



GRI Topic Standard Project for Climate Change – Energy Exposure draft

Comments to be received by 29 February 2024

This exposure draft of the GRI Energy Topic Standard is published for public comment by the Global Sustainability Standards Board (GSSB), the independent standard-setting body of GRI. This exposure draft is intended to replace GRI 302: Energy 2016.

Any interested party can submit comments on this draft by 29 February 2024 via [this online questionnaire](#). As required by the GSSB Due Process Protocol, only comments submitted in writing and in English will be considered. Comments will be published on the GRI website and considered a matter of public record. Instructions to submit comments are outlined on the first page of the online questionnaire.

An explanatory memorandum preceding the exposure draft summarizes the objectives of the project and the significant proposals contained within this exposure draft.

This draft is published for comment only and may change before official publication.

For more information, please visit the [GRI Standards webpage](#). For questions regarding the exposure draft or the public comment period, please send an email to climate@globalreporting.org

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 review of [GRI 302: Energy 2016](#), the
3 significant proposals contained in the exposure draft, and a summary of the GSSB's involvement and
4 views on the development of the draft.

5 Objectives for the project

6 The primary objective of this project is to review [GRI 302: Energy 2016](#) as part of the climate change
7 project. The project includes the review of [GRI 302: Energy 2016](#), [GRI 305: Emissions 2016](#)
8 [\(Disclosures 305-1 to 305-5\)](#), and [GRI 201: Economic Performance 2016 \(Disclosure 201-2\)](#). As
9 outlined in the GSSB's [Due Process Protocol](#), a multi-stakeholder technical committee was
10 established in May 2023 to contribute to the review of the climate change-related disclosures.

11 The aim is to align with internationally agreed best practice, latest developments, and relevant
12 authoritative intergovernmental instruments related to energy. Using energy more efficiently and
13 opting for renewable energy sources is essential for combating climate change and reducing an
14 organization's overall environmental footprint.

15 Specifically, the revised energy-related disclosures will enable an organization to disclose publicly its
16 most significant impacts on energy and how the organization manages these impacts, enhancing the
17 transparency of the organization's impacts and increasing organizational accountability.

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

20 Significant proposals

21 An exposure draft for the revised [GRI 302: Energy 2016](#) has been developed in line with the project
22 objectives as set out above. Notable changes and inclusions in this exposure draft are summarized
23 below.

24 • **New management disclosure on energy management**

25 The Energy exposure draft presents a dedicated, additional management disclosure that will help
26 in disclosing the role of energy policies and commitments in the transition to a decarbonized
27 economy. In this context, disclosure on energy target setting has been included in the guidance.

28 • **Energy consumption and generation within the organization**

29 The Energy exposure draft contains extended requirements on energy consumption and
30 generation. An important update covers purchased and self-generated electricity consumption
31 and sold electricity, with a requirement to provide a breakdown per energy source and information
32 on whether it is renewable or non-renewable. Organizations are required to report on the
33 fulfilment of relevant quality criteria if contractual instruments are used. Additional requirements
34 have been included to report the activities in which fuel and electricity are consumed, and to
35 report separately on self-generated non-fuel renewable electricity consumption. A template is
36 provided to assist in reporting under this disclosure.

37 • **Energy consumption upstream and downstream in the value chain**

38 The Energy exposure draft requires a new breakdown of significant energy consumption in the
39 organization's value chain by upstream and downstream Scope 3 categories. This information will
40 raise awareness on the organization's value chain while enhancing transparency on data
41 disclosed.

42 • **Reduction of energy consumption**

43 The exposure draft presents an additional requirement on whether the energy reductions occur
44 within the organization or at which stage of the value chain. This integrates content from the
45 Disclosure 302-5 Reductions in energy requirements of products and services of GRI 302: *Energy*
46 *2016* into the revised Reduction of energy consumption Disclosure. This change goes in the
47 direction of raising organizations' awareness and responsibility on energy consumption that
48 occurs in their value chain, while enhancing transparency.

