



Item 02 – GRI Topic Standard Project for Climate Change – Climate Change Exposure draft

For GSSB approval

Date	2 November 2023
Meeting	16 November 2023
Project	GRI Topic Standard Project for Climate Change
Description	<p>This document sets out the exposure draft of GRI Climate Change Standard, including the explanatory memorandum summarizing the objectives of the project and the significant proposals contained within the draft. These are submitted for GSSB approval for public exposure.</p> <p>If approved, it is proposed that public exposure commence in late November 2023 and run until the end of February 2024.</p>

This document has been prepared by the GRI Standards Division and is made available to observers at meetings of the Global Sustainability Standards Board (GSSB). It does not represent an official position of the GSSB. Board positions are set out in the GRI Sustainability Reporting Standards. The GSSB is the independent standard setting body of GRI. For more information visit www.globalreporting.org.

1 Explanatory memorandum

2 This explanatory memorandum sets out the objectives for the project to develop new disclosures
3 related to Climate Change, including the review of the [GRI 305: Emissions 2016 \(Disclosures 305-1 to](#)
4 [305-5\)](#), [GRI 302: Energy 2016](#), and [GRI 201: Economic Performance 2016 \(Disclosure 201-2\)](#), the
5 significant proposals resulting from this project, and a summary of the GSSB's involvement and views
6 on the development of the draft.

7 Objectives for the project

8 The primary objective of this project is to review and revise GRI climate change-related Standards
9 and to incorporate new issues to reflect the stakeholder expectations on reporting climate change-
10 related impacts, that go beyond GHG emissions and energy consumption. As outlined in the GSSB's
11 [Due Process Protocol](#), a multi-stakeholder technical committee was established in May 2023 to
12 contribute to the review of the climate change-related disclosures.

13 The aim is to align with internationally agreed best practice, latest developments, and relevant
14 authoritative intergovernmental instruments related to climate change, greenhouse gas (GHG)
15 emissions, and energy. The scope of the revision includes both reviewing the GHG emissions and
16 energy-related disclosures, as using energy more efficiently and opting for renewable energy sources
17 is essential for combating climate change and reducing an organization's overall environmental
18 footprint.

19 [Disclosures 305-6 and 305-7 from GRI 305: Emissions 2016](#) on non-GHG emissions related issues
20 are excluded from the scope of the project and will be addressed in the future revision of pollution-
21 related disclosures. The review of the [GRI 201: Economic Performance 2016 \(disclosure 201-1, 201-](#)
22 [3, and 201-4\)](#) disclosures will be addressed in the economic-related Standards project commenced in
23 2023.

24 The project is not limited to reviewing the current contents of existing GRI climate change-related
25 disclosures. It also incorporates new issues to reflect the stakeholders' expectations related to
26 reporting climate change-related impacts beyond GHG emissions and energy reporting.

27 Specifically, the revised climate change-related disclosures will enable an organization to disclose
28 publicly:

- 29 • its most significant impacts on climate change and how the organization manages these impacts,
30 enhancing transparency of the organization's impacts and increasing organizational
31 accountability;
- 32 • its climate change-related impacts beyond GHG emissions, including impacts related to just
33 transition, climate transition and adaptation plans, GHG removals in the value chain, and carbon
34 credits.

35 For more information on the project, consult the [Project Proposal](#) and the [Technical Committee](#)
36 [biographies](#).

37 Significant proposals

38 An exposure draft including new disclosures related to climate change, as well as the review of [GRI](#)
39 [305: Emissions 2016 \(Disclosures 305-1 to 305-5\)](#) and [GRI 201: Economic Performance 2016](#)
40 [\(Disclosure 201-2\)](#) has been developed in line with the project objectives as set out above. Notable
41 changes and inclusions in this exposure draft are summarized below.

- 42 • **Incorporation of just transition principles**
43 The Climate Change draft covers a dedicated disclosure on just transition metrics, including the
44 number of jobs created, eliminated, and redeployed due to the transition plan, the number of

45 employees that received training for up- and reskilling and the locations where the organization's
46 transition plan has impacts on local communities and Indigenous Peoples.

47 Moreover, the concept of the just transition is present throughout the Climate Change exposure
48 draft. The draft includes multiple requirements urging organizations to disclose their impacts on
49 workers, local communities, vulnerable groups associated with the adaptation plan, and the use of
50 GHG removals and carbon credits.

51 • **New disclosure on transition plan for climate change mitigation**

52 The Climate Change exposure draft includes a new management disclosure focused on the
53 development of a transition plan for climate change mitigation. The disclosure requires
54 organizations to report information on policies and actions, alignment with latest scientific
55 evidence and relevant goals and targets. In addition to GHG emissions reduction targets,
56 organizations are required to report targets to phase out fossil fuels and any other climate change
57 mitigation targets set. Organizations are also required to report on governance-related aspects,
58 investment allocated to the implementation of the transition plan, integration within the
59 organization's overall business strategy, public policy and stakeholder engagement processes
60 that organizations perform to shape their transition plans.

61 Under this disclosure, organizations report the impacts that result from the implementation of the
62 transition plan. Specifically, the disclosure integrates the principles of just transition, and requires
63 organizations to disclose impacts especially on workers, local communities and vulnerable
64 groups. Furthermore, given the interconnection of climate change with biodiversity, organizations
65 are required to report impacts of the transition plan on biodiversity.

66 • **New disclosure on climate change adaptation**

67 This management disclosure focuses on the development of a climate change adaptation plan
68 and the impacts including on local communities, vulnerable groups, workers, and biodiversity
69 associated with the implementation and outcome of the plan. The disclosure also requires
70 organizations to report any impacts associated with climate change-related risks and
71 opportunities that have been identified to inform the development of the adaptation plan.
72 The disclosure covers details on policies and actions, the scenarios used for the development of
73 the adaptation plan, and information on investment allocated for the implementation of the
74 adaptation plan, governance, targets and stakeholder engagement. As stakeholder engagement
75 is a critical aspect of adaptation planning, relevant processes that were implemented in order to
76 develop the adaptation plan are reported.

77 • **New disclosure on emissions reduction targets and progress**

78 Under this disclosure, organizations report their GHG emissions reduction targets for scope 1, 2,
79 and 3 separately or combined and how they align with the latest scientific evidence. Furthermore,
80 organizations shall disclose their targets revision policies, the base year they have set, and
81 recalculations of base year emissions. Importantly, organizations are required to report their
82 progress towards each target using the inventory method and explain how that progress was
83 achieved, including whether it is due to the organization's initiatives, secondary effects due to
84 other initiatives carried out by the organization, or changes due to external factors.

85 • **New disclosure on removals within the value chain**

86 This disclosure aims to increase transparency on the use of GHG removals. Organizations
87 account and report the total GHG removals and how quality criteria are monitored. They shall also
88 report the intended use of removals. When reporting under this disclosure, organizations report
89 impacts associated with GHG removals including on local communities, vulnerable groups,
90 workers, biodiversity, and the actions taken to manage these impacts.

91 • **New disclosure on carbon credits**

92 The aim of this disclosure is to increase transparency regarding the use of carbon credits.
93 Organizations shall disclose the total amount of carbon credits cancelled and provide information
94 on the projects they purchase the carbon credits from. Organizations shall report details on the
95 adherence to quality criteria and on the purpose of the carbon credit cancellation. As carbon
96 credits projects may result in positive and negative impacts, organisations are expected to report
97 on the evaluation and continuous monitoring of such impacts.

98 • **New terms and relevant definitions**

99 Along with the introduction of new disclosures and terms, new definitions have been included in
100 the GRI Glossary, including the following terms:

- 101 • carbon credit
- 102 • greenhouse gas (GHG) removal

103 Where necessary, definitions and explanations for other terms have been modified or included in
104 the guidance of each relevant disclosure (e.g. adaptation, just transition).

105 • **More extensive guidance throughout the drafts**

106 Extensive guidance has been provided within the exposure draft for the new disclosures as well
107 as for the revised disclosures (e.g. disclosures on Scope 1, 2 and 3 GHG emissions). In addition,
108 the exposure drafts include example templates for presenting the information for selected
109 disclosures.

110 **GSSB involvement and views on the development of** 111 **this draft**

112 The GSSB appointed three of its members as sponsors for this project.

113 The GSSB sponsors observed the TC process and attended most of their meetings.

114 The exposure draft is scheduled to be presented for approval to the GSSB at its meeting on 16
115 November 2023.

116 The recording of the meeting can be accessed on the [GSSB website](#).

117 **Note on reading this document**

118 This document includes generic text used in all GRI Standards. This text is highlighted in grey and
119 cannot be changed – please do not comment on this text.

120 Underlined terms in the draft Standard indicate terms for which definitions have been provided. Most
121 of these terms are already defined in the [GRI Standards Glossary 2022](#) – these definitions are
122 highlighted in grey in the Glossary and cannot be changed. The proposed new definition is not
123 highlighted in grey and is open for review.

124 **GRI CC: Climate Change 202X**

125 **Content**

126	Introduction.....	6
127	Background on the topic.....	6
128	System of GRI Standards.....	7
129	Using this Standard	8
130	1. Topic management disclosures	10
131	Disclosure CC-1 Transition plan for climate change mitigation.....	10
132	Disclosure CC-2 Climate change adaptation	16
133	2. Topic disclosures	20
134	Disclosure CC-3 Just transition	20
135	Disclosure CC-4 GHG emissions reduction target setting and progress	23
136	Disclosure GH-1 Scope 1 GHG emissions.....	27
137	Disclosure GH-2 Scope 2 GHG emissions.....	30
138	Disclosure GH-3 Scope 3 GHG emissions.....	34
139	Disclosure GH-4 GHG emissions intensity.....	38
140	Disclosure CC-5 GHG removals in the value chain	40
141	Disclosure CC-6 Carbon credits.....	45
142	Example templates for presenting information for Disclosures GH-1, GH-2 and GH-3.....	51
143	Glossary	52
144	Bibliography	55
145		

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Introduction

146

147 *GRI CC: Climate Change 202X* contains disclosures for organizations to report information about their
148 climate change-related impacts, and how they manage these impacts.

149 The Standard is structured as follows:

- 150 • [Section 1](#) contains two disclosures, which provide information about how the organization
151 manages its climate change-related impacts.
- 152 • [Section 2](#) contains eight disclosures, which provide information about the organization's
153 climate change-related impacts.
- 154 • The [Glossary](#) contains defined terms with a specific meaning when used in the GRI
155 Standards. The terms are underlined in the text of the GRI Standards and linked to the
156 definitions.
- 157 • The [Bibliography](#) lists authoritative intergovernmental instruments and additional references
158 used in developing this Standard.

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

Background on the topic

161

162 This Standard addresses the topic of climate change.

163 The single biggest contributor to climate change is GHG emissions, the impacts of which are
164 occurring at an accelerated rate. Consequently, the United Nations Framework Convention on
165 Climate Change (UNFCCC) and the subsequent Kyoto Protocol and Paris Agreement were
166 implemented to govern the rate of GHG emissions.

167 By taking on the challenge of climate change, organizations have the responsibility of contributing to
168 climate change mitigation and adaptation. Organizations must address the impacts of their mitigation
169 and adaptation actions, such as securing a just transition. In this context, organizations are expected
170 to develop and implement transition and adaptation plans and ensure they align with just transition
171 principles.

172 Climate change mitigation requires actions that reduce the rate of climate change and limit global
173 warming to well below 2°C while pursuing efforts to limit it to 1.5°C above pre-industrial levels, as per
174 the Paris Agreement.

175 Climate change adaptation refers to an organization's adjustments to current and anticipated climate
176 change stimuli and their effects.

177 Organizations are expected to apply the climate change mitigation hierarchy to inform their actions to
178 mitigate climate change. The mitigation hierarchy consists of a hierarchy of steps, in the following
179 order of priority: avoidance, GHG emissions reduction, contribution to climate mitigation beyond the
180 value chain, and counterbalancing residual GHG emissions. An organization should prioritize actions
181 to avoid releasing GHG emissions into the atmosphere and reduce GHG emissions when avoidance
182 is not possible.

183 According to the Intergovernmental Panel on Climate Change (IPCC), organizations should urgently
184 implement all feasible technical and scientific actions across all sectors to limit global warming to
185 1.5°C. As such, organizations are expected to set and report short- and long-term GHG emissions
186 reduction targets and, on an annual basis, disclose emissions inventories and transition plan
187 progress.

188 Organizations are also expected to consider the interrelations of climate change with other
189 sustainable development topics, such as biodiversity or just transition. For example, climate change is
190 a direct driver of biodiversity loss, which in turn accelerates climate change processes. Moreover,

191 addressing the challenge of climate change will result in fundamental restructuring in certain sectors
192 with shifts within and between economic sectors and regions. Organizations are expected to ensure
193 that their transition plans are in line with the principles of just transition.

194 **System of GRI Standards**

195 This Standard is part of the GRI Sustainability Reporting Standards (GRI Standards). The GRI
196 Standards enable an organization to report information about its most significant impacts on the
197 economy, environment, and people, including impacts on their human rights, and how it manages
198 these impacts.

199 The GRI Standards are structured as a system of interrelated standards that are organized into three
200 series: GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards (see [Figure 1](#) in
201 this Standard).

202 **Universal Standards: GRI 1, GRI 2 and GRI 3**

203 [GRI 1: Foundation 2021](#) specifies the requirements that the organization must comply with to report in
204 accordance with the GRI Standards. The organization begins using the GRI Standards by consulting
205 [GRI 1](#).

206 [GRI 2: General Disclosures 2021](#) contains disclosures that the organization uses to provide
207 information about its reporting practices and other organizational details, such as its activities,
208 governance, and policies.

209 [GRI 3: Material Topics 2021](#) provides guidance on how to determine material topics. It also contains
210 disclosures that the organization uses to report information about its process of determining material
211 topics, its list of material topics, and how it manages each topic.

