



European
Circular Economy
Stakeholder Platform

**EUROPEAN CIRCULAR ECONOMY
STAKEHOLDER PLATFORM (ECESP)
COORDINATION GROUP**



**2021
OUTCOME
DOCUMENT**

**ECESP LEADERSHIP GROUP ON
RETAILERS, CONSUMERS AND
SKILLS**

ON THE WAY TO CIRCULAR ELECTRONICS

Consumer electronics have become an essential part of our lives, fuelled by several developments. One is the extensive digitalisation of all areas of society, all the more so because of the COVID-19 pandemic, which has led to even greater use of online formats, and rapid technological developments that make more and new applications possible.

While there are certainly considerable benefits to these developments, there are also some challenges, mostly due to the immense increase in reliance on devices such as smartphones, tablets and laptops and the ecological impacts that go hand in hand with this. This includes the use of resources, greenhouse gas emissions, the use of sometimes harmful chemicals and substances, and the generation of waste.

Ecological impacts of consumer electronics

Electronics is one of the major target sectors of the European Circular Economy Action Plan. The reasons are manifold: each European generates 16.6 kg of e-waste every year. E-waste reached 50 million tonnes in 2018 globally, a figure that grows 3-4% every year (ITU, 2017) and makes e-waste one of the fastest growing waste streams in the world. This is partly because the useful lifetime of most electronic products is decreasing, and an increasing number of appliances are replaced before they reach their average useful service life of 5 years (Prakash et al., 2016). In the meantime, it is estimated that less than 40% of electronic waste is recycled in the EU (Eurostat, 2017), while over one third of European consumers have never repaired an electronic product (DG JUST, 2018). These are some of the challenges faced in the electronics sector in Europe, not to mention the critical resource, carbon and water footprints that result from this.

A fundamental problem here is that the system is set up in a linear way: products are currently still rarely designed according to the principles of the circular economy and generally have far too short a life span, according to the European Environment Agency (EEA, 2020). Although reuse, repair, refurbishment and recycling are circular strategies that promise ecological relief through the longer life of products and resources, there are still some hurdles for their implementation in the electronics sector. These include:

- For the circular economy, it would be important to build suitable infrastructures for refurbishment, reuse and recycling, but the markets for secondary materials are just emerging and, so far, only occupy a niche position and demand is not always steady.
- Illegal shipping of waste further contributes to the fact that the potential of recycling and reuse cannot be fully exploited.
- The right legal framework for refurbishment and reuse is also not yet in place, so that stakeholders lack legal certainty and guidance.
- The low collection rates of used electronic equipment hamper the breakthrough of circular electronics.

This last aspect in particular points to the fact that the implementation of Circular Electronics depends strongly on consumers playing their part: they are the ones who have to bring back old devices for reuse or recycling or select repairable or refurbished products when buying new items: "The choices made by millions of consumers can support or hamper the circular economy. These choices are shaped by the information to which consumers have access, the range and prices of existing products, and the regulatory framework." (EC, 2015) The problem is that changing consumers' behaviour is not easy, because of the "attitude-behaviour" gap – the fact that consumers often claim to favour more sustainable or circular products and services, but in the end do not put this attitude into practice in their everyday actions.

Attitude-Behaviour Gap

A recent Eurobarometer survey showed that 94% of respondents considered that the protection of the environment was important to them personally, and many of them associated it with the need to engage with circular behaviours, such as sorting their waste for recycling (Eurobarometer, 2017). Does this mean that we are on track to mainstream circular and more sustainable behaviours in Europe? Not quite. It is increasingly accepted that such positive attitudes do not necessarily equal action. In fact, food, mobility and housing are, in the reported order, the most impacting areas of consumption, as well as the ones characterised by less durable products and higher use intensity (Triollet et al., 2020). There is a large gap between favourable attitudes and actual consumption of better performing, circular products and services.

Therefore, one of the central questions of the LG's work in 2021 was how the gap between attitude and action among consumers can be overcome. There is still much to do in this area: despite the central role of the consumer, there is still limited research and action on behavioural change and consumer engagement with specific regard to the circular economy.

With the new EU Green Deal, however, this is changing and consumers are under the spotlight. The new EU Circular Economy Action Plan is clearly focused on "empowering consumers and providing them with cost-saving opportunities" as a key building block towards the circular economy (EC, 2020). As stated in the European Environment Agency 2019 circular economy report, "consumer behaviour is one of the key levers for enabling the transition to a circular economy" (EEA, 2019).