49 **GSSB involvement and views on the development of** 50 **this draft**

51 The GSSB appointed three of its members as sponsors for this project and the sponsors observed the
52 Technical Committee process and attended most of the meetings.

53 The GSSB confirmed its support for the contents of the exposure drafts when it voted to approve the
54 drafts for public exposure at its meeting on 16 November 2023. The recording of the meeting can be
55 accessed on the [GSSB website](#).

56 **Note on reading this document**

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

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

Exposure draft for public comment

63 **GRI EN: Energy 202x**

64 **Content**

65 Introduction..... 5

66 Background on the topic..... 5

67 System of GRI Standards..... 5

68 Using this Standard 7

69 1. Topic management disclosures 8

70 Disclosure EN-1 Energy policies and commitments 8

71 2. Topic disclosures 9

72 Disclosure EN-2 Energy consumption and generation within the organization 9

73 Disclosure EN-3 Upstream and downstream energy consumption 14

74 Disclosure EN-4 Energy intensity 16

75 Disclosure EN-5 Reduction of energy consumption..... 18

76 Glossary 20

77 Bibliography 22

78

79

Exposure draft for public comment

Introduction

80

81 *GRI EN: Energy 202X* contains disclosures for organizations to report information about their energy-
82 related impacts, and how they manage these impacts.

83 The Standard is structured as follows:

- 84 • [Section 1](#) contains one disclosure, which provides information about how the organization
85 manages its energy-related impacts.
- 86 • [Section 2](#) contains four disclosures, which provide information about the organization's
87 energy-related impacts.
- 88 • The [Glossary](#) contains defined terms with a specific meaning when used in the GRI
89 Standards. The terms are underlined in the text of the GRI Standards and linked to the
90 definitions.
- 91 • The [Bibliography](#) lists authoritative intergovernmental instruments and additional references
92 used in developing this Standard, as well as resources that the organization can consult.

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

Background on the topic

95

96 This Standard addresses the topic of energy.

97 According to the Intergovernmental Panel on Climate Change (IPCC), global warming cannot be
98 limited to well below 2°C without rapid and deep reductions in energy system GHG emissions over
99 the next 30 years. This will require significant changes to how organizations generate and consume
100 energy, including transitioning to renewable energy, electrifying end-use sectors, and phasing out
101 fossil fuels.

102 Organizations consume energy in various forms, such as fuel, electricity, heating, cooling, or steam.
103 Energy can be self-generated or purchased from external sources and can come from renewable or
104 non-renewable sources.

105 Energy consumption occurs throughout activities upstream and downstream of an organization's
106 operations. This can include consumers' use of the organization's products and the end-of-life
107 treatment of these goods.

108 Impacts from energy consumption, as well as the transition to renewable energy, can affect the
109 economy, environment, and people, including their human rights. As such, measures are required that
110 also support workers, local communities, and other stakeholders.

111 Impacts on the environment can include GHG emissions exacerbating climate change, loss of soil
112 and other natural resources loss, and waste generation, while impacts on the economy can include a
113 shift in market preferences. Impacts on people can include job losses, an increasing need to reskill
114 workers, and different levels of access to affordable, reliable, and sustainable energy.

115 All energy-related impacts are to be considered when pursuing sustainable development.

System of GRI Standards

116

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

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

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

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

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

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

134 **Sector Standards**

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

138 **Topic Standards**

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

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



143

Using this Standard

144

145 This Standard can be used by any organization – regardless of size, type, sector, geographic location,
146 or reporting experience – to report information about its Energy-related impacts. This Standard can
147 also be used by organizations that supply energy or organizations that provide energy management
148 services. In addition to this Standard, disclosures that relate to this topic can be found in [GRI CC:
149 Climate Change 202x](#).

150 An organization reporting in accordance with the GRI Standards is required to report the following
151 disclosures if it has determined Energy to be a material topic:

- 152 • [Disclosure 3-3 in GRI 3: Material Topics 2021](#).
- 153 • Any disclosures from this Topic Standard that are relevant to the organization's Energy-
154 related impacts (Disclosure EN-1 through Disclosure EN-5).

