



# DRAFT Guide

## Guidelines for addressing climate change in standards

*Lignes directrices pour la prise en compte des changements climatiques dans les normes*

ICS: 13.020.01; 01.120

## ISO/DGUIDE 84

ISO/TMBG

Secretariat: **ISO**

Voting begins on:  
**2024-11-25**

Voting terminates on:  
**2025-02-17**

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

[ISO/DGuide 84](#)

<https://standards.iteh.ai/catalog/standards/iso/883bc90a-7412-414c-91ff-83bb796f5a03/iso-dguide-84>

This document is circulated as received from the committee secretariat.

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENTS AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

ISO/DGuide 84

<https://standards.iteh.ai/catalog/standards/iso/883bc90a-7412-4d4c-91ff-83bb796f5a03/iso-dguide-84>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

	Page
<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms, definitions and abbreviated terms</b> .....	<b>1</b>
3.1 Terms and definitions.....	1
3.2 Abbreviated terms.....	8
<b>4 Understanding and responding to climate change</b> .....	<b>9</b>
4.1 What is climate change?.....	9
4.2 Climate change mitigation and climate change adaptation.....	10
4.2.1 General.....	10
4.2.2 Climate change mitigation.....	10
4.2.3 Climate change adaptation.....	10
4.2.4 Interrelation between climate change mitigation and climate change adaptation.....	11
<b>5 Addressing climate change in standards</b> .....	<b>11</b>
5.1 General.....	11
5.2 Principles related to addressing climate change in standards.....	11
5.2.1 General.....	11
5.2.2 Interactivity.....	11
5.2.3 Clarity.....	12
5.2.4 Involvement of interested parties.....	12
5.2.5 Transparency.....	12
5.2.6 Fairness and equity.....	12
5.2.7 Performance-driven approach.....	12
5.2.8 Future orientation.....	13
<b>6 Planning the strategy</b> .....	<b>13</b>
6.1 General.....	13
6.2 Issues to think about before establishing a committee.....	13
6.3 Strategic business plan.....	14
6.4 Review and revision of standards.....	14
<b>7 Planning the content</b> .....	<b>15</b>
7.1 Responsibilities.....	15
7.2 Understanding approaches to responding to climate change.....	16
7.2.1 General.....	16
7.2.2 Systems approach.....	16
7.2.3 Life cycle approach.....	16
7.2.4 Risk-based approach.....	18
7.2.5 Precautionary approach.....	19
7.3 Identifying climate change issues.....	19
7.3.1 General.....	19
7.3.2 Identifying relevant climate change issues.....	21
7.3.3 Identifying significant climate change issues.....	21
<b>8 Addressing climate change issues</b> .....	<b>22</b>
8.1 General.....	22
8.2 Consider interrelations between adaptation and mitigation.....	22
8.3 Addressing climate change mitigation when dealing with specific sources.....	23
8.3.1 General.....	23
8.3.2 GHG emissions from the direct or indirect combustion of fuels and energy efficiency.....	24
8.3.3 GHG emissions from the use of fluorinated industrial gases.....	25
8.3.4 GHG emissions from the process industries.....	25
8.3.5 GHG emissions from agriculture, forestry and crop farming.....	25

