The [Draft] GRI Sustainability Taxonomy Architecture and Implementation Guide

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Table of Contents

1	Introduction to GRI	. 3
	1.1 GRI and its mission	. 3
	1.2 The GRI Standards and its main features	. 3
	1.3 Impact and financial sustainability disclosures	. 5
	1.4 Relationship with other standards setters	. 6
2	Why is GRI developing an XBRL taxonomy?	. 7
3	Understanding the Structure of the GRI Standards	. 9
4	The [draft] GRI Sustainability Taxonomy Architecture	12
	4.1 Considerations for determining the Taxonomy Architecture	12
	4.2 Folder Structure	12
	4.3 Taxonomy Package	13
	4.4 Approaches used for data modelling in the Taxonomy	14
	4.5 Element grouping in the Taxonomy	18
5	Reporting Material Topics and Omissions	21
6	Technical features	23
	6.1 Categorical Elements - Extensible Enumerations	23
	6.2 Categorical Elements - BooleanItemType	24
	6.3 Different Datatypes used across the Taxonomy	25
	6.4 Use of specific labels within the Taxonomy	25
	6.5 Tagging of intensity ratios	26
7	Validation rules	28
	7.1 Modelling of validation rules in formula linkbase	28
A	opendix A: XBRL Glossary	30

1 Introduction to GRI

1.1 GRI and its mission

Established in 1997, GRI (Global Reporting Initiative) is an independent, international not for profit organization that helps businesses and other organizations take responsibility for their impacts by providing them with the global common language to communicate those impacts – the GRI Standards, which are provided as a free public good for use by reporting organizations.

GRI envisions a sustainable future enabled by transparency and open dialogue about impacts. This is a future in which reporting on impacts is common practice by all organizations around the world. By better understanding, managing and disclosing their impacts, organizations can unlock benefits that inform decisions, reduce risks, improve business opportunities and strengthen stakeholder relationships, and enables organizations to demonstrate their contributions towards sustainable development.

GRI works with its partners, businesses, investors, policymakers, civil society, labor organizations and other experts to develop the GRI Standards and promote their use around the world. They are the first and only global reporting standards to fully reflect the due diligence expectations for sustainability impacts - including on human rights, as set out in intergovernmental instruments by the UN and OECD.

The GRI Standards have been developed by the Global Sustainability Standards Board (GSSB) through a rigorous, independent, multi-stakeholder, transparent process, in the public interest, that ensures reporting requirements reflect and align with the requirements of authoritative intergovernmental instruments

Today, more than 14,000 organizations around the world use GRI for their sustainability reporting. It is estimated that 78% of the world's biggest 250 companies by revenue have adopted the GRI Standards for sustainability reporting, and the GRI Standards are referenced in over 289 policies from 102 countries worldwide.

1.2 The GRI Standards and its main features

The GRI Standards are a modular system of interconnected standards organized into three series: the GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards, see Figure 1.1.

The Universal Standards are used by all organizations when reporting in accordance with the GRI Standards. Organizations use the Sector Standards according to the sectors in which they operate, and the Topic Standards according to their list of material topics. Further information about each of these series of the GRI Standards is included below:

• Universal Standards

The Universal Standards are composed of three Standards: GRI 1, GRI 2 and GRI 3. The purpose and content of these Standards are set out below:

GRI 1: Foundation 2021 introduces the purpose and system of GRI Standards and explains key concepts for sustainability reporting. It also specifies the requirements and reporting principles that the organization must comply with to report in accordance with the GRI Standards.

GRI 2: General Disclosures 2021 contains disclosures that the organization uses to provide information about its reporting practices and other organizational details, such as its activities,





Figure 1.1: The modular structure of the GRI Standards

governance, and policies. This information gives insight into the profile and scale of the organization and provides a context for understanding the organization's impacts.

GRI 3: Material Topics 2021 provides step-by-step guidance on how to determine material topics (i.e. topics that represent the organization's most significant impacts on the economy, environment, and people, including impacts on their human rights). GRI 3 also contains disclosures that the organization uses to report information about its process of determining material topics, its list of material topics, and how it manages each topic.

• Sector Standards

The Sector Standards provide information for organizations about their likely material topics. An organization uses the Sector Standards that apply to its sectors to help determine its material topics and what information to report for the material topics. The Sector Standards increase the quality, completeness, and consistency of reporting by organizations within sectors.

The GRI Standards currently contain four Sector Standards: GRI 11: Oil and Gas Sector 2021, GRI 12: Coal Sector 2022, GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022 and GRI 14: Mining Sector 2024.