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

156 Reasons for omission are permitted for these disclosures.

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

162 If the organization cannot report the required information about an item specified in a disclosure
163 because the item (e.g., committee, policy, practice, process) does not exist, it can comply with the
164 requirement by reporting this to be the case. The organization can explain the reasons for not having
165 this item, or describe any plans to develop it. The disclosure does not require the organization to
166 implement the item (e.g., developing a policy), but to report that the item does not exist.

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

172 **Requirements, guidance and defined terms**

173 The following apply throughout this Standard:

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

176 Requirements may be accompanied by guidance.

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

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

181 The word 'should' indicates a recommendation, and the word 'can' indicates a possibility or option.
182 Defined terms are underlined in the text of the GRI Standards and linked to their definitions in the
183 [Glossary](#). The organization is required to apply the definitions in the Glossary.

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 energy 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 disclosure from this section (Disclosure EN-1) that is relevant to its energy-related impacts.

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

Disclosure EN-1 Energy policies and commitments

REQUIREMENTS

The organization shall:

- a. report how its energy management policies and commitments contribute to energy efficiency, the deployment of renewable energy, and the transition to a decarbonized economy.

GUIDANCE

The organization reporting on its energy management policies and commitments should explain how these relate to any country, regional, or industry-level energy regulations that apply.

Policies included in this disclosure can concern benefit-sharing, land rights, employment health and safety, adequate remuneration, and commitments to ensure a clean environment.

The organization should include the following in this disclosure:

- Short-, medium-, and long-term targets aimed at:
 - increasing energy efficiency;
 - increasing the use of renewable energy, including whether and how contractual instruments are taken into account in renewable energy target setting and monitoring;
 - avoiding or reducing the extent of negative impacts associated with the transition to renewable energy. For example, impacts can be related to the procurement of minerals needed for renewable energy and can affect both the environment and local communities;
- Energy consumption reduction targets;
- The investment allocated for energy management improvements, such as investment in energy transition technologies, renewable energy, and energy efficiency initiatives;
- A description of how stakeholders, including workers, local communities, and vulnerable groups, are involved in the development of the organization's energy policies related to the transition and how they are affected.

In addition, the organization should report how its energy-related targets and commitments are in line with the latest scientific evidence to limit global warming to 1.5°C.

221 **2. Topic disclosures**

222 An organization reporting in accordance with the GRI Standards is required to report any disclosures
223 from this section ([Disclosure EN-2 Energy consumption and generation within the organization](#),
224 [Disclosure EN-3 Upstream and downstream energy consumption](#), [Disclosure EN-4 Energy intensity](#),
225 [Disclosure EN-5 Reduction of energy consumption](#)) that are relevant to its energy-related impacts.

226 **Disclosure EN-2 Energy consumption and generation** 227 **within the organization**

228 **REQUIREMENTS**

229 **The organization shall:**

- 230 **a. report total fuel consumption within the organization in joules, watt-hours, or multiples, and**
231 **a breakdown of this total by:**
- 232 **i. source;**
 - 233 **ii. renewable and non-renewable sources;**
 - 234 **iii. activity in which the fuel is consumed;**
- 235 **b. report total self-generated non-fuel renewable electricity, heating, cooling, and steam**
236 **consumption within the organization in joules, watt-hours, or multiples, and a breakdown of**
237 **this total by:**
- 238 **i. electricity, heating, cooling, and steam consumption;**
 - 239 **ii. source;**
 - 240 **iii. activity in which the energy is consumed;**
- 241 **c. report total purchased electricity, heating, cooling, and steam consumption within the**
242 **organization in joules, watt-hours, or multiples, and a breakdown of this total by:**
- 243 **i. electricity, heating, cooling, and steam consumption;**
 - 244 **ii. source;**
 - 245 **iii. renewable and non-renewable sources;**
- 246 **d. report total self-generated energy sold in joules, watt-hours, or multiples, and a breakdown of**
247 **this total by:**
- 248 **i. electricity, heating, cooling, and steam sold;**
 - 249 **ii. source;**
 - 250 **iii. renewable and non-renewable sources;**
- 251 **e. report standards, methodologies, assumptions, and calculation tools used, including:**
- 252 **i. how contractual instruments used to disclose information on purchased**
253 **electricity, heating, cooling, and steam fulfill quality criteria to ensure accuracy**
254 **and consistency;**
 - 255 **ii. the source of the conversion factors used;**

