

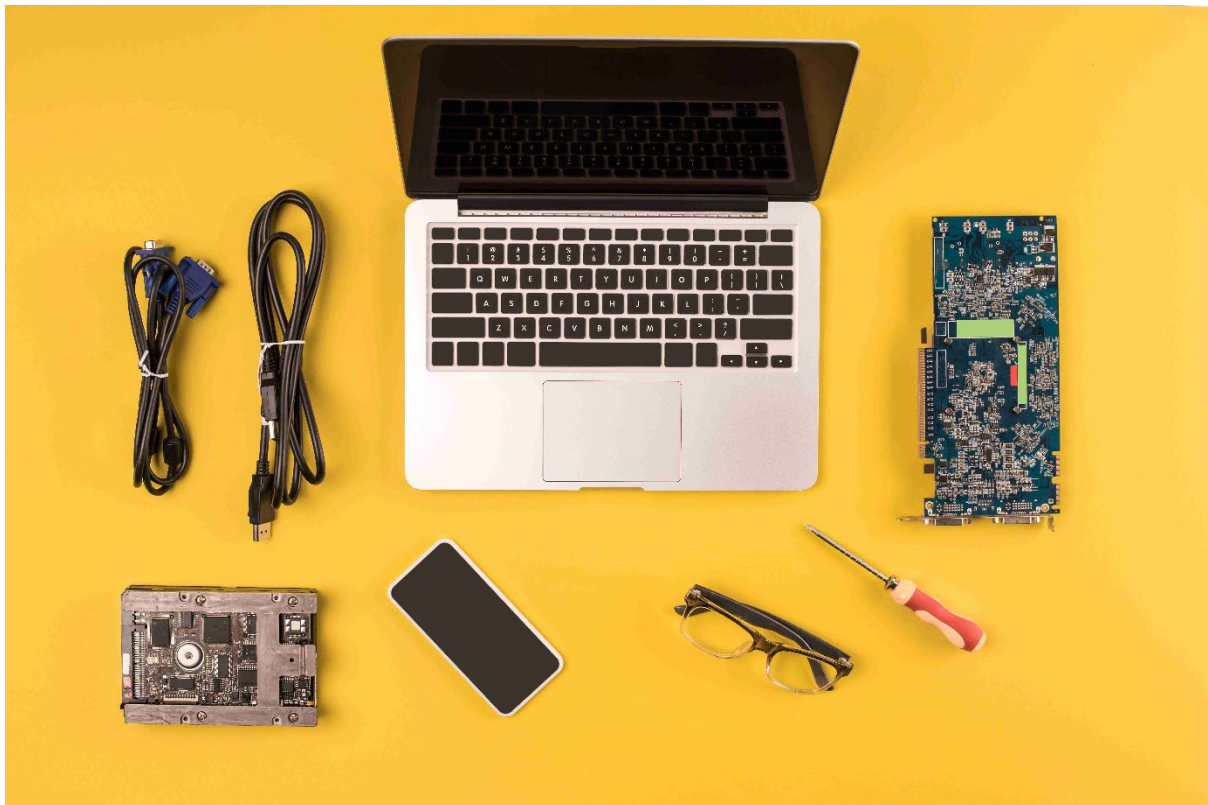
How to Reduce E-Waste?

A citizen's approach to solving the e-waste crisis

e-learning course syllabus

11 October 2022

Geneva, Switzerland



Context

The [Global E-waste Monitor](#) 2020 shows that e-waste has grown to 53.6 million metric tonnes annually (7.3kg per capita). But only 17.4% of the e-waste generated is documented to be collected and recycled. This is a decrease from 20% in 2017. The fate of 76% (44.3 million metric tonnes) is unknown, but likely dumped, traded or recycled under inferior conditions. Much e-waste also remains in the sheds, attics and storage rooms of its owners or gets disposed of with the normal household bin.

E-Waste is growing exponentially because of technological innovations also introducing new gadgets and the resulting global consumer demand continues to increase. Moreover, shorter replacement cycles are contributing to the growth of e-waste. More and more consumers cross over to the other side of the 'Digital Divide' and want to enjoy an easier more comfortable lifestyle. But that understandable demand (from both individuals and businesses) creates a downstream problem of safe disposability. The unsustainable nature of generation and disposal of e-waste in a globalized world causes serious concerns for resource efficiency, human health and environmental impact. The loss of certain scarce resources can even impact future production chains and therefore technological innovation as we are missing appropriate substitutes.