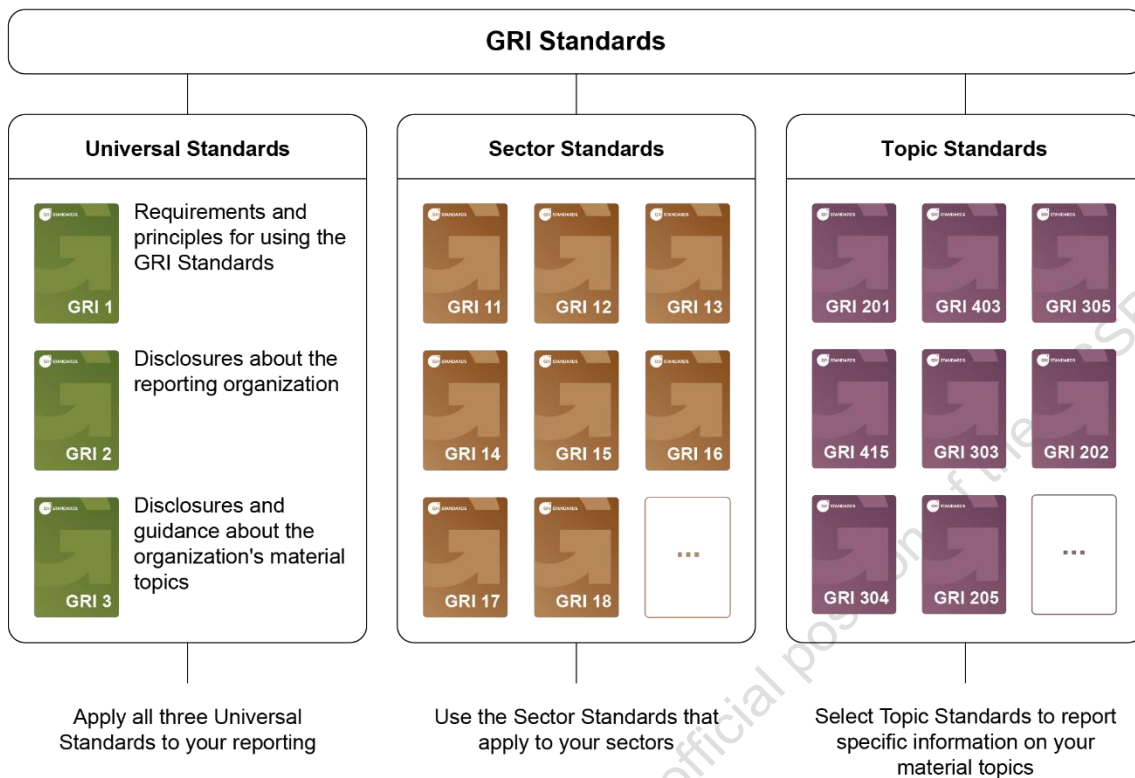
212 **Sector Standards**

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

216 **Topic Standards**

217 The Topic Standards contain disclosures that the organization uses to report information about its
218 impacts in relation to particular topics. The organization uses the Topic Standards according to the list
219 of material topics it has determined using [GRI 3](#).

220 **Figure 1. GRI Standards: Universal, Sector and Topic Standards**



221

222 Using this Standard

223 This Standard can be used by any organization – regardless of size, type, sector, geographic location,
 224 or reporting experience – to report information about its Climate Change-related impacts. In addition
 225 to this Standard, disclosures that relate to this topic can be found in GRI EN: Energy 202X, GRI 101:
 226 Biodiversity 202X.

227 An organization reporting in accordance with the GRI Standards is required to report the following
 228 disclosures if it has determined Climate Change to be a material topic:

- 229 • [Disclosure 3-3 in GRI 3: Material Topics 2021.](#)
- 230 • Any disclosures from this Topic Standard that are relevant to the organization's
 231 Climate Change-related impacts (Disclosure CC-1 through CC-6).

232 See [Requirements 4 and 5 in GRI 1: Foundation 2021.](#)

233 Reasons for omission are permitted for these disclosures.

234 If the organization cannot comply with a disclosure or with a requirement in a disclosure (e.g.,
 235 because the required information is confidential or subject to legal prohibitions), the organization is
 236 required to specify the disclosure or the requirement it cannot comply with, and provide a reason for
 237 omission together with an explanation in the GRI content index. See [Requirement 6 in GRI 1](#) for more
 238 information on reasons for omission.

239 If the organization cannot report the required information about an item specified in a disclosure
 240 because the item (e.g., committee, policy, practice, process) does not exist, it can comply with the
 241 requirement by reporting this to be the case. The organization can explain the reasons for not having

242 this item, or describe any plans to develop it. The disclosure does not require the organization to
243 implement the item (e.g., developing a policy), but to report that the item does not exist.

244 If the organization intends to publish a standalone sustainability report, it does not need to repeat
245 information that it has already reported publicly elsewhere, such as on web pages or in its annual
246 report. In such a case, the organization can report a required disclosure by providing a reference in
247 the GRI content index as to where this information can be found (e.g., by providing a link to the web
248 page or citing the page in the annual report where the information has been published).

249 **Requirements, guidance and defined terms**

250 The following apply throughout this Standard:

251 Requirements are presented in **bold font** and indicated by the word 'shall'. An organization must
252 comply with requirements to report in accordance with the GRI Standards.

253 Requirements may be accompanied by guidance.

254 Guidance includes background information, explanations, and examples to help the organization
255 better understand the requirements. The organization is not required to comply with guidance.

256 The Standards may also include recommendations. These are cases where a particular course of
257 action is encouraged but not required.

258 The word 'should' indicates a recommendation, and the word 'can' indicates a possibility or option.

259 Defined terms are underlined in the text of the GRI Standards and linked to their definitions in the
260 [Glossary](#). The organization is required to apply the definitions in the Glossary.

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1. Topic management disclosures

An organization reporting in accordance with the GRI Standards is required to report how it manages each of its material topics.

An organization that has determined Climate Change to be a material topic is required to report how it manages the topic using [Disclosure 3-3 in GRI 3: Material Topics 2021](#). The organization is also required to report any disclosures from this section ([Disclosure CC-1](#) and [Disclosure CC-2](#)) that are relevant to its climate change-related impacts.

This section is, therefore, designed to supplement – and not replace – [Disclosure 3-3 in GRI 3](#).

Disclosure CC-1 Transition plan for climate change mitigation

REQUIREMENTS

The organization shall:

- a. report transition plan-related policies and actions;
- b. describe how the transition plan is in line with the latest scientific evidence on the global effort needed to limit global warming to 1.5° C, including methodologies and assumptions used;
- c. report the investment allocated to the implementation of the transition plan during the reporting period as the total amount and as a percentage of the total investment in the reporting period;
- d. report the bodies or individual roles responsible for overseeing and implementing the transition plan, including a description of their responsibilities;
- e. describe how the transition plan is embedded in the organization's overall business strategy;
- f. report the targets set to achieve the transition plan and progress toward the targets, including:
 - i. Gross GHG emission reduction targets to be reported according to [Disclosure CC-4](#) of this Standard;
 - ii. Targets to phase out fossil fuels, including the base year and standards, methodologies, and assumptions used to calculate the targets;
 - iii. If any other climate change mitigation targets are set, describe how these were set, the boundaries, the base year, and their role within the transition plan;
- g. describe how engagement with stakeholders has informed the transition plan;
- h. describe the impacts that may result from the organization's transition plan, and the actions taken to manage the impacts, including:
 - i. on workers, local communities, and vulnerable groups to be reported according to [Disclosure CC-3](#) of this Standard;
 - ii. on biodiversity;
- i. describe how its public policy activities, including lobbying activities, are consistent with the transition plan;
- j. describe the reasons why a transition plan is not in place, if applicable, and explain the steps being taken and the expected time frame to develop it.

302 **GUIDANCE**

303 The transition plan for climate change mitigation is an organization's overall strategy, containing
304 actions, policies, resources, accountability mechanisms, and targets concerning the global effort
305 needed to limit global warming.

306 **Guidance to CC-1-a**

307 This requirement covers a high-level overview of actions taken relating to the transition plan.

308

309 Transition plan-related policies can include:

- 310 • policy on energy usage;
- 311 • policy on deforestation;
- 312 • policy on climate-related requirements for suppliers;
- 313 • review policy of the plan.

314 [Disclosure 2-23 in GRI 2: General Disclosures 2021](#) requires reporting the organization's policy
315 commitments. If the organization has described the policies linked to its transition plan under
316 Disclosure 2-23, it can provide a reference to this information.

317 In addition, the organization should describe how its transition plan is intended to address impacts on
318 the economy, environment, and people associated with transition risks and opportunities.

319 Transition risks can include changes in customer behaviors, enhanced regulatory landscape, and
320 increased costs. Transition opportunities can include diversification of business activities, the use of
321 more efficient production and transportation processes, and the use of new technologies.

322 The climate change-related risks and opportunities covered in this disclosure can be informed by
323 analysis already performed by the organization for other regulatory frameworks and standards.

324 Transition risks can have negative impacts on people, such as on workers and local communities. For
325 example, changes in consumer behavior can lead to a reduction in sales volume and a loss of
326 revenue for the organization, resulting in job loss. To mitigate these potential impacts, organizations
327 can align with consumer preferences toward more sustainable products and plan changes to their
328 product portfolios, avoiding revenue loss and protecting jobs. Furthermore, transition risks can have
329 negative impacts also on biodiversity.

330 **Guidance to CC-1-b**

331 When describing how the plan aligns with the latest scientific evidence on the global effort needed to
332 limit global warming to 1.5°C, the organization should disclose how the transition plan is aligned with
333 the mitigation hierarchy, including:

- 334 • avoiding emitting GHGs by transitioning from fossil fuels to non-emitting energy sources,
335 such as renewables;
- 336 • reducing GHG emissions by, for example, improving energy efficiency;
- 337 • deploying GHG removal methods to counterbalance residual GHG emissions after the
338 organization has reduced its gross GHG emissions by at least 90%.

339 In addition, the organization should disclose which climate and policy scenarios were used to develop
340 the transition plan. When developing a transition plan, organizations should include at least a scenario
341 compatible with the Paris Agreement. A scenario compatible with the Paris Agreement will require a
342 temperature rise well below 2°C while pursuing efforts to limit the temperature rise to 1.5°C. See The
343 Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities from the Task
344 Force on Climate-related Financial Disclosures (TCFD) for more guidance.

345 The organization should also explain if it assesses and considers how transition risks and future
346 developments, such as changes in sales volumes or mergers and acquisitions, can have impacts on
347 the organization's transition plan compatibility with the 1.5°C pathway.

348 **Guidance to CC-1-c**

349 The organization should report the investment allocated for the transition plan implementation as the
350 total amount of capital expenditure (CapEx) and as the percentage of CapEx allocated for
351 implementing the transition plan of the total CapEx planned.

352 To calculate the percentage of CapEx allocated for the implementation of the transition plan, an
353 organization can apply the following formula:

354
$$\% = \frac{\text{CapEx allocated to the transition plan}}{\text{Total CapEx planned in the reporting period}}$$

355 The organization can also develop different investment metrics, including operational expenditure
356 (OpEx) information or other relevant information.

357 The organization should explain how the transition plan is factored into the organization's financial
358 planning and whether the highest governance body and senior executives have approved the funding.

359 In addition, to ensure transparency on the weight of the investments for the implementation of the
360 transition plan within an organization's overall investment strategy, the organization can report:

- 361 • CapEx amounts invested in fossil fuel-related activities.
- 362 • Total CapEx planned in the reporting period.

363 **Guidance to CC-1-d**

364 Under this requirement, the organization should report:

- 365 • whether the highest governance body is responsible for overseeing the transition plan and
366 what is included in this responsibility, for example, approving the transition plan, reviewing
367 and monitoring it, and ensuring that the transition plan aligns with the principles of just
368 transition (see [Disclosure CC-3 Just transition](#) for further information);
- 369 • whether senior executives are responsible for implementing the transition plan and what this
370 responsibility includes.

371 [Disclosure 2-12 and Disclosure 2-13 in GRI 2: General Disclosures 2021](#) require reporting the highest
372 governance body's role in overseeing the management of impacts and the delegation of responsibility
373 for managing impacts. If the organization has described the roles and responsibilities of the bodies
374 involved in overseeing and implementing the transition plan under Disclosures 2-12 and 2-13, it can
375 provide a reference to this information.

376 **Guidance to CC-1-e**

377 The organization should report the following:

- 378 • whether and how the responsibility to manage climate change-related impacts is linked to
379 performance assessments or incentive mechanisms. This includes whether and how the
380 remuneration policies for the highest governance body members and senior executives are
381 linked to the management of impacts that result from the organization's transition plan. In
382 addition, the organization can disclose whether the performance of the highest governance
383 body members is assessed against the GHG emissions reduction targets reported under
384 [Disclosure CC-3](#) and if dividend distribution is subject to the achievement of the targets;
- 385 • how research and development activities are aligned with its transition plan;
- 386 • planned changes to the organization's portfolio of products and services to deliver the
387 transition plan. This includes plans to reduce the portfolio of high-carbon products and
388 services and increase the portfolio of low-carbon products and services that it provides, either
389 directly or indirectly;
- 390 • actions taken to build a culture aligned with its transition plan, including how leadership and
391 training programs, human resources policies and procedures, workforce engagement, human
392 rights due diligence, and remedy processes are aligned to its transition plan and in
393 consideration of its impacts;

- 394 • if an internal carbon pricing scheme is in place, a description of it, including which of the
395 organization's GHG emissions sources are covered by the scheme and the prices used per
396 metric ton of CO₂.

397 [Disclosure 2-19 in GRI 2: General Disclosures 2021](#) requires reporting the remuneration policies for
398 members of the highest governance body and senior executives. If the organization has described the
399 incentive mechanisms linked to the management of impacts that result from the organization's
400 transition plan under Disclosure 2-19, it can provide a reference to this information.

401 **Guidance to CC-1-f**

402 When reporting progress toward the goals and targets, the organization should include known gaps or
403 barriers in target achievement and, if applicable, the role of locked-in emissions.

404 Locked-in emissions are estimates of future GHG emissions likely caused by an organization's key
405 assets or products sold within its operating lifetime. The organization should:

- 406 • report a qualitative assessment of the potential locked-in GHG emissions from its key assets
407 and products;
- 408 • if applicable (e.g., in the oil and gas sector), report a quantitative assessment of the locked-in
409 GHG emissions from its assets and products; and
- 410 • report how these emissions may jeopardize the achievement of GHG emissions reduction
411 targets and plans to manage GHG-intensive assets and products.

412 **Guidance to CC-1-f-iii**

413 The organization can report under [CC-1-f-iii](#), for example, net-zero emissions, energy efficiency, and
414 renewable energy targets.

415 If the organization reports net-zero targets, GHG removals within and beyond the value chain must
416 only be used to counterbalance residual emissions as the last step of the mitigation hierarchy.
417 According to the Corporate Net Zero Standard from the Science Based Targets initiative (SBTi),
418 organizations are expected to counterbalance residual emissions at the net-zero target year or after
419 having reduced at least 90% of their GHG emissions when further reduction is not possible.

420 According to the Net Zero Scenario from the IEA and Corporate Net Zero Standard from the SBTi,
421 residual emissions refer to the unabated GHG emissions after the organization has reduced at least
422 90% of its GHG emissions. If an organization is subjected to sectorial decarbonization pathways, it
423 may be subjected to a different percentage of GHG emissions reduction.

424 Organizations can finance and contribute to additional climate change mitigation, for example, via
425 GHG removals or carbon credits, in addition to their GHG emission reduction targets. These
426 contributions are one of the steps of the mitigation hierarchy and are often referred to as beyond
427 value chain mitigation or climate contributions. Such contributions cannot be accounted for in the
428 GHG emissions reduction targets setting and progress reported under [Disclosure CC-4](#) nor used to
429 counterbalance residual emissions for reaching net-zero targets.

430 For further information, see [Disclosure CC-5 Removals in the value chain](#) and [Disclosure CC-6](#)
431 [Carbon credits of this Standard](#) and Corporate Net Zero Standard from the Science Based Targets
432 initiative (SBTi).

433 **Guidance to CC-1-g**

434 The organization should report:

- 435 • how it identifies the stakeholders whose human rights, health, socio-economic well-being, or
436 other interests may be affected as a result of implementing the transition plan;

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- how the organization engages with the identified stakeholders or their legitimate representatives to understand their concerns and interests;
 - how the insights from stakeholder engagement and possible partnerships with workers, trade unions, worker representatives, suppliers, Indigenous Peoples, local communities, and governments have informed strategies to prevent or mitigate negative impacts and maximize positive impacts resulting from the transition plan.

