

Australian Standard[®]

Greenhouse gases

Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals



This Australian Standard® was prepared by Committee EV-015, Greenhouse Gas Measurement and Accounting. It was approved on behalf of the Council of Standards Australia on 19 October 2006.
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The following are represented on Committee EV-015:

- A3P
 - Australian Chamber of Commerce and Industry
 - CRC for Greenhouse Accounting
 - Consumers' Federation of Australia
 - Department of Natural Resources and Water (Qld)
 - Engineers Australia
 - JAS-ANZ
 - Minerals Council of Australia
 - NSW Greenhouse Gas Abatement Scheme
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Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

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PREFACE

This Standard was prepared by the Standards Australia Committee EV-015, Greenhouse Gas Measurement and Accounting.

The objective of this Standard is to provide organizations with a common, internationally agreed approach to measuring and reporting greenhouse gas emissions and removals.

This Standard is identical with, and has been reproduced from ISO 14064-1:2006, *Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text ‘this part of ISO 14064’ should read ‘this Australian Standard’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.
- (d) Any French text on figures should be ignored.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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INTRODUCTION

0.1 Climate change has been identified as one of the greatest challenges facing nations, governments, business and citizens over future decades. Climate change has implications for both human and natural systems and could lead to significant changes in resource use, production and economic activity. In response, international, regional, national and local initiatives are being developed and implemented to limit greenhouse gas (GHG) concentrations in the Earth's atmosphere. Such GHG initiatives rely on the quantification, monitoring, reporting and verification of GHG emissions and/or removals.

This part of ISO 14064 details principles and requirements for designing, developing, managing and reporting organization- or company-level GHG inventories. It includes requirements for determining GHG emission boundaries, quantifying an organization's GHG emissions and removals, and identifying specific company actions or activities aimed at improving GHG management. It also includes requirements and guidance on inventory quality management, reporting, internal auditing and the organization's responsibilities for verification activities.

ISO 14064-2 focuses on GHG projects or project-based activities specifically designed to reduce GHG emissions or increase GHG removals. It includes principles and requirements for determining project baseline scenarios and for monitoring, quantifying and reporting project performance relative to the baseline scenario and provides the basis for GHG projects to be validated and verified.

ISO 14064-3 details principles and requirements for verifying GHG inventories and validating or verifying GHG projects. It describes the process for GHG-related validation or verification and specifies components such as validation or verification planning, assessment procedures and the evaluation of organization or project GHG assertions. ISO 14064-3 can be used by organizations or independent parties to validate or verify GHG assertions.

Figure 1 displays the relationship between the three parts of ISO 14064.

0.2 ISO 14064 is expected to benefit organizations, governments, project proponents and stakeholders worldwide by providing clarity and consistency for quantifying, monitoring, reporting and validating or verifying GHG inventories or projects. Specifically, use of ISO 14064 could

- enhance the environmental integrity of GHG quantification,
- enhance the credibility, consistency and transparency of GHG quantification, monitoring and reporting, including GHG project emission reductions and removal enhancements,
- facilitate the development and implementation of an organization's GHG management strategies and plans,
- facilitate the development and implementation of GHG projects,
- facilitate the ability to track performance and progress in the reduction of GHG emissions and/or increase in GHG removals, and
- facilitate the crediting and trade of GHG emission reductions or removal enhancements.

Users of ISO 14064 could find benefit from some of the following applications:

- a) corporate risk management: for example, the identification and management of risks and opportunities;
- b) voluntary initiatives: for example, participation in voluntary GHG registry or reporting initiatives;
- c) GHG markets: for example, the buying and selling of GHG allowances or credits;
- d) regulatory/government reporting: for example, credit for early action, negotiated agreements or national reporting programmes.

