sofies

Case Studies in E-waste Management from India

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A micro-multinational, boutique sustainability consultancy



- Headquartered in Geneva, with offices in UK and India
- Interdisciplinary team of 60+ consultants across offices
- Combine strong technical expertise with commercial acumen
- Solution-oriented consulting, co-creating sustainability and circular economy strategies with clients
- Clients across private sector, government and multilateral agencies
- Certified B Corporation®
- Now part of DSS



Our key domains of expertise



Secondary resources & urban mines

• E-waste, Plastics, Textiles



Circular economy

• Resource efficiency and circular economy



Alternative energy

· Climate-positive fossil-fuel alternatives



Sustainable territories

• Smart regional development



Managing sustainability

• Innovation, Assessment, Reporting



Sustainable industrial zones

Industrial symbiosis



E-waste management in India

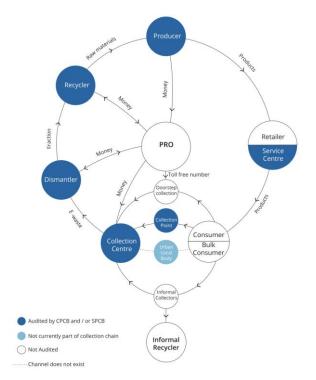
3.2 MT	Estimated annual e-waste arising
2011	First E-waste Management Rules based on Extended Producer Responsibility (EPR)
2016	Revised E-waste Management Rules – introducing collection targets for producers
63	Producer Responsibility Organisations
312	Authorized dismantlers and recyclers
90%	Recycled in the informal sector





E-waste recycling value chain in India – Challenges and innovation opportunities

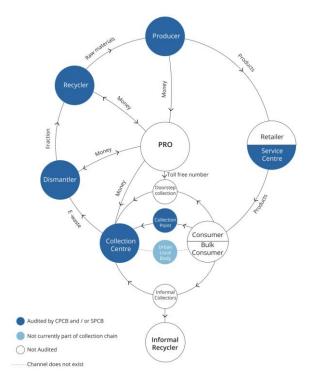
- Producer challenges
 - Limited access to waste or collection infrastructure
 - Lack of traceability and transparency in supply chain
- Consumer challenges
 - Limited knowledge and awareness about hazards of improper e-waste disposal
 - Don't know where to recycler responsibly
- Informal sector challenges
 - · Limited access to capital
 - Limited link to mainstream businesses
 - Risk of sudden closure notice





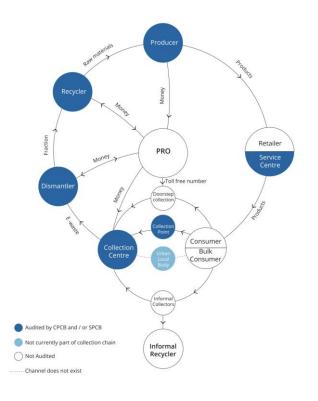
E-waste recycling value chain in India – Challenges and innovation opportunities

- PROs
 - Limited infrastructure for dismantling and recycling
 - Competitive pressures from clients and suppliers
- Formal dismantlers and recyclers
 - Limited access to e-waste volume
 - Pricing pressure with untransparent prices
 - Limited downstream treatment and recycling capacity





Case studies



E[co]work

Informal sector challenges

Formal dismantlers and recyclers

Producer challenges



Producer challenges

Consumer challenges



Formal dismantlers and recyclers Consumer challenges



Case Study 1: E[co]work – transformational solution to formalize the informal sector

E[co]work

Challenge: e-waste recycling today



Polluting, unsafe practices, Incomplete material recovery

Providing and **livelihood** and CE expertise

Formalization is difficult Hard to access communities

Solution: E-waste recycling with E[co]work



Licensed, safe and healthy work place

Proper tools and equipment, storage and digital services

Traceability for safe **disposal of hazardous** fractions

Business owners without investment capital or experience of running a formal business

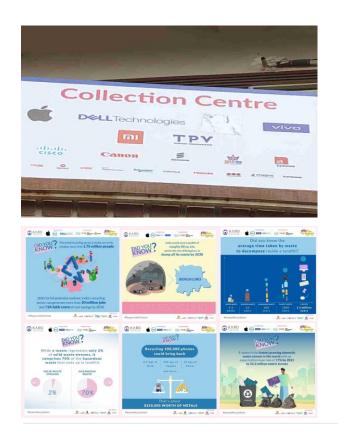


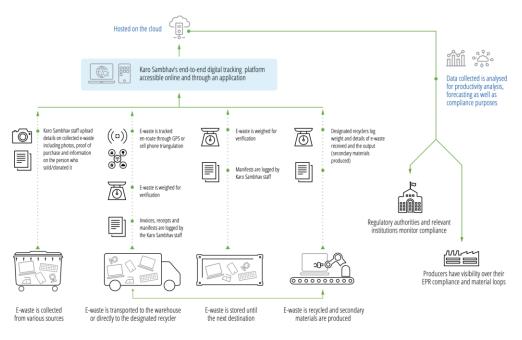
Shared infrastructure & equipment, business support and training



Case Study 2: Karo Sambhav – PRO enabling the financial flows for collection and awareness







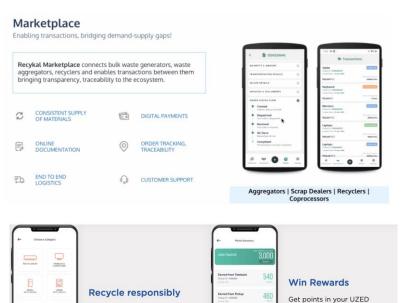
Source: Digital Solutions for a Circular Electronics Value Chain, ITU, GSMA, WEEEForum, Sofies 2021



Case Study 3: Recykal – Digital marketplace to connect ecosystem







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Recycle e-wastes, plastics, paper, PET bottles, toys, bags,

unused electrical electronics

at the tap of a button.

items and 75+ other categories



account for responsible

leading brands.

recycling. Redeem those points

for gift cards from Pantaloons,

Big Bazar, Lifestyle and other

sofies

Thank you

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