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# Item 07 – Mock-up of a GRI Topic Standard

## For GSSB information

Date	27 May 2021	2051
Meeting	10 June 2021	:12)
Project	GRI Universal Standards Project	KIIC.
Description	Standards which need to be aligned document presents a mock-up of a 0 2016) as an example to demonstrate	ndards has implications for the GRI Topic with the revised Universal Standards. This GRI Topic Standard ( <i>GRI 305: Emissions</i> the type of changes that need to be made to the update to the Universal Standards.
	The disclosures will change in excep	uction, glossary, and bibliography sections. tional cases only, when they refer to a the revised Universal Standards (e.g., Topic
	The changes are highlighted in comr	ment boxes within the document.
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## **GRI 305: Emissions 2016**

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- **EFFECTIVE DATE: 1 JULY 2018**
- **TOPIC STANDARD**

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## GRI 305: Emissions 2016

## **TOPIC STANDARD**

	ecti	

- of the GSS This Standard is effective for reports or other materials published on or after 1 July 2018. Earlier
- 8 adoption is encouraged.

#### Responsibility 9

- This Standard is issued by the Global Sustainability Standards Board (GSSB). Any feedback on the 10
- 11 GRI Standards can be submitted to <a>???@globalreporting.org</a> for the consideration of the GSSB.

#### 12 Legal liability

- This document, designed to promote sustainability reporting, has been developed by the Global 13
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Commented [SD3]: The following changes have been made to the contents page:

1) The table 'About this Standard' has been removed. Its content is now included in other sections of the Standard:

'Responsibility' and 'Effective date': The information is included on the inside cover.

'Scope': The information is included in the introduction ('Using this Standard' section).

'Normative references': The part that refers to other Standards has been removed, and the reference to the glossary is included in the introduction ('Using this Standard' section).

2) The box with the note on how to navigate the Standard has been removed for individual Topic Standards. Such information will be included in the consolidated pdf, as that is a long document.



## Introduction

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*GRI 305: Emissions 2016* contains disclosures for organizations to report information about their emissions-related <u>impacts</u>, and how they manage these impacts.

The Standard is structured as follows:

- Section 1 contains requirements, which provide information about how the organization manages its emissions-related impacts.
- Section 2 contains seven disclosures, which provide information about the organization's emissions-related impacts.
- The Glossary contains defined terms with a specific meaning when used in the GRI Standards
- The Bibliography lists authoritative intergovernmental instruments and additional references used in developing this Standard.

The rest of the Introduction section provides a background on the topic, an overview of the system of GRI Standards and further information on using this Standard.

## Background on the topic

GRI 305: Emissions 2016 addresses emissions into air, which are the discharge of substances from a source into the atmosphere. Types of emissions include: greenhouse gas (GHG), ozone-depleting substances (ODS), and nitrogen oxides (NOx) and sulfur oxides (SOx), among other significant air emissions.

## 67 GHG emissions

GHG emissions are a major contributor to climate change and are governed by the United Nations (UN) 'Framework Convention on Climate Change' and the subsequent UN 'Kyoto Protocol'.

70 This Standard covers the following GHGs:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF<sub>6</sub>)
- Nitrogen trifluoride (NF<sub>3</sub>)

Some GHGs, including methane, are also air pollutants that have significant adverse impacts on ecosystems, air quality, agriculture, and human and animal health.

As a result, different national and international regulations and incentive systems, such as emissions trading, aim to control the volume and reward the reduction of GHG emissions.

The reporting requirements for GHG emissions in this Standard are based on the requirements of the 'GHG Protocol Corporate Accounting and Reporting Standard' ('GHG Protocol Corporate Standard') and the 'GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard' ('GHG Protocol Corporate Value Chain Standard'). These two standards are part of the GHG Protocol

Protocol Corporate Value Chain Standard'). These two standards are part of the GHG Protocol
 developed by the World Resources Institute (WRI) and the World Business Council on Sustainable

Development (WBCSD).

**Commented [SD4]:** The introduction has been aligned with the introduction in the revised Universal Standards

**Commented [SD5]:** This section has been aligned with the revised Universal Standards, but has been customized to this Topic Standard.

**Commented [SD6]:** This section comes from section D. Background context in *GRI 305: Emissions 2016* (on page 4).

The following paragraph from section D. Background context has been removed:

In the context of the GRI Standards, the environmental dimension of sustainability concerns an organization's impacts on living and non-living natural systems, including land, air, water and ecosystems.'

This paragraph has been removed, because the Topic Standards will no longer be categorized in economic, environmental, and social series.



The GHG Protocol has established a classification of GHG emissions called 'Scope': Scope 1, Scope 2 and Scope 3. The GHG emissions standard published by the International Organization for

- 90 Standardization (ISO), 'ISO 14064', represents these classifications of Scope with the following terms:
  - Direct GHG emissions = Scope I
- Energy indirect GHG emissions = Scope 2
- Other indirect GHG emissions = Scope 3
  - In this Standard, these terms are combined in the following way, as defined in the Glossary section:
    - Direct (Scope 1) GHG emissions
  - Energy indirect (Scope 2) GHG emissions
  - Other indirect (Scope 3) GHG emissions
- 98 Ozone-depleting substances (ODS)
- 99 The ozone layer filters out most of the sun's biologically harmful ultraviolet (UV-B) radiation. Observed
- and projected ozone depletion due to ODS generates worldwide concern. The UN Environment
- 101 Programme (UNEP) 'Montreal Protocol on Substances that Deplete the Ozone Layer' ('Montreal
- 102 Protocol') regulates the phase-out of ODS internationally.
- 103 Nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and other significant air emissions
- 104 Pollutants such as NO<sub>X</sub> and SO<sub>X</sub> have adverse effects on climate, ecosystems, air quality, habitats,
- 105 agriculture, and human and animal health. Deterioration of air quality, acidification, forest degradation
- and public health concerns have led to local and international regulations to control emissions of
- 107 these pollutants.

