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NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

GB/T 23686-2022

Replacing GB/T 23686-2018

Environmentally conscious design (ECD) - Principles, requirements and guidance

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Table of Contents

foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1.Structure and Drafting Rules for Standardization Documents"

drafting.

This document replaces GB/T 23686-2018 "Environmentally Conscious Design of Electrical and Electronic Products". Compared with GB/T 23686-2018, except

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

a) Changed the name of the document to "Principles, Requirements and Guidance for Environmentally Conscious Design";

b) Changed the scope of application of the document, extending from electrical and electronic products to all products including services (see Chapter 1,.2018

Chapter 1 of the edition);

c) Changed some terms and definitions (see Chapter 3, Chapter 3 of the.2018 edition);

d) Changed "Fundamentals of Environmentally Conscious Design (ECD)" to "Principles of Environmentally Conscious Design (ECD)" and changed the corresponding technology

content (see Chapter 4, Chapter 4 of the.2018 edition);

e) Change "Environmentally Conscious Design Process (ECD Process)" to "ECD Requirements", and change the corresponding technical content (see Section 5

Chapter, Chapter 5 of the.2018 edition);

f) Added the chapter "Guidelines for implementing ECD" (see Chapter 6);

g) Deleted "Basic Principles of Environmentally Conscious Design" and "Details of the Environmentally Conscious Design Process (ECD Process)" (see.2018

Appendices A and B of the edition);

h) Added the content of "Example of how to apply ECD" (see Appendix A);

i) Changed "Examples of tool categories" to "Selection of ECD methods and tools", and changed the corresponding technical content (see Appendix B,

Appendix C of the.2018 edition).

This document is modified to adopt IEC 62430.2019 "Principles, Requirements and Guidance for Environmentally Conscious Design".

The technical differences between this document and IEC 62430.2019 and their reasons are as follows.

---Deleted the content related to the standardization work in the IEC field in Chapter 1 of IEC 62430.2019, because this content is not applicable to the standardization work in my country

standardization work.

The following editorial changes have been made to this document.

--- Adjusted references.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

This document is sponsored by the National Environmental Standardization Technical Committee for Electrical and Electronic Products and Systems (SAC/TC297) and the National Environmental Management Standardization

Proposed and managed by Technical Committee (SAC/TC207).

This document is drafted by. Shenzhen Institute of Standards and Technology, China Electrical Apparatus Research Institute Co., Ltd., China Electrical Equipment Industry Association,

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Introduction

The primary purpose of this document is to establish requirements and provide guidance on how organizations can incorporate Environmentally Conscious Design (ECD) into their design and development.

This document is not a product standard and therefore does not describe requirements applicable to individual products or series of products.

This document refers to physical goods, services, and combinations of the two, collectively referred to as "Products".

ECD is not a stand-alone activity, but an integral part of an organization's existing design and development. Although this document does not govern the

It is a standard, but its requirements for ECD can be incorporated into the organization's existing management system, for example, to support the implementation of GB/T 24001-2016

and the requirements established by the GB/T 19001-2016 system.

Note. GB/T 24001 establishes the link between the organization's process management and environmental impact, but does not specify the requirements for the management process related to design and development. because

Therefore, since GB/T 24001 does not specify how to incorporate ECD into products, this document can be used as a supplement for organizations that have implemented GB/T 24001.

ISO 14006.2020 provides guidance on how to incorporate ECD into an environmental management system, but does not specify how to implement ECD.

Every product has environmental impacts that may occur at all stages of its life cycle. The magnitude of these effects can range from slight

to be significant; can be short-term or long-term; can arise at local, national, regional or global levels (or at multiple levels simultaneously)

pregnancy).

To reduce these effects, it is very important to implement ECD in design and development. ECD is a whole life cycle of the product

A systematic approach to reducing these negative impacts within the organization.

Through the implementation of ECD, the organization, its customers and other stakeholders can obtain multiple benefits, such as overall environmental improvement, cost reduction.

Lower and better marketable.

The intended users of this document are persons directly and indirectly involved in introducing the implementation of ECD into design and development.

This document does not preclude industries from developing their own specific ECD standards or guidance. In any case, in preparing such documents, it is encouraged

The authors use this document as a reference to ensure consistency across various products and supply chains in different industries.

GB/T 23668-2022

Environmentally Conscious Design Principles, Requirements, and Guidance

1 Scope

This document establishes the principles of environmentally conscious design, specifies the requirements for environmentally conscious

Organizations that develop so as to minimize the negative environmental impact of their products provide guidance on implementing environmentally conscious design.

This document applies to the process of incorporating Environmentally Conscious Design (ECD) into design and development. This document is applicable to any organization, regardless of its

model, type or industry.

This document does not give requirements for conformity assessment of individual products.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

The URLs for terminology databases maintained by ISO and IEC for standardization purposes are.

3.1 Terms related to product design and development

3.1.1

A systematic approach to environmental considerations in design and development, aimed at reducing negative environmental impacts throughout a product's life cycle.