## ISO/DGUIDE 84:2024(en)

8.3.6	GHG emissions from livestock operations	25
8.3.7	GHG emissions from waste management	26
8.3.8	GHG emissions from combustion of biomass and natural processes	26
8.3.9	GHG emissions from road transportation fuels	26
8.3.10	GHG emissions from the aviation sector	26
8.3.11	GHG emissions from maritime shipping	27
8.4	Mitigation approaches	27
8.4.1	GHG reduction through energy management and energy efficiency	27
8.4.2	GHG reduction through renewable energy	27
8.4.3	GHG reduction through fuel switching	28
8.4.4	GHG reduction through resource management	28
8.4.5	Carbon capture, use, and storage	28
8.5	Financing the transition to a low carbon economy	28
8.5.1	General	28
8.5.2	Policy incentives	29
8.5.3	Green debt instruments	29
8.5.4	Mitigation projects	29
8.6	Carbon neutrality and net zero	30
8.7	Addressing climate change adaptation aspects in product and process standards	30
8.7.1	General	30
8.7.2	Considerations and approaches for adaptation	31
8.7.3	Incorporating climate change adaptation measures into standards	32
8.7.4	Process standards	34
8.7.5	Product standards	34
8.7.6	Addressing health and safety consequences of climate change	36
8.8	Adaptation and mitigation in management system standards	37
8.9	Other aspects for consideration	38
8.9.1	Organizational inventories	38
8.9.2	GHG project monitoring	39
8.9.3	Per unit of product “footprints”	39
8.9.4	Role of verification in monitoring and evaluation	40
<b>Annex A (informative) Using systems thinking to set boundaries for climate change adaptation</b>		<b>41</b>
<b>Annex B (informative) Background information on approaches for responding to climate change</b>		<b>45</b>
<b>Annex C (informative) Planetary boundary conditions</b>		<b>51</b>
<b>Annex D (informative) Climate change adaptation and climate change mitigation: Examples and supporting information</b>		<b>53</b>
<b>Bibliography</b>		<b>59</b>

## 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 document 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](http://www.iso.org/directives)).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at [www.iso.org/patents](http://www.iso.org/patents). ISO shall not be held responsible for identifying any or all such patent rights.

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

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This second edition cancels and replaces the first edition (ISO Guide 84:2020) which has been technically revised.

The main changes are as follows:

- context of the London Declaration;
- new requirements regarding management system standards (MSS);
- health and safety consequences of climate change.

This document was prepared by the ISO Technical Management Board Task Force on Climate Change Coordination.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

This document is intended for developers of ISO standards and other deliverables to encourage the inclusion of provisions in standards to address climate change impacts, risks and opportunities, and aims to:

- enable standards committees to determine if the standard under consideration should take into account aspects, issues, impacts, risks and/or opportunities associated with climate change;
- provide standards developers with a systematic approach to address climate change impacts, risks and opportunities in a coherent and consistent manner, with regard to both new and revised standards, and in a manner related to the objective and scope of the standard being developed;
- promote consistency and compatibility to the extent practicable among standards that directly or indirectly address climate change and their wider uptake in support of sustainability.

In February 2024, the IAF/ISO Joint Communiqué on the addition of Climate Change considerations to Management Systems Standards highlighted new requirements to consider the effect of Climate Change when revising or developing new ISO Management Systems Standards (MSS).

This document supports ISO's commitment to accelerate achieving the goals of the Paris Agreement, the UN SDGs and the UN Call for Action on Adaptation and Resilience, as outlined in the September 2021 ISO London Declaration. The London Declaration commits ISO to develop processes to enable:

- the active consideration of climate science and associated transitions in the development of all new and revised International Standards and publications; and to
- facilitate the involvement of civil society and those most vulnerable to climate change in the development of International Standards and publications.

ISO will develop and publish an Action Plan and Measurement Framework detailing concrete actions and initiatives and a reporting mechanism to track progress.

NOTE Standards developers are encouraged to consider the mandatory committee-specific policies in the ISO/IEC Directives, Part 1, for the development of sector-specific environmental management standards and sector-specific environmental management system standards.

[Figure 1](#) provides a schematic overview of this document as a process for addressing climate change in standards.