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- 108 Reductions in the emission of regulated pollutants lead to improved health conditions for workers and
- 109 local communities and can enhance relations with affected stakeholders. In regions with emission
- 110 caps, the volume of emissions also has direct cost implications.
- 111 Other significant air emissions include, for example, persistent organic pollutants or particulate matter,
- as well as air emissions that are regulated under international conventions and/or national laws or
- regulations, including those listed on an organization's environmental permits.

## 114 System of GRI Standards

- 115 This Standard is part of the GRI Sustainability Reporting Standards (GRI Standards). The GRI
- 116 Standards enable an organization to report information about its most significant impacts on the
- 117 economy, environment, and people, including impacts on their human rights, and how it manages
- these impacts.
- 119 The GRI Standards are structured as a system of interrelated standards that are organized into three
- 120 series: GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards (see Figure 1 in
- 121 this Standard).
- 122 Universal Standards: GRI 1, GRI 2 and GRI 3
- 123 GRI 1: Foundation 2021 specifies the requirements that the organization must comply with to report in
- accordance with the GRI Standards. The organization begins using the GRI Standards by consulting
- 125 GRI 1.
- 126 GRI 2: General Disclosures 2021 contains disclosures that the organization uses to provide
- 127 information about its reporting practices and other organizational details, such as its activities,
- 128 governance, and policies.
- 129 GRI 3: Material Topics 2021 provides guidance on how to determine material topics. It also contains
- 130 disclosures that the organization uses to report information about its process of determining material
- topics, its list of material topics, and how it manages each topic.

**Commented [SD7]:** This section is the same as in the revised Universal Standards.



### Sector Standards

- 133 The Sector Standards provide information for organizations about their likely material topics. The
- 134 organization uses the Sector Standards that apply to its sectors when determining its material topics
- and when determining what to report for each material topic.

### 136 Topic Standards

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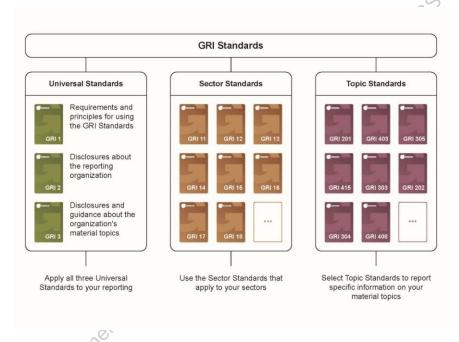
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- 137 The Topic Standards contain disclosures that the organization uses to report information about its
- 138 impacts in relation to particular topics. The organization uses the Topic Standards according to the list
  - of material topics it has determined using GRI 3.

## Figure 1. GRI Standards: Universal, Sector and Topic Standards



## **Using this Standard**

- This Standard can be used by any organization regardless of size, type, sector, geographic location, or reporting experience to report information about its emissions-related <u>impacts</u>.
- An organization reporting in accordance with the GRI Standards is required to report the following disclosures if it has determined emissions as a <u>material topic</u>:
  - Disclosure 3-3 in GRI 3: Material Topics 2021 (see clause 1.1 in this Standard);
  - Clause 1.2 in this Standard. The organization is required to report clause 1.2 only if it is relevant to its impacts in relation to emissions;
  - The disclosures from this Topic Standard that are relevant to the organization's impacts in relation to emissions (Disclosures 305-1 to 305-7).
- See Requirements 4 and 5 in GRI 1: Foundation 2021.



152 Reasons for omission are permitted for these requirements and disclosures. 153 If the organization cannot comply with a disclosure or with a requirement in a disclosure (e.g., 154 because the required information is confidential or subject to legal prohibitions), the organization is 155 required to specify the disclosure or the requirement it cannot comply with, and provide a reason for 156 omission together with an explanation in the GRI content index. See Requirement 6 in GRI 1: 157 Foundation 2021 for more information on reasons for omission. 158 If the organization cannot report the required information about an item specified in a disclosure 159 because the item (e.g., committee, policy, practice, process) does not exist, it can comply with the 160 requirement by reporting this to be the case. The organization can explain the reasons for not having 161 this item, or describe any plans to develop it. The disclosure does not require the organization to 162 implement the item (e.g., developing a policy), but to report that the item does not exist. 163 If the organization intends to publish a standalone sustainability report, it does not need to repeat 164 information that it has already reported publicly elsewhere, such as on web pages or in its annual 165 report. In such a case, the organization can report a required disclosure by providing a reference in 166 the GRI content index as to where this information can be found (e.g., by providing a link to the web page or citing the page in the annual report where the information has been published). 167 168 Requirements, guidance and defined terms 169 The following apply throughout this Standard: 170 Requirements are presented in **bold font** and indicated by the word 'shall'. An organization must comply with requirements to report in accordance with the GRI Standards. 171 172 Requirements may be accompanied by guidance. 173 Guidance includes background information, explanations, and examples to help the organization better understand the requirements. The organization is not required to comply with guidance. 174 175 The Standards may also include recommendations. These are cases where a particular course of 176 action is encouraged but not required. 177 The word 'should' indicates a recommendation, and the word 'can' indicates a possibility or option. Defined terms are underlined in the text of the GRI Standards and linked to their definitions in the 178 This document does not Glossary. The organization is required to apply the definitions in the Glossary. 179

**Commented [SD8]:** This section has been aligned with the revised Universal Standards, but has been customized to this Topic Standard.