Topic Standards

The Topic Standards contain disclosures for the organization to report information about its impacts in relation to particular topics. The Topic Standards cover a wide range of topics. The organization uses the Topic Standards according to the list of material topics it has determined using GRI 3.

The GRI Standards currently contain 33 Topic Standards.

Organizations can choose to either report 'in accordance' or 'with reference' to the GRI Standards. When organizations reporting in accordance, they provide a comprehensive picture of



their most significant impacts on the economy, environment, and people, including impacts on their human rights, and how they manage these impacts. Organizations report with reference when they cannot comply with all the requirements for reporting in accordance with the GRI Standards or when they use selected GRI Standards, or parts of their content, to report information about specific topics for specific purposes.

The requirements that have to be met for an organization to claim it is reporting in accordance with, or with reference to, the GRI Standards are set out in GRI 1: Foundation 2021, Section 3. Reporting in accordance with the GRI Standards.

1.3 Impact and financial sustainability disclosures

The GRI Standards enable organizations to report information about the most significant impacts of their activities and business relationships on the economy, environment, and people, including impacts on their human rights. These impacts are identified and reported using GRI 3: Material Topics 2021. The reported impacts are important to sustainable development and to an organization's stakeholders, such as investors, workers, customers, or local communities. This perspective is also referred to as 'impact materiality'. It has been adopted in the European Sustainability Reporting Standards (ESRS) as one of the two dimensions an undertaking needs to report on and is expected to see more widespread adoption in regulatory approaches around the world.

The most significant impacts of an organization can also affect the availability, quality, and affordability of the resources and relationships it depends on. Thus, an organization's impacts can result in risks and opportunities for the organization. In this context, 'risks and opportunities' is used to refer to the negative and positive effects on an organization's prospects (e.g., financial risk, market risk, operational risk, reputational risk); it does not refer to the likelihood of a negative or positive impact (e.g., risk to society, risk to the environment).

The risks and opportunities that arise from an organization's impacts can affect the organization's business model or strategy and, consequently, its cash flows, access to finance, or cost of capital over the short, medium, or long term. For example, an organization's high use of non-renewable energy contributes to climate change and could, at the same time, result in increased operating costs due to legislation that seeks to shift energy use toward renewable sources. Or, an organization's track record of respecting human rights and promoting gender equality at work helps attract skilled workers, increasing the organization's reputation and thus boosting customers' demand for its products and services.

An organization's impacts can thus give rise to sustainability-related risks and opportunities in the short, medium, or long term. Nearly all, if not all, of the most significant impacts of an organization, will eventually translate into risks and opportunities. Therefore, understanding these impacts is a necessary first step in identifying risks and opportunities that result from an organization's impacts.

An organization's dependencies on resources and relationships are also a source of risks and opportunities, independent of the organization's impacts on those resources and relationships. For example, when an organization's business model depends on water that is affected by the polluting activities of other organizations upstream in the river basin.

Information about the risks and opportunities that arise from an organization's most significant impacts and the organization's dependencies on resources and relationships are reported under the IFRS Sustainability Disclosure Standards. The material topics and related impacts determined with the GRI Standards provide crucial input for identifying the risks and opportunities that arise from an organization's impacts.

The IFRS Sustainability Disclosure Standards require disclosing material information about all sustainability-related risks and opportunities that could reasonably be expected to affect an organization's business model or strategy and consequently its cash flows, access to finance, or cost of capital over the short, medium, or long term. This includes the sustainability-related risks and opportunities arising from the impacts of the organization on the economy, environment, and people. Information is material if omitting, misstating, or obscuring that information could



reasonably be expected to influence decisions of primary users of general purpose financial reports (that is, existing and potential investors, lenders, and other creditors).

The use of the GRI Standards and the IFRS Sustainability Disclosure Standards provides a comprehensive overview of an organization's sustainability-related impacts, risks, and opportunities. The perspectives these standards bring are relevant in their own right and complement each other.

The European Sustainability Reporting Standards have adopted 'financial materiality' as the second dimension an undertaking needs to report on. The combination of impact and financial materiality is referred to as 'double materiality' under the European Sustainability Reporting Standards.

An organization using the GRI Standards is required to report on its most significant impacts regardless of whether the organization identifies, or over which timeframe it identifies, that those impacts will lead to risks and opportunities for the organization. Therefore, it is important for the organization to report on all the material topics that it has determined using the GRI Standards. These material topics cannot be deprioritized on the basis that the organization identifies that they will not result in risks and opportunities for the organization or by applying materiality definitions of other reporting standards.

