



*Insights about the EU Circular Electronics Initiative  
and  
take-back study*

*#EUCircularTalksElectronics, 25 May 2021*

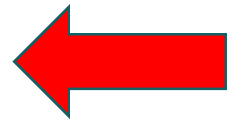
# Circular Economy Action Plan - Key product value chains



**Food, water & nutrients**



**Electronics and ICT**



**Batteries & vehicles**



**Construction & buildings**



**Textiles**



**Plastics**



**Packaging**

# CEI - Why ?

## Europe produces the most e-waste per capita worldwide

- 16.2kg per person/year
- **Growing** by 3-5%/year
- Less than half is **recycled, though targets in legislation (Waste Electrical and Electronic Equipment, WEEE Directive (EU) 2012/19/EU)**
- Value lost in **raw materials** ca. €13 billion/year (e.g. gold, tungsten, gallium, tantalum, silicon metals)
- **Hazardous materials** from e-waste is a significant source of pollution

**ICT devices** (smartphones, tablets and laptops) **are of particular concern**: quantity, growth, material composition and high emission production methods.

- ~80% of a smartphones lifetime emissions are from its production, transport and sale, not its actual use.

extending the lifespan of smartphones in the EU by 1 year



removal of 1 million cars from our roads (in emissions)

## Opportunity to grow local/EU aftermarkets for electronics

- E.g.: Enabling independent *automotive* aftermarkets created a €256 billion/year industry in the EU alone, employing more than 4.3 million
- With 63 jobs needed per 1000 tonnes treated, the development of electrical and electronic waste refurbishment could create up to 55,000 new jobs in Europe



# Circular Electronics Initiative, announced in Digital Strategy February 2020 + New Circular Economy Action Plan (March 2020)

## - *the Sustainable Products Initiative*

### Supply side

- Regulatory measures including mobile phones, tablets and laptops under the **Ecodesign** Directive (*design requirements durability, upgarability, maintenance, upgradeability, reuse, recycling; spare parts, repair/Maintenance information*)
- The **common charger initiative**
- Review of legislation on the Restrictions of **hazardous substances** in electrical & electronic equipment (RoHS)

Council Conclusions on Making the Recovery Circular and Green, 17 December 2020

Council Conclusions on the New Consumer Agenda, 22 February 2021

### Demand side

- A “**right to repair**” for electronics (link new Ecodesign requirements smartphones, tablets and laptops , choice of instrument, approach, currently being assessed, link with revision SGD)
- Initiative on **Empowering Consumers** for the Green Transition and the **Green Claims** Initiative
- Explore options at EU level for **take-back schemes** to return small used/ waste EEE (mobile phones, tablets & laptops)

European Parliament Resolution ‘Towards a more sustainable single market for business and consumers’, 25 November 2020)

# Circular Electronics Initiative

## ➤ Preparatory studies

- Several studies pending to assess **new eco-design measures** for phones, tablets, laptops + IoT/edge and other electronic devices (incl. software)
- Ongoing studies on extending **consumer protection** legislation on horizontal rights to information/transparency and repair

## ➤ Legislative actions (through existing or new instruments)

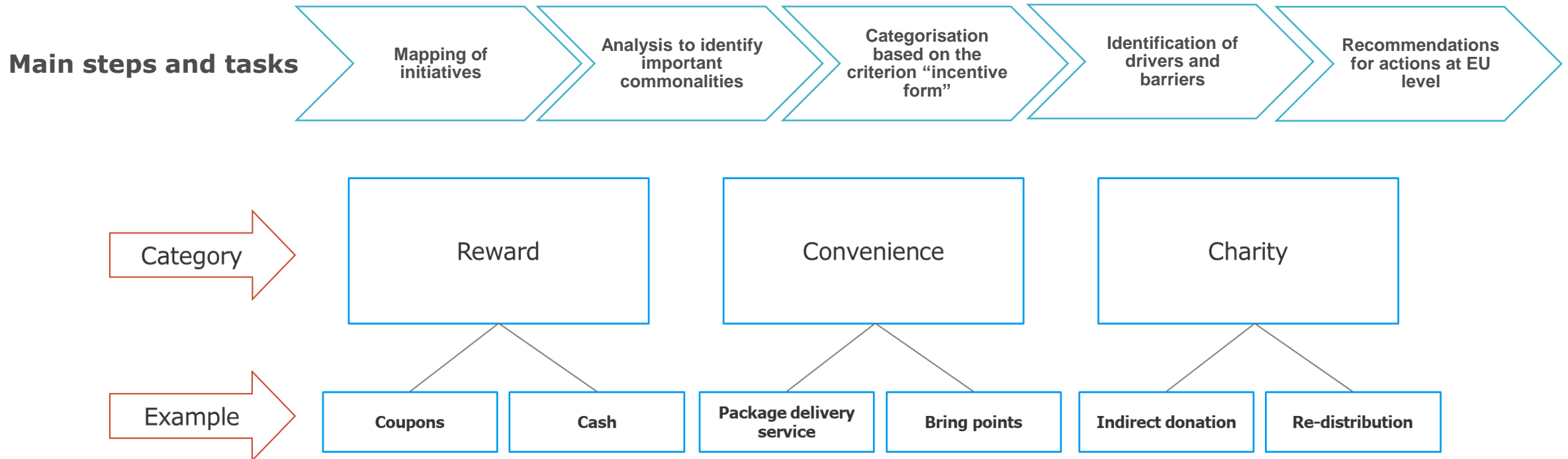
- New minimum **design requirements** for ICT devices (e.g. phones, tablets and laptops): Implementing measures (current Ecodesign Directive)
- Enable measures beyond design requirements (e.g. **right to repair**): TBD – possibly via consumer protection legislation
- **Common Charger** (decoupling, collection)

