

SLOVENSKI STANDARD
oSIST prEN ISO 14064-2:2017
01-september-2017

Toplogredni plini - 2. del: Specifikacija z navodilom za količinsko določanje, spremljanje in poročanje o povečanem zmanjševanju ali odstranjevanju emisij toplogrednih plinov na ravni projekta (ISO/DIS 14064-2:2017)

Greenhouse gases - Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements (ISO/DIS 14064-2:2017)

Treibhausgase - Teil 2: Spezifikation mit Anleitung zur quantitativen Bestimmung, Überwachung und Berichterstattung von Reduktionen der Treibhausgasemissionen oder Steigerungen des Entzugs von Treibhausgasen auf Projektebene (ISO/DIS 14064-2:2017)

Gaz à effet de serre - Partie 2: Spécifications et lignes directrices, au niveau des projets, pour la quantification, la surveillance et la déclaration des réductions d'émissions ou d'accroissements de suppressions des gaz à effet de serre (ISO/DIS 14064-2:2017)

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ICS:

13.020.40	Onesnaževanje, nadzor nad onesnaževanjem in ohranjanje	Pollution, pollution control and conservation
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Greenhouse gases —

Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements

*Gaz à effet de serre —**Partie 2: Spécifications et lignes directrices, au niveau des projets, pour la quantification, la surveillance et la déclaration des réductions d'émissions ou d'accroissements de suppressions des gaz à effet de serre*

ICS: 13.020.40

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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ISO/DIS 14064-2:2017(E)**52 Foreword**

53 ISO (the International Organization for Standardization) is a worldwide federation of national
54 standards bodies (ISO member bodies). The work of preparing International Standards is normally
55 carried out through ISO technical committees. Each member body interested in a subject for which a
56 technical committee has been established has the right to be represented on that committee.
57 International organizations, governmental and non-governmental, in liaison with ISO, also take part in
58 the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all
59 matters of electrotechnical standardization.

60 The procedures used to develop this document and those intended for its further maintenance are
61 described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the
62 different types of ISO documents should be noted. This document was drafted in accordance with the
63 editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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67 on the ISO list of patent declarations received (see www.iso.org/patents).

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

70 For an explanation on the meaning of ISO specific terms and expressions related to conformity
71 assessment, as well as information about ISO's adherence to the World Trade Organization (WTO)
72 principles in the Technical Barriers to Trade (TBT) see the following URL:
73 www.iso.org/iso/foreword.html.

74 The committee responsible for this document is Technical Committee ISO/TC 207, *Environmental
75 Management*, Subcommittee SC 7, *Greenhouse gas management and related activities*.

76 This second edition cancels and replaces the first edition (ISO 14064-2:2006), which has been
77 technically revised.

78 The main changes compared to the previous edition are as follows:

- 79 — Change to the concept of additionality and baseline scenario; and
- 80 — Deletion of text related to the Kyoto mechanism.

81 ISO 14064 consists of the following parts, under the general title *Greenhouse gases*:

- 82 — *Part 1: Specification with guidance at the organization level for quantification and reporting of
83 greenhouse gas emissions and removals*
- 84 — *Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of
85 greenhouse gas emission reductions or removal enhancements*
- 86 — *Part 3: Specification with guidance for the assurance of greenhouse gas statements*

87 Introduction

88 **0.1** Climate change arising from anthropogenic activity has been identified as one of the greatest
89 challenges facing the world and will continue to affect business and citizens over future decades.

90 Climate change has implications for both human and natural systems and could lead to significant
91 impacts on resource availability, economic activity and human wellbeing. In response, international,
92 regional, national, and local initiatives are being developed and implemented by public and private
93 sectors to mitigate greenhouse gas (GHG) concentrations in the Earth's atmosphere as well as to
94 facilitate adaptation to climate change.

95 There is a need for an effective and progressive response to the urgent threat of climate change on the
96 basis of the best available scientific knowledge. ISO produces documents that support the
97 transformation of scientific knowledge into tools that will help address climate change.

98 GHG initiatives on mitigation rely on the quantification, monitoring, reporting and verification of GHG
99 emissions and/or removals.