443 **Guidance to CC-1-h**

444 This requirement covers impacts on biodiversity and people, including human rights and
445 intergenerational equity, resulting from the organization's transition plan. The aim is to increase
446 transparency on how an organization's transition plan incorporates the principles of a just transition.

447 Requirements 3-3-a and 3-3-c in [GRI 3: Material Topics 2021](#) entail the description of the
448 organization's impacts and the actions taken to manage the impacts. If the organization has described
449 the impacts on the environment and people that may result from the organization's transition plan and
450 the actions taken to manage them under requirements 3-3-a and 3-3-c, it can provide a reference to
451 this information.

452 The organization should also disclose any impacts associated with the failure to implement its
453 transition plan.

454 **Guidance to CC-1-h-i**

455 According to the International Labour Organization (ILO), a just transition involves greening the
456 economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent
457 work opportunities and leaving no one behind. A Just Transition involves maximizing the social and
458 economic opportunities of climate action, while minimizing and carefully managing any challenges –
459 including through effective social dialogue among all groups impacted, and respect for fundamental
460 labour principles and rights.

461 **Guidance to CC-1-h-ii**

462 Actions to mitigate climate change can have positive impacts on biodiversity. For example, planting
463 mangroves can contribute to climate change mitigation by capturing and storing carbon and protecting
464 biodiversity by increasing wildlife populations. Actions to mitigate climate change can also result in
465 biodiversity loss. For example, forestation of an area with non-native species can mitigate climate
466 change by absorbing greenhouse gases, but it may also result in biodiversity loss.

467 Disclosure 101-2 in *GRI 101: Biodiversity 202X* requires describing how the organization enhances
468 synergies and reduces trade-offs between actions taken to manage its biodiversity impacts and its
469 climate change impacts. If the organization has described the impacts on biodiversity resulting from
470 its transition and the actions taken to manage those impacts under Disclosure 101-2, it can provide a
471 reference to this information.

472 **Guidance to CC-1-i**

473 The organization should report:

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- 480
- its stance on issues related to the transition plan, e.g., phasing out fossil fuels addressed in its public policy activities;
 - any differences between its public policy activities and its stated policies, goals, or other public positions on issues related to its transition plan;
 - whether it is a member of or contributes to any representative associations or committees that participate in public policy activities on issues related to its transition plan, including:
 - the nature of this contribution;

481 ○ any differences between the organization’s stated policies, goals, or other public
482 positions on significant issues related to its transition plan and the positions of the
483 representative associations or committees.

484 Requirement CC-1-i is related to the recommendations in [GRI 415: Public Policy 2016](#). The
485 organization can provide a reference to public policy activities related to its transition plan for climate
486 change mitigation when it has determined public policy to be a material topic and has reported
487 information in [GRI 415](#).

This document does not represent an official position of the GSSB

Disclosure CC-2 Climate change adaptation

REQUIREMENTS

The organization shall:

- a. describe its impacts on the economy, environment, and people, associated with its climate change-related risks and opportunities;
- b. describe its climate change adaptation plan, including:
 - i. policies and actions;
 - ii. the climate change-related scenarios, methodologies, and assumptions used;
 - iii. the investment allocated for the implementation of the adaptation plan during the reporting period as the total amount and as a percentage of the total investment in the reporting period;
 - iv. the bodies or individual roles responsible for overseeing and implementing the adaptation plan, including a description of their responsibilities;
 - v. the targets set to achieve the adaptation plan and progress toward the goals and targets;
 - vi. how engagement with stakeholders has informed the plan;
- c. describe the impacts that may result from the organization's adaptation plan, and the actions taken to manage the impacts, including:
 - i. on workers, local communities, vulnerable groups;
 - ii. on biodiversity;
- d. describe the reasons why an adaptation plan is not in place, if applicable, and explain the steps being taken and the expected time frame to develop it.

GUIDANCE

Organizations contribute to climate change and are simultaneously affected by it. This disclosure covers:

- impacts on the economy, environment, and people, associated with an organization's climate change-related risks and opportunities, for example, impacts on workers, local communities, and biodiversity.
- an organization's adaptation plan;
- impacts of the implementation of the adaptation plan, as for example on workers, local communities, biodiversity.

Adaptation refers to changes in processes, practices, and structures in response to actual or potential climate-related events and their impacts. Adaptation aims to mitigate potential negative impacts or leverage opportunities associated with climate change. For example, adaptation can include building flood defenses and redesigning business operations.

Under this disclosure, different impacts are reported in CC-2-a and CC-2-c:

- Under CC-2-a, the organization reports impacts associated with climate change-related risks and opportunities used to inform the adaptation plan.
- Under CC-2-c, the organization reports the impacts associated with implementing the adaptation plan.

Guidance to CC-2-a

Under this requirement, the organization reports the impacts associated with its climate change-related risks and opportunities.

532 Climate change-related risks can be classified as physical or transition risks.

533 Physical risks can include increased frequency and severity of flooding and storms, rising mean
534 temperatures, precipitation and sea level changes, and drought.

535 Transition risks can include changes in customer behaviors, enhanced regulatory landscape, and
536 increased costs.

537 Impacts associated with physical risks are reported under this requirement. Examples of impacts
538 associated with physical risks include:

- 539 • impacts on workers' health due to extreme weather events (e.g., heat-related illness or
540 disease);
- 541 • extreme weather events (e.g. hurricane) affecting energy companies and subsequently
542 resulting in lack of access to energy for the population;
- 543 • the loss of employment due to the need to relocate operations to a less flood-prone area.

544 In addition, only impacts associated with transition risks and opportunities relevant to the adaptation
545 plan are required to be reported under this disclosure. For example, regulatory changes such as
546 upcoming legislation are a type of transition risk that may influence the adaptation plan.

547 Opportunities related to climate change can include increased efficiency of production processes,
548 reduced consumption of resources, access to new markets, integration of new technologies, and
549 diversification of the business portfolio. Impacts related to opportunities may include job creation,
550 redefinition of existing jobs resulting in reskilling, and improvements in income through investments in
551 environmentally sustainable production.

552 The climate change-related risks and opportunities covered in this disclosure can be informed by
553 analysis already performed by the organization for other regulatory frameworks and standards.

554 **Guidance to CC-2-b-i**

555 The organization should include a description of the policies it has developed specifically to achieve
556 the adaptation plan and a high-level overview of actions taken.

557 The organization can report key adaptation actions by type, such as nature-based adaptation,
558 engineering, or technological solutions.

559 [Disclosure 2-23 in GRI 2: General Disclosures 2021](#) requires reporting the organization's policy
560 commitments. If the organization has described the policies linked to its adaptation plan under
561 Disclosure 2-23, it can provide a reference to this information.

562 In addition, the organization can describe how its adaptation plan contributes to sectoral, regional, or
563 national adaptation plans.

564 **Guidance to CC-2-b-ii**

565 Scenario analysis allows for the simultaneous consideration of alternative forms of future states
566 affected by climate change and can be used to explore climate change-related risks. Organizations
567 typically define scenarios according to the transition speed, expressed in the average global
568 temperature changes. When developing an adaptation plan, organizations are expected to include a
569 range of climate scenarios, including at least a high-emissions scenario and a scenario compatible
570 with the Paris Agreement. A scenario compatible with the Paris Agreement will require a temperature
571 rise well below 2°C while pursuing efforts to limit the temperature rise to 1.5°C. Other scenarios can
572 be defined according to an organization's national context.

573 See The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities from the
574 Task Force on Climate-related Financial Disclosures (TCFD) for more guidance.

575 Conducting climate change scenario analysis enhances transparency and assists organizations in
576 planning effective actions to prevent and mitigate potential negative impacts on the economy,
577 environment, and people, including on their human rights.

578 The impacts identified and reported under [CC-2-a](#) and the climate change scenario analysis inform
579 the organization's adaptation plan, reported under [CC-2-c](#).

580 **Guidance to CC-2-b-iii**

581 The organization should report the investment allocated for the adaptation plan implementation as the
582 total amount of capital expenditure (CapEx) and as the percentage of CapEx allocated for
583 implementing the adaptation plan of the total CapEx planned.

584 To calculate the percentage of CapEx allocated for the implementation of the adaptation plan, an
585 organization can apply the following formula:

$$586 \quad \% = \frac{\text{CapEx allocated to the adaptation plan}}{\text{Total CapEx planned in the reporting period}}$$

587 The organization can also develop different investment metrics, including operational expenditure
588 (OpEx) information or other relevant information.

589 **Guidance to CC-2-b-iv**

590 Under this requirement, the organization should report:

- 591 • whether the highest governance body is responsible for overseeing the adaptation plan and
592 what is included in this responsibility, for example, approving the adaptation plan, reviewing it
593 and monitoring it, implementing remedial actions if necessary, ensuring that the adaptation
594 plan aligns with the principles of just transition (see [Disclosure CC-3 Just transition](#) for further
595 information);
- 596 • whether senior executives are responsible for implementing the adaptation plan and what this
597 responsibility includes.

598 [Disclosures 2-12 and 2-13 in GRI 2: General Disclosures 2021](#) require reporting the highest
599 governance body's role in overseeing the management of impacts and the delegation of responsibility
600 for managing impacts. If the organization has described the roles and responsibilities of the bodies
601 involved in overseeing and implementing the adaptation plan under Disclosures 2-12 and 2-13, it can
602 provide a reference to this information.

603 **Guidance to CC-2-b-v**

604 The organization should report how:

- 605 • it identifies the stakeholders whose human rights, health, socio-economic well-being, or wider
606 interests may be impacted as a result of implementing the adaptation plan;
- 607 • it engages with the identified stakeholders or their legitimate representatives to understand
608 their concerns and interests;
- 609 • the outcomes from stakeholder engagement and possible partnerships with workers, trade
610 unions and worker representatives, local communities, and suppliers have informed the
611 development of the adaptation plan.

612 **Guidance to CC-2-c**

613 This requirement covers positive or negative impacts that may result from implementing the
614 adaptation plan. If an adaptation plan is well managed, this can translate into positive impacts such as
615 economic development and local employment. However, an adaptation plan can also result in
616 negative impacts on the economy, environment, and people, including on their human rights.
617 Negative impacts associated with adaptation plans can include the relocation of a production site to a

618 jurisdiction less prone to climatic weather events such as flooding. Jobs from the original production
619 site will be eliminated due to the relocation.

620 The organization should also report any impacts associated with the failure to implement its
621 adaptation plan. For example, an organization's failure to implement its adaptation plan may
622 exacerbate impacts such as disruptions in operations, increased occupational health and safety
623 impacts, loss of livelihood, and food insecurity.

624 Under [Requirements 3-3-a and 3-3-c in GRI 3: Material Topics 2021](#), the organization is required to
625 describe the organization's impacts and the actions taken to manage the impacts. If the organization
626 has described the impacts on the economy, environment, and people that may result from the
627 organization's adaptation plan and the actions taken to manage them under 3-3-a and 3-3-c, it can
628 provide a reference to this information.

629 **Guidance to CC-2-c-i**

630 Examples of actions taken to manage the impacts on people that may result from the organization's
631 adaptation plan may include:

- 632 • supporting workers who lost their jobs due to relocation of operations to find new
633 employment;
- 634 • investing and utilizing nature-based or technological solutions on-site, rather than production
635 relocation, to prevent job elimination.

636 **Guidance to CC-2-c-ii**

637 Actions to adapt to climate change can have positive impacts on biodiversity. For example, planting
638 mangroves can contribute to climate change adaptation by controlling floods and protecting
639 biodiversity by increasing wildlife populations. Actions to adapt to climate change can also result in
640 biodiversity loss. For example, forestation of an area with non-native species can contribute to climate
641 change adaptation by controlling erosion and flooding, but it may also result in biodiversity loss.

642 Disclosure 101-2 in *GRI 101: Biodiversity 202X* requires describing how the organization enhances
643 synergies and reduces trade-offs between actions taken to manage its biodiversity impacts and its
644 climate change impacts. If the organization has described the impacts on biodiversity resulting from
645 its adaptation plan and the actions taken to manage those impacts under Disclosure 101-2, it can
646 provide a reference to this information.

647 2. Topic disclosures

648 An organization reporting in accordance with the GRI Standards is required to report any disclosures
649 from this section ([Disclosure CC-3 Just transition](#), [Disclosure CC-4 GHG emissions reduction targets](#),
650 [Disclosure GH-1 Scope 1 Emissions](#), [Disclosure GH-2 Scope 2 Emissions](#), [Disclosure GH-3 Scope 3](#)
651 [Emissions](#), [Disclosure GH-4 GHG Emissions intensity](#), [Disclosure CC-5 GHG removals in the value](#)
652 [chain](#), [Disclosure CC-6 Carbon Credits](#)) that are relevant to its Climate Change-related impacts.

653 Disclosure CC-3 Just transition

654 REQUIREMENTS

655 The organization shall:

- 656 a. report the total number of jobs created as a result of the organization's transition plan
657 and provide a breakdown of this total by temporary and permanent jobs and describe
658 the actions taken to determine that adequate remuneration is paid;
- 659 b. report the total number of jobs eliminated as a result of the organization's transition
660 plan and provide a breakdown of this total by temporary and permanent jobs;
- 661 c. report the ratio of the total number of jobs that have been redeployed as a result of the
662 organization's transition plan to the total number of jobs eliminated as a result of the
663 organization's transition plan;
- 664 d. report the number of employees that received training for up- and reskilling as a result
665 of the implementation of the transition plan;
- 666 e. list the locations where the organization's transition plan has impacts on local
667 communities and Indigenous Peoples;
- 668 f. report the percentage of locations listed in CC-3-e in which an agreement has been
669 reached with local communities and Indigenous Peoples to safeguard their interests.

670 GUIDANCE

672 This disclosure covers both employment aspects that are relevant for workers and implications for
673 other stakeholder groups such as local communities and Indigenous Peoples.

674 This disclosure enables organizations to report on the quantitative and qualitative aspects of jobs as a
675 result of the transition plan. Under the quantitative aspect, organizations report the jobs created,
676 eliminated, and redeployed. Under the qualitative aspect, organizations can report on the quality of
677 jobs by indicating whether they are permanent or temporary and if they provide adequate
678 remuneration.

679 Permanent jobs are those where a contract for an indeterminate period is given for full-time or part-
680 time work. Temporary jobs are when a contract is given for a limited period and it ends when the
681 specific time period expires, or when the specific task or event that has an attached time estimate is
682 completed.

683 Several benchmarks are available for organizations to determine adequate remuneration, for
684 example, the minimum wage set by a competent national authority, cost of living estimates, wages set
685 by collective bargaining agreements, or industry-standard wages applicable for a specific sector.

686 It is important that just transition safeguards the needs of local communities and Indigenous Peoples
687 and therefore, this disclosure also enables organizations to report if they have participated in the
688 emerging opportunities for the transition to a greener economy.

689 **Guidance to CC-3-a**

690 As a result of the organization's transition plan, jobs may be created due to the development of new
691 low-carbon-intensive products, services, and infrastructure. Examples include jobs in renewable
692 energy, energy efficiency, and adaptation projects.

693 Jobs created in the transition to a low-carbon economy are expected to provide adequate
694 remuneration and ensure equal pay for work of equal value. When reporting the actions taken to
695 determine whether adequate remuneration is provided, the organization can report that it:
696

- consults with worker representatives and employer organizations;
- relies on external research; or
- is part of local civil society initiatives to determine the cost of living estimates and compare it
699 with the actual remuneration.