## ➤ Non-legislative actions

- **Take-back scheme** (TBD)
- Capacity building (e.g. after-markets, repair/recycling)
- Improved consumer information (e.g. product passports, ecolabels)



# Explore options at EU level for take-back schemes for the take-back of mobile phones, tablets & laptops



## Next steps:

Final recommendations by the consultants – publication Q2 2021

	Actions	Type of action	Level of implementation	Suggested implementation
1	<b>Financial Incentives</b>	Policy toolkit	EU level	Financial incentives for consumers for the buy-back of WEEE and used EEE. This policy action should target devices regardless of their value. A minimum financial incentive could be set for devices without residual value.
		Regulation	MS - level	
2	<b>Door to door services</b>	Policy toolkit	MS- level	<ul style="list-style-type: none"> <li>• Leverage existing door-to-door (private delivery services) and postal services. NB. The latter are already implemented as a collection system in various EU countries, for phones or cables for instance ;</li> <li>• Encourage the creation of new door-to-door services (via an EU innovation contest for instance)</li> </ul>
3	<b>Targets for re-use</b>	Regulation	EU - level	<ul style="list-style-type: none"> <li>• Set a methodology to assess re-use rates targets.</li> <li>• Set targets at EU-level (art.5 of WEEE directive) and/or PROs level</li> <li>• NB. Some EU countries (Spain, Belgium) have implemented re-use targets – although not specific for small EEE.</li> </ul>
4	<b>Data privacy certification scheme</b>	Standardisation (labels)	EU - level	Ensure harmonised data deletion and management processes for repair, refurbishing and recycling activities. NB. certifications already exist and could be leveraged and applied at the EU level.
5	<b>Drop-off points databases</b>	Innovation Funding / Policy toolkit	EU - level	Option 1 : Support MS to develop databases and associated search engines of all collection points and repair facilities would improve awareness. Alternatively, a single EU wide database could be considered.
		Regulation	EU - level	Option 2 : Commission establishes common quality standards and / or technical requirements for databases.

	Actions	Type of action	Level of implementation	Suggested implementation
6	<b>Personalised EoL information</b>	Innovation Funding	EU-level	Option 1: fund research on “nudging” consumers by sending specific information which would ensure better awareness on end-of-life options, such as : best practices for deleting personal data (in line with GDPR and data safety regulations), indications on the closest collection/repair facilities, information on the environmental impact of new phones, etc. These features could be found in an application (for iOS, Androids, etc.).
		Regulation	EU-level	Option 2: Have operators send such specific information to consumers.
7	<b>Create the enabling regulatory framework for reuse</b>	Policy toolkit	EU-level	Option 1: Develop guidelines to clarify the distinction between used and waste EEE.
		Regulation	EU-level	Option 2: Establish end-of-waste criteria for WEEE that have been prepared for reuse.
8	<b>Product passport</b>	Innovation Funding	EU-level	User and repairer information could both be leveraged with the help of innovative technologies (distributed ledger, digital twin...), and could help track devices, collect data, better follow environmental performances, send more personalised information (see action#6), etc.
9	<b>Low VAT</b>	Regulation	EU-level	Modify the VAT directive to allow for a lower VAT regarding certain activities. Scope could include repair and second-hand activities of used EEE.
10	<b>Deposit-refund systems</b>	Regulation	MS- level	Option 1: A deposit-refund system has a promising potential to incentivise return of devices at the end of use, to be harvested for pieces or refurbished. Decision to implement a DRS system should thus be left to MS, as it is the case for Packaging – see Directive (EU) 2019/904.
		Funding	EU-level	Option 2: conduct in-depth studies to assess the feasibility and replicability of such as system



# Complementary policy/ legislative actions

- Communication campaigns and educational measures
- Separate monitoring and reporting of small WEEE covered (*nb:requiring legislative change*)/improve monitoring of collection and reuse flows
- Extension of collection obligations for retailers
- Tackling free riding
- .... ???

# Thank you

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