



# Technical Specification

**ISO/TS 14064-4**

## Greenhouse gases —

Part 4:

## Guidance for the application of ISO 14064-1

*Gaz à effet de serre —*

*Partie 4: Recommandations relatives à l'application de l'ISO  
14064-1*

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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 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 document was prepared by Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 7, *Greenhouse gas and climate change management and related activities*.

This first edition cancels and replaces ISO/TR 14069:2013, which has been technically revised.

The main changes are as follows:

- a more systematic structure has been adopted, aligned with the main clauses of ISO 14064-1:2018;
- a more detailed approach to quantification is provided, including step-by-step guidance on source identification, data collection and emission factor selection;
- consistency with other international frameworks has been enhanced, notably the GHG Protocol and IPCC guidelines;
- the conditions of use for this document in potentially more demanding contexts has been clarified, with an emphasis on traceability and justification of methodological choices, supporting more robust application.

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

ISO 14064-1 enables organizations around the world to quantify greenhouse gas (GHG) emissions and removals. This document uses the principles and process from ISO 14064-1 to develop guidance on quantification and reporting of GHG for organizations.

This document is consistent with the objective of building on existing International Standards and protocols on corporate GHG inventories. Many key concepts have been developed over a number of years.

ISO 14064-1 identifies six GHG inventory categories:

- a) direct GHG emissions and removals;
- b) indirect emissions from imported energy;
- c) indirect emissions from transportation;
- d) indirect emissions from products used by the organization;
- e) indirect emissions associated with the use of products from the organization;
- f) indirect emissions from other sources.

[Annex B](#) provides a table of correspondence between this document, the GHG Protocol Corporate Standard (2010)<sup>[11]</sup> and ISO 14064-1.

In tackling climate change, there is a convergence of interests between organizations, national and regional regulators, and international negotiators on the need to develop methods of quantifying GHG emissions and providing reliable tools to do so.

This document is intended to assist users in the application of ISO 14064-1, using guidance and examples, to provide transparency in the quantification of emissions and their reporting.

This document enables an organization to:

- enhance the transparency and consistency of reported GHG emissions (direct and indirect);
- select categories and determine subcategories for ISO 14064-1 inventories;
- choose or develop the method of calculating emissions;
- differentiate, whenever necessary, the two main types of organization that are addressed in this document:
  - a facility or production site (spatially delimited) providing goods (industry) and/or services (tertiary), belonging to a private or public organization;
  - a private or public organization with several facilities/sites and/or subsidiaries, and needing consolidation procedures;
- report GHG emissions and removals, using a simplified format to make the report easier to understand.

This document is intended to give guidance on the quantification of a GHG inventory within the selected boundaries of an organization. The objective of this document is to offer organizations guidance on the quantification and reporting of their GHG inventory, using a process that incorporates the principles of relevance, completeness, consistency, accuracy and transparency. This kind of GHG inventory is expressed as net global warming potential (GWP) in carbon dioxide equivalent (CO<sub>2</sub>e).

# Greenhouse gases —

## Part 4: Guidance for the application of ISO 14064-1

### 1 Scope

This document describes the principles, concepts, and methods relating to the quantification and reporting of direct and indirect greenhouse gas (GHG) emissions for an organization. It gives guidance on the application of ISO 14064-1 to GHG inventory at the organization level, for the quantification and reporting of direct emissions and indirect emissions.

This document describes for all organizations, the steps for:

- establishing organizational boundaries, in accordance with either a control approach (financial or operational) or an equity share approach;
- establishing reporting boundaries, by identifying direct and indirect emissions to be quantified and reported; for each category of emission, guidance is provided on specific boundaries and methodologies for the quantification of GHG emissions and removals;
- GHG reporting: the guidance is provided to promote transparency regarding the boundaries, the methodologies used for the quantification of direct and indirect GHG emissions and removals, and the uncertainty of the results.

The examples and case studies presented in this document are not exclusive nor exhaustive. The values of the emission or removal factors mentioned in the examples are given for illustrative purposes only. A non-exhaustive list of database references is provided in [Annex A](#).

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### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14064-1, *Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14064-1 and the following 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/>