700 When reporting the information under CC-3-a, the organization should provide additional relevant
701 breakdowns, for example, by gender of those who fulfill the jobs created, the significant locations of
702 operation.

703 **Guidance to CC-3-b**

704 Jobs may be eliminated – either phased out or massively reduced in numbers – without direct
705 replacement as a result of the organization's transition plan. For example, when emitting and energy-
706 intensive economic activities are reduced or phased out entirely.

707 A breakdown of temporary and permanent jobs eliminated will allow for comparison with the
708 temporary and permanent jobs created and reported under CC-3-a.

709 When reporting the information required by CC-3-b, the organization should provide relevant
710 breakdowns, for example, by gender of those whose jobs have been eliminated and significant
711 locations of operation. The breakdown of jobs eliminated by location will allow comparison with jobs
712 created in those locations and reported under CC-3-a and enable an understanding of the net change
713 in employment in that location.

714 **Guidance to CC-3-c**

715 Redeployment occurs when, for example, existing employees working in emissions-intensive
716 economy are up-and-reskilled with the direct assistance of the organizations they work for, and
717 therefore they are able to continue working for those organizations in less emissions-intensive
718 activities. For example, an existing employee in automobile manufacturing can work in the production
719 line of electric cars. Redeployment can help organizations to reduce job elimination.

720 The following formula can be used to calculate the ratio required by CC-3-iii:

721
$$\text{Ratio} = \frac{\text{Number of jobs redeployed}}{\text{Number of jobs eliminated}}$$

722 When reporting the information required by CC-3-c, the organization should provide relevant
723 breakdowns, for example, by gender of those who their jobs redeployed or eliminated and significant
724 locations of operation.

725 **Guidance to CC-3-d**

726 When reporting the information required by CC-3-d, the organization should provide relevant
727 breakdowns, for example, by gender and significant locations of operation.

728 In addition to reporting the number of employees trained, the organization can also describe the
729 impact of the training. For an organization, the impacts of the training can include improved employee
730 retention and improved market competitiveness, due to a skilled workforce to implement the transition
731 plan.

732 **Guidance to CC-3-e**

733 The organization provides specific locations within the countries (e.g., states, cities) where it has
734 operations, and its transition plan impacts the rights of local communities and Indigenous Peoples as
735 set out in the UN Declaration on the Rights of Indigenous Peoples.

736 **Guidance to CC-3-f**

737 In the context of just transition, organizations need to engage with local communities and Indigenous
738 Peoples to prevent and mitigate potential and actual negative impacts. Agreements through free, prior
739 and informed consent (FPIC) that uphold rights and reflect the interests of Indigenous Peoples and
740 local communities provide clear, sustainable and accountable outcomes of such engagements. This
741 requirement aims to understand the effectiveness of the organization's engagement actions with local
742 communities and Indigenous People. When reporting this requirement, the organization calculates the
743 percentage of locations based on the list of locations reported under CC-3-e.

This document does not represent an official position of the GSB

Disclosure CC-4 GHG emissions reduction target setting and progress

REQUIREMENTS

The organization shall:

- a. report gross GHG emissions reduction short-term and long-term targets in metric tons of CO₂ equivalent and as a percentage of the emissions of a base year, where:
 - i. Scope 1, Scope 2, and Scope 3 GHG emissions targets are reported separately or combined;
 - ii. A list of Scope 3 categories covered in the Scope 3 GHG emissions targets is included;
 - iii. A list of the gases covered in the targets is included;
 - iv. GHG removals, GHG trades, and avoided emissions are excluded;
- b. explain how the targets are in line with the latest scientific evidence on the global effort needed to limit global warming to 1.5° C;
- c. report its target revision policy;
- d. report the base year for the targets, including:
 - i. the rationale for choosing it;
 - ii. emissions in the base year;
 - iii. the context for any significant changes in emissions that triggered recalculations of base year emissions;
 - iv. when there are recalculations of the base year emissions, and the current and previously reported values;
- e. report the progress toward the targets using the inventory method, in metric tons of CO₂ equivalent and as a percentage of the emissions of a base year;
- f. explain how the progress for the targets was achieved, relative to the base year, including whether it is due to:
 - i. reductions through the organization's initiatives;
 - ii. secondary effects through other organization's initiatives;
 - iii. external factors;
- g. report standards, methodologies, and assumptions used to calculate the targets and progress, including a reference to any calculation tool used.

GUIDANCE

This disclosure should be used in combination with [Disclosures GH-1](#), [GH-2](#), and [GH-3](#) of this Standard. The organization should ensure consistency between the target boundary and the inventory boundary.

The organization should report whether an independent third party has validated the GHG emissions reduction targets and the related emissions reduction progress.

Guidance to CC-4-a

The organization should include biogenic CO₂ emissions in the scope of its targets. The organization can refer to the GHG Protocol Corporate Accounting Standard and Land Sector and Removals Guidance for further information.

786 In addition to reporting gross GHG emissions reduction targets for Scope 1, Scope 2, and Scope 3
787 GHG emissions in metric tons of CO₂ equivalent and as a percentage of the emissions of a base year,
788 the organization can report intensity targets.

789 Organizations are expected to set short-term targets (e.g., for 2030), long-term targets (e.g., for
790 2050), and interim targets. For further information, the organization can refer to the United Nations
791 High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities, 'Integrity
792 Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions' Report.

793 If significant changes could compromise the relevance and consistency of existing GHG emissions
794 reduction targets, the organization should recalculate its targets to reflect those changes. For further
795 information, the organization can refer to SBTi Corporate Net Zero Standard.

796 The organization should also disclose the year in which the targets were set.

797 **Guidance to CC-4-a-i**

798 When reporting combined GHG emissions reduction targets, the organization should specify which
799 scopes cover the combined target.

800 If the organization reports Scope 2 GHG emissions reduction targets using the market-based method,
801 the organization is expected to also set and report separately Scope 2 GHG emissions reduction
802 targets using the location-based method.

803 **Guidance to CC-4-a-ii**

804 In the case a Scope 3 GHG emissions target does not cover all Scope 3 categories, the organization
805 should report the percentage of Scope 3 categories covered by the target (reported under GH-3-a and
806 GH-3-c). The percentage can be calculated using the following formula:

$$807 \quad \text{Percentage (\%) of Scope 3 emissions covered by the target} \\ 808 \quad = \frac{\text{Scope 3 emissions covered by the target}}{\text{Gross Scope 3 emissions (GH - 3 - a) + Biogenic Scope 3 emissions (GH - 3 - c)}} * 100$$

809 The organization should explain why any Scope 3 categories are excluded and describe actions taken
810 to include all categories in the future.

811 **Guidance to CC-4-a-iv**

812 GHG removals within the value chain, GHG trades, and avoided emissions cannot be included when
813 calculating an organization's gross GHG emissions reduction targets reported under this requirement.
814 For further information, see [Disclosures CC-5 GHG removals within the value chain](#) and [CC-6 Carbon](#)
815 [credits](#).

816 Avoided emissions fall under a separate accounting system from corporate inventories and do not
817 count toward GHG emission reduction targets.

818 The organization may be allowed to include GHG removals in the targets reported under this
819 requirement only if subjected to specific sector programs (e.g., the SBTi Forest, Land and Agriculture
820 (FLAG) Guidance). The organization should report the sector program based on authoritative
821 scientific evidence.

822 **Guidance to CC-4-b**

823 The organization should report which guidance or framework has been used to determine the targets,
824 including the underlying climate and policy scenarios. The organization should explain how it has
825 considered future developments (e.g., changes in sales volumes, mergers, and acquisitions) and
826 transition risks (e.g., shifts in customer preferences and demand, regulatory factors, and new
827 technologies) when setting the GHG emissions reduction targets. The organization should also
828 explain how these developments and risks will potentially impact the ambition of the targets.

829 **Guidance to CC-4-d-iii**

830 Cases that should trigger a recalculation of base year emissions can include:

- 831 • structural changes in the reporting organization that have a significant impact on the
832 organization’s base year emissions, including mergers, acquisitions, divestments,
833 outsourcing, and insourcing of emitting activities.
- 834 • changes in calculation methodology or improvements in the accuracy of emission factors or
835 activity data that result in a significant impact on the base year emissions data.
- 836 • discovery of significant errors, or a number of cumulative errors, that are collectively
837 significant. In such a case, the organization should also report the established processes to
838 prevent such errors in future reporting.

839 **Guidance to CC-4-e**

840 When reporting the progress under CC-4-e, GHG removals, GHG trades, and avoided emissions are
841 excluded.

842 Progress against GHG emissions targets can include reductions and increases in GHG emissions. To
843 ensure transparency, an organization should report both reductions and increases in GHG emissions.
844 When reporting separate targets for Scope 1, Scope 2, and Scope 3 GHG emissions, progress should
845 be reported against each target the organization has set.

846 When calculating the progress against the targets, the inventory method is used, which compares
847 emissions to a base year.

848 When reporting the progress in metric tons of CO₂ equivalent, an organization should apply the
849 following formula:

850
$$\text{Change in emissions} = \text{Current year emissions} - \text{Base year emissions}$$

851 Further details on this method are available in the GHG Protocol Corporate Accounting Standard.

852 When reporting the progress as a percentage of the emissions of a base year, an organization should
853 apply the following formula:

854
$$\text{Progress (\%)} = \frac{\text{Change in emissions}}{\text{Base year emissions}} * 100$$

855 The progress as a percentage can be reported as in the following example:

856 [Organization name] reduced Scope 1 and Scope 2 GHG emissions by 20% from a 2019 base year.

857 In addition, the organization should also report the aggregated Scope 1, Scope 2, and Scope 3 GHG
858 emissions changes relative to the aggregated base year Scope 1, Scope 2, and Scope 3 GHG
859 emissions.

860 For an example of how to present information on requirements CC-4-a-i, CC-4-d-ii, and CC-4-e, see
861 Table 1.

862 **Table 1. Example template for presenting information on GHG emissions reduction targets**

GHG emissions reduction targets	Scopes included	Scope 3 categories included	Gases	Base year	Base year emissions (MtCO ₂ e)	Target (%)	Progress (%)	Target (MtCO ₂ e)	Progress (MtCO ₂ e)	Target year
Gross emissions reduction targets 1										

Gross emissions reduction targets 2										
Gross emissions reduction targets 3										

863

864 **Guidance to CC-4-f**

865 Progress in GHG inventory emissions can be reductions due to the organization’s initiatives,
 866 secondary effects due to other initiatives carried out by the organization, or changes due to external
 867 factors.

868 Initiatives of the organization that result in reductions can include:

- 869 • process redesign;
- 870 • conversion and retrofitting of equipment;
- 871 • fuel switching;
- 872 • changes in behavior.

873 Secondary effects due to other initiatives of the organization that result in reductions or increases can
 874 include:

- 875 • changes in production capacity;
- 876 • outsourcing.

877 Changes due to external factors that result in reductions or increases can include:

- 878 • decarbonization of the electricity grid caused by government policy;
- 879 • changes in consumer behavior, e.g., driving less;
- 880 • decarbonization of purchased goods and services initiated by suppliers;
- 881 • reduced emissions from waste disposal due to waste governmental policies.

This document does not represent an official position of the GUSB

Disclosure GH-1 Scope 1 GHG emissions

REQUIREMENTS

The organization shall:

- a. report gross Scope 1 GHG emissions in metric tons of CO₂ equivalent, and in the calculation:
 - i. include CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃;
 - ii. include biogenic non-CO₂ GHG emissions from the combustion or biodegradation of biomass from owned or controlled operations;
 - iii. exclude GHG trades, GHG removals, and avoided emissions;
 - iv. use the global warming potential (GWP) values based on a 100-year timeframe from the latest IPCC assessment reports;
- b. provide a breakdown of gross Scope 1 GHG emissions by CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃, in metric tons and in metric tons of CO₂ equivalent;
- c. report biogenic CO₂ emissions from the combustion or biodegradation of biomass from owned or controlled operations in metric tons, separately from gross Scope 1 GHG emissions;
- d. report the base year for the calculation, including:
 - i. the rationale for choosing it;
 - ii. emissions in the base year;
 - iii. the context for any significant changes in emissions that triggered recalculations of base year emissions;
 - iv. when there are recalculations of the base year emissions, and the current and formerly reported values;
- e. report the consolidation approach for emissions, whether equity share, financial control, or operational control;
- f. report standards, methodologies, and assumptions, including the source of the emission factors and calculation tools used.

GUIDANCE

Gross Scope 1 GHG emissions include, but are not limited to, the CO₂ emissions from energy consumption as reported in [Requirement EN-2-a in GRI EN: Energy 20xx](#).

Gross Scope 1 GHG emissions can come from the following operations owned or controlled by an organization:

- Generation of electricity, heating, cooling, and steam – these emissions result from the 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 emissions result from intentional or unintentional releases of GHGs. These include equipment leaks from joints, seals, packing, and gaskets; methane (CH₄) emissions from coal mines and venting; hydrofluorocarbon (HFC) emissions from refrigeration and air conditioning equipment; and CH₄ leakages.

928 **Guidance to GH-1-a**

929 All seven gases covered by the Kyoto Protocol are included in the gross Scope 1 GHG emissions
930 calculation.

931 Emissions from other GHGs, such as the Montreal Protocol gases, can be reported by the
932 organization separately from gross Scope 1 GHG emissions.

933 Where it aids transparency or comparability over time, the organization can provide additional
934 breakdowns of gross Scope 1 GHG emissions by, for example:

- 935 • business unit or facility;
- 936 • country;
- 937 • type of source (stationary and mobile combustion, process emissions, fugitive emissions);
- 938 • type of activity.

939 To present the information for this requirement, see Table 5.

940 The gross Scope 1 GHG emissions calculation excludes GHG removals and GHG trades.

941 GHGs emitted during Scope 1 removal activities is reported under GH-1-a. If there are Scope 2 or
942 Scope 3 emissions associated with Scope 1 removal activities, they are reported under GH-2-a and
943 GH-3-a.

944 **Guidance to GH-1-a-iv**

945 The organization is required to use the latest Intergovernmental Panel on Climate Change (IPCC)
946 global warming potential (GWP) values. If the organization used different IPCC GWP values in
947 previous reporting periods, it should disclose the IPCC GWP values used in each reporting period.

948 The organization should consistently apply GWP values for the information disclosed.

949 **Guidance to GH-1-b**

950 The organization is required to report emissions data for all seven gases separately. If the
951 organization cannot report the emissions data for each gas, it is required to provide a reason for
952 omission. See [Requirement 6 in GRI 1 Foundation 2021](#).

953 To present the information for this requirement, see Table 6.

954 **Guidance to GH-1-c**

955 As per the GHG Protocol Corporate Standard, biogenic non-CO₂ emissions, such as CH₄ and nitrous
956 oxide (N₂O), from the combustion or biodegradation of biomass from owned or controlled operations
957 are reported under GH-1-a as part of the gross Scope 1 GHG emissions. Biogenic CO₂ emissions
958 from the combustion or biodegradation of biomass from owned or controlled operations are reported
959 separately under GH-1-c and not included in the gross Scope 1 GHG emissions calculation in GH-1-
960 a.

961 To present the information for this requirement, see Table 5.

962 **Guidance to GH-1-d**

963 As specified in the comparability principle in [GRI 1: Foundation 2021](#), the organization should present
964 the information for the current reporting period and at least two previous reporting periods.