**Commented [SD9]:** This section is the same as in the revised Universal Standards.



## **Topic management disclosures**

181 An organization reporting in accordance with the GRI Standards is required to report how it manages

182 each of its material topics. 183 An organization that has determined emissions to be a material topic is required to report how it

184 manages the topic using Disclosure 3-3 in GRI 3: Material Topics 2021 (see clause 1.1 in this

185 section). The organization is also required to report information about how it manages its emissions-186 related impacts using clause 1.2 in this section, if it is relevant to its specific impacts.

This section is therefore designed to supplement – and not replace – Disclosure 3-3 in GRI 3. 187

#### 188 Requirements

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189 1.1 The reporting organization shall report how it manages emissions using Disclosure 3-3 190 in GRI 3: Material Topics 2021.

1.2 When reporting on GHG emissions targets, the reporting organization shall explain whether offsets were used to meet the targets, including the type, amount, criteria or scheme of which the offsets are part.

#### Guidance

The reporting organization can also:

explain whether it is subject to any country, regional, or industry-level emissions regulations and policies; and provide examples of these regulations and policies;

mi. is cert is cert does not represent does not res disclose expenditures on treatment of emissions (such as expenditures for filters, agents) and for the purchase and use of emissions certificates.

Commented [SD10]: The Standard title and the overview of disclosures has been removed from this

Commented [SD11]: The title of this section has been updated. The revised Universal Standards no longer include 'management approach disclosures'.

Original text: Management approach disclosures

Commented [SD12]: This section has been updated.

#### Original text:

Management approach disclosures are a narrative explanation of how an organization manages a material topic, the associated impacts, and stakeholders' reasonable expectations and interests. Any organization that claims its report has been prepared in accordance with the GRI Standards is required to report on its management approach for every material topic, as well as reporting topic-specific disclosures for those topics.

Therefore, this topic-specific Standard is designed to be used together with GRI 103: Management Approach in order to provide full disclosure of the organization's impacts. GRI 103 specifies how to report on the management approach and what information to provide.

Commented [SD13]: This requirement has been updated to align with the revisions to GRI 3: Material Topics 2021.

<u>Original text:</u> The reporting organization shall report its management approach for emissions using GRI 103: Management **Approach** 

Commented [SD14]: This sentence has been updated. The revised Universal Standards no longer include the concept of 'management approach'.

Original text:
When reporting its management approach for emissions, the reporting organization can also:



## 2. Topic disclosures

## Disclosure 305-1 Direct (Scope 1) GHG emissions

#### 202 Requirements

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- 203 The reporting organization shall report the following information:
- 204 Gross direct (Scope 1) GHG emissions in metric tons of CO2 equivalent.
- 205 Gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.
- 206 Biogenic CO2 emissions in metric tons of CO2 equivalent.
- Base year for the calculation, if applicable, including: 207
- 208 the rationale for choosing it;
- 209 ii. emissions in the base year;
- the context for any significant changes in emissions that triggered recalculations 210 iii. 211 of base year emissions.
- 212 Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. 213
- Consolidation approach for emissions; whether equity share, financial control, or 214 operational control. 215
- 216 g. Standards, methodologies, assumptions, and/or calculation tools used.

#### Compilation requirements 217

- When compiling the information specified in Disclosure 305-1, the reporting organization shall:
  - exclude any GHG trades from the calculation of gross direct (Scope 1) GHG 2.1.1 emissions:
  - 212 report biogenic emissions of CO2 from the combustion or biodegradation of biomass separately from the gross direct (Scope 1) GHG emissions. Exclude biogenic emissions of other types of GHG (such as CH4 and N2O), and biogenic emissions of CO2 that occur in the life cycle of biomass other than from combustion or biodegradation (such as GHG emissions from processing or transporting biomass).

### Recommendations

- 229 When compiling the information specified in Disclosure 305-1, the reporting organization 230 should:
  - apply emission factors and GWP rates consistently for the data disclosed;
- 232 use the GWP rates from the IPCC assessment reports based on a 100-year 2.2.2 233 timeframe:

Commented [SD15]: The title of this section has been updated. In the revised Universal Standards, 'Topicspecific Standards' were changed to 'Topic Standards'.

Original text:
Topic-specific disclosures

Commented [SD16]: This has been updated throughout this Standard to align with the revised Universal Standards.

Original text:

Reporting requirements

Commented [SD17]: A heading has been added for the requirements in clauses (e.g., 2.1) to clarify that these are compilation requirements.

Commented [SD18]: This has been updated throughout this Standard to align with the revised Universal Standards.

Original text: Reporting recommendations



234 235 236	2.2.3	(Scope 2	consistent approach for consolidating direct (Scope 1) and <u>energy indirect</u> <u>OGHG emissions</u> ; choosing from the equity share, financial control, or all control methods outlined in the 'GHG Protocol Corporate Standard';
237 238	2.2.4	if subject selecting	to different standards and methodologies, describe the approach to them;
239 240	2.2.5		aids transparency or comparability over time, provide a breakdown of the cope 1) GHG emissions by:
241		2.2.5.1	business unit or facility;
242		2.2.5.2	country;
243		2.2.5.3	country; type of source (stationary combustion, process, fugitive);
244		2.2.5.4	type of activity.

### 245 Guidance

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### Guidance for Disclosure 305-1

Direct (Scope 1) GHG emissions include, but are not limited to, the CO<sub>2</sub> emissions from the fuel consumption as reported in Disclosure 302-1 of *GRI 302: Energy 2016*.