256
257

258 **GUIDANCE**

259 Consumption of non-renewable energy usually contributes to Scope 1 GHG emissions, which are
260 reported in *Disclosure GH-1 of GRI CC Climate Change 20xx*. Consumption of purchased electricity,
261 heating, cooling, and steam contributes to the organization's Scope 2 GHG emissions, which are
262 reported in *Disclosure GH-2 of GRI CC Climate Change 20xx*.

263 Throughout this Standard, emissions from the generation of acquired and consumed electricity,
264 heating, cooling or steam, are collectively referred to as "electricity", in alignment with the *GHG*
265 *Protocol Scope 2 Guidance*. In addition, in line with the *GHG Protocol Scope 2 Guidance*, definitions
266 of electricity, heating, cooling and steam can include but are not limited to:

- 267 • Electricity. This energy is used for operating machines, lighting, electric vehicle charging, or
268 heating and cooling systems.
- 269 • Heating. Most commercial or industrial buildings require heat to control interior climates and
270 heat water. Many industrial processes also require heat for specific equipment. That heat
271 may be produced from electricity or through a non-electrical process, such as solar thermal
272 heat or thermal combustion processes (as with a boiler or thermal power plant).
- 273 • Cooling. Similar to heat, cooling may be produced from electricity or through the distribution
274 of cooled air or water.
- 275 • Steam. Formed when water boils, steam is a valuable energy source for industrial
276 processes. It is used for mechanical work, heat, or directly as a process medium.

277 For some organizations, electricity is the only form of energy consumed. For others, energy
278 consumption takes different forms, such as steam or water provided by a district heating or chilled
279 water plant.

280 Energy can be purchased from external sources or produced by the organization (self-generated).

281 Organizations can also store or purchase energy through specific energy carriers (e.g., hydrogen) and
282 energy storage systems (e.g., batteries). When the organization consumes the energy from the
283 energy carrier or energy storage systems, this consumption is reported under EN-2-a, EN-2-b, or EN-
284 2-c. If an organization sells the energy from the energy carrier or energy storage systems, this is
285 reported under EN-2-d. The organization should also report any additional information useful to
286 understand the energy carriers' primary energy source.

287 Unused feedstocks and fuels for energy generation are excluded when compiling the information
288 specified in EN-2-a, EN-2-b, and EN-2-c.

289 In addition to disclosing information in EN-2, the organization can report the total energy consumption
290 within the organization as the sum of EN-2-a, EN-2-b, and EN-2-c. The organization can also report
291 the total net energy consumption by subtracting the energy sold (EN-2-d) from the total energy
292 consumption within the organization.

293 The organization's energy consumption activities can include manufacturing processes, operating
294 office equipment, operating a car fleet, heating buildings, and conducting research and development
295 activities.

296 In this disclosure, purchased electricity, heating, cooling, and steam also refers to circumstances
297 where an organization may indirectly acquire and use electricity (e.g., as a tenant of a property).

298 See Table 1 for an example of how to present information on EN-2-a, EN-2-b, and EN-2.

299 The organization can provide additional breakdowns of energy consumption data when it supports
300 transparency or comparability over time, for example, by:

- 301 • business unit or facility;
- 302 • country.

303 **Guidance to EN-2-a**

304 This requirement covers fuel consumption, including fuels purchased by the organization and fuel
305 generated by the organization's activities (such as coal mined, or oil and gas extracted by the
306 organization).