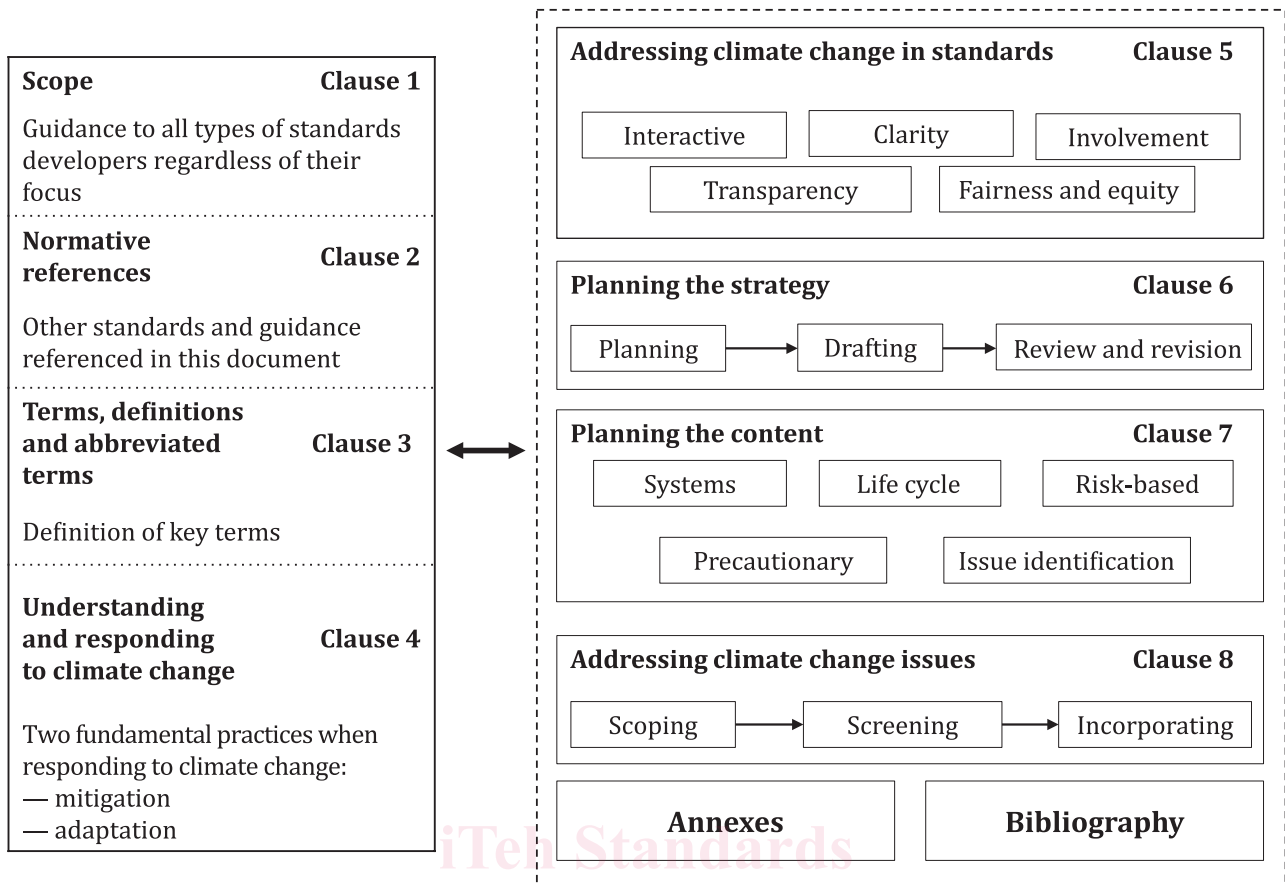


Figure 1 — Schematic overview of this document

The international community has expressed a commitment to strengthen the global response to the threat of climate change, in the context of sustainable development, including:

- a) holding the increase in the global average temperature to below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1,5 °C above pre-industrial levels, recognizing that this would significantly reduce the negative climate change impacts;
- b) increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production.

Climate change affects many regions of the world and includes significant climate change impacts, risks and opportunities arising from changing weather patterns, rising sea levels and more extreme weather events. Rapidly expanding urban areas are recognized to be particularly vulnerable. Climate extremes affecting urban systems, such as power supplies, can lead to cascading failures in other utilities and services compromising the safety, health and well-being of the population. The potential consequences of such climate-related impacts, risks and opportunities include the disruption of different environmental, social and economic systems within national economies, affecting communities and organizations, as well as individuals, with the poorest and most vulnerable people expected to be affected the most. Action is needed, involving both climate change adaptation and mitigation, in order to limit the effects of climate change impacts, risks and opportunities, while also contributing to the reduction of the world’s average surface temperature. Against this challenging outlook, the scope, need and opportunity for action on climate change is extensive.

