IEC GUIDE 118

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GUIDE

GUIDE

colour inside

Preparation of basic and group energy efficiency publications including energy efficiency aspects

Élaboration des publications fondamentales et de groupe sur l'efficacité énergétique, y compris les aspects d'efficacité énergétique

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PREPARATION OF BASIC AND GROUP ENERGY EFFICIENCY PUBLICATIONS INCLUDING ENERGY EFFICIENCY ASPECTS

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This second edition of IEC Guide 118 has been prepared, in accordance with ISO/IEC Directives, Part 1, Annex A, by the IEC Advisory Committee on Energy Efficiency (ACEE).

This second edition cancels and replaces the first edition published in 2017. This second edition also replaces the first edition of IEC Guide 119 published in 2017.

The main changes with respect to the previous edition are as follows:

a) merging of IEC Guide 118 edition 1 with IEC Guide 119 edition 1;
b) elimination of duplication;
c) addition of definitions.

The text of this IEC Guide is based on the following documents:

Draft	Report on voting
SMBNC/37/DV	SMBNC/45/RV

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 Guide 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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

Energy efficiency (EE) is key to support energy policies while preserving the environment, thus contributing to UN Sustainable Development Goals (https://www.iec.ch/sdg).

Many energy efficient technologies and solutions are already available and cost-effective; nevertheless, a variety of barriers inhibit the deployment of these technologies and impede harvesting their energy efficiency potential.

Standardization can play an important role to help overcome these barriers and to disseminate and promote energy efficient technologies, solutions and services in order to overcome some of the barriers to the implementation of energy efficient technologies and solutions.

Examples include:

- common measurement and test methods to assess the use of energy and reductions attained through new technologies and processes;
- calculation methods so that sound comparisons of alternatives can be made in specific situations and can help with adaptation of infrastructure to integrate new technologies and interoperability;
- means to codify best practices and management processes for efficient energy use and energy conservation;
- design checklists and guides that can be applied to both the design of new systems as well as the retrofit of existing systems;
- common efficiency classifications, tolerances and minimum energy performance standards;
- the definition of possible energy efficiency metrics.

When developing IEC publications, barriers to energy efficiency should be considered, with the goal to contribute to overcoming such barriers through standardization activity. Annex C provides some examples.

This Guide aims to give advice to technical committees (TCs) on the way energy efficiency should be considered and included in IEC publications.

IEC publications may deal exclusively with energy efficiency or may include clauses specific to energy efficiency; however, TCs are encouraged to:

- consider energy efficiency in their standardization work;
- identify which aspects of energy efficiency are relevant for their standardization;
- use a structured approach when addressing energy efficiency;
- use a systems approach when addressing energy efficiency.

This Guide helps to fulfil IEC Energy Efficiency Policy[1] by indicating how energy efficiency can be included in electrotechnical publications.

TCs with subjects relating to energy efficiency for the whole, or for a specific part of their activities, are invited to follow the provisions of this Guide.

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1 White Paper: Coping with the Energy Challenge. The IEC's role from 2010 to 2030. Smart electrification – The key to energy efficiency.

In this Guide, the term "technical committees" (TCs) includes "subcommittees" (SCs) and "systems committees" (SyCs). The term "publication" includes International Standard, Publicly Available Specification, Technical Report, Technical Specification and Guide.

In addition, the term "product" includes "process", "service" and combinations thereof, commonly known as "systems".