Direct (Scope 1) GHG emissions can come from the following sources owned or controlled by an organization:

- Generation of electricity, heating, cooling and steam: these emissions result from combustion
  of fuels in stationary sources, such as boilers, furnaces, and turbines and from other
  combustion processes such as flaring;
- Physical or chemical processing: most of these emissions result from the manufacturing or processing of chemicals and materials, such as cement, steel, aluminum, ammonia, and waste processing;
- Transportation of materials, products, waste, workers, and passengers: these emissions
  result from the combustion of fuels in mobile combustion sources owned or controlled by the
  organization, such as trucks, trains, ships, airplanes, buses, and cars;
- Fugitive emissions: these are emissions that are not physically controlled but result from
  intentional or unintentional releases of GHGs. These can include equipment leaks from joints,
  seals, packing, and gaskets; methane emissions (e.g., from coal mines) and venting; HFC
  emissions from refrigeration and air conditioning equipment; and methane leakages (e.g.,
  from gas transport).

Methodologies used to calculate the direct (Scope I) GHG emissions can include:

- direct measurement of energy source consumed (coal, gas) or losses (refills) of cooling systems and conversion to GHG (CO<sub>2</sub> equivalents);
- mass balance calculations;
- calculations based on site-specific data, such as for fuel composition analysis;
- calculations based on published criteria, such as emission factors and GWP rates;
- direct measurements of GHG emissions, such as continuous online analyzers;
- · estimations.

If estimations are used due to a lack of default figures, the reporting organization can indicate the basis and assumptions on which figures were estimated.

For recalculations of prior year emissions, the organization can follow the approach in the 'GHG Protocol Corporate Standard'.

**Commented [SD19]:** The publication year has been added.

The publication year will be added to all Standard titles to clarify which version it refers to.



277 The chosen emission factors can originate from mandatory reporting requirements, voluntary 278 reporting frameworks, or industry groups.

Estimates of GWP rates change over time as scientific research develops. GWP rates from the Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) are used as the basis for international negotiations under the 'Kyoto Protocol'. Thus, such rates can be used for disclosing GHG emissions where it does not conflict with national or regional reporting requirements.

282 283 The organization can also use the latest GWP rates from the most recent IPCC assessment report.

The organization can combine Disclosure 305-1 with Disclosures 305-2 (energy indirect/Scope 2 284 285 GHG emissions) and 305-3 (other indirect/Scope 3 GHG emissions) to disclose total GHG emissions.

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Commented [SD20]: Throughout the Standard, the format for in-text referencing has been updated, and 'References section' has been replaced by 'Bibliography'.

Original text: See also references 1, 2, 12, 13, 14 and 19 in the References section.

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#### Disclosure 305-2 Energy indirect (Scope 2) GHG emissions 288 289 Requirements 290 The reporting organization shall report the following information: 291 Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 292 equivalent. 293 b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons 294 of CO<sub>2</sub> equivalent. c. If available, the gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, 295 296 297 d. Base year for the calculation, if applicable, including: 298 i. the rationale for choosing it; 299 ii. emissions in the base year; the context for any significant changes in emissions that triggered recalculations 300 iii. 301 of base year emissions. 302 Source of the emission factors and the global warming potential (GWP) rates used, or a 303 reference to the GWP source. Consolidation approach for emissions; whether equity share, financial control, or 304 305 operational control. g. Standards, methodologies, assumptions, and/or calculation tools used. 306 **Compilation requirements** 307 308 When compiling the information specified in Disclosure 305-2, the reporting 309 organization shall: 310 exclude any GHG trades from the calculation of gross energy indirect (Scope 2) 311 GHG emissions: 312 2.3.2 exclude other indirect (Scope 3) GHG emissions that are disclosed as specified 313 in Disclosure 305-3; 314 2.3.3 account and report energy indirect (Scope 2) GHG emissions based on the 315 location-based method, if it has operations in markets without product or supplier-specific data; 316 317 account and report energy indirect (Scope 2) GHG emissions based on both the 318 location-based and market-based methods, if it has any operations in markets 319 providing product or supplier-specific data in the form of contractual 320 instruments. 321 Recommendations 322 2.4 When compiling the information specified in Disclosure 305-2, the reporting organization

apply emission factors and GWP rates consistently for the data disclosed;

use the GWP rates from the IPCC assessment reports based on a 100-year



should:

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2.4.2

timeframe;

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327 328 329	2.4.3	(Scope 2)	consistent approach for consolidating <u>direct (Scope 1)</u> and ) GHG emissions, choosing from the equity share, financia al control methods outlined in the 'GHG Protocol Corporat	l control, or
330 331	2.4.4	if subject selecting	to different standards and methodologies, describe the apthem;	proach to
332 333	2.4.5		aids transparency or comparability over time, provide a bre direct (Scope 2) GHG emissions by:	akdown of the
334		2.4.5.1	business unit or facility;	
335		2.4.5.2	country;	68
336		2.4.5.3	type of source (electricity, heating, cooling, and steam);	6550
337		2.4.5.4	type of activity.	~@

#### 338 Guidance

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### Guidance for Disclosure 305-2

Energy indirect (Scope 2) GHG emissions include, but are not limited to, the CO2 emissions from the generation of purchased or acquired electricity, heating, cooling, and steam consumed by an organization - disclosed as specified in Disclosure 302-1 of GRI 302: Energy 2016. For many organizations, the energy indirect (Scope 2) GHG emissions that result from the generation of purchased electricity can be much greater than their direct (Scope 1) GHG emissions.

The 'GHG Protocol Scope 2 Guidance' requires organizations to provide two distinct Scope 2 values: a location-based and a market-based value. A location-based method reflects the average GHG emissions intensity of grids on which energy consumption occurs, using mostly grid-average emission factor data. A market-based method reflects emissions from electricity that an organization has purposefully chosen (or its lack of choice). It derives emission factors from contractual instruments. which include any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims.

The market-based method calculation also includes the use of a residual mix, if the organization does not have specified emissions-intensity from its contractual instruments. This helps prevent double counting between consumers' market-based method figures. If a residual mix is unavailable, the organization can disclose this and use grid-average emission factors as a proxy (which can mean that the location-based and market-based are the same number until information on the residual mix is available).