100 ISO 14060 series provides clarity and consistency for quantifying, monitoring, reporting and validating
101 or verifying GHG emissions and removals to support sustainable development through low-carbon
102 economy and it also benefits organizations, project proponents and stakeholders worldwide by
103 providing clarity and consistency for quantifying, monitoring, reporting and validating or verifying GHG
104 emissions and removals. Specifically, use of ISO 14060 series:

- 105 — enhances the environmental integrity of GHG quantification,
- 106 — enhances the credibility, consistency, and transparency of GHG quantification, monitoring,
107 reporting, validation and verification, <https://standards.iteh.ai/catalog/standards/sist/4e7cc5fe-0c32-44aa-a880-ecc3b2fb5fe6/sist-14064-2-2019>
- 108 — facilitates the development and implementation of GHG management strategies and plans,
- 109 — facilitates the development and implementation of mitigation actions through emission reductions
110 or removal enhancements
- 111 — facilitates the ability to track performance and progress in the reduction of GHG emissions and/or
112 increase in GHG removals, and
- 113 — facilitates GHG emission reductions or removal enhancements

114 Applications of ISO 14060 series include:

- 115 — corporate decisions such as: identifying emission reduction opportunities and increasing
116 profitability by reducing energy consumption;
- 117 — carbon risk management such as: the identification and management of risks and opportunities;
- 118 — voluntary initiatives such as: participation in voluntary GHG registry or sustainability reporting
119 initiatives;
- 120 — GHG markets such as: the buying and selling of GHG allowances or credits;
- 121 — regulatory/government GHG programmes such as: credit for early action, agreements or national
122 and local reporting initiatives.

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123

124 ISO 14064-1 details principles and requirements for designing, developing, managing and reporting
125 organization-level GHG inventories.

126 It includes requirements for determining GHG emission and removal boundaries, quantifying an
127 organization's GHG emissions and removals and identifying specific company actions or activities aimed
128 at improving GHG management.

129 It also includes requirements and guidance on inventory quality management, reporting, internal
130 auditing and the organization's responsibilities in verification activities.

131 ISO 14064-2 details principles and requirements for determining baselines, and monitoring, quantifying
132 and reporting of project emissions. It focuses on GHG projects or project-based activities specifically
133 designed to reduce GHG emissions and/or enhance GHG removals. It provides the basis for GHG
134 projects to be validated and verified.

135 ISO 14064-3 details requirements for verifying GHG statements related to GHG inventories, GHG
136 projects, and carbon footprints of products. It describes the process for validation or verification
137 including validation or verification planning, assessment procedures, and the evaluation of
138 organizational, project and product GHG statements. ISO 14064-3 can be used by first, second and third
139 parties.

140 ISO 14066 specifies competence requirements for validation teams and verification teams. ISO 14066
141 complements the implementation of ISO 14065. ISO 14066 is not linked to any particular greenhouse
142 gas (GHG) programme. If a particular GHG programme is applicable, competence requirements of that
143 GHG programme are additional to the requirements of ISO 14066.

144 ISO 14067 defines requirements for the quantification of carbon footprint of product. The aim of this
145 standard is to quantify GHG emissions associated with the life cycle stages of a product beginning with
146 resource extraction and raw material sourcing and extending through the production, use and end-of-
147 life phases of the product.

148 ISO TR 14069 intends to assist users in the application of ISO 14064-1, providing guidelines and
149 examples for improving transparency in the quantification of emissions and their reporting. This
150 Technical report does not provide additional guidance to 14064-1.

151 Figure 1 displays relationships among the three parts of ISO 14064 and other standards related to
152 validation and verification.