965 The organization should report the emissions consistently according to the selected recalculation
966 policy when there are recalculations of the base year emissions.

967 Cases that should trigger a recalculation of base year emissions can include:

- 968 • structural changes in the reporting organization that have a significant impact on the
969 organization's base year emissions, including mergers, acquisitions, divestments,
970 outsourcing, and insourcing of emitting activities.
- 971 • changes in calculation methodology or improvements in the accuracy of emission factors or
972 activity data that result in a significant impact on the base year emissions data.
- 973 • discovery of significant errors, or a number of cumulative errors, that are collectively
974 significant. In such a case, the organization should also report the established processes to
975 prevent such errors in future reporting.
- 976 For further information on recalculations of emissions in prior reporting periods, the organization can
977 follow the approach in the GHG Protocol Corporate Standard.
- 978 In the case where the organization has reported the base year according to the [Disclosure CC-4 GHG](#)
979 [emissions reduction targets and progress](#), the organization can refer to that disclosure and does not
980 need to repeat the information.
- 981 **Guidance to GH-1-d-ii**
- 982 This requirement covers separate base year emissions data for:
- 983 • gross Scope 1 GHG emissions (GH-1-a);
984 • biogenic CO₂ emissions (GH-1-c).
- 985 **Guidance to GH-1-e**
- 986 The organization should select a consistent approach for consolidating gross Scope 1 GHG
987 emissions, choosing from the equity share, financial control, or operational control methods outlined in
988 the GHG Protocol Corporate Standard. The approach should be consistent throughout the GHG
989 inventory. The organization should explain the reason for choosing the consolidation approach.
- 990 The organization should report GHG emissions for the same group of entities included in its financial
991 reporting. If the group of entities included in its financial reporting differs from the one included in its
992 sustainability reporting, the organization is required to specify any differences in [Disclosure 2-2 in GRI](#)
993 [2: General Disclosures 2021](#). See also [section 5.1 in GRI 1: Foundation 2021](#).
- 994 If there are any changes in the organizational boundaries, the organization should report these
995 changes.
- 996 **Guidance to GH-1-f**
- 997 Methodologies used to calculate the gross Scope 1 GHG emissions can include:
- 998 • direct measurements of GHG emissions;
999 • calculation of GHG emissions based on activity data (i.e., fuel use) and emission factors.
- 1000 The organization should describe the reasons why the standards, methodologies, assumptions, and
1001 calculation tools used were chosen.
- 1002 The emission factors can originate from mandatory reporting requirements, voluntary reporting
1003 frameworks, industry groups, scientific papers, commercial data providers, or suppliers to the
1004 reporting organization.
- 1005 The organization should consistently apply emissions factors for the information disclosed.

Disclosure GH-2 Scope 2 GHG emissions

REQUIREMENTS

The organization shall:

- a. report gross location-based and, if applicable, market-based Scope 2 GHG emissions in metric tons of CO₂ equivalent, and in the calculation:
 - i. include CO₂, CH₄, N₂O;
 - ii. include biogenic non-CO₂ emissions from electricity use;
 - iii. exclude GHG trades, GHG removals, and avoided emissions.
 - iv. use the global warming potential (GWP) values based on a 100-year timeframe from the latest IPCC assessment reports;
- b. provide a breakdown of gross location-based and, if applicable, market-based Scope 2 GHG emissions by CO₂, CH₄, N₂O, in metric tons and metric tons of CO₂ equivalent;
- c. report location-based and, if applicable, market-based biogenic CO₂ emissions from electricity use in metric tons, separately from gross Scope 2 GHG emissions;
- d. report the base year for the calculation, including:
 - i. the rationale for choosing it;
 - ii. emissions in the base year;
 - iii. the context for any significant changes in emissions that triggered recalculations of base year emissions;
 - iv. when there are recalculations of the base year emissions, and the current and former values;
- e. report the consolidation approach for emissions, whether equity share, financial control, or operational control;
- f. report standards, methodologies, and assumptions, including the source of the emission factors and calculation tools used.

GUIDANCE

Gross 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 [Requirement EN-2-c in GRI EN: Energy 20xx](#). For many organizations, the Scope 2 GHG emissions that result from the generation of purchased electricity can be much greater than the Scope 1 GHG emissions.

Guidance to GH-2-a

This requirement covers CO₂, CH₄, and N₂O, the GHGs which occur from energy production processes (e.g. combustion) and are relevant for the gross Scope 2 GHG emissions calculation. If the organization does not have information on all the gases, it is required to provide a reason for omission. See [Requirement 6 in GRI 1: Foundation 2021](#).

Other GHGs which are emitted directly in the energy production process (e.g. combustion) and covered by the Kyoto Protocol can also be reported, if relevant.

Emissions from other GHGs, such as the Montreal Protocol gases, can be reported by the organization separately from gross Scope 2 GHG emissions.

Where it aids transparency or comparability over time, the organization can provide additional breakdowns of gross Scope 2 GHG emissions by, for example:

- 1049 • business unit or facility;
- 1050 • country;
- 1051 • type of source (electricity, heating, cooling, and steam);
- 1052 • type of activity.

1053 There are two methods to calculate gross Scope 2 GHG emissions:

- 1054 • A location-based method, which reflects the average GHG emissions intensity of grids on
- 1055 which energy consumption occurs, using mostly grid-average emission factor data.
- 1056 • A market-based method, which reflects emissions from the electricity that an organization has
- 1057 purposefully chosen (or its lack of choice). It derives emission factors from contractual
- 1058 instruments, including any contract between two parties for the sale and purchase of energy
- 1059 bundled with attributes about the energy generation or for unbundled attribute claims.

1060 Market-based method is applicable to organizations with operations in markets providing product or

1061 supplier-specific data in the form of contractual instruments.

1062 According to the *GHG Protocol Scope 2 Guidance*, in a market-based calculation, emission factors

1063 should be chosen based on the following hierarchy: energy attributes and certificates, contracts for

1064 electricity, supplier and utility emission rates, residual mix and other regional, subnational and national

1065 grid average emissions factors.

1066 In case the organization reports information obtained using the market-based method, the following

1067 quality criteria, built on the *GHG Protocol Scope 2 Guidance*, apply:

- 1068 • Contractual instruments must convey the GHG emission rate attribute associated with
- 1069 the MWh produced. Attributes are defined as descriptive or performance characteristics
- 1070 of a particular generation resource. Each contractual instrument must be the only
- 1071 source of an GHG emission rate attribute claim associated with its quantity of energy
- 1072 generation.
- 1073 • A contractual instrument must be tracked and redeemed, retired, or canceled by or on
- 1074 behalf of the reporting organization.
- 1075 • Contractual instruments must have temporal and physical connections to their
- 1076 associated energy consumption by demonstrating that they are:
 - 1077 ○ sourced from a region reasonably linked to where it is applied, preferably from
 - 1078 the same grid market;
 - 1079 ○ issued and redeemed as close as possible to the energy consumption period to which
 - 1080 the contractual instrument is applied; or based on certifications that demonstrate
 - 1081 energy users may have benefitted from zero emissions electricity during the same
 - 1082 hour to match all of their consumption on a 24-hours a day, seven days a week basis;
- 1083 • Utility-specific emission factors should be calculated, including certificates retired on behalf of
- 1084 customers and applying the residual mix rate to null power.
- 1085 • All instruments must be transferred to the reporting organization for direct purchasing or on-
- 1086 site generation.
- 1087 • A residual mix must be used to represent the GHG intensity of unclaimed or publicly shared
- 1088 electricity.

1089 For further information on the quality criteria for gross Scope 2 GHG emissions accounting following

1090 the market-based method and how to support accurate accounting if the organization cannot meet the

1091 Scope 2 quality criteria, see the *GHG Protocol Scope 2 guidance*.

1092 If a residual mix is unavailable, the organization can use grid-average emission factors as a proxy

1093 which can mean that the location-based and market-based are the same number until information on

1094 the residual mix is available. The organization should disclose if a residual mix is unavailable and if

1095 grid-average emission factors are used as a proxy.

1096 In addition, and if applicable, the organization should disclose which types of market-based
1097 contractual instruments it uses, e.g., power purchase agreements, utility green tariffs, unbundled
1098 certificates, and the percentage of purchased electricity covered by each instrument. The organization
1099 can report additional information on the contractual arrangements, for example:

- 1100 • the date that the renewable generation facility was commissioned or repowered;
- 1101 • whether the renewable generation facility receives government subsidies or other
1102 support;
- 1103 • the length of the contract for the contractual instruments;
- 1104 • whether the contract was signed before the investment decision to build the renewable
1105 generation facility.

1106 To present the information for this requirement, see Table 5.

1107 **Guidance to GH-2-a-iv**

1108 The organization is required to use the latest Intergovernmental Panel on Climate Change (IPCC)
1109 global warming potential (GWP) values. If the organization used different IPCC GWP values in
1110 previous reporting periods, it should disclose the IPCC GWP values used in each reporting period.

1111 The organization should consistently apply GWP values for the information disclosed.

1112 **Guidance to GH-2-b**

1113 The organization is required to report emissions data for all seven gases separately. If the
1114 organization cannot report the emissions data for each gas, it is required to provide a reason for
1115 omission. See [Requirement 6 in GRI 1: Foundation 2021](#).

1116 To present the information for this requirement, see Table 6.

1117 **Guidance to GH-2-c**

1118 Electricity use refers to the use of purchased electricity, heating, cooling, and steam.

1119 As per the GHG Protocol Corporate Standard and GHG Protocol Scope 2 Guidance, any biogenic
1120 non-CO₂ emissions such as methane (CH₄) or nitrous oxide (N₂O) from electricity use (e.g., biomass
1121 combustion in the electricity value chain) are to be reported under GH-2-a. The information required
1122 under GH-2-c is reported separately and not included in the gross Scope 2 GHG emissions
1123 calculation in GH-2-a.

1124 To present the information for this requirement, see Table 5.

1125 **Guidance to GH-2-d**

1126 As specified in the comparability principle in [GRI 1: Foundation 2021](#), the organization should present
1127 the information for the current reporting period and at least two previous reporting periods.

1128 For further information on recalculations of emissions in prior reporting periods, the organization can
1129 refer to the [Guidance to GH-1-d](#) in this Standard and the GHG Protocol Corporate Standard.

1130 If the organization has reported the base year under [Disclosure CC-4 GHG emissions reduction
1131 targets and progress](#) (CC-4-d), it can provide a reference to this information and does not need to
1132 repeat the information.

1133 **Guidance to GH-2-d-ii**

1134 This requirement covers separate base year emissions data for:

- 1135 • gross Scope 2 GHG emissions (GH-2-a);
- 1136 • biogenic CO₂ emissions (GH-2-c).

1137 **Guidance to GH-2-e**

1138 The organization should select a consistent approach for consolidating gross Scope 2 GHG
1139 emissions, choosing from the equity share, financial control, or operational control methods outlined in
1140 the GHG Protocol Corporate Standard. The approach should be consistent throughout the GHG
1141 inventory. The organization should explain the reason behind choosing the consolidation approach.

1142 The organization should report information on GHG emissions for the same group of entities included
1143 in its financial reporting. If the group of entities included in its financial reporting differs from the one
1144 included in its sustainability reporting, the organization is required to specify any differences. See
1145 [section 5.1 in GRI 1 Foundation 2021](#) and [Disclosure 2-2 in GRI 2: General Disclosures 2021](#).

1146 If there are any changes in the organizational boundaries, the organization is required to report these
1147 changes.

1148 **Guidance to GH-2-f**

1149 The organization should describe the reasons why the standards, methodologies, assumptions, and
1150 calculation tools used were chosen.

1151 The emission factors can originate from mandatory reporting requirements, voluntary reporting
1152 frameworks, industry groups, or specialized data providers.

1153 The organization should consistently apply emissions factors for the information disclosed.

This document does not represent an official position of the GSCB

Disclosure GH-3 Scope 3 GHG emissions

REQUIREMENTS

The organization shall:

- a. report gross Scope 3 GHG emissions in metric tons of CO₂ equivalent, and in the calculation:
 - i. include upstream and downstream categories;
 - ii. include CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃;
 - iii. include biogenic non-CO₂ emissions from the combustion or biodegradation of biomass;
 - iv. exclude GHG trades, GHG removals, and avoided emissions;
 - v. use the global warming potential (GWP) values based on a 100-year timeframe from the latest IPCC assessment reports;
- b. provide a breakdown of gross Scope 3 GHG emissions by each of the 15 Scope 3 categories in metric tons of CO₂ equivalent;
- c. report, total biogenic CO₂ emissions from the combustion or biodegradation of biomass in metric tons separately from gross Scope 3 GHG emissions, and a breakdown of this total by each of the 15 Scope 3 categories;
- d. report the base year for the calculation, including:
 - i. the rationale for choosing it;
 - ii. emissions in the base year;
 - iii. the context for any significant changes in emissions that triggered recalculations of base year emissions;
 - iv. when there are recalculations of the base year emissions, and the current and former values;
- e. report standards, methodologies, and assumptions, including for each of the 15 Scope 3 categories, the sources of the emission factors, and calculation tools used.

GUIDANCE

Gross Scope 3 GHG emissions are indirect greenhouse gas emissions that occur outside the organization, including upstream and downstream emissions, other than those covered in gross Scope 2 GHG emissions.

For many organizations, Scope 3 GHG emissions can be much greater than Scope 1 or Scope 2 GHG emissions.

Gross Scope 3 GHG emissions can come from, but are not limited to, 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. Gross Scope 3 GHG emissions can also come from decomposing the organization's waste. Process-related emissions during the manufacture of purchased goods and fugitive emissions in facilities not owned by the organization can also produce Scope 3 GHG emissions.

Gross Scope 3 GHG emissions include, but are not limited to, the CO₂ emissions from energy consumption as reported under [Requirement EN-3-a in GRI EN: Energy 20xx](#).

