

Australian Standard<sup>®</sup>

## Greenhouse gases

**Part 2: Specification with guidance at  
the project level for quantification and  
reporting of greenhouse gas emission  
reductions and removal enhancements  
(ISO 14062-2:2006, MOD)**

STANDARDS  
Australia



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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  - 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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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through public comment period.

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STANDARDS AUSTRALIA

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RECONFIRMATION

OF

AS ISO 14064.2-2006

Greenhouse gases

**Part 2: Specification with guidance at the project level for quantification and reporting of greenhouse gas emission reductions and removal enhancements (ISO 14062-2:2006, MOD)**

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## PREFACE

This Standard was prepared by the Standards Australia Committee EV-015, Greenhouse Gas Measurement and Accounting. It is an adoption with national modifications and has been reproduced from on ISO 14064-2:2006 *Greenhouse gases – Part 2: Specification with guidance at the project level for quantification and reporting of greenhouse gas emission reductions and removal enhancements*.

The objective of this Standard is to provide proponents of greenhouse gas emission reduction projects with an internationally agreed framework for reporting.

For the purpose of this Standard, the ISO 14064-2:2006 text shall be modified as set out in Annex ZZ, which has been added after the source text.

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

- (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 Committee was aware that ISO 14064-2 did not deal with removal enhancements from forest projects in detail and therefore decided that for Australian afforestation and reforestation projects, the relevant Australian Standard, AS 4701, should be used instead of the requirements in the original ISO text.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas 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.

ISO 14064-1 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 in verification activities.

This part of ISO 14064 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. It 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. ISO 14064-3 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 relationships among 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 organization 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.

