

ITU Toolkit

In addition to its groundbreaking standardization work, ITU has published a Toolkit on end-of-life management for ICT equipment as part of the Toolkit on environmental sustainability for the ICT sector, developed by ITU-T in partnership with over 50 ICT companies and environmental organizations.

In particular, the toolkit looks at securing an environmentally sustainable solution for end-of-life (EOL) management of ICT equipment. Specifically, it offers guidance for the recovery and recycling of materials contained in ICT equipment and discusses issues surrounding the use of conflict minerals in the context of clean supply chains.

ITU Symposia and Forums

ITU symposia and forums aim to raise awareness on the dangers of e-waste and encourage the consideration of e-waste management in the design of national ICT policies. A series of forums on the environmentally sound management of E-waste is being organized around the world with partners including UNEP, the Secretariat of the Basel Convention, the United Nations University (UNU) and the Center for Environment and Development for the Arab Region and Europe (CEDARE), as well as members of the Solving the E-waste Problem (StEP) Initiative.

Information

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Environmentally Sound Management of E-Waste

E-Waste Facts and Figures

"E-waste is a term used to cover items of all types of electrical and electric equipment (EEE) that have been discarded." (StEP Initiative 2013).

- 67 million metric tons of electrical and electronic equipment were put on the market in 2013 (United Nations University)
- 53 million metric tons e-waste were disposed of worldwide in 2013 (United Nations University)
- For every one million cell phones that are recycled, 35 274 pounds (16 tons) of copper, 772 pounds (350 kilos) of silver, 75 pounds (34 kilos) of gold and 33 pounds (15 kilos) of palladium can be recovered (United States Environmental Protection Agency (EPA))
- A large amount of what is labeled as "e-waste" is actually not waste at all, but rather whole electronic equipment or parts that are readily marketable for reuse or can be recycled for materials recovery

ITU and Resolution 79

In November 2012, Resolution 79 on "The role of telecommunications/ICT in handling and controlling e-waste from telecommunications/ICT equipment and methods of treating it" was approved at the World Telecommunication Standardization Assembly (WTSA-12) in Dubai.

The Resolution came as a response to the rapid growth of the ICT industry, responsible for rising consumption of electrical and electronic equipment (EEE) and a marked increase in e-waste that, as a result of global mismanagement, has led to negative environmental and health effects, particularly in developing countries.

As part of its commitment to a sustainable future, ITU promotes and participates in various activities addressing this urgent global issue.

ITU-T Activities

ITU-T Recommendations

Question 13 within ITU-T Study Group 5 (Environment and climate change) has generated a number of important new international technical standards, including Recommendations ITU-T L.1000, L.1001 and L.1100.

Recommendation ITU-T L.1000 (Universal power adapter and charger solution for mobile terminals and other hand-held ICT devices) sets out technical specifications for a universal charger compatible with a wide variety of consumer electronic devices, reducing waste and improving user convenience. When fully implemented around the world, the new standard will eliminate an estimated 82 000 tons of redundant chargers and at least 13.6 million tons of CO₂ emissions annually.

In the same line, ITU-T Recommendation L.1001 (External universal power adapter solutions for stationary information and communication technology devices) establishes technical specifications for a universal power adapter (UPA) designed to serve the vast majority of stationary ICT devices. The standard will substantially reduce the number of power adapters that need to be manufactured by widening their application to more devices, enabling their reuse and extending their lifetime, as well as cutting energy consumption and reducing the volume of E-waste.

A mobile phone contains no less than 20 rare metals and the need to recycle these metals is clear – a ton of gold ore yields just 5 g of gold, whereas a ton of used mobile phones yields 400 g.

Recommendation ITU-T L.1100 (Procedure for recycling rare metals in information and communication technology goods) outlines the necessity for rare metal recycling and the procedures to be employed when recycling. The recommendation details considerations in all phases of the recycling process and provides guidelines as to how organizations may fairly and transparently report on rare metal recycling.

Global Portal on ICTs, Environment and Climate Change

Via its Global Portal on ICTs, the Environment and Climate Change, ITU-T provides references to external resources, including information on e-waste.

URL: www.itu.int/en/ITU-T/climatechange/resources/Pages/