Guidance to GH-3-a

As detailed in the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, the organization is required to use the following 15 upstream and downstream categories to calculate gross Scope 3 GHG emissions:

- 1199 **Upstream categories**
- 1200 1. Purchased goods and services
 - 1201 2. Capital goods
 - 1202 3. Fuel- and energy-related activities (not included in gross Scope 1 or Scope 2 GHG emissions)
 - 1203 4. Upstream transportation and distribution
 - 1204 5. Waste generated in operations
 - 1205 6. Business travel
 - 1206 7. Employee commuting
 - 1207 8. Upstream leased assets
- 1208 **Downstream categories**
- 1209 9. Downstream transportation and distribution
 - 1210 10. Processing of sold products
 - 1211 11. Use of sold products
 - 1212 12. End-of-life treatment of sold products
 - 1213 13. Downstream leased assets
 - 1214 14. Franchises
 - 1215 15. Investments
- 1216
- 1217 All seven gases covered by the Kyoto Protocol are included in the gross Scope 3 GHG emissions
- 1218 calculation. If the organization does not have data on all the gases, it should refer to [Requirement 6 in](#)
- 1219 [GRI 1: Foundation 2021](#) to provide a reason for the omission.
- 1220 Emissions from other GHGs, such as the Montreal Protocol gases, can be reported by the
- 1221 organization separately from gross Scope 3 GHG emissions.
- 1222 To present the information for this requirement, see Table 5.
- 1223 GHG emissions associated with Scope 3 removal activities within an organization's inventory
- 1224 boundary are reported under GH-3-a. If there are Scope 1 or Scope 2 GHG emissions associated
- 1225 with Scope 3 removal activities, they should be reported under GH-1-a and GH-2-a.
- 1226 **Guidance to GH-3-a-iii**
- 1227 Under requirement GH-3-a, an organization is required to include biogenic non-CO₂ emissions from
- 1228 the combustion or biodegradation of biomass in the calculation of gross Scope 3 GHG emissions, for
- 1229 example, methane (CH₄) and nitrous oxide (N₂O) emissions from the combustion of biofuels.
- 1230 For further information, refer to the GHG Protocol Corporate Standard and GHG Protocol Scope 3
- 1231 Standard.
- 1232 **Guidance to GH-3-a-iv**
- 1233 The organization is required to use the latest Intergovernmental Panel on Climate Change (IPCC)
- 1234 global warming potential (GWP) values. If the organization used different IPCC GWP values in
- 1235 previous reporting periods, it should disclose the IPCC GWP values used in each reporting period.
- 1236 The organization should consistently apply GWP values for the information disclosed.
- 1237 **Guidance to GH-3-b**
- 1238 Emissions data in metric tons of CO₂ equivalent are reported for each of the 15 Scope 3 categories.
- 1239 The organization should ensure that the Scope 3 inventory appropriately reflects the GHG emissions
- 1240 of the organization. The organization should not exclude any category that would compromise the
- 1241 relevance of the reported inventory.
- 1242 If the organization cannot report the emissions data for a particular category, it is required to provide a
- 1243 reason for omission. Where data cannot be reported because it is unavailable or incomplete, the
- 1244 organization is required to specify which information is unavailable or incomplete and why, and

1245 describe the steps being taken and the expected time frame to obtain the information. If the GHG
1246 emissions value of a particular category is identified as not applicable, the organization is required to
1247 explain why the category is considered not applicable. See [Requirement 6 in GRI 1 Foundation 2021](#).

1248 The organization can refer to the GHG Protocol Corporate Value Chain Standard for information on
1249 the Scope 3 GHG accounting quality criteria.

1250 An organization can also provide the breakdown of gross Scope 3 GHG emissions of carbon dioxide
1251 (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs),
1252 sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃), in metric tons.

1253 To ensure transparency, for each of the 15 Scope 3 categories, the organization should report the
1254 percentage of the total emissions obtained through primary data on the total for each category.
1255 Primary data is obtained from suppliers or other value chain entities. The following formula may be
1256 used:

$$1257 \quad \text{Primary data (\%)} = 100 * \frac{\text{Primary data (MtCO}_2\text{e)}}{\text{total Scope 3 category emissions (MtCO}_2\text{e)}}$$

1258

1259 Where it aids transparency or comparability over time, the organization can provide additional
1260 breakdowns of gross Scope 3 GHG emissions by, for example:

- 1261 • business unit or facility;
- 1262 • country;
- 1263 • type of source;
- 1264 • type of activity.

1265 To present the information for this requirement, see Table 5.

1266 **Guidance to GH-3-c**

1267 Biogenic CO₂ emissions from the combustion or biodegradation of biomass in the value chain are
1268 reported separately from gross Scope 3 GHG emissions and, therefore, are not included in the
1269 calculation for GH-3-a.

1270 The organization can refer to the GHG Protocol Corporate Standard and GHG Protocol Scope 3
1271 Standard for further information.

1272 To present the information for this requirement, see Table 5.

1273 **Guidance to GH-3-d**

1274 As specified in the comparability principle in [GRI 1: Foundation 2021](#), the organization should present
1275 the information for the current reporting period and at least two previous reporting periods.

1276 For further information on recalculations of emissions in prior reporting periods, the organization can
1277 refer to [Guidance to GH-1-d](#) in this Standard and the GHG Protocol Corporate Standard.

1278 If the organization has reported the base year under [Disclosure CC-4 GHG emissions reduction
1279 targets and progress](#) (GH-1-d), it can refer to that information and does not need to repeat it.

1280 **Guidance to GH-3-d-ii**

1281 This requirement covers separate base year emissions data for:

- 1282 • gross Scope 3 GHG emissions (GH-3-a);
- 1283 • biogenic CO₂ emissions (GH-3-c).

1284 In addition, the organization should provide the breakdowns of base year emissions by categories
1285 (GH-3-b and GH-3-c).

1286 **Guidance to GH-3-e**

1287 When reporting gross Scope 3 GHG emissions, the organization should ensure consistency with the
1288 consolidation approach selected under Scope 1 and 2.

1289 The organization should describe the reasons why the standards, methodologies, assumptions, and
1290 calculation tools used were chosen.

1291 The emission factors can originate from mandatory reporting requirements, voluntary reporting
1292 frameworks, or industry groups.

1293 The organization should consistently apply emissions factors for the information disclosed.

This document does not represent an official position of the GSSB

Disclosure GH-4 GHG emissions intensity

REQUIREMENTS

The organization shall:

- a. report GHG emissions intensity ratio(s), including the specific metrics (the denominators) chosen to calculate the ratio(s);
- b. report the types of GHG emissions included in the intensity ratio(s), whether Scope 1, Scope 2, or Scope 3.

GUIDANCE

Intensity ratios are obtained by dividing the absolute GHG emissions by an organization-specific metric (the denominator). Many organizations track environmental performance with intensity ratio(s).

GHG emissions intensity expresses the amount of GHG emissions per unit of activity, output, or any other organization-specific metric. In combination with an organization's absolute GHG emissions, reported in Disclosures GH-1, GH-2, and GH-3, GHG emissions intensity helps to contextualize the organization's efficiency, including in relation to other organizations.

The organization selects a specific metric that applies to its activities. For example, organizations that manufacture products may choose 'tons of product produced' as a denominator, whereas organizations with diversified activities and services may choose 'full-time equivalent employee (FTE)' as a denominator.

Table 2. Example template for presenting information on GHG emissions intensity ratio(s)

GHG emissions intensity ratios	Scopes (1,2,3)	Specific metric	Reporting period (1)	Reporting period (2)	Reporting period (3)
Ratio 1					
Ratio 2					
Ratio XX					

Guidance to GH-4-a

The organization can report intensity ratios for Scope 1, Scope 2, or Scope 3 separately or combined for Scope 1 and Scope 2. The organization should specify whether biogenic emissions are included in the numerator of the selected ratio(s).

Where it aids transparency or comparability over time, the organization should provide a breakdown of the GHG emissions intensity ratios by, for example:

- business unit or facility;
- country;
- type of source;
- type of activity;
- Scope 3 category.

Guidance to GH-4-b

Organization-specific metrics (denominators) can include, but are not limited to:

- units of product;
- production volume (such as metric tons, liters, or MWh);
- size (such as m² floor space);

- 1331 • number of full-time employees;
- 1332 • monetary units (such as revenue or sales).

1333 Relevant denominators will be different from industry to industry or even among different business
1334 units of an organization. Therefore, the organization should choose a denominator relevant to its
1335 industry and aligned with current industry standards.

This document does not represent an official position of the GSSB

Disclosure CC-5 GHG removals in the value chain

REQUIREMENTS

The organization shall:

- a. report total GHG removals in metric tons of CO₂ equivalent in the value chain, excluding any GHG trades, and a breakdown of this total by:
 - i. Scope 1 GHG removals and a further breakdown by storage pool;
 - ii. Scope 3 GHG removals and a further breakdown by storage pool;
- b. for each storage pool, describe how quality criteria are monitored in order to manage the risk of non-permanence;
- c. report the intended use of GHG removals;
- d. report standards, methodologies, assumptions, and calculation tools used;
- e. report the impacts associated with GHG removals and the actions taken to manage these impacts, including on:
 - i. local communities, vulnerable groups and workers;
 - ii. biodiversity.

GUIDANCE

This disclosure aims to increase transparency by helping organizations report on GHG removals.

GHG removals are anthropogenic activities removing CO₂ or other GHGs from the atmosphere and durably storing it in geological or terrestrial reservoirs. CO₂ removals occur when CO₂ is transferred from the atmosphere to a non-atmospheric carbon pool (e.g., land-based pool or geologic pool). CO₂ removals can also be referred to as carbon sequestration or enhanced carbon storage, where the carbon is derived from atmospheric CO₂.

According to the Intergovernmental Panel on Climate Change (IPCC), removals have two distinct elements:

- transfer of CO₂ or other GHGs from the atmosphere via sinks (the process, activity, or mechanism that removes greenhouse gases from the atmosphere); and
- storage of CO₂ or other GHGs within pools (the physical reservoir or medium where the removed CO₂ or other GHGs are stored).

Globally accepted accounting methods for GHG removals are currently under development. Organizations can refer to the Land Sector and Removals Guidance of the GHG Protocol, where guidance on accounting for CO₂ removals and carbon pools is provided. However, there is potential for removing other GHGs from the atmosphere, and additional guidance may be developed in the future.

Consistent with the climate change mitigation hierarchy, organizations are expected to prioritize implementing all feasible technical and scientific actions to avoid and reduce emissions in alignment with the effort to limit global warming to 1.5°C. Therefore, GHG removals cannot be counted as emission reductions toward an organization's gross GHG emissions reduction targets reported under [Disclosure CC-4 GHG emissions reduction target setting and progress](#). If the organization reports net-zero targets under [CC-1-f](#), GHG removals can only be used to counterbalance residual emissions at the net-zero target year or after having reduced at least 90% of their GHG emissions when further reduction is not possible.

Guidance to CC-5-a

1380 The organization should exclude from the calculation any removal activity undertaken by an
 1381 organization within its inventory boundary that is sold as a carbon credit.

1382 In cases where the organization reports removals other than CO₂, it should separately report
 1383 removals for each GHG covered by the Kyoto Protocol and use the GWP based on a 100-year
 1384 timeframe.

1385 To present the information for this requirement, see Table 3.

1386 **Guidance to CC-5-a-i**

1387 Scope 1 removals are direct and constitute removals for which the reporting organization owns or
 1388 controls the sink that transfers CO₂ or other GHGs from the atmosphere and the storage pool. Scope
 1389 3 removals are indirect and result from the activities of the reporting organization and where the
 1390 organization does not own or control both the sink (that transfers GHG from the atmosphere) and the
 1391 pool (that stores CO₂ or other GHGs).

1392 There are no Scope 2 removals since removals do not occur when generating electricity, heating,
 1393 cooling, or steam. According to the Land Sector and Removals Guidance of the GHG Protocol,
 1394 removals occurring in the value chain of the energy generation process are accounted for in Scope 3,
 1395 category 3, fuel- and energy-related activities as per the Scope 3 categories of the Corporate
 1396 Standard of the GHG Protocol.

1397 **Guidance to CC-5-a-ii**

1398 By reporting the storage pool, the organization provides transparency on the removal and storage
 1399 activity and the technology used.

1400 A storage pool is a physical reservoir or medium where a greenhouse gas or its constituent elements
 1401 are stored. There are two types of storage pools considered for reporting under this disclosure:

- 1402 • Land-based pools store carbon in terrestrial biomass, dead organic matter, and soil carbon
 1403 pools. The organization can report CO₂ removals resulting from annual increases in carbon
 1404 stored in land-based carbon pools due to land management. All land management removals
 1405 are from biogenic sinks;
- 1406 • Geologic pools are geologic formations that store inorganic minerals not used as products, for
 1407 example, fossil carbon in sedimentary formations containing oil and natural gas. The
 1408 organization can report CO₂ removals resulting from annual increases of carbon stored in
 1409 geologic pools derived from biogenic or technological CO₂ sinks.

1410 In addition, the organization should disaggregate the total GHG removals by sink process. The United
 1411 Nations Framework Convention on Climate Change (UNFCCC) defines a sink as any biogenic or
 1412 technological process that removes greenhouse gases from the atmosphere.

1413 As explained in the GHG Protocol's Land Sector and Removals Guidance, two main types of sink
 1414 processes remove CO₂ from the atmosphere:

- 1415 • Biogenic CO₂ removals resulting from atmospheric CO₂ transferred via biological sinks, such
 1416 as photosynthesis, to storage in biogenic carbon pools;
- 1417 • Technological CO₂ removals resulting from atmospheric CO₂ transferred via technological
 1418 sinks to storage in geologic carbon pools.

1419 To present the information for this requirement, see Table 3.

1420 **Table 3. Example template for presenting information on GHG removals**

1421

GHG removals in the value chain	Scope 1 removals in metric tons	Scope 3 removals in metric tons
Storage pool 1		
Storage pool 2		

Storage pool 3		
Storage pool 4		
Storage pool 5		
Total GHG removals in the value chain in metric tons		

1422

1423 **Guidance to CC-5-b**

1424 Risk of non-permanence means the inability to demonstrate that CO₂ or other GHGs remain stored
 1425 and losses of CO₂ and other GHG stock are accounted for and reported as emissions or reversals in
 1426 future inventory periods. Reversals are GHG emissions from carbon pools previously reported as
 1427 GHG removals by the organization.

1428 The risk of non-permanence should also include possible losses or leaks during transport.

1429 The risk of non-permanence may be in the form of unintentional natural factors such as fire, wind, and
 1430 other extreme weather events, intentional or purposeful actions such as harvests that are not part of
 1431 the management plan, conversion, or changes to land use.

1432 In order to implement the permanence principle, quality criteria are used to manage removals. Quality
 1433 criteria include:

- 1434 • An ongoing storage monitoring program – to demonstrate that CO₂ and other GHGs remain stored
 1435 or used to detect losses of stored CO₂ and other GHGs;
- 1436 • Traceability – where the organization can identify, track, and collect information throughout the
 1437 entire removal pathway, particularly in the case of Scope 3 removals, where the sinks and pools
 1438 are both not owned or controlled by the organization;
- 1439 • Availability of primary data – where the organization demonstrates that it has accounted for
 1440 removals using empirical data specific to the sinks and pools where GHG is stored in its own
 1441 operations or within its value chain;
- 1442 • Uncertainty – where the organization provides a quantitative uncertainty range for the removals,
 1443 including the removal value, the uncertainty range for the removal estimate is based on a
 1444 specified confidence level, and the organization can justify how the selected value does not
 1445 overestimate removals;
- 1446 • Reversals accounting – where the organization reports CO₂ stock and other GHG losses of
 1447 previously reported removals. The CO₂ stock and other GHG losses should be reported as GHG
 1448 emissions, if storage pools are part of the GHG inventory boundary in the reporting period or as
 1449 reversals, if storage pools are no longer part of the GHG inventory in the reporting period.

1450 If GHG removals do not meet one or more quality criteria listed above, or the organization cannot
 1451 describe how the removals meet one or more quality criteria, the organization should state this and
 1452 provide an explanation. The organization should also describe the planned or implemented actions to
 1453 meet the quality criteria.

1454 **Guidance to CC-5-c**

1455 This requirement covers the intended use of GHG removals reported under CC-5-a.

1456 GHG removals can be used to counterbalance residual emissions as the last step of the mitigation
 1457 hierarchy. Organizations are expected to counterbalance residual emissions at the net-zero target
 1458 year or after having reduced at least 90% of their GHG emissions when further reduction is not
 1459 possible, according to the Corporate Net Zero Standard from the Science Based Targets initiative
 1460 (SBTi).