Climate change is acknowledged as a foremost challenge with regards to the goal of sustainable development, which encompasses any state of the global system in which the needs of the present are met without compromising the ability of future generations to meet their own needs.

Standards that take into consideration climate change adaptation and/or mitigation can contribute to the achievement of sustainability, either directly (where they specifically address sustainability issues such

## ISO/DGUIDE 84:2024(en)

as climate change) or indirectly (where they relate to testing, products, procedures, services, terminology, management systems or assessment). It is recognized that both climate change mitigation (CCM) and climate change adaptation (CCA) are important for all processes related to a technology, activity or product (TAP). Although there are very important interactions, the two disciplines are distinct and are addressed individually within this document.

Standards developers are encouraged to consider climate change issues in their work at all stages in the standards development process. If climate change issues have not been considered, this can be a valid reason to start the revision of a standard. In addition, the significance or relevance of specific issues can have changed since the previous edition of a standard was drafted or reviewed. Whenever a new standard is drafted, or an existing standard is revised, all standards developers (including project leaders, convenors, committee chairs, committee managers and secretaries) are encouraged to actively promote the application of this document, and to involve experts knowledgeable in the subject.

When standards developers address climate change in different existing or new standards, the result can be an increased awareness of climate change issues among the user community across various market sectors. Through the application of this document, users of such standards will be better able to address climate change mitigation and/or adaptation in ways that many would not have expected or considered. And with entirely new standards, users will realize that there are new opportunities for the market to respond to these issues in ways not previously considered or contemplated.

# iTeh Standards (<https://standards.iteh.ai>) Document Preview

[ISO/DGuide 84](#)

<https://standards.iteh.ai/catalog/standards/iso/883bc90a-7412-4d4c-91ff-83bb796f5a03/iso-dguide-84>



# Guidelines for addressing climate change in standards

## 1 Scope

This document provides guidance to standards developers on how to take account of climate change in the planning, drafting, revision and updating of ISO standards and other deliverables.

It outlines a framework and general principles that standards developers can use to develop their own approach to addressing climate change on a subject-specific basis.

It aims to enable standards developers to include climate change adaptation (CCA) and climate change mitigation (CCM) considerations in their standardization work. Considerations related to CCA are intended to contribute to increasing preparedness and disaster risk reduction as well as impacting the resilience of organizations and their technologies, activities or products (TAPs). Considerations related to CCM consist primarily of approaches that seek to avoid, reduce or limit the release of GHG emissions and/or increase GHG removals.

## 2 Normative references

There are no normative references in this document.

## 3 Terms, definitions and abbreviated terms

### 3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

#### 3.1.1

##### **climate**

statistical description of weather in terms of the mean and variability of relevant quantities over a period of at least 30 years or a period of time required by relevant authorities

Note 1 to entry: The classical period for averaging these variables is 30 years, as defined by the World Meteorological Organization.

Note 2 to entry: The relevant quantities are most often near-surface variables such as temperature, precipitation and wind.

[SOURCE: ISO 14090:2019, 3.4, modified — Replaced "time ranging from months to thousands or millions of years" with "at least 30 years or a period of time required by relevant authorities".]

#### 3.1.2

##### **climate change**

change in *climate* (3.1.1) relevant quantities that persists for an extended period, typically decades or longer

Note 1 to entry: Change in climate can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties.

Note 2 to entry: Climate change might be due to natural processes, internal to the climate system, or external forcings such as modulations of the solar cycles, volcanic eruptions, and persistent *anthropogenic* (3.1.36) changes in the composition of the atmosphere or in *land use* (3.1.37).

[SOURCE: ISO 14090:2019, 3.5, modified]

### 3.1.3

#### climate change adaptation

##### CCA

process of adjustment to actual or expected *climate* (3.1.1) and its effects

Note 1 to entry: In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities.

Note 2 to entry: In some natural systems, human intervention can facilitate adjustment to expected climate and its effects.

[SOURCE: ISO 14090:2019, 3.1, modified — The preferred term “adaptation” has been added.]

