transform together

SUSTAINABLE DEVELOPMENT GOALS

Case studies: Sustainable solutions for transforming the smartphones and ICT sector

Karo Sambhav: creating a cohesive e-waste movement in India

India is the world's 4th largest producer of e-waste with 2 million tonnes in 2016. At present, 95% of this is processed by the informal sector, often exposing workers and their communities to toxic substances from the discarded products due to lack of protections and poor waste handling practices. Meanwhile these informal entrepreneurs do not contribute tax revenue, and their livelihoods are made more precarious due to a lack of legal recognition and certainty.

To address the mounting e-waste problem, the Indian government strengthened its Extended Producer Responsibility (EPR) legislation in 2016. Producers are now required to ensure that a certain share of the electronics they have produced gets appropriately collected and processed at the end of life. They must also help consumers understand how e-waste can be properly disposed of.

Producers can meet their EPR responsibilities through a Producer Responsibility Organisation (PRO), such as Karo Sambhav, which sets up systems to redirect bulk amounts of waste towards responsible disposal and spreads information on e-waste disposal among consumers. Karo Sambhav uses the cash flow from its EPR clients to build deeper social value and fairness into its model, and to attack the problems in the e-waste system from all angles.

Image credit: Karo Sambhav

The right partners

Four major tech producers – Apple, Dell, HP and Lenovo – needed to find ways to meet EPR in India, and also wanted to push forward on a circular economy for electronics. As a group, they consulted with Karo Sambhav's founder Pranshu Singhal and became its 'principal partners'.

When seeking out recycling facilities which would receive its waste, Karo Sambhav found that even many official recyclers had practices that are no

better than the informal sector. There was no official certification system to prove that a recycler was operating sustainably. Therefore Karo Sambhav researched best practices and developed its own criteria, which it has used to choose just three recyclers. An important criterion is that the recycler must be able to provide all necessary documentation in order to create transparency. This builds trust in the system and helps Karo Sambhav's EPR clients to show that they have truly fulfilled their legal responsibilities.

Invigorating the informal e-waste sector

Karo Sambhav needed to harness the potential of India's existing vast and vibrant informal e-waste sector in order to aggregate e-waste streams at volume. To gain trust and to fulfil its social value goals, Karo Sambhav needed to offer real advantages to these informal e-waste aggregators in return for their supply of e-waste. Karo Sambhav now sends its own vans to collect the e-waste in bulk so that aggregators do not have to disassemble it themselves, allowing them to save time and to avoid health risks. In return they are offered assistance in opening bank accounts and registering as an official legal business, and they receive automated payments on time. This brings financial security, social dignity and legal rights.

"In one year, Karo Sambhav has redirected more than 3,000 tonnes of e-waste to sustainable recycling.

Image credit: Karo Sambhav

Sharing knowledge

To address the other aspect of EPR legislation – consumer awareness – Karo Sambhav developed an educational program for schools. Teachers are trained to deliver this three to four-month program, where pupils learn about the problems of e-waste in India. They are also taught the importance of disposing of old products correctly, and how to do so. Karo Sambhav gives an award to the school that collects the most e-waste at its new drop-off point. Students get strongly involved in this competition, making posters, talking to family and spreading awareness through their communities.

Finally, to draw all stakeholders together, Karo Sambhav developed a mobile app which absorbs and provides 360-degree information to all stakeholders. A map shows where Karo Sambhav operates, so that new stakeholders can join or request a pickup of waste. Waste-pickers and aggregators can enter data on the amounts they have collected or transported, which feeds into graphs that show progress against larger targets. This helps to track waste through the system, creating transparency which is especially valuable for EPR clients.

Impact and scalability

In one year, Karo Sambhav's operations have expanded from one city to 68 across 32 states, and has redirected more than 3,000 tonnes of e-waste to sustainable recycling. Throughout its activities, it builds both the mechanisms and the demand for transparency. It now plays a mutually advisory role with the International Finance Corporation (IFC) of the World Bank, which is looking for ways to invest in improving India's e-waste system.

In the process, Karo Sambhav has engaged 5,000+ informal e-waste processors and 800+ repair shops, helping them to gain livelihood security and legitimacy, as well as reducing the exposure of people and the environment to toxic hazards. As these newly formalised e-waste businesses are drawn into tax mechanisms, this also generates public revenue that can be re-invested.

This extremely rapid expansion has been made possible by tapping into existing networks of NGOs and social enterprises in new locations. In return

they receive cash flow and support to strengthen their existing activities and take on new ones.

Lessons learned and further opportunities

At present, India only has a small capacity for sustainable recycling of e-waste. The small number of facilities which undertake truly safe and responsible recycling cannot process the full volume and variety of products in the e-waste stream. Karo Sambhav notes that this is a major bottleneck which inhibits up-scaling. Options to address this could include government investment to bring more sustainable recycling facilities to the country, and the introduction of proper checks and balances to ensure all licensed recyclers operate according to best practices. Greater transparency is also key, with automation of documentation crucial to traceability and time-saving. Karo Sambhav wishes to see the e-waste system start to function more like a proper market, encouraging investment in a truly circular economy.

Image credit: Karo Sambhav

Find out more

karosambhav.com
engage@karosambhav.com

Keys to success

- Government adopting Extended Producer Responsibility legislation
- Including marginalised communities at the frontline of e-waste collection
- Using technology to track e-waste throughout the system to create transparency
- Knowing the best domestic recycling facilities.

Next steps

- Improving the national capacity for proper recycling of e-waste
- More stringent responsibility criteria for recycling facilities before official licensing.

About Transform Together

Transform Together works with civil society, governments and businesses to advance sustainable consumption and production in high and middle income countries. Bioregional is the convenor and secretariat of the partnership.

About Bioregional

Bioregional works with partners to create better, more sustainable places for people to live, work and do business. We call this One Planet Living®.

Bioregional transform together