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Sustainable management of waste electrical and electronic equipment (e-waste)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Sustainable management of waste electrical and electronic equipment (e-waste)

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IEC 63395 has been prepared by IEC technical committee 111: Environmental standardization for electrical and electronic products and systems. It is an International Standard.

The text of this International Standard is based on the following documents:

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Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

Electrical and electronic equipment has become a defining and ubiquitous feature of modern life, which has raised living standards in most of the countries worldwide.

Globally, the slow adoption of sustainable practices for the management of waste electrical and electronic equipment (e-waste) means that environmental impacts due to, for example, resource consumption, greenhouse gas emissions, and hazardous substance releases continue unabated.

As a result, many countries face challenges related to considerable environmental and human health risks caused by inadequately managed e-waste.

This is all the more critical as collection and recovery activities are failing to keep up with total e-waste generation. According to the Global E-waste Monitor 2024, less than a quarter of e-waste generated was officially documented as collected and recycled. Electronic waste generation is rising five times faster than documented e-waste recycling.

This document sets out requirements for the sustainable management of e-waste, thereby contributing to the following objectives:

- protecting human health and safety and the environment;
- maximizing resource circularity through the recovery of e-waste products, components and materials;
- optimizing the quality of recovered products, components and materials;
- minimizing the quantity of e-waste being disposed of;
- preventing unsustainable and unsafe e-waste recovery and disposal practices;
- preventing or minimizing, or both, pollution and emissions;
- providing a framework for assuring the environmental sustainability of output of product, component and material recovery operations;
- preventing shipments of e-waste to operators whose activities do not conform with this document or a comparable set of requirements.

1 Scope

This document specifies requirements and provides guidance for the sustainable management of waste electrical and electronic equipment (e-waste) for all process steps, from collection to returning recovered products, components, materials or energy to the value chain. It includes traceability, monitoring and evaluation of the e-waste flow, recovery rate and recovery quality.

This document is intended for use by an organization involved in e-waste management seeking to manage its responsibilities in a systematic manner.

The requirements set by this document will help an organization to achieve sustainability outcomes within the context of e-waste management, including:

- enhancement of organizations' performance in relation to quality, environment and occupational health and safety;
- fulfilment of compliance obligations.

This document is applicable to any organization, regardless of its size, type and nature.

This document applies to the environmental, health and safety, and quality aspects of e-waste management activities that the organization determines it can either control or influence, from a lifecycle perspective.

NOTE 1 Social aspects – e.g. employment creation, conflict minerals, employment conditions – are not addressed directly but indirectly through the benefits of sustainable management of e-waste.

NOTE 2 Additional local requirements or regulations can apply.

This document is a basic environment horizontal publication focusing on essential requirements and is primarily intended for use by committees in the preparation of publications within the area of environment in accordance with the principles laid down in IEC Guide 123. Wherever applicable, it is the responsibility of committees to make use of environment basic publications in the preparation of their environment group and product publications. Committees can apply this document directly to products when they do not develop a product publication in the area of environment.

2 Normative references

There are no normative references in this document.

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