

This is a preview of "ISO 13065:2015". [Click here to purchase the full version from the ANSI store.](#)

First edition
2015-09-15

Sustainability criteria for bioenergy

Critères de durabilité pour la bioénergie



Reference number
ISO 13065:2015(E)

© ISO 2015

This is a preview of "ISO 13065:2015". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

This is a preview of "ISO 13065:2015". [Click here to purchase the full version from the ANSI store.](#)

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General requirements and recommendations	9
4.1 General.....	9
4.2 Purpose and context.....	9
4.3 Scope of assessment.....	9
4.4 Stakeholder involvement.....	9
4.5 Relevance and significance.....	10
4.6 Recording of legal requirements.....	10
4.7 Time periods.....	11
4.8 Science-based approach.....	11
4.9 Data and information.....	11
4.10 Traceability.....	12
4.11 Comparability.....	12
4.12 Direct and indirect effects.....	13
4.13 Ecosystem services.....	13
5 Principles, criteria and indicators	13
5.1 General.....	13
5.2 Environmental principles, criteria and indicators.....	13
5.2.1 GHG.....	13
5.2.2 Water.....	14
5.2.3 Soil.....	14
5.2.4 Air.....	15
5.2.5 Biodiversity.....	15
5.2.6 Energy efficiency.....	16
5.2.7 Waste.....	16
5.3 Social principles, criteria and indicators.....	17
5.3.1 Human rights.....	17
5.3.2 Labour rights.....	17
5.3.3 Land use rights and land use change.....	19
5.3.4 Water use rights.....	19
5.4 Economic principle, criteria and indicators.....	20
5.4.1 Economic sustainability.....	20
6 Greenhouse gas methodologies, assessments and comparisons	20
6.1 General.....	20
6.2 Special considerations for time periods for GHG assessments.....	21
6.2.1 General.....	21
6.2.2 Reference system.....	21
6.3 Assigning GHG emissions or GHG removals from carbon stock change in biomass and soil to the bioenergy product.....	22
6.4 Other climate-forcing agents.....	22
6.5 Functional and delivered units.....	22
6.6 Treatment of co-products in a GHG quantification.....	23
6.6.1 General.....	23
6.6.2 Procedures for treatment of co-products.....	23
6.7 Treatment of waste.....	24
6.8 System boundaries.....	24
6.9 Process for comparison to determine GHG reduction.....	24
Annex A (informative) Example format for summarizing information	25

This is a preview of "ISO 13065:2015". [Click here to purchase the full version from the ANSI store.](#)

Annex B (informative) Guidance related to water indicators	30
Annex C (informative) Guidance related to soil indicators	34
Annex D (informative) Guidance related to air indicators	39
Annex E (informative) Guidance related to biodiversity indicators	43
Annex F (informative) Guidance related to waste indicators	47
Annex G (informative) Child labour (text from ISO 26000:2010)	51
Annex H (informative) Greenhouse gas	52
Bibliography	55

This is a preview of "ISO 13065:2015". [Click here to purchase the full version from the ANSI store.](#)

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 Project Committee ISO/PC 248, *Sustainability criteria for bioenergy*.

Introduction

The production and use of bioenergy have potential roles in mitigating climate change, promoting energy security and fostering sustainable development. This International Standard is designed to provide a consistent basis on which the sustainability of bioenergy can be assessed within a defined context and for a specified purpose. This International Standard provides principles, criteria and indicators. The principles reflect aspirational goals while the criteria and indicators address sustainability aspects and the information that is to be provided. However, the indicators in this International Standard might not comprehensively capture all sustainability aspects for all bioenergy processes.

Virtually every country in the world uses some form of bioenergy. Various types of biomass are used for the production of bioenergy through many types and sizes of economic operations. The characteristics of bioenergy production therefore are heterogeneous and depend on several factors, such as geography, climate, level of development, institutions and technologies.

The purpose of this International Standard is to provide a framework for considering environmental, social and economic aspects that can be used to facilitate the evaluation and comparability of bioenergy production and products, supply chains and applications. As part of the development of this International Standard, other relevant sustainability initiatives and International Standards were considered.

This International Standard aims to facilitate the sustainable production, use and trade of bioenergy and will enable users to identify areas for continual improvement in the sustainability of bioenergy. It can be used in several ways. It can facilitate business-to-business communications by providing a standard framework that allows businesses to “speak the same language” when describing aspects of sustainability. Purchasers can use this International Standard to compare sustainability information from suppliers to help identify bioenergy processes and products that meet their requirements. Other standards, certification initiatives and government agencies can use this International Standard as a reference for how to provide information regarding sustainability.

This International Standard does not provide threshold values. Threshold values can be defined by economic operators in the supply chain and/or other organizations (e.g. government). Sustainability information provided through the use of this International Standard can then be compared with defined threshold values.

In International Standards, the following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.

Further details can be found in the ISO/IEC Directives, Part 2.