358 The reporting organization can apply the Quality Criteria in the 'GHG Protocol Scope 2 Guidance' so that contractual instruments convey GHG emission rate claims and to prevent double counting. See 359 360 reference [18] in the Bibliography.

361 For recalculations of prior year emissions, the organization can follow the approach in the 'GHG 362 Protocol Corporate Standard'.

363 The chosen emission factors can originate from mandatory reporting requirements, voluntary 364 reporting frameworks, or industry groups.

365 Estimates of GWP rates change over time as scientific research develops. GWP rates from the 366 Second Assessment Report of the IPCC are used as the basis for international negotiations under the 367 'Kyoto Protocol'. Thus, such rates can be used for disclosing GHG emissions where it does not

conflict with national or regional reporting requirements. The organization can also use the latest 368

GWP rates from the most recent IPCC assessment report. 369

370 The organization can combine Disclosure 305-2 with Disclosures 305-1 (direct/Scope 1 GHG 371 emissions) and 305-3 (other indirect/Scope 3 GHG emissions) to disclose total GHG emissions.

Further details and guidance are available in the 'GHG Protocol Corporate Standard'. Details on the 372 373 location-based and market-based methods are available in the 'GHG Protocol Scope 2 Guidance'.

374 See also references [1], [2], [12], [13], [14] and [18] in the Bibliography.



#### Disclosure 305-3 Other indirect (Scope 3) GHG emissions 375 376 Requirements 377 The reporting organization shall report the following information: 378 Gross other indirect (Scope 3) GHG emissions in metric tons of CO2 equivalent. b. If available, the gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, 379 380 NF<sub>3</sub>, or all. c. Biogenic CO<sub>2</sub> emissions in metric tons of CO<sub>2</sub> equivalent. 381 Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. 382 383 calculation. Base year for the calculation, if applicable, including: 384 385 i. the rationale for choosing it; 386 ii. emissions in the base year; 387 the context for any significant changes in emissions that triggered recalculations 388 of base year emissions. Source of the emission factors and the global warming potential (GWP) rates used, or a 389 390 reference to the GWP source. g. Standards, methodologies, assumptions, and/or calculation tools used. 391 392 Compilation requirements 393 When compiling the information specified in Disclosure 305-3, the reporting 394 organization shall: 395 2.5.1 exclude any GHG trades from the calculation of gross other indirect (Scope 3) 396 GHG emissions; 397 2.5.2 exclude energy indirect (Scope 2) GHG emissions from this disclosure. Energy 398 indirect (Scope 2) GHG emissions are disclosed as specified in Disclosure 305-399 400 2.5.3 report biogenic emissions of CO<sub>2</sub> from the combustion or biodegradation of 401 biomass that occur in its value chain separately from the gross other indirect 402 (Scope 3) GHG emissions. Exclude biogenic emissions of other types of GHG 403 (such as CH<sub>4</sub> and N<sub>2</sub>O), and biogenic emissions of CO<sub>2</sub> that occur in the life 404 cycle of biomass other than from combustion or biodegradation (such as GHG 405 emissions from processing or transporting biomass). 406 Recommendations 407 2.6 When compiling the information specified in Disclosure 305-3, the reporting organization 408 409 2.6.1 apply emission factors and GWP rates consistently for the data disclosed; 410 2.6.2 use the GWP rates from the IPCC assessment reports based on a 100-year 411

if subject to different standards and methodologies, describe the approach to



2.6.3

selecting them;

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414 415	2.6.4		indirect (Scope 3) GHG emissions, with a breakdown by upstream and am categories and activities;
416 417	2.6.5		aids transparency or comparability over time, provide a breakdown of the rect (Scope 3) GHG emissions by:
418		2.6.5.1	business unit or facility;
419		2.6.5.2	country;
420		2.6.5.3	type of source;
421		2.6.5.4	type of activity.
422	Guidance		202.0
423	Guidance for l	Disclosure	e 305-3

Other indirect (Scope 3) GHG emissions are a consequence of an organization's activities, but occur from sources not owned or controlled by the organization. Other indirect (Scope 3) GHG emissions include both upstream and downstream emissions. Some examples of Scope 3 activities include extracting and producing purchased materials; transporting purchased fuels in vehicles not owned or controlled by the organization; and the end use of products and services.

Other indirect emissions can also come from the decomposing of the organization's waste. Processrelated emissions during the manufacture of purchased goods and fugitive emissions in facilities not

owned by the organization can also produce indirect emissions.

For some organizations, GHG emissions that result from energy consumption outside of the organization can be much greater than their direct (Scope 1) or energy indirect (Scope 2) GHG emissions.

The reporting organization can identify other indirect (Scope 3) GHG emissions by assessing which of its activities' emissions:

- contribute significantly to the organization's total anticipated other indirect (Scope 3) GHG
  emissions:
- offer potential for reductions the organization can undertake or influence;
- contribute to climate change-related risks, such as financial, regulatory, supply chain, product and customer, litigation, and reputational risks;
- are deemed material by stakeholders, such as customers, suppliers, investors, or civil society;
  - result from outsourced activities previously performed in-house, or that are typically performed in-house by other organizations in the same sector;
  - have been identified as significant for the organization's sector;
  - meet any additional criteria for determining relevance, developed by the organization or by organizations in its sector.