153

154

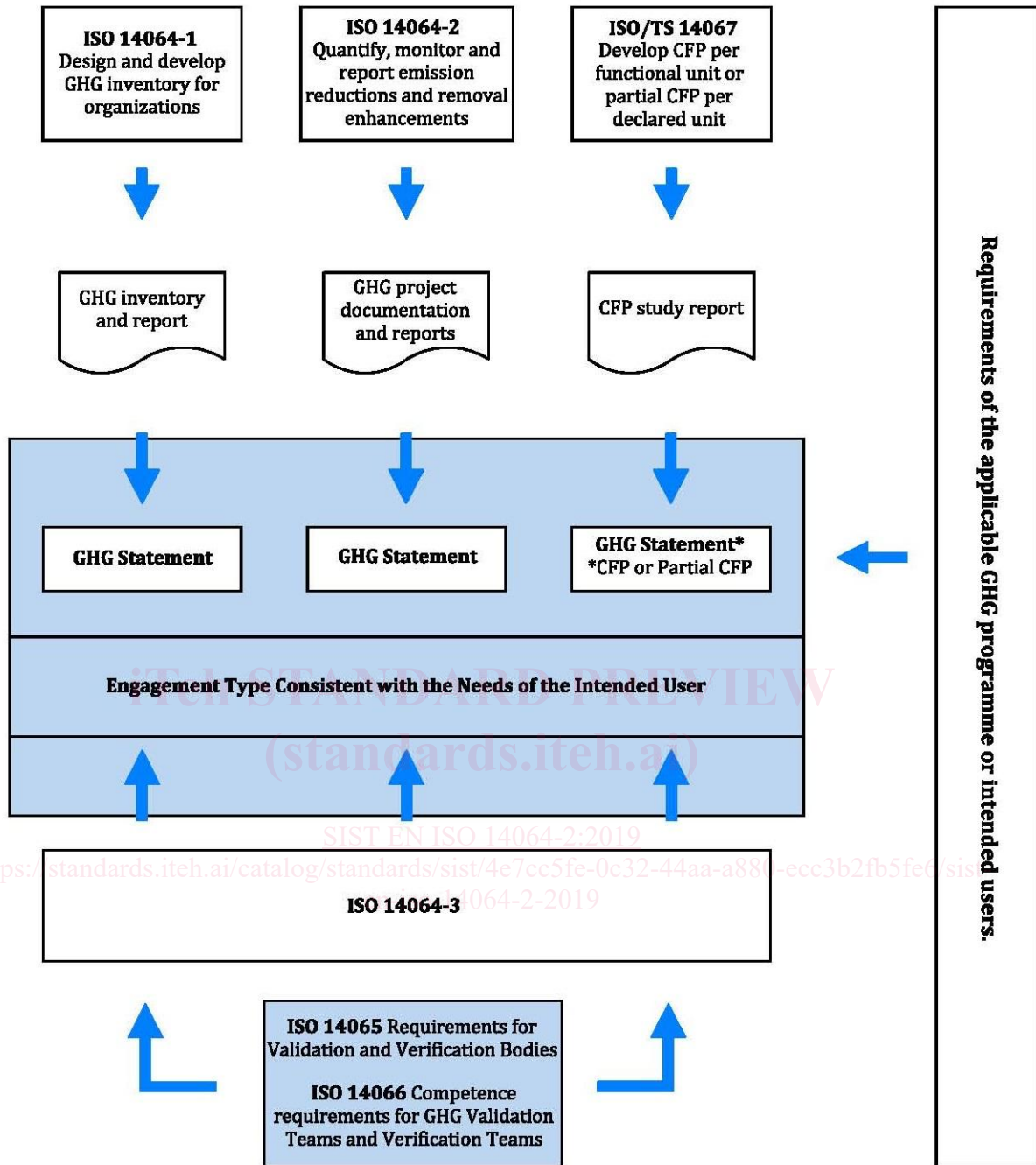


Figure 1 — Relationship between the parts of ISO 14064 series

155

156

157 **0.2** A standardized approach for quantification, monitoring and reporting is needed for GHG projects
 158 and any resulting GHG emission reductions and/or removal enhancements, in order that they are
 159 comparable among intended users and GHG programmes. Accordingly, this part of ISO 14064 specifies
 160 a general, GHG programme-neutral framework and uses terms and concepts designed to be compatible
 161 with other requirements and guidance from relevant GHG policies and programmes, good practice,
 162 legislation and standards. Reference [8] provides an example of good practice guidance.

163 This part of ISO 14064 contains general requirements for GHG projects and does not prescribe specific
 164 criteria and procedures. GHG programmes (e.g. GHG offset programmes) may apply additional
 165 requirements on GHG projects in relation to additionality, specific methodologies, project baselines, etc.
 166 Although this standard leaves specific criteria and requirements related to additionality to individual

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167 programs, it does require that the GHG project should result in emission reductions or removal
168 enhancements in addition to what would have happened in the absence of the project.

169 This part of ISO 14064 requires the project proponent to identify and select GHG sources, sinks and
170 reservoirs (SSR) relevant for the GHG project and to determine the GHG baseline. GHG project
171 emissions/removals and baseline scenario emissions/removals are quantified separately, and the
172 emission reductions and/or removal enhancements are calculated by comparison of the GHG project
173 emissions/removals with the baseline scenario emissions/removals. It is important to demonstrate that
174 the GHG baseline is consistent with the principles of this part of ISO 14064, including conservativeness
175 and accuracy, in order to increase the level of confidence that GHG emission reductions and/or removal
176 enhancements are credible and not over-estimated. Generally, the GHG baseline could be determined
177 based on historical information or setting of alternative scenarios according to the requirement of the
178 intended user/programme. For both the project emissions and the baseline scenario, the quantification,
179 monitoring and reporting of GHG emissions and removals are based on procedures developed by the
180 project proponent or adopted from a GHG programme.

181 This part of ISO 14064 does not use the terms “project boundary”. In order to be compatible with the
182 broadest range of GHG programmes, project boundary is referred to as sources, sinks and reservoirs
183 that are “relevant” to the project. If any GHG programme requires a specific time period or a
184 methodology, these can be compared to the GHG baseline and estimated project emissions, and any
185 discrepancies are recorded and reported in the GHG report.