The fact that clear political priority is placed on the consumer and yet knowledge and experience in this area are not yet very well developed, means that specific focus on developing corresponding competences and skills among the key stakeholders is necessary. How can these stakeholders support circular behaviour and what skills do they need?

These are the questions addressed by the Leadership Group on Retailers, Consumers and Skills in 2021. To this end, it held two EU Circular Talks in 2021:

- 25 May 2021: 1st EU Circular Talk on "Insights on the EU Circular Electronics Initiative & Skills required to make it happen"

- 19 October 2021: 2nd EU Circular Talk on "Circular consumer electronics: getting it right from design to consumption"

In addition, the LG has launched the Circular Academy, a training programme for retail representatives who wish to address the issue of consumer behavioural change for circular electronics.

SOLUTION PATHWAYS TO CIRCULAR BEHAVIOURS AMONG CONSUMERS

There are various entry points for stakeholders to foster circular behaviours among consumers:

- Firstly, stakeholders can edit choices by selecting and deselecting products as well as working together with producer and supplier companies to stimulate circular manufacturing and the design and development of more circular products and services. The measures mentioned on the supply side of the Circular Electronics Initiative, such as Ecodesign, belong to this rather indirect area of intervention (upstream activities / choice editing);
- Secondly, stakeholders can provide consumers with a new option to choose from, which may meet unmet needs, while keeping previous options still available (e.g. offering refurbished smartphones or second-hand furniture) (upstream activities / choice expansion);
- Thirdly, stakeholders can shape the environment and approach in which shopping and disposal decisions are made. Changes in the environment may nudge consumers towards different, more circular behaviours and options. Examples that were mentioned during the 1st Circular Talk are door-to-door services for the pick-up of old electronic devices, financial incentives or easily accessible drop-off points (downstream activities / choice environment);
- Finally, stakeholders can further explore more systemic and holistic approaches to lifestyle changes, by enabling consumers to play a more active role in the circular transition, e.g. as "prosumers" (i.e. consumers that produce), as repairers (e.g. through DIY offers or capacity building) or as actors in the sharing economy (downstream activities / complementing choice).

Best Practice: Smart bins in Italy to collect e-waste

In Italy, there are some interesting initiatives centred around the promotion of circular consumer behaviour, which were presented during the Circular Talks. For example, the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) has tested a take-back solution for e-waste, especially small electronic devices that are often stored at home after being replaced and not returned to the value cycle. The aim was to recover and reuse these valuable resources. The initiative was part of the Innowee project that was funded in 2018 by EIT Climate KIC. ENEA was responsible for running a pilot project in Cava de' Tirreni, a small town in southern Italy. Rubbish bins have been placed in the city and ENEA ran a large marketing campaign to raise awareness of the project. Consumers who participated and handed in their old devices at the smart bin were given a receipt showing how many resources and emissions were saved. They also received discounts at local shops. The project was very successful: the amount of WEEE collected increased from 153 tonnes (2.6 kg/inhabitant) in 2018 to 177 tonnes (3.4 kg/inhabitant) in 2020. ENEA also hopes that in the long run a change in consumer awareness has been triggered.

Best Practice: MediaMarkt Saturn Retail Group

MediaMarkt Saturn signed the EU's Green Consumption Pledge in 2021, committing to support sustainable consumption. The potential is enormous: with 135 million customers in Europe, the retail company has huge leverage to trigger long-term changes in consumption patterns. The company wants to start directly in its core business and slowly transform it more and more towards a circular economy. They have started to question their products: how sustainable are our products? What does a sustainable product look like? Who should certify it? However, they are also offering services to consumers to help them act consciously: this includes educating them about what sustainability in electronics means, but also showing them the importance of repair and refurbishment. They also try to draw attention to new services: for example, renting appliances or a repair service that is available in the shops, even for devices that were not purchased at MediaMarkt Saturn. In addition, vending machines are currently being introduced where consumers can hand in their smaller old appliances without much effort. Consumers want the latest technology and cool products: the company now wants to show customers that this is also possible with repaired or refurbished products.