1461 Residual emissions refer to the unabated GHG emissions after the organization has reduced at least
 1462 90% of its GHG emissions, when further reduction is not possible, according to the Net Zero Scenario
 1463 from the International Energy Agency (IEA) and Corporate Net Zero Standard from the Science

1464 Based Targets initiative (SBTi). In the case an organization is subjected to sectorial decarbonization
1465 pathways, it may be subjected to a different percentage of GHG emissions reduction.

1466 GHG removals cannot be counted as emission reductions toward an organization's gross GHG
1467 emissions reduction targets reported under [Disclosure CC-4 GHG emissions reduction target setting](#)
1468 [and progress](#).

1469 The organization may be allowed to include GHG removals in the targets reported under this
1470 disclosure only if subjected to specific sector programs (e.g., the SBTi Forest, Land and Agriculture
1471 (FLAG) Guidance). The organization should report the sector program based on authoritative
1472 scientific evidence.

1473 In addition, the organization should disclose whether GHG removal targets are in place and the
1474 purpose of the targets. The purpose of GHG removal targets can include counterbalancing residual
1475 emissions at the net-zero target year (as part of their net-zero strategy) and beyond value chain
1476 mitigation. If the organization sets GHG removal targets for other purposes, it should report and
1477 explain them.

1478 The organization should also report its reversals accounting policy, including how reversals of
1479 previously reported GHG removals in their target are accounted.

1480 **Guidance to CC-5-e**

1481 Under requirement CC-5-e, an organization should report impacts associated with GHG removals that
1482 occur both in the value chain and beyond its value chain.

1483 The organization should also report how it engages with stakeholders to identify impacts on people,
1484 including local communities, vulnerable groups and workers and on the environment including
1485 biodiversity.

1486 **Guidance to CC-5-e-i**

1487 Examples of impacts associated with GHG removals on local communities, vulnerable groups and
1488 workers can include:

- 1489 • Local communities lose the right to access lands if lands are used for new infrastructure,
1490 afforestation, or reforestation for removals and if the land is not acquired through inclusive
1491 and participatory processes.
- 1492 • Indigenous Peoples can be negatively impacted when land is not acquired with their free,
1493 prior, and informed consent.
- 1494 • Workers in carbon capture and storage facilities may face negative impacts on their health in
1495 the case of leakage of CO₂, as leakage may occur at any stage of capture, transport and
1496 storage.

1497 **Guidance to CC-5-e-ii**

1498 Examples of impacts associated with GHG removals on biodiversity can include:

- 1500 • Negative impacts on species when removal activities occur in or near threatened species'
1501 habitats.
- 1502 • Water is no longer available for use by ecosystems or local communities due to the extensive
1503 use of water for removal activities, leading to reduced water table levels.
- 1504 • Impacts on air quality and thereby on the health of local communities, resulting from potential
1505 leakage of CO₂ from storage pools.

1506 Disclosure 101-2 in *GRI 101: Biodiversity 202X* requires describing how the organization enhances
1507 synergies and reduces trade-offs between actions taken to manage its biodiversity impacts and its
1508 climate change impacts. If the organization has described the impacts on biodiversity resulting from
1509 its GHG removals and the actions taken to manage those impacts under Disclosure 101-2, it can
1510 provide a reference to this information.

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1511 Disclosure CC-6 Carbon credits

1512 REQUIREMENTS

1513 The organization shall:

- 1514 a. report the total amount of carbon credits in metric tons of CO₂ equivalent canceled and a
1515 breakdown of this total by types of carbon credit project;
- 1516 b. for each project for which carbon credits have been canceled, report:
- 1517 i. Project name and project ID;
 - 1518 ii. Project type, i.e., whether a reduction or removal project;
 - 1519 iii. Cancellation serial number, cancellation date, and vintage;
- 1520 c. for each carbon credit project reported under CC-5-b, describe how the project adheres to
1521 each of the following quality criteria;
- 1522 i. additionality;
 - 1523 ii. credible baselines;
 - 1524 iii. permanence;
 - 1525 iv. leakage avoidance;
 - 1526 v. unique issuance and claiming;
 - 1527 vi. regular monitoring;
 - 1528 vii. independent validation and verification;
 - 1529 viii. GHG program governance;
- 1530 d. report the purpose of cancellation of carbon credits;
- 1531 e. describe how the organization continuously monitors and evaluates the positive and
1532 negative impacts of the projects from which carbon credits are purchased, including:
- 1533 i. categories of stakeholders consulted in the implementation of the project;
 - 1534 ii. how human rights are respected;
 - 1535 iii. how socio-economic benefits for local communities and vulnerable groups are
1536 provided;
 - 1537 iv. how biodiversity is conserved;
 - 1538 v. how trade-offs are assessed.
- 1539

1540 GUIDANCE

1541 This disclosure aims to increase transparency regarding the use of carbon credits.

1542 A carbon credit is a transferable or tradable instrument representing one metric ton of CO₂ equivalent.
1543 Carbon credits are GHG emissions reduction or removal generated outside the organization's value
1544 chain and purchased by the organization.

1545 Carbon credits can be generated as follows:

- 1546 • GHG emissions reduction projects, such as renewable energy projects, to replace planned
1547 fossil fuel power plants or improve cookstoves' energy efficiency, and REDD+ projects
1548 (Reducing emissions from deforestation and forest degradation in developing countries).
- 1549 • Removal projects, for example, afforestation, reforestation, soil carbon sequestration, direct
1550 air carbon capture and storage (DACs), and bioenergy with carbon capture and storage
1551 (BECCS).

1552 Consistent with the climate change mitigation hierarchy, organizations are expected to prioritize
1553 implementing all feasible technical and scientific actions to avoid and reduce GHG emissions in
1554 alignment with the effort to limit global warming to 1.5° C.

1555 Therefore, carbon credits cannot be counted as emission reductions toward an organization’s gross
 1556 GHG emissions reduction targets reported under [Disclosure CC-4 GHG emissions reduction target](#)
 1557 [setting and progress](#).

1558 If the organization reports net-zero targets under [CC-1-f](#), GHG removal carbon credit projects can
 1559 only be used to counterbalance residual emissions at the net-zero target year or after having reduced
 1560 at least 90% of their GHG emissions, when further reduction is not possible.

1561 Organizations can use carbon credits to finance additional climate change mitigation beyond the
 1562 expected GHG emission reduction targets, in line with the latest scientific evidence to limit global
 1563 warming to 1.5 C°.

1564 **Guidance to CC-6-a**

1565 A carbon credit is canceled when permanently removed from circulation in a registry account.

1566 In this requirement, the organization provides a breakdown of the total carbon credits canceled in the
 1567 reporting period by type of project, i.e., whether the carbon credits were from GHG emissions
 1568 reduction or removal activities. The organization can additionally report the percentage corresponding
 1569 to the type of project.

1570
 1571 The organization may also report the amount of carbon credits purchased and not canceled during
 1572 the reporting period in metric tons of CO₂ equivalent.

1573
 1574 To present carbon credits canceled, purchased, and not canceled during the reporting period, the
 1575 organization can use Table 4.

1576
 1577 **Table 4. Example template for presenting information on carbon credits canceled and carbon**
 1578 **credits purchased and not canceled by type of project**

Carbon credits	mtCO ₂ e	%
Total carbon credits canceled during the reporting period		
Emissions reduction projects		
Removal projects		
Total carbon credits purchased and not canceled during the reporting period		
Emissions reduction projects		
Removal projects		

1579 **Guidance to CC-6-b-iii**

1580 Serial numbers are allocated to credits within the scope of trading programs to ensure that the serial
 1581 numbers are retired once used.

1582 According to the Voluntary Carbon Market Integrity Initiative (VCMI), Claims Code of Practice, credit
 1583 vintage refers to the year the carbon emission reduction occurred. As the verification process can
 1584 take two to three years from project inception, projects may generate credits for already reduced
 1585 emissions.

1586 **Guidance to CC-6-c**

1587 In the case where carbon credits that are canceled and reported under CC-6-a do not meet one or
 1588 more quality criteria, or the organization is not able to describe how the carbon credits cancelled meet

1589 the quality criteria, the organization should state it and provide an explanation. The organization
1590 should also describe the planned or implemented actions to meet the quality criteria.

1591 **Guidance to CC-6-c-i**

1592 A project is additional if it would not have occurred without the incentives provided by the credit.

1593 **Guidance to CC-6-c-ii**

1594 GHG emissions reduction or removal are quantified based on a realistic estimate using a baseline
1595 scenario or performance standard. Carbon credits are calculated relative to a baseline that represents
1596 a hypothetical scenario for what GHG emissions would have been in the absence of the project. See
1597 the GHG Protocol for Project Accounting for more information on project-specific and performance
1598 standard baseline approaches.

1599 **Guidance to CC-6-c-iii**

1600 The GHG emission reduction and GHG removal projects are permanent. The longevity of a carbon
1601 pool and the stability of its stocks over time (such as 100 years or other periods defined by a carbon
1602 credit program) must meet the criterion of permanence.

1603
1604 When reporting how a project adheres to the criteria of permanence, the organization should report
1605 how the risk of non-permanence is managed, including disclosing which measures are in place to
1606 address the risks of reversal and to compensate for reversals.

1607 **Guidance to CC-6-c-iv**

1608 GHG emissions reduction and removal projects must mitigate the risk of causing impacts elsewhere
1609 and account for any increase in emissions or decrease in removals outside the project's boundary. In
1610 order to avoid leakage, the organization should report which measures are in place to determine and
1611 monitor leakage.

1612 **Guidance to CC-6-c-v**

1613 Carbon credits are expected to be uniquely issued, claimed, and canceled by an electronic registry.

1614 The organization that cancels the credit should claim the carbon credit. Double counting credits is not
1615 permitted, so another organization or entity cannot claim the same GHG emissions reduction or
1616 removal.

1617 Organizations developing GHG emissions reduction or removal projects within value chains to sell as
1618 carbon credits are expected to have procedures to prevent double counting.

1619 Double counting includes the following:

- 1620
- 1621 • Double use occurs if multiple parties use a single GHG emission reduction or removal unit.
 - 1622 • Double issuance occurs when multiple GHG emission reductions or removal units are issued
1623 for the same GHG emission reduction or removal.
 - 1624 • Double claiming occurs when multiple parties claim the right to a single emission reduction,
removal, or mitigation outcome.

1625 Double use can be avoided through registry systems that assign unique serial numbers to individual
1626 offset credits, track transfer, and ownership, and record the purpose of use. A way by which double
1627 issuance can be avoided is by checking that the accounting boundaries used to quantify GHG
1628 reductions for different projects do not overlap. Double claiming can be avoided if project developers
1629 sign legal attestations asserting exclusive claims to any credited emission reductions and legally
1630 conveying the claims to the buyers of credits.

1631 The organization should report whether the carbon credits qualify as corresponding adjustments. For
1632 further information, see the UN Paris Agreement, Article 6.

1633 **Guidance to CC-6-c-vi**

1634 GHG emissions reduction and removal credits are monitored and quantified ex-post. This should
1635 include accurate and precise measurement, sampling, and quantification protocols. The organization
1636 should report the processes for data monitoring throughout the crediting period.

1637 **Guidance to CC-6-c-vii**

1638 Carbon credits are verified according to recognized quality standards by independent third-party
1639 validators and verifiers. The organization should report the processes in place for the independent
1640 third-party validation and verification of the carbon credits, as well as the relevant standards used.

1641 **Guidance to CC-6-c-viii**

1642 GHG programs issue GHG emissions reduction and removal credits with a clearly defined and
1643 transparent governance structure. The organization should report the GHG governance structure of
1644 the carbon credit projects. Specifically, the organization should report the relevant published rules and
1645 procedures, accreditation procedures for third-party auditors, and stakeholder consultation
1646 procedures for developing or refining program requirements and as part of the project approval
1647 process, with established grievance and input mechanisms to address complaints about projects after
1648 implementation.

1649 **Guidance CC-6-d**

1650 This requirement covers the purpose of the cancellation reported under CC-6-a.
1651 Purpose of cancellation includes, for example:

- 1652 • Compliance with any country, regional, or industry-level sectorial carbon-crediting program.
- 1653 • Financing and contributing additional climate change mitigation in addition to the
1654 organization's GHG emission reduction actions. These contributions are one of the steps of
1655 the mitigation hierarchy. Such contributions cannot be used to counterbalance residual
1656 emissions for reaching net-zero targets.
- 1657 • Counterbalancing residual emissions is the last step of the mitigation hierarchy. Only GHG
1658 removal from carbon credit projects can be used to counterbalance residual emissions
1659 according to the Corporate Net Zero Standard from the Science Based Targets initiative
1660 (SBTi). Organizations are expected to counterbalance residual emissions at the net-zero
1661 target year or after having reduced at least 90% of their GHG emissions, when further
1662 reduction is not possible.

1663
1664 Residual emissions refer to the unabated GHG emissions after the organization has taken all feasible
1665 technical and scientific actions to reduce at least 90% of its GHG emissions, when further reduction is
1666 not possible, according to the Net Zero Scenario from the International Energy Agency (IEA) and
1667 Corporate Net Zero Standard from the Science Based Targets initiative (SBTi).

1668
1669 When reporting the purpose of carbon credit cancellation, the organization should indicate how the
1670 cancellation does not impede nor reduce the achievement of its GHG emissions reduction targets.

1671
1672 Carbon credits cannot be counted as emission reductions toward an organization's gross GHG
1673 emissions reduction targets reported under [Disclosure CC-4 GHG emissions reduction target setting
1674 and progress.](#)

1675 **Guidance to CC-6-e**

1676 Organizations are expected to have a due diligence process in place to select carbon credit projects
1677 that maximize positive impacts and prevent or mitigate negative impacts on people and the
1678 environment.

1679 **Guidance to CC-6-e-i**

1680 The organization can refer to [Guidance 2-29 in GRI 2](#) for reporting under this requirement.

1681 **Guidance CC-6-e-ii**

1682 The organization is expected to select carbon credit projects that respect human rights, with special
1683 attention to vulnerable groups and Indigenous Peoples. For further information, the organization can
1684 refer to the United Nations High-Level Expert Group on the Net Zero Emissions Commitments of Non-
1685 State Entities 'Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities
1686 and Regions' Report.

1687 Carbon credit projects should not negatively impact the livelihoods and earnings of workers, food
1688 security, water rights, or land rights. These projects should not result in physical violence towards
1689 workers or local communities.

1690 When reporting on the human rights impacts of carbon credit projects, the organization can describe
1691 how local communities are consulted and how tenure rights for the land used for projects are
1692 respected without the threat of forceable eviction. The organization can also describe how it obtains
1693 the free, prior, and informed consent of Indigenous Peoples with regard to any action that affects their
1694 lands, territories, or resources.

1695 **Guidance to CC-6-e-iii**

1696 In this disclosure, the organization explains how the carbon credit activities generate socio-economic
1697 benefits for local communities and vulnerable groups.

1698 Examples of socio-economic benefits for local communities and vulnerable groups resulting from
1699 carbon credit projects can include providing them with a portion of the payments for each credit
1700 purchased, creating new jobs, and developing technical skills and training.

1701 **Guidance to CC-6-e-iv**

1702 Requirement CC-6-e-iv enables the organization to describe how its carbon credit projects contribute
1703 to biodiversity conservation.

