



Enhancing Resource Efficiency and Circular Economy through EPR

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- Provide education, capacity building, and information to ensure monitoring and enforcement of the E-waste Management Rules
- Applicable to a wide range of target groups:
 - Strengthening capacities of SPCBs to meet monitoring, enforcement and reporting requirements vis-a-vis CPCB
 - Increase knowledge of consumers (households and schools) on formalised disposal channels and segregation of e-waste from regular household waste
 - Skilling of workers from the informal sector on environmentally sound handling of e-waste (e.g. MeitY awareness raising programme) and path to formalisation















- Develop integrated monitoring frameworks to ensure enforcement of Rules at the ground level
 - Development of guidelines for inventorisation methodologies for ewaste and capacity building of SPCBs to meet reporting requirements
 - Audit mechanisms for recyclers to understand capacity of different WEEE/plastic packaging items to ensure double reporting/paper trading
 - Guidelines for recycling and use of SRM from urban mining to substitute demand for virgin raw materials















- Create negative and positive financial incentives (e.g. taxes versus subsidies)
 - Implementation of EPR fund financed by producers which could be disbursed as grants/subsidies to authorised recyclers and collectors to enhance waste management infrastructure
 - Provide tax breaks on repairs to support local service industry in the nonacademic sector
 - Encourage the use of Deposit Refund Schemes (DRS); successfully implemented in EU countries for various types of packaging (e.g. PET bottles), yet little experience in the field of e-waste; may incentivise ecodesign and recyclability
 - In the case of globally-traded products, better eco-design incentives could also be achieved by harmonising environmentally-sensitive design (OECD).









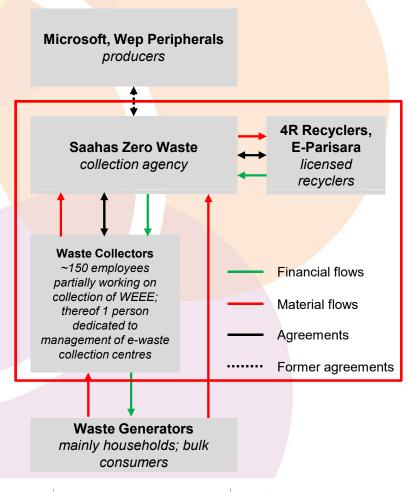






- Promote inclusion of the informal sector via dedicated policies and incentives for formalisation
 - Informal sector not explicitly addressed by E-waste Managmenet Rules or Plastic Waste Management Rules
 - Regcognise importance of informal workers through dedicated state policies (e.g. case of e-waste strategy of Telangana)
 - Encourage formal-informal partnerships and innovative business models

Case study: Saahas Zero Waste (India)











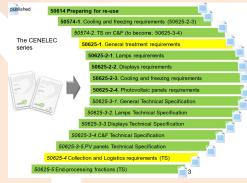






Adaptation of CENELEC standards to the Indian context

- Standards can support the implementation of E-Waste (Management) Rules and create business opportunities
- Adaptation of CENELEC can be beneficial for public and private institutions, such as
 - Producer/ producer associations: interested in a level playing field and recycling benchmarks
 - Formal collector/ recycler/ refurbisher: interested in complaince with legislation
 - Public organisations: improving enforcement of legislation
 - Consumer Organisations and Environmental Groups
- Illegal imports and existing Indian waste management infrastructure needs to be taken into account when opening up to the international markets

























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Adaptation of CENELEC standards to the Indian context

- Combination of advantages of available standards and tailoring to Indian context as optimal solution
- Implementation and enforcement of standards in India can be challenging:
 - Lack of awareness on hazardous informal recycling
 - Investment from manufacturers and recyclers needed
 - Lack of awareness on value-creating aspects of standards
 - Informal structure of waste management sector -> lack of compliance
- Prospective Conformity Assessment system to be brought with system wide changes
- No recycling and recovery targets should be addressed through progressive strategies
 like draft RE policy and signals by the government in setting up EcoPark
- Categories of e-waste should be expanded (for e.g. solar panels?) and existing subcategories to be specific
- Wastes with negative treatment value would need additional financial support
- Public tenders for e-waste arising from bulk consumers should consider compliance with standards and implement monitoring mechanisms to ensure compliance in downstream











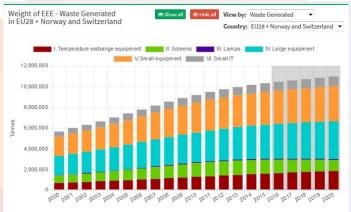




Policy Options for Enhance EPR awareness in India

Case study: ProSUM – Prospecting Secondary raw materials in the Urban mine and mining wastes funded by the EU Horizon 2020 programme

- ProSUM from Latin: "I am valuable"
- First urban mining knowledge data platform, co-developed by WEEE Forum and funded by the European Union (Jan 2015- Dec 2017)
- Functions as a centralised database for material stocks, flows and treatment of WEEE, ELVS, batteries and mining wastes
- Web-portal easily accessible; database which helps identify opportunities for e-waste recycling and extraction of precious metals fit to end- user requirements







Prospecting Secondary raw materials in the Urban mine and Mining wastes















In 2019 alone, Circularity Capital-backed flexible subscription business Grover successfully recirculated 94,500 devices. Hugely important when we consider that only 17.4% of all global e-waste is properly collected and recycled every year

Source: Circularity Capital, 2020















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- Issue horizontal high-level guidelines for eco-design criteria of EEE in order to increase longevity of products
 - Guidelines may include criteria for recyclability, provision of repair manuals/services and spare parts, modular design etc.
 - "If you can't repair it, you don't own it"
 - Particular attention may be given to the availability of firmware updates, patches and fixes in order to ensure that hardware can reach its technical lifetime

Software innovation cycles rather short; create need for increased computational capacities

Easily exchangeable via updates

Technical product lifespan



The free repair guide for everything, written by everyone.





Innovation cycles for hardware components usually slower

Free ICT Europe

EEE hardware often not upgradable















Thank you

Website: www.eu-rei.com