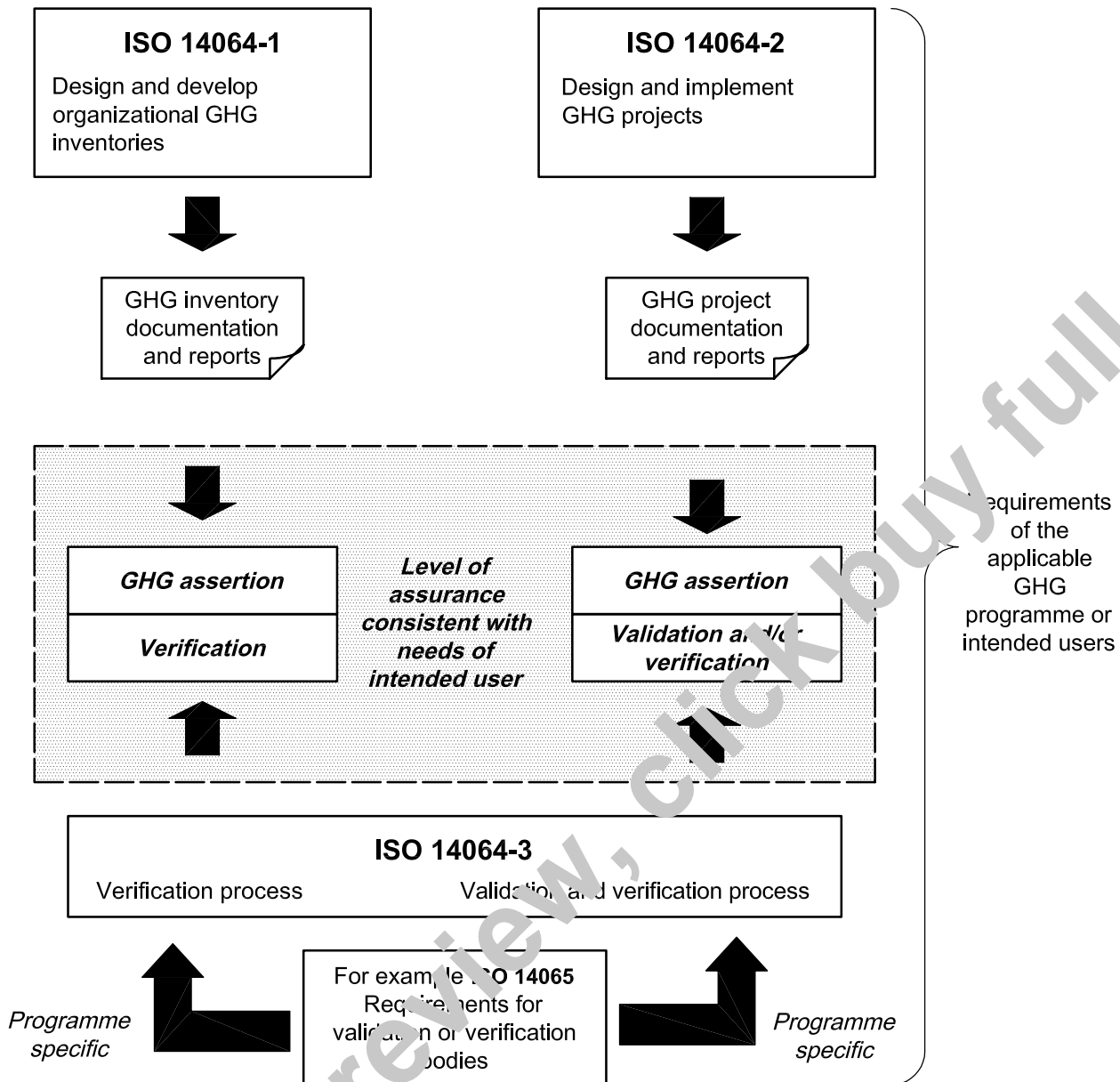


Figure 1 — Relationship between the parts of ISO 14064

**0.3** A standardized approach for quantification, monitoring and reporting is required for GHG projects and any resulting GHG emission reductions and/or removal enhancements, in order that they are comparable among intended users and GHG programmes. Accordingly, this part of ISO 14064 specifies a general, GHG programme-neutral framework and uses terms and concepts designed to be compatible with other requirements and guidance from relevant GHG policies and programmes, good practice, legislation and standards. Reference [13] provides an example of good practice guidance.

This part of ISO 14064 deals with the concept of additionality by requiring that the GHG project has resulted in GHG emission reductions or removal enhancements in addition to what would have happened in the absence of that project. It does not use the term “additionality”, prescribe baseline procedures or specify additionality criteria. This part of ISO 14064 requires the project proponent to identify and select GHG sources, sinks and reservoirs relevant for the GHG project and for the baseline scenario. In order to be compatible with the broadest range of GHG programmes, it does not use the term “boundaries” to describe which GHG sources, sinks and/or reservoirs are considered for quantification, monitoring and reporting, but instead uses the concept

of relevant GHG sources, sinks and/or reservoirs. Thus the project proponent may apply additionality criteria and procedures, or define and use boundaries consistent with relevant legislation, policy, GHG programmes and good practice.

Quantification and monitoring of project-level GHG emissions, removals, emission reductions and removal enhancements is challenging because actual project performance is assessed against a hypothetical baseline scenario that represents what would have happened in the absence of the GHG project. Consequently, it is difficult to verify GHG emissions, removals and/or stocks of the baseline scenario. It is therefore important to demonstrate that the baseline scenario is consistent with the principles of this part of ISO 14064, including conservativeness and accuracy, in order to increase the level of confidence that GHG emission reductions and/or removal enhancements are credible and not over-estimated. Generally, the baseline scenario is determined on the basis of an assessment of alternative scenarios. For both the project and the baseline scenario, the quantification, monitoring and reporting of GHG emissions, removals and/or stocks by GHG sources, sinks and reservoirs is based on procedures developed by the project proponent or adopted from recognized authorities.

**0.4** This part of ISO 14064 does not specify requirements for validation/verification bodies or validators/verifiers in providing assurance against GHG assertions or claims by GHG projects. Such requirements may be specified by the authority of the applicable GHG programme or can be found in ISO 14064-3. The process to recognize certified GHG emission reductions or removal enhancements as GHG units, credits or offsets is an extension of the GHG project cycle. The certification and crediting process, which may be under the authority of a GHG programme and may vary among GHG programmes, is also not included in the specifications of this part of ISO 14064.

Annex A contains additional information in cases where the project proponent wishes to conform to the United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol's Clean Development Mechanism (CDM) or Joint Implementation (JI) Mechanism.

**0.5** 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 2:

**Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements****1 Scope**

This part of ISO 14064 specifies principles and requirements and provides guidance at the project level for quantification, monitoring and reporting of activities intended to cause greenhouse gas (GHG) emission reductions or removal enhancements. It includes requirements for planning a GHG project, identifying and selecting GHG sources, sinks and reservoirs relevant to the project and baseline scenario, monitoring, quantifying, documenting and reporting GHG project performance and managing data quality.

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 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 (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>).

**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.