THE CRITICAL ROLE OF SKILLS IN MOVING TOWARDS A CIRCULAR ECONOMY

By talking with a number of leading international stakeholders about the importance of enabling circular behaviours and consumer engagement in the past years, the LG found that this is a hot topic but one which lacks the know-how and a deliberate strategy to achieve it. The focus on skills can achieve two goals at once: firstly, it can specifically address the new field of behavioural change by providing all stakeholders with the necessary skills. Secondly, it can address the fact that there is a great need for training in all aspects of the circular economy so as to make European workers fit for the system transformation. While overall the circular economy is seen as having more potential for the net creation of good quality jobs, losses can occur if the existing labour force is not reskilled or upskilled, as was pointed out in our Circular Talks. The fact that some of the traditional jobs are being replaced by digitalisation fuels further fears here. Reskilling and upskilling of the various stakeholder groups has therefore also been identified as a priority at EU level, and is included in the EU Pact for Skills.

However, it is not just stakeholders and workers who lack the necessary skills: consumers do too. How can they learn about repairing, sharing, prosuming, recycling and consuming differently? There are many "old" skills that former generations possessed (such as how to repair a product) that seem to be being lost. These need to be restored and revitalised, as pointed out during the Circular Talks. But soft skills are also important: what is the actual value of a product? Throughout the entire chain, skill development and capacity building play a key role in equipping stakeholders, including consumers, to make circular behaviours possible:

- Public authorities, at various governance levels, need the skills to effectively develop and implement preventive and rectifying strategies for more circular consumption.
- With regard to the private sector, retailers need to be capable of interacting with consumers in such a way that they can induce behavioural change and make it easier for the consumer to get information, to bring back old devices, to have them repaired or to purchase recycled and/or reused devices.

- Producers, on the other hand, need to improve design to bring about behavioural change, both by developing and expanding circular options of products and services put on the market and by phasing out resources or options that are unsustainable and incompatible with the circular economy. This would include options for upgrading old devices and software.
- Civil society organisations and researchers need to show how the transition can be made more effective and to mobilise stakeholders to act.
- Ultimately, consumers themselves should have the necessary competences and skills to act circularly, be it by receiving information on the reparability and upgrading of products and new offers or by learning how to repair and upgrade a product themselves.

It became very clear in the course of the LG's work in 2021 that these groups must not be addressed separately, but together - only in this way can interdependence, which is particularly important in the circular economy, be transformed into joint initiatives. Circular competence centres at city level could be a way to communicate the skills to the stakeholder groups and enable interaction. Cities can play an important role in this, because they provide the basic infrastructures for economic behaviour and for stakeholder interaction. Ultimately, stakeholder engagement at local level is a key skill in itself that enables the development of the other capabilities.

Excursion: Reskilling and upskilling for a changing job market

- The initiative RREUSE shows clearly the importance of skills in the circular economy with a focus on the potential role that social enterprises could play in providing these skills. Since 2001, RREUSE has supported and championed the development of social enterprises active in the circular economy through innovative policies, partnerships and best practices.
- The majority of RREUSE network organisations are Work Integration Social Enterprises which focus on providing job and training opportunities in the field of reuse, repair and recycling, especially to individuals who are most at risk of social exclusion. The social enterprises in the network have developed a variety of training programmes focused on both soft and hard skills, often manual in nature, and in some cases on keeping alive essential skills that are slowly being forgotten in Europe - such as the ability to repair things.
- One example of how RREUSE's members are contributing to skills development in the circular economy is Label Ecole in France, an amazing new training centre focused on developing skills in e-commerce, from web marketing to business management. The training centre is linked to a successful circular online marketplace of second-hand goods called Label Emmaüs where trainees can put their skills into practice. 80% of students participating in the 5-month course have found a job.

Best practice of a multi-stakeholder approach to reskilling and upskilling: ENEA

The Italian Circular Economy Stakeholder Platform (ICESP) is a network aiming to bring together Italian initiatives, experiences, criticisms and expectations regarding the circular economy, promoting the "Italian way of making the economy circular" in Europe. The objectives are: promoting the circular economy in Italy, mapping Italian good practices and implementing a tool for inter-sectoral dialogue and synergies between Italian stakeholders. Currently, ICESP comprises 143 signatory organisations and 262 organisations which contribute to working groups as expert participants. 60% of them are companies and trade associations, 19% are research and innovation organisations, 11% are public institutions, and 10% are citizens and part of the third sector. ICESP members represent local and central public administrations, the educational, research and innovation system, companies and professional associations, and civil society. In the field of training and skills, ICESP has created a subgroup dedicated to these themes which analyses the demand for skills and training regarding the circular economy, and focuses on eco-innovation, policy recommendations and a system of technical training for companies. In particular, the training, information and culture strand focuses on training at school and university levels, re-training technical and management personnel, and interactive awareness campaigns.