### 3.1.4

#### climate change mitigation

##### mitigation

human intervention to reduce *GHG emissions* (3.1.13) or enhance *GHG removals* (3.1.14)

[SOURCE: ISO 14080:2018, 3.1.2.1, modified — The preferred term “mitigation” has been added, and the words “to reduce the sources or enhance the sinks of greenhouse gases (GHGs)” have been replaced with “to reduce GHG emissions or enhance GHG removals” in the definition.]

### 3.1.5

#### climate change impact

effect on natural or human systems as a result of being exposed to *climate change* (3.1.2)

Note 1 to entry: Impacts can be adverse or beneficial.

[SOURCE: ISO 14090:2019, 3.8, modified — The preferred term and definition have been contextualized to directly refer to climate change: the term “impact” has been replaced with “climate change impact”, the words “as a result of being exposed to climate change” have been added to the definition and the original Note 1 to entry has been replaced.]

### 3.1.6

#### climate change risk

*risk* (3.1.7) of negative *climate change impacts* (3.1.5) that reflects the interaction among *vulnerability* (3.1.8), *exposure* (3.1.10) and *hazard* (3.1.11)

Note 1 to entry: A risk assessment can include the consideration of vulnerabilities, exposure and *climate change* (3.1.2) hazards, or the consideration of *likelihoods* (3.1.44) and *consequences* (3.1.43).

[SOURCE: ISO 14080:2018, 3.1.3.3, modified — The preferred term has been changed from “climate risk” to “climate change risk”, the words “potential of negative impacts of climate change” have been replaced with “risk of negative climate change impacts”, and the original Note 1 to entry has been replaced.]

### 3.1.7

#### risk

effect of uncertainty on objectives

Note 1 to entry: An effect is a deviation from the expected. It can be positive, negative or both, and can address, create or result in opportunities and threats.

Note 2 to entry: Objectives can have different aspects and categories, and can be applied at different levels.

Note 3 to entry: Risk is usually expressed in terms of *risk sources* (3.1.41), *potential events* (3.1.42), their *consequences* (3.1.43) and their *likelihood* (3.1.44).

[SOURCE: ISO 31000:2018, 3.1]

### 3.1.8

#### **vulnerability**

propensity or predisposition to be adversely affected by *climate* (3.1.1) variability or *change* (3.1.2)

Note 1 to entry: Vulnerability encompasses a variety of concepts and elements including *sensitivity* (3.1.9) or susceptibility to harm and lack of capacity to cope and adapt.

[SOURCE: ISO 14090:2019, 3.15, modified — The definition has been contextualized to directly refer to climate variability or change: the words “by climate variability or change” have been added to the definition.]

### 3.1.9

#### **sensitivity**

degree to which a system or species is affected, either adversely or beneficially, by *climate* (3.1.1) variability or *change* (3.1.2)

[SOURCE: ISO 14080:2018, 3.1.3.7, modified — The note to entry has been removed.]

### 3.1.10

#### **exposure**

presence of people, livelihoods, species or ecosystems, environmental functions, services, resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected by *climate* (3.1.1) variability or *change* (3.1.2)

Note 1 to entry: Exposure can change over time, for example as a result of *land use* (3.1.37) change.

[SOURCE: ISO 14090:2019, 3.6, modified — The definition has been contextualized to directly refer to effect of climate change and climate variability: the term “affected” has been replaced by “adversely affected by climate variability or change” in the definition.]

### 3.1.11

#### **hazard**

potential source of injury or damage to the health of people, or damage to property or the environment

Note 1 to entry: The potential for harm can be in terms of loss of life, injury or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems and environmental resources.

Note 2 to entry: In this document, the term usually refers to climate-related physical *events* (3.1.42) or trends or their physical impacts.

Note 3 to entry: Hazard comprises slow-onset developments (e.g. rising temperatures over the long term) as well as rapidly developing climatic extremes (e.g. a heatwave or a landslide) or increased variability.

[SOURCE: ISO 14090:2019, 3.7, modified — The word “harm” has been replaced by “injury or damage to the health of people, or damage to property or the environment” in the definition.]