The organization can use the following upstream and downstream categories and activities from the 'GHC Protocol Corporate Value Chain Standard' (see reference [15] in the Bibliography):

## 450 Upstream categories

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- 1. Purchased goods and services
- Capital goods
- 3. Fuel- and energy-related activities (not included in Scope 1 or Scope 2)
- 454 4. Upstream transportation and distribution
- 455 5. Waste generated in operations
- 456 6. Business travel



458	Upstream leased assets
459	Other upstream
460	Downstream categories
461	9. Downstream transportation and distribution
462	10. Processing of sold products
463	11. Use of sold products
464	<ul> <li>12. End-of-life treatment of sold products</li> <li>13. Downstream leased assets</li> <li>14. Franchises</li> <li>15. Investments         Other downstream</li> </ul> For each of these categories and activities, the organization can provide a figure in CO <sub>2</sub> equivalent or
465	13. Downstream leased assets
466	14. Franchises
467	15. Investments
468	Other downstream
469 470	For each of these categories and activities, the organization can provide a figure in $CO_2$ equivalent or explain why certain data are not included.
471 472	For recalculations of prior year emissions, the organization can follow the approach in the 'GHG Protocol Corporate Value Chain Standard'.
473 474	The chosen emission factors can originate from mandatory reporting requirements, voluntary reporting frameworks, or industry groups.
475 476 477 478 479	Estimates of GWP rates change over time as scientific research develops. GWP rates from the Second Assessment Report of the IPCC are used as the basis for international negotiations under the 'Kyoto Protocol'. Thus, such rates can be used for disclosing GHG emissions where it does not conflict with national or regional reporting requirements. The organization can also use the latest GWP rates from the most recent IPCC assessment report.
480 481	The organization can combine Disclosure 305-3 with Disclosures 305-1 (direct/Scope 1 GHG emissions) and 305-2 (energy indirect/Scope 2 GHG emissions) to disclose total GHG emissions.
482	See references [1], [2], [12], [13], [15], [17] and [19] in the Bibliography.
	See references [1], [2], [13], [13], [17] and [19] in the bibliography.



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7. Employee commuting

## Disclosure 305-4 GHG emissions intensity

484 Requirements

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- 485 The reporting organization shall report the following information:
- 486 a. GHG emissions intensity ratio for the organization.
- 487 b. Organization-specific metric (the denominator) chosen to calculate the ratio.
- 488 c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3).
- 490 d. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.
- 491 Compilation requirements
- 492 2.7 When compiling the information specified in Disclosure 305-4, the reporting organization shall:
  - 2.7.1 calculate the ratio by dividing the absolute GHG emissions (the numerator) by the organization-specific metric (the denominator);
    - 2.7.2 if reporting an intensity ratio for other indirect (Scope 3) GHG emissions, report this intensity ratio separately from the intensity ratios for direct (Scope 1) and energy indirect (Scope 2) emissions.

## 499 Recommendations

- 500 2.8 When compiling the information specified in Disclosure 305-4, the reporting organization
   501 should, where it aids transparency or comparability over time, provide a breakdown of the
   502 GHG emissions intensity ratio by:
- 503 2.8.1 business unit or facility;
- 504 2.8.2 country
- 505 2.8.3 type of source;
- 506 2.8.4 type of activity

## 507 Guidance

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## 508 Guidance for Disclosure 305-4

- Intensity ratios can be provided for, among others:
  - products (such as metric tons of CO<sub>2</sub> emissions per unit produced);
  - services (such as metric tons of CO<sub>2</sub> emissions per function or per service);
  - sales (such as metric tons of CO<sub>2</sub> emissions per sales).
- 513 Organization-specific metrics (denominators) can include:
- units of product;
- production volume (such as metric tons, liters, or MWh);
- size (such as m² floor space);
- number of full-time employees;
- monetary units (such as revenue or sales).



519 The reporting organization can report an intensity ratio for direct (Scope 1) and energy indirect (Scope 2) GHG emissions combined, using the figures reported in Disclosures 305-1 and 305-2. 520

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Intensity ratios define GHG emissions in the context of an organization-specific metric. Many organizations track environmental performance with intensity ratios, which are often called normalized 522 523 524 environmental impact data.

of an asions, experience of the prosent an official position of the prosent and the prosen 525 GHG emissions intensity expresses the amount of GHG emissions per unit of activity, output, or any 526 other organization-specific metric. In combination with an organization's absolute GHG emissions, 527

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## **Disclosure 305-5 Reduction of GHG emissions**

#### 531 Requirements

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- 532 The reporting organization shall report the following information:
- 533 GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO2 534 equivalent.
- b. Gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all. 535
- c. Base year or baseline, including the rationale for choosing it. 536
- 537 Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). 538
- e. Standards, methodologies, assumptions, and/or calculation tools used. 539

### **Compilation requirements**

- 541 When compiling the information specified in Disclosure 305-5, the reporting organization shall: 542
- 543 2.9.1 exclude reductions resulting from reduced production capacity or outsourcing;
  - 2.9.2 use the inventory or project method to account for reductions;
    - 2.9.3 calculate an initiative's total reductions of GHG emissions as the sum of its associated primary effects and any significant secondary effects;
    - if reporting two or more  $\underline{\textbf{Scope}}$  types, report the reductions for each separately; 2.9.4
- 2.9.5 report reductions from offsets separately. 548

#### 549 Recommendations

550 When compiling the information specified in Disclosure 305-5, the reporting organization 551 should, if subject to different standards and methodologies, describe the approach to selecting 552

#### 553 Guidance

#### 554 Guidance for Disclosure 305-5

555 The reporting organization can prioritize disclosing reduction initiatives that were implemented in the 556 reporting period, and that have the potential to contribute significantly to reductions. Reduction initiatives and their targets can be described in the management approach for this topic.

558 Reduction initiatives can include:

- process redesign;
- conversion and retrofitting of equipment;
- fuel switching:
- 562 changes in behavior;
- 564 The organization can report reductions disaggregated by initiatives or groups of initiatives.
- 565 This disclosure can be used in combination with Disclosures 305-1, 305-2, and 305-3 of this Standard 566 to monitor the reduction of GHG emissions with reference to the organization's targets, or to

567 regulations and trading systems at international or national level.