307 Non-renewable sources include all fuel used for transport, warehousing, and distribution (e.g., fuel
308 for combustion in boilers, furnaces, heaters, turbines, flares, incinerators, generators, and vehicles
309 owned or controlled by the organization, like gasoline and LPG).

310 Renewable sources can include biofuels purchased for direct use and biomass from sources owned
311 or controlled by the organization (also comprising industrial and municipal waste of biological origin).

312 **Guidance to EN-2-b**

313 This requirement covers self-generated electricity, heating, cooling, and steam consumption from
314 non-fuel renewable energy sources (e.g., wind and solar).

315 This requirement excludes self-generated electricity, heating, cooling, and steam consumption if it is
316 generated from fuel consumption. When the organization generates electricity from a non-
317 renewable or renewable fuel source and then consumes the generated electricity, heating, cooling,
318 or steam, the energy consumption is counted once under EN-2-a.

319 **Guidance to EN-2-c**

320 The organization may find it difficult to consistently report the breakdown between purchased
321 electricity non-renewable and renewable sources across multiple countries due to variations in
322 accounting methods. In this case, contractual instruments (i.e., energy attribute certificates, power
323 purchase agreements, and green electricity products) can provide information on the required
324 breakdown.

325 Organizations can use contractual instruments to report on EN-2-c if they are available in the markets
326 where they operate. However, these contractual instruments are expected to be assessed against
327 specific quality criteria to ensure consistency and credibility (see EN-2-e for further information).

328 **Guidance to EN-2-e**

329 This requirement covers EN-2-a to EN-2-d.

330 The organization should:

- 331 • apply conversion factors consistently for all data disclosed;
- 332 • use conversion factors that best represent the specific energy content of the fuel to convert
333 to joules, watt-hours, or multiples (for example, when reporting on energy consumption from
334 bituminous coal, the organization should use conversion factors for bituminous coal instead
335 of generic coal);
- 336 • describe the reasons why the standards, methodologies, assumptions, and calculation
337 tools used were chosen.

338 When the organization reports information specified in EN-2-c using data from contractual
339 instruments (market-based method), the following quality criteria apply, which are built on the
340 *GHG Protocol Scope 2 Guidance*:

- 341 • Contractual instruments must convey the GHG emission rate attribute associated with
342 the MWh produced. Attributes are defined as descriptive or performance characteristics
343 of a particular generation resource. Each contractual instrument must be the only
344 source of an GHG emission rate attribute claim associated with its quantity of energy
345 generation.
- 346 • A contractual instrument must be tracked and redeemed, retired, or canceled by or on
347 behalf of the reporting organization.

- 348 • Contractual instruments must have temporal and physical connections to their
- 349 associated energy consumption by demonstrating that they are:
- 350 ○ sourced from a region reasonably linked to where it is applied, preferably from
- 351 the same grid market;
- 352 ○ issued and redeemed as close as possible to the energy consumption period to
- 353 which the contractual instrument is applied; or based on certifications that
- 354 demonstrate energy users may have benefitted from zero emissions electricity
- 355 during the same hour to match all of their consumption on a 24-hours a day,
- 356 seven days a week basis.

357 See the *GHG Protocol Scope 2 Guidance* for further information on the quality criteria for gross
 358 Scope 2 GHG emissions accounting following the market-based method and how to support
 359 accurate accounting if the organization cannot meet the Scope 2 quality criteria.

360 In addition, and if applicable, the organization should disclose which types of market-based
 361 contractual instruments it uses (e.g., power purchase agreements, utility green tariffs,
 362 unbundled certificates) and the percentage of purchased electricity covered by each instrument.