186 **0.3** This part of ISO 14064 does not specify requirements for validation/verification bodies or
187 validators/verifiers in providing assurance against GHG statements or claims by GHG projects. Such
188 requirements may be specified by the authority of the applicable GHG programme or can be found in
189 ISO 14064-3. The process to recognize certified GHG emission reductions or removal enhancements as
190 GHG units, credits or offsets is an extension of the GHG project cycle. The certification and crediting
191 process, which may be under the authority of a GHG programme and may vary among GHG programmes,
192 is also not included in the specifications of this part of ISO 14064. [https://standards.teh.ai/catalog/standards/sist/4e7cc5fe-0c32-44aa-a880-ecc3b2fb5fe6/sist-](https://standards.teh.ai/catalog/standards/sist/4e7cc5fe-0c32-44aa-a880-ecc3b2fb5fe6/sist-14064-2-2019)

193 **0.4** Some clauses require users of this part of ISO 14064 to explain the use of certain approaches or
194 decisions taken. Explanation will generally include documentation of the following:

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

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

- 199 — How approaches were used or decisions taken.
- 200 — Why approaches were chosen or decisions made.
- 201 — Why alternative approaches were not chosen.

202 **0.5** Some clauses require users of this part of ISO 14064 to explain and to justify the use of certain
203 approaches or decisions taken. Explanation will generally include (i) how approaches were used or
204 decision taken and (ii) why approaches were chosen or decisions made. Justification has two more
205 criteria: (iii) why alternative approaches were not chosen and (iv) display supporting data or analysis
206 requested.

207

208 **Greenhouse gases — Part 2: Specification with guidance at the**
209 **project level for quantification, monitoring and reporting of**
210 **greenhouse gas emission reductions or removal**
211 **enhancements**

212 **1 Scope**

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

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

221 **2 Normative references**

222 There are no normative references in this document.

223 **3 Terms and definitions** [SIST EN ISO 14064-2:2019](https://standards.iteh.ai/catalog/standards/sist/4e7cc5fe-0c32-44aa-a880-ccc3b2fb5fe6/sist-14064-2-2019)

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

225 **3.1 Terms relating to greenhouse gases**

226 **3.1.1**

227 **greenhouse gas**

228 **GHG**

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

232 Note 1 to entry: GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O),
233 hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆).

234 Note 2 to entry: Other examples of GHGs are provided in the current Intergovernmental Panel on Climate
235 Change (IPCC) Assessment Report.

236 **3.1.2**

237 **greenhouse gas source**

238 process that releases GHG into the atmosphere

239 **3.1.3**

240 **greenhouse gas sink**

241 process that removes GHG from the atmosphere

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- 242 **3.1.4**
 243 **greenhouse gas reservoir**
 244 component, other than the atmosphere, which has the capacity to accumulate GHGs, and store and
 245 release the GHGs
- 246 **3.1.5**
 247 **greenhouse gas emission**
 248 release of a GHG to the atmosphere
- 249 **3.1.6**
 250 **greenhouse gas removal**
 251 withdrawal of a GHG from the atmosphere
- 252 **3.1.7**
 253 **greenhouse gas emission reduction**
 254 quantified decrease in GHG emissions between comparable situations
- 255 **3.1.8**
 256 **greenhouse gas removal enhancement**
 257 quantified increase in GHG removals between comparable situations
- 258 **3.1.9**
 259 **greenhouse gas emission factor**
 260 coefficient relating activity data with the GHG emission
- 261 **3.1.10**
 262 **greenhouse gas removal factor**
 263 coefficient relating activity data with the GHG removal
- 264 **3.1.11** <https://standards.iteh.ai/catalog/standards/sist/4e7cc5fe-0c32-44aa-a880-ecc3b2fb5fe6/sist-4064-2-2019>
 265 **affected greenhouse gas source, sink or reservoir**
 266 GHG source, sink or reservoir influenced by a project activity, through changes in market demand or
 267 supply for associated products or services, or through physical displacement
- 268 Note 1 to entry: An affected GHG source, sink or reservoir is generally off the project site.
- 269 Note 2 to entry: GHG emission reductions or removal enhancements offset by affected GHG sources, sinks or
 270 reservoirs are often referred to as leakage.
- 271 **3.1.12**
 272 **controlled greenhouse gas source, sink or reservoir**
 273 GHG source, sink or reservoir whose operation is under the direction and influence of the GHG project
 274 proponent (3.3.2) through financial, policy, management or other instruments
- 275 Note 1 to entry: A controlled GHG source, sink or reservoir is generally on the GHG project site.
- 276 **3.1.13**
 277 **related greenhouse gas source, sink or reservoir**
 278 GHG source, sink or reservoir that has material or energy flows into, out of, or within the GHG project
- 279 Note 1 to entry: A related GHG source, sink or reservoir is generally upstream or downstream from the GHG
 280 project, and can be either on or off the GHG project site.