Commented [SD21]: This is an example of text within the disclosures that needs to be rewritten, because the concept of 'management approach' is no longer included in the revised Universal Standards.



568 See references [12], [13], [14], [15], [16], and [19] in the Bibliography.

#### 569 Guidance for clause 2.9.2

570 The inventory method compares reductions to a base year. The project method compares reductions

to a baseline. Further details on these methods are available in references [15] and [16] in the

571 572 Bibliography.

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#### 573 Guidance for clause 2.9.3

July and the present an official position of the contract 574 Primary effects are the elements or activities designed to reduce GHG emissions, such as carbon 575

storage. Secondary effects are smaller, unintended consequences of a reduction initiative, including

changes to production or manufacture, which result in changes to GHG emissions elsewhere. See



578	וט	sciosure	e 305-6 Emissions of ozone-depleting substances (ODS)		
579	Requirements				
580	The	ereporting	organization shall report the following information:		
581 582	a.	Production equivalent	n, imports, and exports of <u>ODS</u> in metric tons of <u>CFC-11 (trichlorofluoromethane)</u>		
583	b.	Substance	es included in the calculation.		
584	c.	Source of	the emission factors used.		
585	d.		the emission factors used.  , methodologies, assumptions, and/or calculation tools used.		
586	Co	mpilation re	equirements		
587 588	2.1		compiling the information specified in Disclosure 305-6, the reporting cation shall:		
589 590 591		2.11.1	calculate the production of ODS as the amount of ODS produced, minus the amount destroyed by approved technologies, and minus the amount entirely used as feedstock in the manufacture of other chemicals;		
592			Production of ODS		
593			= -		
594 595			ODS produced		
596			ODS destroyed by approved technologies		
597			· · · · ·		
598 599			ODS entirely used as feedstock in the manufacture of other chemicals		
600		2.11.2	exclude ODS recycled and reused.		
601	Red	commenda	tions		
602 603	2.1	2 When c should:	ompiling the information specified in Disclosure 305-6, the reporting organization		
604 605		2.12.1	if subject to different standards and methodologies, describe the approach to selecting them;		
606 607		2.12.2	where it aids transparency or comparability over time, provide a breakdown of the ODS data by:		
608		90	2.12.2.1 business unit or facility;		
609		is	2.12.2.2 country;		
610		,	2.12.2.3 type of source;		
611			2.12.2.4 type of activity.		
612	Gui	idance			
613	Gu	idance for l	Disclosure 305-6		
614 615		e reporting o	organization can report separate or combined data for the substances included in the		



## Background

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- 617 Measuring ODS production, imports, and exports helps to indicate how an organization complies with
- 618 legislation. This is particularly relevant if the organization produces or uses ODS in its processes,
- 619 products and services and is subject to phase-out commitments. Results on ODS phase-out help to
- 620 indicate the organization's position in any markets affected by regulation on ODS.
- 621 This disclosure covers the substances included in Annexes A, B, C, and E of the 'Montreal Protocol'
- 622 as well as any other ODS produced, imported, or exported by an organization.
- 623

This document does not represent an official position of the CSSB



624 625			re 305-7 Nitrogen oxides (NO $_{\rm X}$ ), sulfur oxides (SO $_{\rm X}$ ), and nificant air emissions
626	Requ	irement	s
627	The r	eporting	organization shall report the following information:
628	a. <u>S</u>	ignifica	nt air emissions, in kilograms or multiples, for each of the following:
629		i. N	Ox Ox ersistent organic pollutants (POP) olatile organic compounds (VOC) azardous air pollutants (HAP) articulate matter (PM)
630		ii. S	O <sub>X</sub>
631		iii. P	ersistent organic pollutants (POP)
632		iv. V	olatile organic compounds (VOC)
633		<b>v.</b> H	azardous air pollutants (HAP)
634		vi. P	articulate matter (PM)
635		vii. O	ther standard categories of air emissions identified in relevant regulations
636	b. S	ource of	f the emission factors used.
637	c. S	tandard	s, methodologies, assumptions, and/or calculation tools used.
638	Com	pilation	requirements
639 640 641	2.13		compiling the information specified in Disclosure 305-7, the reporting ization shall select one of the following approaches for calculating significant air ions:
642		2.13.1	Direct measurement of emissions (such as online analyzers);
643		2.13.2	Calculation based on site-specific data;
644		2.13.3	Calculation based on published emission factors;
645 646		2.13.4	Estimation. If estimations are used due to a lack of default figures, the organization shall indicate the basis on which figures were estimated.
647	Reco	mmenda	ations
648 649	2.14	When should	compiling the information specified in Disclosure 305-7, the reporting organization
650 651	٠	2.14.1	if subject to different standards and methodologies, describe the approach to selecting them;
652 653	1/1	2.14.2	where it aids transparency or comparability over time, provide a breakdown of the air emissions data by:
654			2.14.2.1 business unit or facility;
655			2.14.2.2 country;
656			2.14.2.3 type of source;



2.14.2.4 type of activity.

658 Guidance

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See references [3], [4], [5], [6] and [10] in the Bibliography.