ICESP's measurable output is the number of good practices (184) developed by stakeholders and shared by them in the interactive Circular Economy Good Practices database. The key factors of potential transferability are based on the relationship between the Italian and European platforms, a feature that makes the model perfectly replicable in other Member States. The European circular economy governance structure also facilitates the transferability of the initiative at national level in order to spread circularity thinking widely.

Best Practice of upskilling through territorial cooperation: the Interreg MED Green Growth community

The Interreg MED Green Growth community (GGC) is a thematic network of 17 projects promoting a green and circular economy in the Mediterranean region by enhancing cross-sectoral innovation practices through a territorially-based cooperation approach. GGC projects perform different types of training, including "train the trainers" sessions. One example is the PEFMED PLUS project, whose overall aim is to support agrifood companies in transitioning to circular economy models based on the Product Environmental Footprint (PEF), an EU methodology for assessing the environmental footprint of products in their life cycle, and to promote sustainable production and consumption. PEFMED PLUS has developed a "train the trainers" programme divided into two main phases. The first phase was designed as a series of online training sessions and webinars geared towards intermediate organisations (i.e. local action groups, associations of producers, sectoral agencies) that are trained on key aspects such as EU environmental regulation and PEF methodology, including case studies.

After the "train the trainers" session has been completed and a set of training materials compiled, each intermediate organisation carries out a training and capacity building programme at national level. This programme consists of a series of knowledge transfer actions for local SMEs, public institutions, innovative agrifood clusters and regional bodies on how to use PEF tools and provide recommendations to make production systems more circular and resource efficient. A total of 45 food producers are currently participating in the knowledge transfer activities organised by the intermediate organisations in Italy, Montenegro and Bosnia and Herzegovina.

CLOSING REMARKS AND OUTLOOK

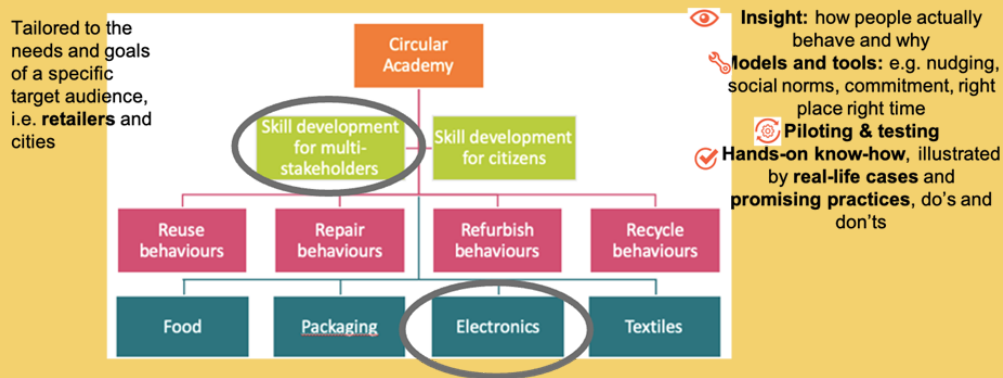
Taking action on ecodesign is a complex but essential matter to make a circular economy for textiles happen and reduce the impact on our environment. One possible avenue is to introduce minimum quality criteria for products entering the EU market to ensure better quality and prolong the lifetime of clothes. A second way to take action on ecodesign further down the product lifecycle is by encouraging and embracing technological innovations which make recycling more efficient. How to strike a balance between requirements for reusability and recyclability is one of the challenges here.

EPR schemes can also play a role in managing end-of-life textiles in line with the waste hierarchy. How much they can also help push for better products through eco-modulation and how such a fee should be designed still needs to be discussed.

This document is published in anticipation of the EU Textile Strategy Communication in 2022 and in the hope for a strong policy framework for the EU to boost sustainable business models, products and ways of consumption which will create a textile value chain that respects planetary boundaries.