363 The organization can report additional information on its contractual instruments, for example:

- 364 • The date that the renewable generation facility was commissioned or repowered.
- 365 • Whether the renewable generation facility receives government subsidies or other
- 366 support.
- 367 • The length of the contract for the contractual instruments.
- 368 • Whether the contract was signed prior to the investment decision to build the renewable
- 369 generation facility.
- 370

371 **Table 1. Example template for presenting information for EN-2-a, EN-2-b and EN-2-c**

372 Table 1 provides examples of how the organization can present information on energy consumption.
 373 Examples of activities are manufacturing processes and operating office equipment. Examples of
 374 sources include biofuel (renewable fuel source), natural gas (non-renewable fuel source), wind and
 375 solar (self-generated renewable electricity source). 'N.A.' means 'not applicable'. The organization
 376 can amend the table according to its practices and report additional information, such as additional
 377 activities or additional sources.

| | | From renewable sources | | From non-renewable sources | | Total |
|--|--------------|------------------------|-----|----------------------------|------|-------|
| | | Source 1 | ... | Source 1 | ... | |
| Fuel consumption | Activity 1 | | | | | |
| | Activity ... | | | | | |
| Total | | | | | | |
| Self-generated renewable electricity consumption | Electricity | Activity 1 | | | N.A. | |
| | | Activity ... | | | | |
| | Heating | Activity 1 | | | | |
| | | Activity ... | | | | |
| | Cooling | Activity 1 | | | | |
| | | Activity ... | | | | |
| Steam | Activity 1 | | | | | |

| | | | | | | |
|---|--------------------|---------------------|--|--|--|--|
| | | <i>Activity ...</i> | | | | |
| Total | | | | | | |
| Purchased electricity consumption | <i>Electricity</i> | | | | | |
| | <i>Heating</i> | | | | | |
| | <i>Cooling</i> | | | | | |
| | <i>Steam</i> | | | | | |
| Total | | | | | | |

378

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379 **Disclosure EN-3 Upstream and downstream energy**
380 **consumption**

381 **REQUIREMENTS**

382 **The organization shall:**

- 383 a. **report significant energy consumption upstream and downstream of its value chain in**
384 **joules, watt-hours, or multiples, and a breakdown by each upstream and downstream**
385 **category;**
386 b. **report standards, methodologies, and assumptions, including the source of conversion**
387 **factors and calculation tools used.**

388 **GUIDANCE**

389 This disclosure covers energy consumption from activities outside the organization, upstream and
390 downstream of its value chain.

391 Quantifying energy consumption from non-renewable sources upstream and downstream in the
392 organization's value chain can provide a basis for calculating Scope 3 GHG emissions in [Disclosure](#)
393 [GH-3 of GRI CC Climate Change 20xx](#).

394 **Guidance to EN-3-a**

395 The organization can identify significant energy consumption upstream and downstream in the value
396 chain by assessing whether an activity's energy consumption:

- 397 • contributes substantially to the organization's total anticipated energy consumption
398 upstream and downstream in the value chain;
399 • offers potential for reductions the organization can undertake or influence;
400 • contributes substantially to climate change as high-emitting activities;
401 • is deemed relevant by stakeholders, such as customers, suppliers, investors, or civil society
402 organizations;
403 • results from outsourced activities previously performed in-house or that are typically
404 performed in-house by other organizations in the same sector;
405 • has been identified as substantial for the organization's sector;
406 • meets any additional criteria for determining relevance developed by the organization or
407 organizations in its sector.

408 When reporting the breakdown by upstream or downstream category in the organization's value
409 chain the organization can refer to the *GHG Protocol Corporate Value Chain (Scope 3)*
410 *Accounting and Reporting Standard* for the following categories:

411 ***Upstream categories***

- 412 1. Purchased goods and services
413 2. Capital goods
414 3. Fuel- and energy-related activities (not included in [Disclosure EN-2](#))
415 4. Upstream transportation and distribution
416 5. Waste generated in operations
417 6. Business travel
418 7. Employee commuting
419 8. Upstream leased assets

420

421 ***Downstream categories***

- 422 9. Downstream transportation and distribution
423 10. Processing of sold products
424 11. Use of sold products

- 425 12. End-of-life treatment of sold products
- 426 13. Downstream leased assets
- 427 14. Franchises
- 428 15. Investments

429 Organizations should report for which of the 15 categories estimations are used, if estimations are
430 used to report upstream and downstream energy consumption under EN-3-a. In that case,
431 organizations should report also the percentage of data estimated for each category.
432 If the organization does not report the energy consumption assessed as significant for a particular
433 category, it is required to provide a reason for omission. Where data cannot be reported because it is
434 unavailable or incomplete the organization is required to specify which information is unavailable or
435 incomplete and why, and describe the steps being taken and the expected time frame to obtain the
436 information. See [Requirement 6 in GRI 1 Foundation 2021](#).