This document does not represent an official position of the CESSB

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Giossary
This glossary provides definitions for terms used in this Standard. The organization is required to apply these definitions when using the GRI Standards.
The definitions included in this glossary may contain terms that are further defined in the complete <i>GRI Standards Glossary</i> . All defined terms are underlined. If a term is not defined in this glossary or in the complete <i>GRI Standards Glossary</i> , definitions that are commonly used and understood apply.
base year
historical datum (such as year) against which a measurement is tracked over time
base year historical datum (such as year) against which a measurement is tracked over time baseline starting point used for comparisons
starting point used for comparisons
<b>Note:</b> In the context of energy and emissions reporting, the baseline is the projected energy consumption or emissions in the absence of any reduction activity.
biogenic carbon dioxide (CO <sub>2</sub> ) emission
emission of CO <sub>2</sub> from the combustion or biodegradation of biomass
carbon dioxide (CO₂) equivalent
measure used to compare the emissions from various types of greenhouse gas (GHG) based on their global warming potential (GWP)
<b>Note:</b> The $CO_2$ equivalent for a gas is determined by multiplying the metric tons of the gas by the associated GWP.
CFC11 (trichlorofluoromethane) equivalent
measure used to compare various substances based on their relative ozone depletion potential (ODP)
<b>Note:</b> The reference level of 1 is the potential of CFC-11 (trichlorofluoromethane) and CFC-12 (dichlorodifluoromethane) to cause ozone depletion.
direct (Scope 1) GHG emissions
GHG emissions from sources that are owned or controlled by an organization
Note 1: A GHG source is any physical unit or process that releases GHG into the atmosphere.
Note 2: Direct (Scope 1) GHG emissions can include the CO <sub>2</sub> emissions from fuel consumption.
energy indirect (Scope 2) GHG emissions
$\underline{\text{GHG}}$ emissions that result from the generation of purchased or acquired electricity, heating, cooling, and steam consumed by an organization
global warming potential (GWP)
value describing the radiative forcing impact of one unit of a given <u>GHG</u> relative to one unit of CO <sub>2</sub> over a given period of time
Note: GWP values convert GHG emissions data for non-CO <sub>2</sub> gases into units of CO <sub>2</sub> equivalent.
greenhouse gas (GHG)

gas that contributes to the greenhouse effect by absorbing infrared radiation

**Commented [SD22]:** The glossary has been updated.

Please note that those definitions that are only included in this Topic Standard have not yet been updated to the style used in the revised Universal Standards. This work still needs to be completed. The terms 'impact' and 'material topics' are presented as in the revised Universal Standards, because they have been taken from the revised Universal Standards.

Commented [SD23]: This section has been updated.

Original text:
This Glossary includes definitions for terms used in this Standard, which apply when using this Standard.
These definitions may contain terms that are further defined in the complete GRI Standards Glossary.

All defined terms are underlined. If a term is not defined in this Glossary or in the complete *GRI Standards Glossary*, definitions that are commonly used and understood apply.



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697	purchase, sale or transfer of <u>GHG</u> emission offsets or allowances
698	impact
699 700 701	effect the organization has or could have on the economy, environment, and people, including on their <a href="https://human.rights">https://human.rights</a> , which in turn can indicate its contribution (negative or positive) to <a href="https://sustainable.gov/sustainable-gevelopment">sustainable</a> <a href="https://development">development</a>
702 703	Note 1: Impacts can be actual or potential, negative or positive, short-term or long-term, intended or unintended, and reversible or irreversible.
704	Note 2: See section 2.1 in <i>GRI 1: Foundation 2021</i> for more information on 'impact'.
705	material topics
706 707	topics that represent the organization's most significant <u>impacts</u> on the economy, environment, and people, including impacts on their <u>human rights</u>
708 709	Note: See section 2.2 in <i>GRI 1: Foundation 2021</i> and section 1 in <i>GRI 3: Material Topics 2021</i> for more information on 'material topics'.
710	other indirect ( <u>Scope</u> 3) GHG emissions
711 712	indirect <u>GHG</u> emissions not included in <u>energy indirect (Scope 2) GHG emissions</u> that occur outside of the organization, including both upstream and downstream emissions
713	ozone-depleting substance (ODS)
714 715	substance with an ozone depletion potential (ODP) greater than 0 that can deplete the stratospheric ozone layer
716 717 718	<b>Note:</b> Most ODS are controlled under the United Nations Environment Programme (UNEP), 'Montreal Protocol on Substances that Deplete the Ozone Layer', 1987, and its amendments, and include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), halons, and methyl bromide.
719	reduction of greenhouse gas (GHG) emissions
720 721	decrease in <u>GHG</u> emissions or increase in removal or storage of GHG from the atmosphere, relative to <u>baseline</u> emissions
722 723 724	<b>Note:</b> Primary effects will result in GHG reductions, as will some secondary effects. An initiative's total GHG reductions are quantified as the sum of its associated primary effect(s) and any significant secondary effects (which may involve decreases or countervailing increases in GHG emissions).
725	Scope of GHG emissions
726	classification of the operational boundaries where GHG emissions occur
727 728	<b>Note I:</b> Scope classifies whether GHG emissions are created by an organization itself, or are created by other related organizations, for example electricity suppliers or logistics companies.
729	<b>Note 2:</b> There are three classifications of Scope: <u>Scope 1</u> , <u>Scope 2</u> and <u>Scope 3</u> .
730 731 732	<b>Note 3:</b> The classification of Scope derives from the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 'GHG Protocol Corporate Accounting and Reporting Standard', Revised Edition, 2004.
733	significant air emission

air emission regulated under international conventions and/or national laws or regulations

Note: Significant air emissions include those listed on environmental permits for an organization's

**Commented [SD24]:** These terms have been updated with the revised definitions of 'impact' and 'material topics' in the revised Universal Standards.



operations.

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greenhouse gas (GHG) trade

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This section lists authoritative intergovernmental instruments and additional references used in developing this Standard.

#### Authoritative instruments:

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Commented [SD25]: The title of this section has been updated.

Original text: References

Commented [SD26]: This sentence has been updated.

Original text:

The following documents informed the development of this Standard and can be helpful for understanding and applying it.

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Original text:
Authoritative intergovernmental instruments

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Original text:
Other relevant references



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