

Energy efficiency and renewable energy sources -
Common international terminology - Part 2: Renewable
energy sources (ISO/IEC 13273-2:2015)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO/IEC 13273-2:2016 sisaldab Euroopa standardi EN ISO/IEC 13273-2:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO/IEC 13273-2:2016 consists of the English text of the European standard EN ISO/IEC 13273-2:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 24.02.2016.	Date of Availability of the European standard is 24.02.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 27.010

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Aru 10, 10317 Tallinn, Eesti; koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Energy efficiency and renewable energy sources -
Common international terminology - Part 2: Renewable
energy sources (ISO/IEC 13273-2:2015)

Efficacité énergétique et sources d'énergies
renouvelables - Terminologie internationale commune
- Partie 2: Sources d'énergie renouvelables (ISO/IEC
13273-2:2015)

Energieeffizienz und erneuerbare Energiequellen -
Gemeinsame Internationale Terminologie - Teil 2:
Erneuerbare Energiequellen (ISO/IEC 13273-2:2015)

This European Standard was approved by CEN on 25 January 2016.

CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN and CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN and CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN and CENELEC members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of ISO/IEC 13273-2:2015 has been prepared by Technical Committee ISO/IEC JPC 2 “Joint Project Committee - Energy efficiency and renewable energy sources - Common terminology” of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) and has been taken over as EN ISO/IEC 13273-2:2016.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/CLC/TR 16103:2010.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO/IEC 13273-2:2015 has been approved by CEN as EN ISO/IEC 13273-2:2016 without any modification.

Contents

Page

Foreword	iv
0 Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 Terms related to energy sources.....	1
3.2 Terms related to renewable energy sources.....	2
3.3 Terms related to renewable energy.....	3
3.3.1 General.....	3
3.3.2 Terms related to hydro energy.....	4
3.3.3 Terms related to marine energy.....	4
3.3.4 Terms related to solar energy.....	5
3.3.5 Terms related to wind energy.....	6
3.3.6 Terms related to geothermal energy.....	6
3.3.7 Terms related to aerothermal energy.....	6
Annex A (informative) Methodology used in the development of the vocabulary	7
Bibliography	9

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/IEC JPC2, *Energy efficiency and renewable energy sources — Common terminology*

ISO/IEC 13273 consists of the following parts, under the general title *Energy efficiency and renewable energy sources — Common international terminology*:

- *Part 1: Energy efficiency*
- *Part 2: Renewable energy sources*

0 Introduction

0.1 General

The aim of this part of ISO/IEC 13273 is to support activities related to energy and deal with renewable energy sources. The terms were selected based upon their relevance and transverse nature. ISO/IEC 13273 is a horizontal standard in accordance with IEC Guide 108. It addresses the fundamental principles and concepts of renewable energy sources, which is relevant to a number of technical committees, with the goal of improving coherence and common characteristics for energy terms. This part of ISO/IEC 13273 does not address terms specific to topics such as environmental sustainability or nuclear energy terms but rather transverse energy terminology.

It is intended to be of help to technical practitioners and other interested parties who either use or develop International Standards in this subject field.

With the growth in the number International Standards that directly or indirectly relate to energy, there is an increasing need for an agreement on a common language in the domain.