437 The organization should report energy consumption separately for non-renewable sources and
438 renewable sources.

439 **Guidance to EN-3-b**

440 The organization should describe the reasons why the standards, methodologies, assumptions, and
441 calculation tools used were chosen.
442

Exposure draft for public comment

Disclosure EN-4 Energy intensity

REQUIREMENTS

The organization shall:

- a. report energy intensity ratio(s), including the specific metrics (the denominators) chosen to calculate the ratio(s);
- b. report whether the energy intensity ratio(s) include energy consumption:
 - i. within the organization;
 - ii. upstream and downstream in the organization's value chain;
 - iii. within the organization and upstream and downstream in the organization's value chain;
- c. report types of energy consumption included in the intensity ratio(s), whether fuel, electricity, heating, cooling, steam, or all.

GUIDANCE

Energy intensity ratios define energy consumption in the context of an organization-specific metric and are obtained by dividing the energy consumption (the numerator) by organization-specific metrics (the denominator).

These ratios express the energy required per unit of activity, output, or any other organization-specific metric.

The organization should report this disclosure with absolute data on energy consumption reported in EN-2 and EN-3. Disclosing energy intensity ratios can help stakeholders understand the organization's efficiency in relation to its sector while supporting energy reduction and efficiency investments.

See additional references [1] and [3] in the [Bibliography](#).

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

| Energy intensity ratios | Energy consumption within/in the value chain | Types of energy consumption | Specific metric | Reporting period (1) | Reporting period (2) | Reporting period (3) |
|-------------------------|--|-----------------------------|-----------------|----------------------|----------------------|----------------------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |

Guidance to EN-4-a

Where it aids transparency or comparability over time, the organization can provide a breakdown of energy intensity ratio(s) by:

- business unit or facility;
- country;
- type of source (see definitions for the listing of non-renewable sources and renewable sources);
- type of activity;
- each upstream and downstream category.

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

- 478 • units of product;
- 479 • production volume (such as metric tons, liters, or MWh);
- 480 • size (such as m² floor space);
- 481 • number of full-time employees;
- 482 • monetary units (such as revenue or sales).

483 Relevant denominators will differ between industries or even among business units within an
484 organization. Therefore, the organization should choose a denominator relevant to its industry and
485 aligned with current industry standards.

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Disclosure EN-5 Reduction of energy consumption

REQUIREMENTS

The organization shall:

- a. report the reduction of energy consumption achieved as a result of conservation and efficiency initiatives, in joules, watt-hours, or multiples, excluding reductions resulting from other factors;
- b. report types of energy included in the reduction, whether fuel, electricity, heating, cooling, steam, or all;
- c. report whether the energy reduction occurs within the organization or in which one of upstream and downstream categories of its value chain;
- d. report whether energy reduction is estimated, modeled, or sourced from direct measurements and, if estimations or modeling is used, disclose the methods;
- e. report the base year or baseline for calculating reductions in energy consumption, including the rationale for choosing it;
- f. report standards, methodologies, assumptions, and calculation tools used.

GUIDANCE

When reporting how it manages this topic, the organization is required to include energy-related targets, as per [Disclosures 3-3 in GRI 3: Material Topics 2021](#) and [EN-1](#).

Guidance to EN-5-a

The organization should prioritize disclosing energy reductions achieved as a result of conservation and efficiency initiatives implemented in the reporting period.

Energy conservation and efficiency initiatives can include:

- process redesign;
- conversion and retrofitting of equipment;
- changes in behavior;
- operational changes.

