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## Guidelines for addressing climate change in standards

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



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## 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](http://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](http://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 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 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 practical among standards that directly or indirectly address climate change and their wider uptake in support of sustainability.

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.

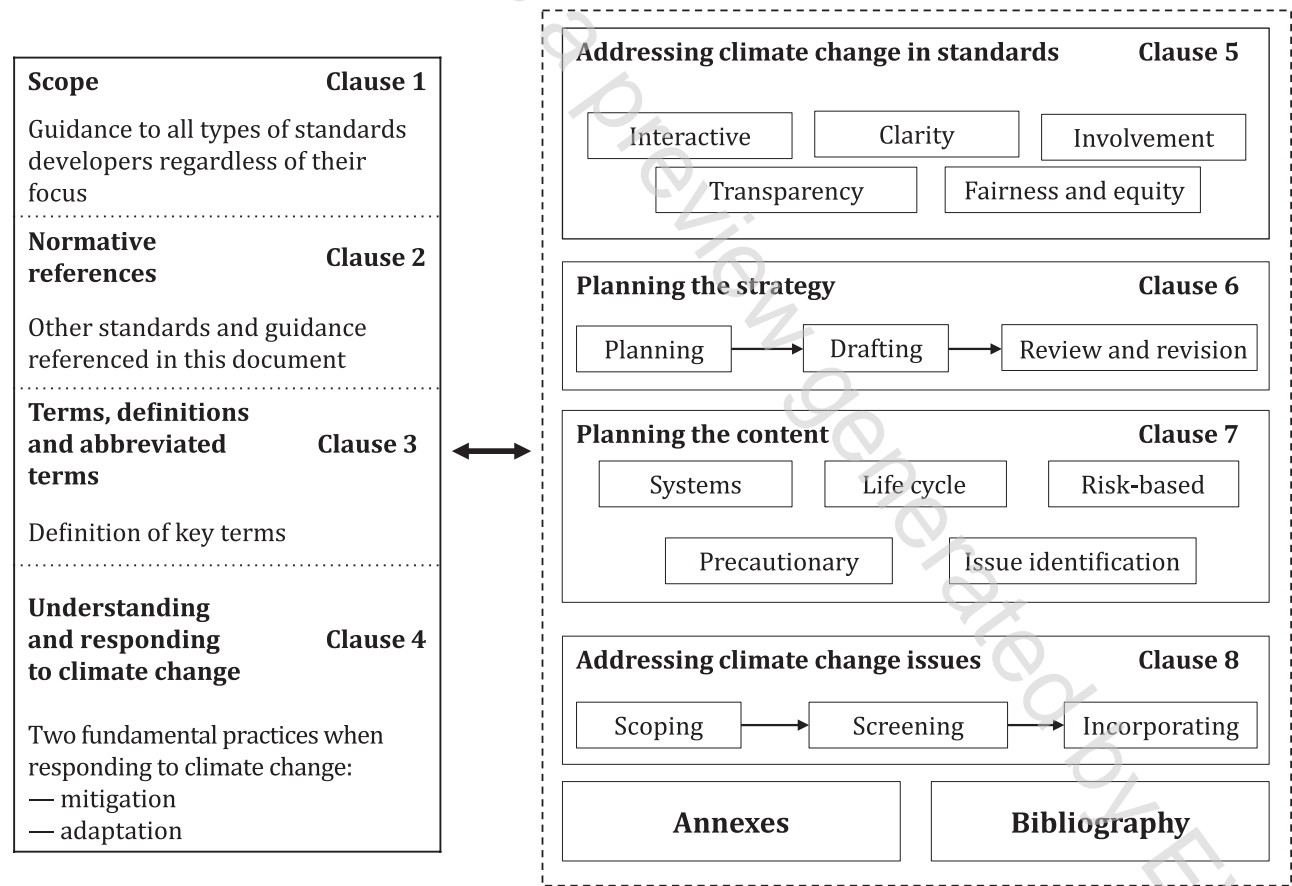


Figure 1 — Schematic overview of this document

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 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 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 adaptation to climate change (ACC) 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.





# 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 adaptation to climate change (ACC) and climate change mitigation (CCM) considerations in their standardization work. Considerations related to ACC are intended to contribute to increasing preparedness and disaster 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 terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://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 time ranging from months to thousands or millions of years

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]

#### 3.1.2

##### **climate change**

change in *climate* (3.1.1) 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).