CIRCULAR ACADEMIES

Given the central role that skills training plays among circular economy stakeholders and the importance of the role played by consumers, which was unanimously underlined in the Circular Talks, the LG's 2021 work resulted in the decision to set up a Circular Academy, which is a training programme for different stakeholders on behavioural change. Retailers were chosen as the first target group, since they play a particular role in the interface between consumers and producers, considered as authentic "gatekeepers" of product value chains (van der Ven, 2018). They are strategically well positioned to support the transition towards greater consumer engagement with the circular economy in various sectors.



Within the training programme, retailers will be enabled to support consumers' circular behaviours, and to build a stable bond with them in order to establish circular business models in the long term by incorporating evidence-based expertise about consumer behaviour into their strategies and projects. This will not only entail the design of new ways of doing (circular) business, but also developing a better understanding of the behavioural elements inherent in the circular transition, including the barriers and opportunities faced by consumers in playing their part and how to best address them in practice. The programme takes participants on a journey from models of circular electronics to practical behaviour change interventions, implementation guidance and evaluation thinking, all applied to the circular economy realm and tailored to participants' own needs and situations.

At the second EU Circular Talk 2021, the Circular Academy was launched together with EuroCommerce, the European trade association. It was kicked off online together with electronics retailers in December 2021. For 2022, it is planned to continue the Circular Academy and to run through the entire training course with retailers, and subsequently with other stakeholders, in order to be able to advance this important topic and to continue the work of the LG. This will be especially important when the Circular Electronics Initiative is published, scheduled for March 2022.

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In addition, more regulatory initiatives raise new questions and issues. One example is the product digital passport, which draws attention to the need to engage more with the role of digitalisation in circular electronics and behavioural change – a topic that will be taken up in the LG's work in 2022.

WHO ARE WE?

We are leaders on the circular economy from multiple expertise sectors and stakeholder groups, all members of the European Circular Economy Stakeholder Platform Leadership Group on Retailers, Consumers & Skills. Led by the Collaborating Centre on Sustainable Consumption and Production (CSCP), the group includes organisations such as EuroCommerce, RREUSE and the European Environment Agency (EEA). We bring complementary and beyond state-of-the-art skills, combining theory and practice, to jointly support circular consumer and business practice.



European Environment Agency



SOURCES

- Eurobarometer (2017): Special Eurobarometer 468, Attitudes of European Citizens towards the environment, in: https://data.europa.eu/data/datasets/s2156_88_1_468_eng?locale=en
- European Commission (EC) (2015): COM(2015) 614 final, Closing the Loop – An EU action Plan for the Circular Economy, Brussels, in: [https://ec.europa.eu/transparency/documents-register/detail?ref=COM\(2015\)614&lang=en](https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2015)614&lang=en)
- European Commission (EC) (2020): COM(2020) 98 final, A new Circular Economy Action Plan – For a cleaner and more competitive Europe, in: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN>
- European Commission, Directorate-General for Justice and Consumers (DG JUST) (2018): Annual Activity Report, in: https://ec.europa.eu/info/sites/default/files/just_aar_2018_final.pdf
- European Environment Agency (EEA) (2020): Longer-lasting electronics benefit environment, climate and circular economy, in: <https://www.eea.europa.eu/highlights/longer-lasting-electronics-benefit-environment>
- European Environment Agency (EEA) (2019): Paving the way for a circular economy: insights on status and potentials, in: <https://www.eea.europa.eu/publications/circular-economy-in-europe-insights>
- Eurostat (2017): Key figures on Europe. 2017 edition. Waste statistics, in: <https://ec.europa.eu/eurostat/documents/3217494/8309812/KS-EI-17-001-EN-N.pdf/b7df53f5-4faf-48a6-aca1-c650d40c9239>
- ITU (2017): Measuring the Information Society Report 2017. Volume 2. ICT country profiles, in: https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2017/MISR2017_Volume2.pdf
- Prakash, Chandra et al. (2016): A combined MCDM approach for evaluation and selection of third-party reverse logistics partner für Indian electronics industry; in: Sustainable Production and Consumption, Volume 7, July 2016, pp. 66-78.
- Triollet, R., Mccafferty, E.J., Alvarez Martinez, A.F., Tóth, B., Bellan, E. and Al Khudhairi, D. (2020): JRC Annual Report 2019, Publications Office of the European Union, Luxembourg, in: <https://publications.jrc.ec.europa.eu/repository/handle/JRC119146>
- Van der Ven, Hamish (2018): Gatekeeper power: understanding the influence of lead firms over transnational sustainability standards, in: Review of International Political Economy 25(03), pp. 1-23.