://www.interregeurope.eu/replace/>

- length of the value chain,
- number of patents in circular innovation,
- reduction of material leak.

These extra indicators focus on the life-cycle perspective of circular economy.

5. INSTITUTIONAL SUPPORT AND INCENTIVES

Economic instruments are an efficient tool for incentivizing business to prioritize circularity. Moreover, they can account for both positive and negative externalities. However, most market-based instruments such as the tax regimes are decided at national level thus the Regions have little power to change them. A common European agreement would be beneficial to establishing clear goals and strategies.

Circular Economy goals must also be included in broader policies. Linking it with economic, social and environmental policies can aid the embeddedness of circularity in policy-making considerations, as well as enabling the access to additional budgets.⁸

There are some further non-market-based instruments used by the Regions participating in the Policy Lab. First, the inclusion of Circular Economy in dedicated regional roadmaps and the availability of working groups fosters the research and inclusion of circularity in policy-making. This can also be expanded via the conduction of meetings with different regional stakeholders to discuss their potential role in transitioning to Circular Economy in the region. Furthermore, it fosters the creation of partnerships and synergies between different actors of the economy. The participation in European projects is another key measure that all Regions are employing in order to accelerate the creation of knowledge and the cross-regional integration of value chains.

Raising awareness, especially in regions in which Circular Economy is a recent development, is crucial to increase the involvement of private stakeholders. Some actions which explicitly focus on this are capacity-building sessions for stakeholders, information sessions, the creation of Circular Economy platforms, clustering activities and the

⁸ <https://www.wbcsd.org/Programs/Circular-Economy/Factor-10/Resources/Policy-enablers-to-accelerate-the-circular-economy>, 2019. p.12-13

promotion of good practices. Furthermore, all Regions agree that Green Public Procurement can lead the demand for circular business and create best practice cases for other stakeholders to follow. Green Public Procurement can act as a catalyzer for innovative solutions and the creation of a green market.

Regions highlighted the importance of bridging the gap between industries and research facilities and academia, in order to better explore the actual industries' needs and on the other side to drive academic research towards specific solutions able to foster the industrial transition. A platform able to gather data and provide a research demand-supply matching could be extremely relevant at European Level; the European project DIGIPRIME⁹, started on 2020 and participated by Veltha, is working to meta platform having also this goal and will take into account the results of the Policy Lab discussions.

Finally, legislation and regulations need to be expanded in certain areas such as education and data availability. The regions experienced, and still experiencing, a lack of accessibility regarding acquiring established information for how to approach Circular Economy. A developed data framework focusing on statistics that promotes a circular strategy, will result in established norms, that eases the transition. Regions also highlight the need of funded education for the regional staff, in order to increase both interest and operational capacities. There is a path dependency from past European policies on energy saving which causes that many Circular Economy policies focus on these areas, thus maintaining a traditional approach which is not optimal for circular innovation.

6. THE EUROPEAN UNION'S ROLE IN SPARKING THE TRANSITION

The coordination of regional, national and European programming is crucial in order to help the harmonization of policies, instruments and actions, which facilitate the transition to a Circular Economy. Clear and consistent policies must be established at top-level in order to diminish the ambiguity surrounding circular economy and to set the minimum standards required in each state member.

⁹ <https://cordis.europa.eu/project/id/873111>

Although the regions have a significant impact on the transition process, the need of governing from European level is essential to establish harmonized policies, instruments and actions out of three perspective: (1) a stated definition of the term Circular Economy, and its implication in order to counteract the diffused variety of application; (2) a promotion of a joint strategy for better planning to ensure that the cooperation leads to the same results regardless of action by different actors; (3) In order to achieve a strong political action, the European Union needs to have a strong commitment regarding developing a framework that constitute a clear process for how Circular Economy should be processed.

Furthermore, to enable and enhance the transition process, there are four aspects to take in consideration for improvement:

- Enabling the full potential of SMEs;
- economic incentives;
- enacting progressive EU legislation;
- Innovation funding and subsidies.