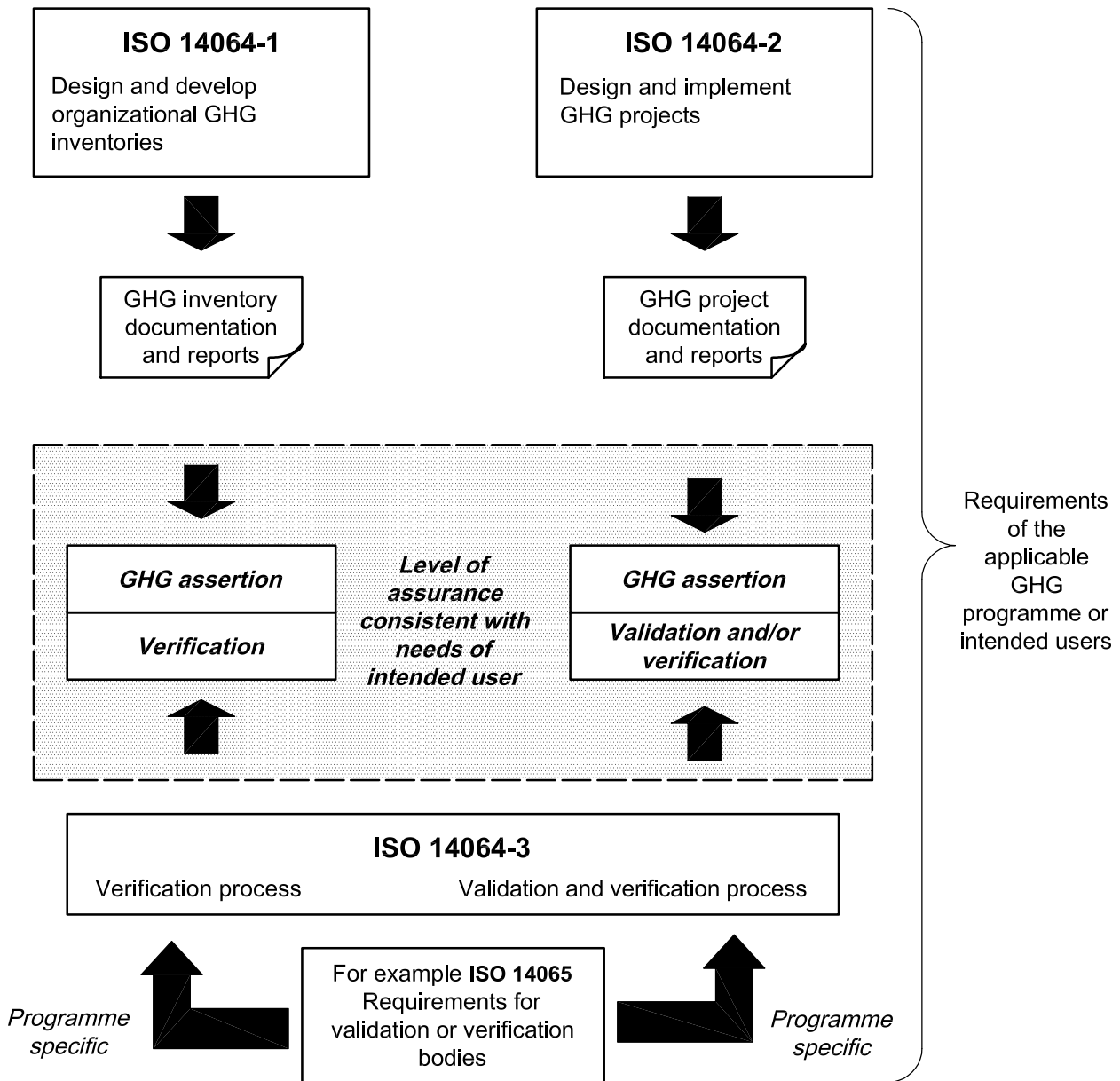


Figure 1 — Relationship between the parts of ISO 14064

0.3 Consistent with the objective of building on existing International Standards and protocols on corporate GHG inventories, this part of ISO 14064 incorporates many key concepts and requirements stated by World Business Council for Sustainable Development/World Resources Institute in Reference [4]. Users of this part of ISO 14064 are encouraged to refer to Reference [4] for additional guidance on applying relevant concepts and requirements.

0.4 Some clauses require users of this part of ISO 14064 to explain the use of certain approaches or decisions taken. Explanation will generally include documentation of the following:

- How approaches were used or decisions taken.
- Why approaches were chosen or decisions made.

Some clauses require users of this part of ISO 14064 to justify the use of certain approaches or decisions taken. Justification will generally include documentation of the following:

- How approaches were used or decisions taken.
- Why approaches were chosen or decisions made.
- Why alternative approaches were not chosen.

AUSTRALIAN STANDARD

Greenhouse gases —

Part 1:

Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals**1 Scope**

This part of ISO 14064 specifies principles and requirements at the organization level for quantification and reporting of greenhouse gas (GHG) emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organization's GHG inventory.

ISO 14064 is GHG programme neutral. If a GHG programme is applicable, requirements of that GHG programme are additional to the requirements of ISO 14064.

NOTE If a requirement of ISO 14064 prohibits an organization or a GHG project proponent from complying with a requirement of the GHG programme, the requirement of the GHG programme takes precedence.

2 Terms and definitions

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

2.1**greenhouse gas****GHG**

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

NOTE GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆).

2.2**greenhouse gas source**

physical unit or process that releases a GHG into the atmosphere

2.3**greenhouse gas sink**

physical unit or process that removes a GHG from the atmosphere

2.4**greenhouse gas reservoir**

physical unit or component of the biosphere, geosphere or hydrosphere with the capability to store or accumulate a GHG removed from the atmosphere by a **greenhouse gas sink** (2.3) or a GHG captured from a **greenhouse gas source** (2.2)

NOTE 1 The total mass of carbon contained in a GHG reservoir at a specified point in time could be referred to as the carbon stock of the reservoir.

NOTE 2 A GHG reservoir can transfer greenhouse gases to another GHG reservoir.



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