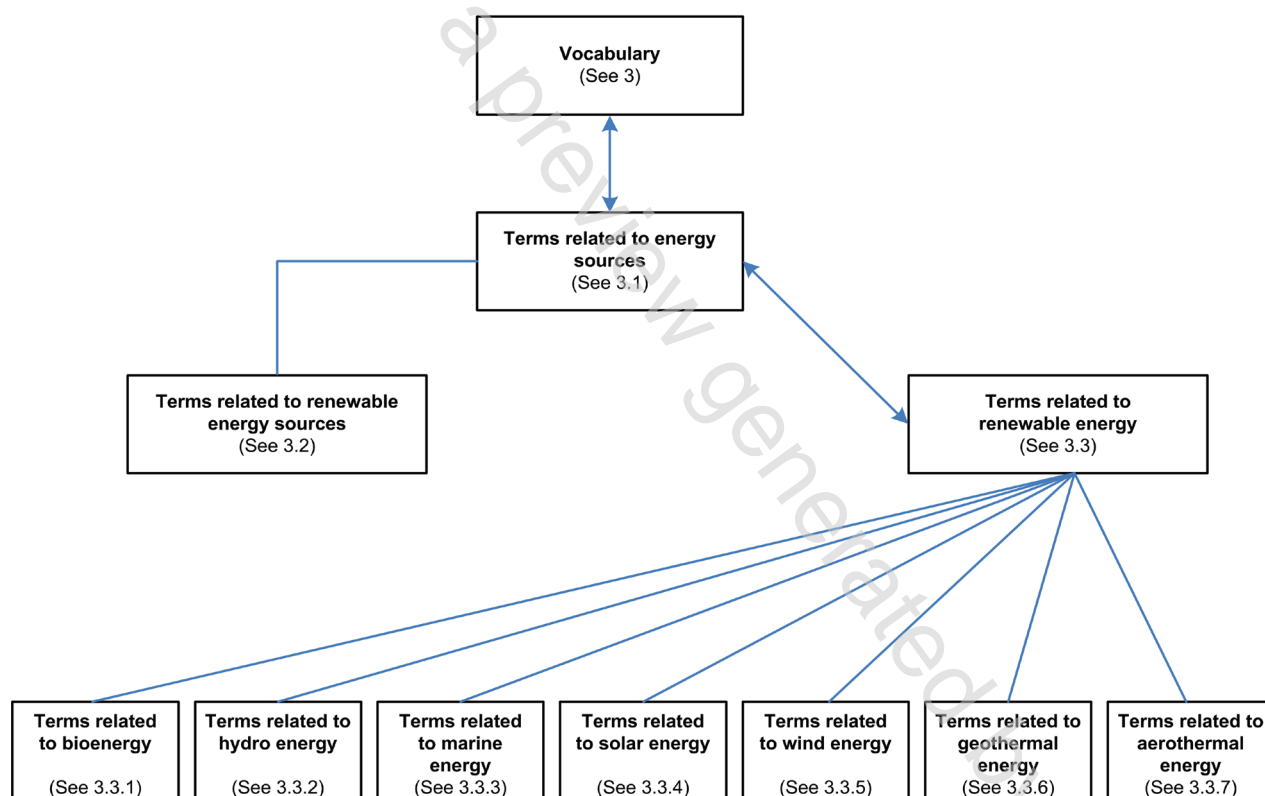


Figure 1 — Vocabulary structure

0.2 Vocabulary structure

This part of ISO/IEC 13273 deals with concepts belonging to the general energy subject field within which transversal concepts in the field of renewable energy sources. For energy efficiency, see ISO/IEC 13273-1.

The arrangement of terms and definitions in this part of ISO/IEC 13273 is based upon concept systems that show corresponding relationships among energy efficiency and renewable energy sources concepts

(see [Annex A](#) for additional diagrams on each group of terms). This arrangement provides users with a structured view of transversal energy concepts and facilitates their understanding. This terminology promotes a common understanding among all parties involved with renewable energy sources and facilitates effective communication. This part of ISO/IEC 13273 includes terms and definitions that are commonly used in renewable energy sources. The organization of terms is illustrated in [Figure 1](#). ISO/IEC 13273 is a first effort in the development of a complete set of terms related to energy, and will be updated as further terms and definitions are agreed upon.

Energy efficiency and renewable energy sources — Common international terminology —

Part 2: Renewable energy sources

1 Scope

This part of ISO/IEC 13273 contains transversal concepts and their definitions in the subject field of renewable energy sources. This horizontal standard is primarily intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 108.

One of the responsibilities of a technical committee is, wherever applicable, to make use of horizontal standards in the preparation of its publications. The contents of this horizontal standard will not apply unless specifically referred to or included in the relevant publications.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For undated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

This section has been maintained to match the numbering of ISO/IEC 13273-1 and for potential future use.

3 Terms and definitions

3.1 Terms related to energy sources

3.1.1 energy E

capacity of a system to produce external activity or to perform work

Note 1 to entry: Commonly the term energy is used for electricity, fuel, steam, heat, compressed air and other like media.

Note 2 to entry: Energy is commonly expressed as a scalar quantity.

Note 3 to entry: Work as used in this definition means external supplied or extracted energy to a system. In mechanical systems, forces in or against direction of movement; in thermal systems, heat supply or heat removal.

[SOURCE: 1986 World Energy Conference Energy Terminology glossary, modified – The word “the” at the beginning of the description was removed, the symbols were added as was the Note 1 to entry from ISO 50001:2011.]

3.1.2 energy source

material, natural resource or technical system from which *energy* (3.1.1) can be extracted or recovered

Note 1 to entry: A press spring, flywheel or battery are examples of a technical system used as an energy source.