The organization can also provide a breakdown of energy consumption reductions by individual or group initiatives.

Examples of other factors include reduced production capacity or outsourcing, changes in organizational boundaries, and weather fluctuations.

The organization should report reductions of energy consumption in percentage compared to the base year or baseline, in addition to reporting reductions as required in EN-5-a.

Guidance to EN-5-b

The organization can report reductions in energy consumption by combining energy types or separately for fuel, electricity, heating, cooling, and steam.

Guidance to EN-5-c

The organization can refer to the *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard* for the following categories:

Upstream categories

1. Purchased goods and services
2. Capital goods

527 3. Fuel- and energy-related activities (not included in [Disclosure EN-2](#))

528 4. Upstream transportation and distribution

529 5. Waste generated in operations

530 6. Business travel

531 7. Employee commuting

532 8. Upstream leased assets

533

534 ***Downstream categories***

535 9. Downstream transportation and distribution

536 10. Processing of sold products

537 11. Use of sold products

538 12. End-of-life treatment of sold products

539 13. Downstream leased assets

540 14. Franchises

541 15. Investments

542 Organizations should consider the whole life cycle of the products they manufacture and release on
543 the market. This is particularly important for products and services with high energy consumption
544 during their use phase due to their potential to affect energy demand, such as electronic equipment
545 and vehicles.

546 Where applicable, the organization should include, under this requirement, the reporting of reductions
547 in energy requirements during the use phase of sold products and services achieved during the
548 reporting period.

549 **Guidance to EN-5-f**

550 This requirement covers EN-5-a to EN-5-e.

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

553 Glossary

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

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

559 **base year**

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

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

564

565 **baseline**

566 starting point used for comparisons

567 Note: In the context of energy reporting, the baseline is the projected energy consumption in the
568 absence of any reduction activity

569

570 **conservation and efficiency initiative**

571 organizational or technological modification that allows a defined process or task to be carried out
572 using less energy

573 Examples: conversion and retrofitting of equipment such as energy-efficient lighting, elimination of
574 unnecessary energy use due to changes in behavior, process redesign

575

576 **energy reduction**

577 amount of energy no longer used or needed to carry out the same processes or tasks

578 Note: Energy reduction does not include overall reduction in energy consumption from reducing
579 production capacity or outsourcing organizational activities.

580

581 **human rights**

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

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

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

590

591 **impact**

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

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

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

598

599 **material topics**

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

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

604

605 **non-renewable energy source**

606 energy source that cannot be replenished, reproduced, grown or generated in a short time period
607 through ecological cycles or agricultural processes

608 Examples: coal; fuels distilled from petroleum or crude oil, such as gasoline, diesel fuel, jet fuel, and
609 heating oil; fuels extracted from natural gas processing and petroleum refining, such as butane,
610 propane, and liquefied petroleum gas (LPG); natural gas, such as compressed natural gas (CNG),
611 and liquefied natural gas (LNG); nuclear power

612

613 **renewable energy source**

614 energy source that is capable of being replenished in a short time through ecological cycles or
615 agricultural processes

616 Examples: biomass, geothermal, hydro, solar, wind

617

618 **sustainable development / sustainability**

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

621 Note: The terms 'sustainability' and 'sustainable development' are used interchangeably in the GRI
622 Standards.

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

624

625 **Bibliography**

626 **Authoritative instruments**

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631

632 **Additional references**

633

- 634 1 World Resources Institute (WRI) and World Business Council for Sustainable Development
635 (WBCSD), *GHG Protocol Corporate Accounting and Reporting Standard, Revised Edition*,
636 2004.
- 637 2 World Resources Institute (WRI) and World Business Council for Sustainable Development
638 (WBCSD), *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting*
639 *Standard*, 2011.
- 640 3 World Resources Institute (WRI) and World Business Council for Sustainable Development
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644 (WBCSD), *'Greenhouse Gas Protocol Accounting Notes, No. 1, Accounting and Reporting*
645 *Standard Amendment'*, 2012.

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