1704 Carbon credit projects can result in positive and negative impacts on biodiversity. An example of a
1705 positive impact can be when a carbon credit project leads to the recovery of a degraded ecosystem.
1706 An example of a negative impact can be when a carbon credit project leads to biodiversity loss, for
1707 example, from afforesting an area with single-species trees.

1708 The organization can also describe the impacts of the carbon credit projects on biodiversity, for
1709 example, whether the variety of plant and animal species increases or decreases or whether the
1710 projects support land regeneration or lead to land degradation.

1711 Disclosure 101-2 in *GRI 101: Biodiversity 202X* requires describing how the organization enhances
1712 synergies and reduces trade-offs between actions taken to manage its biodiversity impacts and its
1713 climate change impacts. If the organization has described how its carbon credit projects conserve
1714 biodiversity under Disclosure 101-2, it can provide a reference to this information.

1715 **Guidance to CC-6-e-v**

- 1716 Carbon credit projects are likely to involve trade-offs. For example, land-based removal projects can
1717 reduce the availability of land for food production.
- 1718 Under requirement CC-6-e-v, the organization should also describe the process to mitigate trade-offs.

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1719 **Example templates for presenting information for Disclosures GH-1, GH-2 and GH-3**

1720 **Table 5. Example template for presenting information on Scope 1, Scope 2 and Scope 3 GHG**
 1721 **emissions**

Scope 1, Scope 2 and Scope 3 GHG emissions	Base year		Reporting period-2		Reporting period-1		Reporting period	
	Emissions in mtCO ₂ e	Biogenic CO ₂ emissions in metric tons	Emissions in mtCO ₂ e	Biogenic CO ₂ emissions in metric tons biogenic CO ₂	Emissions in mtCO ₂ e	Biogenic CO ₂ emissions in metric tons biogenic CO ₂	Emissions in mtCO ₂ e	Biogenic CO ₂ emissions in metric tons biogenic CO ₂
Scope 1 GHG emissions								
Scope 2 GHG emissions								
Location-based								
Market-based								
Scope 3 GHG emissions								
Category 1: Purchased goods and services								
Category 2: Capital goods								
Category 3: Fuel- and energy-related activities (not included in Scope 1 or Scope 2)								
Category 4: Upstream transportation and distribution								
Category 5: Waste generated in operations								
Category 6: Business travel								
Category 7: Employee commuting								
Category 8: Upstream leased assets								
Category 9: Downstream transportation and distribution								
Category 10: Processing of sold products								
Category 11: Use of sold products								
Category 12: End-of-life treatment of sold products								
Category 13: Downstream leased assets								
Category 14: Franchises								
Category 15: Investments								

1722 **Table 6. Example template for presenting information on Scope 1 and Scope 2 GHG emissions**
 1723 **by gas**
 1724

Emissions – Breakdown by gas	Reporting period-2		Reporting period-1		Reporting period	
	metric tons	mtCO ₂ e	metric tons	mtCO ₂ e	metric tons	mtCO ₂ e
Scope 1 GHG emissions						
CO ₂						
CH ₄						
N ₂ O						
HFCs						
PFCs						

SF ₆						
NF ₃						
Scope 2 GHG emissions (location-based)						
CO ₂						
CH ₄						
N ₂ O						
Scope 2 GHG emissions (market-based)						
CO ₂						
CH ₄						
N ₂ O						

Glossary

1725

1726 This glossary provides definitions for terms used in this Standard. The organization is required to
1727 apply these definitions when using the GRI Standards.

1728 The definitions included in this glossary may contain terms that are further defined in the complete
1729 [GRI Standards Glossary](#). All defined terms are underlined. If a term is not defined in this glossary or in
1730 the complete *GRI Standards Glossary*, definitions that are commonly used and understood apply.

1731

1732 **base year**

1733 historical datum (a specific year or an average over multiple years) against which a measurement is
1734 tracked over time

1735 Source: World Resources Institute (WRI) and World Business Council for Sustainable Development
1736 (WBCSD), *GHG Protocol Corporate Accounting and Reporting Standard, Revised Edition*, 2004; modified.

1737

1738 **biogenic carbon dioxide (CO₂) emission**

1739 emission of CO₂ from the combustion or biodegradation of biomass

1740

1741 **carbon credit**

1742 Transferable or tradable instrument that represents one metric ton of CO₂ equivalent emissions
1743 reduction or removal

1744 Note: Carbon credits are uniquely serialized, issued, tracked, and canceled according to recognized
1745 quality standards.

1746

1747 **carbon dioxide (CO₂) equivalent**

1748 The universal unit of measurement to indicate the global warming potential (GWP) of each
1749 greenhouse gas, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate
1750 the release, or avoiding the release, of different greenhouse gases against a common basis

1751 Source: World Resources Institute (WRI) and World Business Council for Sustainable Development
1752 (WBCSD), *GHG Protocol Scope 2 Guidance. An amendment to the GHG Protocol Corporate*
1753 *Standard*, 2015 and *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting*
1754 *Standard*, 2011.

1755 Note: The CO₂ equivalent for a gas is determined by multiplying the metric tons of the gas by the
1756 associated GWP.

1757

1758 **global warming potential (GWP)**

1759 Factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a
1760 given greenhouse gas (GHG) relative to one unit of CO₂

1761 Source: World Resources Institute (WRI) and World Business Council for Sustainable Development
1762 (WBCSD), *GHG Protocol Scope 2 Guidance. An amendment to the GHG Protocol Corporate*
1763 *Standard, 2015* and *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting*
1764 *Standard, 2011.*

1765 Note: GWP values convert GHG emissions data for non-CO₂ gases into units of CO₂ equivalent.

1766

1767 **greenhouse gas (GHG)**

1768 gas that contributes to the greenhouse effect by absorbing infrared radiation

1769 Note: For the purposes of this Standard, GHGs are the seven gases covered by the UNFCCC:
1770 carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs);
1771 perfluorocarbons (PFCs); sulphur hexafluoride (SF₆); and nitrogen trifluoride (NF₃).

1772

1773 **greenhouse gas (GHG) removal**

1774 anthropogenic activities to remove CO₂ or other greenhouse gas (GHGs) emissions from
1775 the atmosphere and durably store them in geological, terrestrial, or ocean reservoirs

1776

1777 Source: Intergovernmental Panel on Climate Change (IPCC), *Global Warming of 1.5°C. An IPCC*
1778 *Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and*
1779 *related global greenhouse gas emission pathways, in the context of strengthening the global*
1780 *response to the threat of climate change, sustainable development, and efforts to eradicate*
1781 *poverty, Annex I: Glossary, 2018; modified.*

1782

1783 **greenhouse gas (GHG) trade**

1784 purchase, sale, or transfer of carbon credits or greenhouse gas (GHG) allowances

1785 Source: World Resources Institute (WRI) and World Business Council for Sustainable Development
1786 (WBCSD), *GHG Protocol Corporate Accounting and Reporting Standard, Revised Edition, 2004;*
1787 modified

1788

1789 **human rights**

1790 rights inherent to all human beings, which include, at a minimum, the rights set out in the *United*
1791 *Nations (UN) International Bill of Human Rights* and the principles concerning fundamental rights set
1792 out in the *International Labour Organization (ILO) Declaration on Fundamental Principles and Rights*
1793 *at Work*

1794 Source: United Nations (UN), *Guiding Principles on Business and Human Rights: Implementing the*
1795 *United Nations "Protect, Respect and Remedy" Framework, 2011; modified*

1796 Note: See [Guidance to 2-23-b-i in GRI 2: General Disclosures 2021](#) for more information on 'human
1797 rights'.

1798

1799 **impact**

1800 effect the organization has or could have on the economy, environment, and people, including on their
1801 human rights, which in turn can indicate its contribution (negative or positive) to sustainable
1802 development

1803 Note 1: Impacts can be actual or potential, negative or positive, short-term or long-term, intended or
1804 unintended, and reversible or irreversible.

1805 Note 2: See [section 2.1 in GRI 1: Foundation 2021](#) for more information on 'impact'.

1806

1807 **material topics**

1808 topics that represent the organization's most significant impacts on the economy, environment, and
1809 people, including impacts on their human rights

1810 Note: See [section 2.2 in GRI 1: Foundation 2021](#) and [section 1 in GRI 3: Material Topics 2021](#) for
1811 more information on 'material topics'.

1812

1813 **Scope 1 GHG emissions**

1814 Greenhouse gas (GHG) emissions from operations that are owned or controlled by the organization

1815 Source: World Resources Institute (WRI) and World Business Council for Sustainable Development
1816 (WBCSD), GHG Protocol Scope 2 Guidance. An amendment to the GHG Protocol Corporate
1817 Standard, 2015 and GHG Protocol Corporate Value Chain (Scope 3) Accounting and
1818 Reporting Standard, 2011.

1819 Examples: CO₂ emissions from fuel consumption

1820 Note: A GHG source is any physical unit or process that releases GHG into the atmosphere.

1821

1822 **Scope 2 GHG emissions**

1823 Indirect greenhouse gas (GHG) emissions from the generation of purchased or acquired electricity,
1824 steam, heating, and cooling consumed by the organization

1825 Source: World Resources Institute (WRI) and World Business Council for Sustainable Development
1826 (WBCSD), GHG Protocol Scope 2 Guidance. An amendment to the GHG Protocol Corporate
1827 Standard, 2015 and GHG Protocol Corporate Value Chain (Scope 3) Accounting and
1828 Reporting Standard, 2011.

1829

1830 **Scope 3 GHG emissions**

1831 All indirect greenhouse gas (GHG) emissions (not included in Scope 2) that occur in the value chain
1832 of the organization, including both upstream and downstream emissions

1833 Source: World Resources Institute (WRI) and World Business Council for Sustainable Development
1834 (WBCSD), GHG Protocol Scope 2 Guidance. An amendment to the GHG Protocol Corporate
1835 Standard, 2015 and GHG Protocol Corporate Value Chain (Scope 3) Accounting and
1836 Reporting Standard, 2011.

1837

1838 **sustainable development / sustainability**

1839 development that meets the needs of the present without compromising the ability of future
1840 generations to meet their own needs

1841 Source: World Commission on Environment and Development, Our Common Future, 1987

1842 **Note:** The terms 'sustainability' and 'sustainable development' are used interchangeably in the GRI
1843 Standards.

1844 Bibliography

1845 Authoritative instruments

- 1846 1. Intergovernmental Panel on Climate Change (IPCC), *Global Warming of 1.5°C. An IPCC*
1847 *Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and*
1848 *related global greenhouse gas emission pathways, in the context of strengthening the global*
1849 *response to the threat of climate change, sustainable development, and efforts to eradicate*
1850 *poverty, Annex I: Glossary, 2018*
- 1851 2. Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2022: Mitigation of*
1852 *Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the*
1853 *Intergovernmental Panel on Climate Change, 2022.*
- 1854 3. United Nations (UN) Framework Convention, *United Nations Framework Convention on*
1855 *Climate Change, 1992.*
- 1856 4. United Nations (UN) Protocol, *Kyoto Protocol to the United Nations Framework Convention*
1857 *on Climate Change, 1997.*
- 1858 5. United Nations (UN), *Declaration on the Rights of Indigenous Peoples, 2007.*
- 1859 6. United Nations Environment Programme (UNEP), *Montreal Protocol on Substances that*
1860 *Deplete the Ozone Layer, 1987.*
- 1861 7. United Nations Framework Convention on Climate Change (UNFCCC), *Paris Agreement, 2016*
1862

1863 Additional references

- 1864 8. International Energy Agency (IAE) Net Zero Emissions by 2050 Scenario (NZE),
1865 [https://www.iea.org/reports/global-energy-and-climate-model/net-zero-emissions-by-2050-](https://www.iea.org/reports/global-energy-and-climate-model/net-zero-emissions-by-2050-scenario-nze)
1866 [scenario-nze](https://www.iea.org/reports/global-energy-and-climate-model/net-zero-emissions-by-2050-scenario-nze), accessed on 5 October 2023.
- 1867 9. International Labour Organization (ILO) Frequently Asked Questions on just transition,
1868 https://www.ilo.org/global/topics/green-jobs/WCMS_824102/lang--en/index.htm, accessed on 5
1869 October 2023.
- 1870 10. Science-Based Target initiative (SBTi), *FLAG Science Based Target Setting Guidance, 2022.*
- 1871 11. Science-Based Target initiative (SBTi), *SBTi Corporate Net Zero Standard, Version 1.1, 2023.*
- 1872 12. Task Force on Climate-related Financial Disclosures (TCFD), *The Use of Scenario Analysis in*
1873 *Disclosure of Climate-related Risks and Opportunities, Technical Supplement, 2017.*
- 1874 13. United Nations (UN), *Integrity Matters: Net Zero Commitments by Businesses, Financial*
1875 *Institutions, Cities and Regions, Report from the United Nations High-Level Expert Group on*
1876 *the Net Zero Emissions Commitments of Non-State Entities, 2022.*
- 1877 14. Voluntary Carbon Market Integrity Initiative (VCMI), *Claims Code of Practice, 2023.*
- 1878 15. World Resources Institute (WRI) and World Business Council for Sustainable Development
1879 (WBCSD), *GHG Protocol Corporate Accounting and Reporting Standard, Revised Edition,*
1880 *2004.*
- 1881 16. World Resources Institute (WRI) and World Business Council for Sustainable Development
1882 (WBCSD), *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting*
1883 *Standard, 2011.*
- 1884 17. World Resources Institute (WRI) and World Business Council for Sustainable Development
1885 (WBCSD), *GHG Protocol for Project Accounting, 2005.*
- 1886 18. World Resources Institute (WRI) and World Business Council for Sustainable Development
1887 (WBCSD), *GHG Protocol Scope 2 Guidance. An amendment to the GHG Protocol Corporate*
1888 *Standard, 2015.*
- 1889 19. World Resources Institute (WRI) and World Business Council for Sustainable Development
1890 (WBCSD), *Land Sector and Removals Guidance, Part 1: Accounting and Reporting*

1891 *Requirements and Guidance, Supplement to the GHG Protocol Corporate Standard and Scope*
1892 *3 Standard, Draft for Pilot Testing and Review, 2022.*
1893 20. World Resources Institute (WRI) and World Business Council for Sustainable Development
1894 (WBCSD), '*Greenhouse Gas Protocol Accounting Notes, No. 1, Accounting and Reporting*
1895 *Standard Amendment*', 2012.

1896

1897 **Resources**

1898 21. Carbon Disclosure Project (CDP), *Technical Note: Accounting of Scope 2 emissions, 2023*
1899 22. Science-Based Target initiative (SBTi), *Science Based Targets Initiative Public Consultation on*
1900 *Beyond Value Chain Mitigation (BVCM), Version 1, 2023.*
1901 23. Task Force on Climate-related Financial Disclosures (TCFD), *Recommendations of the Task*
1902 *Force on Climate-related Financial Disclosures, 2017.*
1903 24. United Nations Framework Convention on Climate Change (UNFCCC), *Just Transition of the*
1904 *Workforce, and the Creation of Decent Work and Quality Jobs, Technical Paper, 2020*
1905 25. United Nations Development Programme (UNDP), *How Just Transition Can Help Deliver the*
1906 *Paris Agreement, 2022.*
1907 26. World Resources Institute (WRI) and World Business Council for Sustainable Development
1908 (WBCSD), *Technical Guidance for Calculating Scope 3 Emissions, 2013.*
1909

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