### 3.1.12

#### **greenhouse gas**

#### **GHG**

gaseous constituent of the atmosphere, both natural and *anthropogenic* (3.1.36), that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth’s surface, the atmosphere, and clouds

[SOURCE: ISO 14064-1:2018, 3.1.1, modified — The Notes to entry have been removed.]

### 3.1.13

#### **greenhouse gas emission**

#### **GHG emission**

release of a *GHG* (3.1.12) into the atmosphere

[SOURCE: ISO 14064-1:2018, 3.1.5]

**3.1.14**

**greenhouse gas removal**

**GHG removal**

withdrawal of a *GHG* (3.1.12) from the atmosphere

[SOURCE: ISO 14064-1:2018, 3.1.6, modified — The words “by GHG sinks” have been removed from the definition.]

**3.1.15**

**greenhouse gas source**

**GHG source**

*process* (3.1.35) that releases a *GHG* (3.1.12) into the atmosphere

[SOURCE: ISO 14064-1:2018, 3.1.2]

**3.1.16**

**greenhouse gas sink**

**GHG sink**

*process* (3.1.35) that removes a *GHG* (3.1.12) from the atmosphere

[SOURCE: ISO 14064-1:2018, 3.1.3]

**3.1.17**

**carbon dioxide capture and storage**

carbon capture and storage

**CCS**

*process* (3.1.35) consisting of the separation of CO<sub>2</sub> from industrial and energy-related sources, transportation and injection into a geological formation, resulting in long-term isolation from the atmosphere

Note 1 to entry: CCS is often referred to as carbon capture and storage. This terminology is not encouraged because it is inaccurate: the objective is the capture of carbon dioxide and not the capture of carbon. Tree plantation is another form of carbon capture that does not describe precisely the physical process of removing CO<sub>2</sub> from industrial emission sources.

Note 2 to entry: The term "sequestration" is also used alternatively to "storage". The term "storage" is preferred since "sequestration" is more generic and can also refer to biological processes (absorption of carbon by living organisms).

Note 3 to entry: Long-term means the minimum period necessary for geological storage of CO<sub>2</sub> to be considered an effective and environmentally safe *climate change mitigation* (3.1.4) option.

[SOURCE: ISO 27917:2017, 3.1.1, modified — The admitted term “carbon capture and storage” has been added, and Notes 4 and 5 to entry have been removed]

**3.1.18**

**carbon dioxide capture and utilization**

**CCU**

*process* (3.1.35) of separating (capturing) CO<sub>2</sub> from an industrial or manufacturing process or from air, and converting it for use as material feedstock within another *product system* (3.1.30)

Note 1 to entry: CCU is sometimes referred to as CO<sub>2</sub> transformation, CO<sub>2</sub> conversion, CO<sub>2</sub> recycling or CO<sub>2</sub> upcycling.

Note 2 to entry: Currently, the CO<sub>2</sub> that is captured is typically converted for use in creating fuels, chemicals, or material feedstock or used directly for enhancing plant growth in horticulture or as a refrigerant in a liquid form.

**3.1.19**

**greenhouse gas inventory**

**GHG inventory**

list of *GHG sources* (3.1.15) and *GHG sinks* (3.1.16), and their quantified *GHG emissions* (3.1.13) and *GHG removals* (3.1.14)

[SOURCE: ISO 14064-1:2018, 3.2.6]

**3.1.20**

**greenhouse gas programme  
GHG programme**

voluntary or mandatory international, national, or subnational system or scheme that registers, accounts or manages *GHG emissions* (3.1.13), *GHG removals* (3.1.14), *GHG emission reductions* (3.1.22) or *GHG removal enhancements* (3.1.23) outside the *organization* (3.1.40) or *GHG project* (3.1.21)

[SOURCE: ISO 14064-1:2018, 3.2.8]

**3.1.21**

**greenhouse gas project  
GHG project**

activity or activities that alter the conditions of a *GHG baseline* (3.1.24) and which cause *GHG emission reductions* (3.1.22) or *GHG removal enhancements* (3.1.23)

[SOURCE: ISO 14064-1:2018, 3.2.7, modified — Note to entry has been removed.]