Many countries have recognised the need to properly recycle e-waste and are working to implement sustainable solutions. Yet, progress is slow and fragmented. The pace of e-waste generation far outstrips the pace, by which recycling is growing.

Although information on how to reduce and tackle e-waste is available to consumers, the general public is still largely unaware of the scale of the issue and further awareness raising is needed to bring about behavioural change. Most often consumers do not understand or know what to do about e-waste.

The lack of awareness and capacities to prevent, reuse and recycle e-waste is a main factor contributing to the challenge. But it is also an opportunity to find solutions.

This e-learning course aims to correct this gap and improve the understanding and abilities of consumers to take action to tackle e-waste by developing a user-friendly, consumer-focused, solution-oriented e-learning course.

Overall Objective

The main objective of the UNITAR's e-course "*How to Prevent E-Waste?*" is to raise awareness about the negative impact of e-waste and provide learners with knowledge and resources to help them minimize their contribution to e-waste. Ultimately, the course aims to create change agents, able to act and promote the sustainable tackling of e-waste upstream and downstream.

Learning Objectives

The course aims to enable a change in consumer behaviour. For example, course alumni should be able to locate e-waste collection and recycling facilities in their area, and understand how value can be created from old and/or broken e-products at their home. The course should raise the awareness of

consumers with regard to the role of other stakeholders, including local governments, retailers and manufacturers.

At the end of the course learners will be able to:

- Explain what electronic waste its impact on health, the environment, and the economy;
- Describe the role consumers, manufacturers and public authorities play in reducing e-waste;
- Identify ways for consumers to influence industry players and lawmakers to advance circularity;
- Highlight individual and community actions to tackle and prevent e-waste through reduction, repair and reuse.

Target Audience

The course is available online, at any time, to anyone, worldwide.

The target audience of the e-waste course is the general consumer, with a specific focus on younger adults in the age group of 16-35, who will continue to “consume” for many years to come and are (likely) more open to learning new things and changing their behaviour.

Course Scope and Structure

After a course introductory module, the course takes learners through the main approaches for tackling e-waste, from least desired to most preferred, as follows: 2) recycling, 3) reuse & repair, and 4) reduce.

Module 1: The State of Play

Module 1 provides an overview of the magnitude of the e-waste problem and its impact. After completing the module, learners will be able to:

- Explain what e-waste is;
- Discuss how much e-waste we generate and why;
- Outline the impact e-waste has on the economy, environment, and human health;
- List the main approaches for coping with e-waste.

Module 2: Recycling

This Module discusses challenges, opportunities, and best practices for e-waste recycling. After completing the module, learners will be able to:

- Cite the current rates of recycling globally;
- Explain the main challenges with advancing recycling;
- Identify the elements of a well-functioning recycling system;
- Discuss the role of personal action for improving recycling.

Module 3: Reuse & Repair

Module 3 focuses on approaches to preparing and reusing electronic products so that their lifespan is prolonged. After completing the module, learners will be able to:

- Explain why repair & reuse is preferable to recycling;
- Identify obstacles to the reuse & repair of old and/or broken e-products;
- Point to initiatives that promotes the repair and reuse of e-products;
- Discuss the role of manufacturers and lawmakers, and how consumers can influence them.

Module 4: Reduce

Ideas around achieving a zero-e-waste society through social, technological, business, and political innovation. After completing the module, learners will be able to:

- Discuss the challenges and opportunities for enabling circularity on a global scale;
- Explain the role of innovation and what types of innovation can help solve the e-waste crisis;
- Identify ways in which your personal actions and attitudes make a difference.

Methodology

The total seat time of the course is around 2h.

The course is interactive, engaging, and relatable. It features the following elements:

- Interactive videos
- Interactive lessons
- Reflection points
- Discussion boards
- Polls
- Knowledge checks
- Scenarios, and
- Formal quizzes

Completion and Certification

A certificate of completion is awarded to learners who complete the following:

- Final quiz is complete with 70% or higher score
- Pre- and post- evaluation survey.

Certificate will be available upon completion of the course. Once conditions are met, the certificate will become available to download automatically.

Acknowledgement

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