6.1 Enabling the full potential of SMEs

The establishment of circular innovation clusters promoted at European level allows the SMEs to target and foster collaborations. The SMEs is regarded as a major source of innovations and implicates a crucial part of contributing towards a European Circular Economy. By mobilizing various stakeholder groups, such as civil society and local authorities to small or medium-sized and large companies, contributes to accelerate the transition to a circular economy. On the contrary, the SMEs continues to face setbacks by numerous barriers:

- Lack of demand for green and circular products and services
- Lack of access to funding
- Lack of transparency throughout the value chain
- Lack of awareness or collaborative networks

It also faces problems regarding leading national examples of successful price incentives (fiscal, extended producer responsibility) or circular business models.¹⁰ These issues are in some cases being addressed at national and regional level, but only in some member states. Therefore, lies a potential of alignment and improvement to assure the transition throughout the European Union. The SMEs represents 99% of European companies, which makes it pivotal to facilitate and fund the process from a European level, to guarantee a collaborative development.

7.CONCLUSIONS

The presented issues should be considered as surmountable obstacles, that this publication wishes to stress, rather than impossible tasks. Regarding the set of a common criteria, the table with the assessment criteria used during the SCREEN project was successfully tested during the REPLACE project, which indicates a positive adaptation for upcoming or present projects. An adaption of an exhaustive set of criteria simplifies the assessment process of each project and may function as an assisting tool for decision-making regarding the eligibility of proposals and distribution of funds for circular projects.

To actually engage companies in shifting their business model towards a circularity characteristic business strategy, it is necessary to collaborate between research and industries to a better understanding of what is necessary for the industries in order to make the shift. It also directs research to focusing on solutions, which will foster the industrial transition. To enable the industrial transition, Circular Economy goals must be supported by not only economic instruments, but also by embedding a broader set of policies. Linking policies with social, environmental, and economic aspects will enhance the possibility of accessing additional budgets. Together with the development of a joint European agreement regarding economic incentives that focuses on prioritization of circularity is crucial in order to guarantee a beneficial establishment of clear strategies and goals.

Finally, the publication highlights the fact of raising awareness in regions that recently adopted Circular Economy, in order to increase the involvement of private stakeholders.

¹⁰ [2020-09-10-Ecopreneur_eu-advocates-Circular-Acceleration-Houses-in-all-EU-regions.pdf](#)
Ecopreneur.eu 10/09/2020



This leads to the final aspect regarding increasing the expertise on circularity and the role of the European Union. In order to develop a joint transition for all regions in the European Union, the regions urge assistance regarding developing their current knowledge about circularity. There is therefore a need of raising the understanding of circularity where it is less known and continue its development where it is already established. The European Union's role in the transition process is therefore vital regarding sparking the process by coordinate the regional and national actors. By coordination, the EU can promote and enable the SMEs full potential for future collaborations and mobilize the involved partners for a just and accelerated transition.

8. References

Synergic Circular Economy across European Regions (SCREEN) The project received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No730313. Retrieved from www.screen-lab.eu

European Commission: A new Circular Economy Action Plan For a cleaner and more competitive Europe COM/2020/98 final. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN>

J. Kirchherr et Al. - Conceptualizing the circular economy: An analysis of 114 definitions - Resources, Conservation and Recycling Volume 127, December 2017, Pages 221-232, - <https://doi.org/10.1016/j.resconrec.2017.09.005>

European Economic and Social Committee (EESC) Industrial transition towards a green and digital European economy INT/913 15/09/2020. Retrieved from [Industrial transition towards a green and digital European economy: regulatory requirements and the role of social partners and civil society \(exploratory opinion requested by the Parliament\) | European Economic and Social Committee \(europa.eu\)](#)

European Commission: Communication from to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2018) 29 Final. Retrieved from <http://ec.europa.eu/environment/circular-economy/pdf/monitoring-framework.pdf>

Regional Policy Actions for Circular Economy (Project REPLACE) Connected to the H2020 project. Retrieved from <http://www.interregeurope.eu/replace/>

Policy enablers to accelerate the circular economy: Scaling up actions across regions and stakeholders. By the World Business Council for Sustainable Development (WBCSD)
Retrieved from <https://www.wbcsd.org/Programs/Circular-Economy/Factor-10/Resources/Policy-enablers-to-accelerate-the-circular-economy>, 2019. p.12-13

Digital Platform for Circular Economy in Cross-sectorial Sustainable Value Networks. DigiPrime. Horizon 2020. Retrieved from <https://cordis.europa.eu/project/id/873111>

Ecopreneur.eu. advocates Circular Acceleration Houses in all EU regions, Date 10/09/2020. Retrieved from [2020-09-10-Ecopreneur_eu-advocates-Circular-Acceleration-Houses-in-all-EU-regions.pdf](#)