**3.1.22**

**greenhouse gas emission reduction  
GHG emission reduction**

quantified decrease in *GHG emissions* (3.1.13) between a *baseline scenario* (3.1.25) and the *GHG project* (3.1.21)

[SOURCE: ISO 14064-2:2019, 3.1.7]

**3.1.23**

**greenhouse gas removal enhancement  
GHG removal enhancement**

quantified increase in *GHG removals* (3.1.14) between a *baseline scenario* (3.1.25) and the *GHG project* (3.1.21)

[SOURCE: ISO 14064-2:2019, 3.1.8]

**3.1.24**

**greenhouse gas baseline  
GHG baseline**

quantitative reference(s) of *GHG emissions* (3.1.13) and/or *GHG removals* (3.1.14) that would have occurred in the absence of a *GHG project* (3.1.21) and provides the *baseline scenario* (3.1.25) for comparison with project GHG emissions and/or GHG removals

[SOURCE: ISO 14064-2:2019, 3.2.5]

**3.1.25**

**baseline scenario**

hypothetical reference case that best represents the conditions most likely to occur in the absence of a proposed *GHG project* (3.1.21)

[SOURCE: ISO 14064-2:2019, 3.2.6]

**3.1.26**

**life cycle**

consecutive and interlinked stages related to a *product* (3.1.29), from raw material acquisition or generation from natural resources to end-of-life treatment.

[SOURCE: ISO 14067:2018, 3.1.4.2, modified — Notes to entry have been removed.]

**3.1.27**

**life cycle assessment**

compilation and evaluation of the inputs, outputs and the potential environmental impacts of a *product system* (3.1.30) throughout its *life cycle* (3.1.26)

[SOURCE: ISO 14040:2006, 3.2]

**3.1.28**

**life cycle inventory analysis**

**LCI**

phase of *life cycle assessment* (3.1.27) involving the compilation and quantification of inputs and outputs for a *product* (3.1.29) throughout its *life cycle* (3.1.26)

[SOURCE: ISO 14040:2006, 3.3]

**3.1.29**

**product**

goods or service

[SOURCE: ISO 14067:2018, 3.1.3.1, modified — Notes to entry have been removed.]

**3.1.30**

**product system**

collection of *unit processes* (3.1.31) with elementary flows and product flows, performing one or more defined functions and which models the *life cycle* (3.1.26) of a *product* (3.1.29)

[SOURCE: ISO 14067:2018, 3.1.3.2, modified — Note to entry has been removed.]

**3.1.31**

**unit process**

smallest element considered in the *life cycle inventory analysis* (3.1.28) for which input and output data are quantified

[SOURCE: ISO 14040:2006, 3.34]

**3.1.32**

**carbon footprint of a product**

**CFP**

sum of *GHG emissions* (3.1.13) and *GHG removals* (3.1.14) in a *product system* (3.1.30), expressed as *CO<sub>2</sub> equivalents* (3.1.34) and based on a *life cycle assessment* (3.1.27) using the single impact category of *climate change* (3.1.2)

[SOURCE: ISO 14067:2018, 3.1.1.1, modified — Notes to entry have been removed.]

**3.1.33**

**partial carbon footprint of a product**

**partial CFP**

sum of *GHG emissions* (3.1.13) and *GHG removals* (3.1.14) of one or more selected *process(es)* (3.1.35) in a *product system* (3.1.30), expressed as *CO<sub>2</sub> equivalents* (3.1.34) and based on the selected stages or processes within the *life cycle* (3.1.26)

[SOURCE: ISO 14067:2018, 3.1.1.2, modified — Notes to entry have been removed.]

**3.1.34**

**CO<sub>2</sub> equivalent**

**carbon dioxide equivalent**

unit for comparing the radiative forcing of a *GHG* (3.1.12) to that of carbon dioxide

[SOURCE: ISO 14067:2018, 3.1.2.2, modified — The third preferred term and Notes to entry have been removed.]

**3.1.35**

**process**

set of interrelated or interacting activities that transforms inputs into outputs

[SOURCE: ISO 14067:2018, 3.1.3.5]