1.4 Relationship with other standards setters

In July 2021, GRI and the European Financial Reporting Advisory Group (EFRAG) signed a cooperation agreement whereby both organizations agreed to share technical expertise to co-construct new EU sustainability reporting standards and contribute to further global convergence. This collaboration also aimed to assist the European Commission in fulfilling its objective to increase corporate transparency in support of the European Green Deal.

In November 2023, crediting their close cooperation during the development of the draft ESRS, EFRAG and GRI acknowledged that they had achieved a high level of interoperability between their respective standards in relation to impact reporting. A <u>GRI-ESRS Interoperability Index</u> was made publicly available setting out how the disclosure requirements and datapoints in each set of standards relate to each other, emphasizing the high degree of commonality already achieved and laying a solid foundation on which to build a reciprocal digital taxonomy.

GRI and EFRAG have agreed to continue to working together on the development of sector standards and standards for SMEs, leveraging our knowledge and content to ensure optimal alignment between GRI and new ESRS standards. Both organizations have also agreed to collaborate on a detailed mapping of the common ESRS and GRI Standards datapoints in order to inform and align XBRL taxonomies through a digital correspondence table. The resulting interoperable XBRL taxonomies should enable the identification and simplified tagging of common datapoints.

The European Commission has been clear about its objective to build on existing standards. This approach ensures global comparability and limits additional reporting burden for companies – and is a key driver for GRI's active engagement in the development of the ESRS.

This approach also underpins GRI's Memorandum of Understanding with the IFRS Foundation, in relation to their International Sustainability Standards Board (ISSB). The collaboration with the IFRS Foundation seeks to provide a seamless, global and comprehensive sustainability reporting system for companies looking to meet the information needs of both investors and a broader range of stakeholders.

The increased collaboration will optimize how GRI and ISSB Standards can be used together to facilitate reporting on an organization's impacts, risks and opportunities, including risks that arise from the organization's impacts.

The ISSB and the GSSB have committed to jointly identify and align common disclosures that address information needs under the distinct scopes and purposes of their respective standards, for both thematic and sector-based standard setting. An initial outcome of the collaboration will involve a methodology pilot building on the recently published <u>GRI 101: Biodiversity Standard</u> and the ISSB's upcoming project on Biodiversity, Ecosystems and Ecosystem Services.



2 Why is GRI developing an XBRL

taxonomy?

This is not the first taxonomy GRI has released. In 2013 a taxonomy was developed based on the G4 version of the GRI Guidelines. At the time, however, reporting of sustainability impacts was in an earlier phase and the sector not ready for digital reporting.

Today, however, the landscape has changed. With both the IFRS Sustainability Disclosure Standards and Corporate Sustainability Reporting Directive (CSRD) in the EU supporting reporting using XBRL, reporting organizations will increasingly need to produce their reports in digital format alongside traditional, human readable formats.

There is also an increasing need for consistent, robust sustainability data that digital reporting enables access to. Examples of the potential use of sustainability data include:

- allowing reporting organizations to compare themselves to their peers and competitors, as well as track performance against industry benchmarks for important sustainability metrics;
- supporting data-driven decision making by organizations, to improve sustainability strategies and provide the basis for more accurate identification of sustainability-related financial risks and opportunities;
- providing a richer set of evidence on which regulators can design, improve and effectively implement regional sustainability policies;
- enabling robust data to support assessments made by rankers and raters, and allowing investors to better identify companies that align with the sustainability requirements of their portfolios;
- supporting robust auditing of sustainability reports, and
- enabling academic and other research into sustainability topics and trends.

Access to robust data is also essential given the potential use of Generative AI (GenAI) to support the drafting of sustainability reports. While GenAI offers opportunities to reduce the burden of drafting, allowing reporters to focus on improving quality of disclosures instead, it is important that its application is based upon and supported by comprehensive, accurate and robust data.

The GRI Standards provide the ideal basis for developing this sustainability data because:

- The GRI Standards are already embedded in sustainability reporting practices, used by more than 14,000 organizations across different countries and sectors, many of whom have reported using GRI across several years. This provides a rich source of existing sustainability data that could, for example, be used for robust benchmarking.
- The GRI Topic Standards provide comprehensive coverage of sustainability topics, including impacts on the economy, environment, and people. This could be used, for example, to investigate correlations between and trends in performance against different topics.
- The GRI Standards are referenced or required by 289 policies in 102 countries worldwide, meaning that GRI reported information is of direct relevance to these policies.

By digitizing its Standards, therefore, GRI aims to unlock access to sustainability data in a way that benefits the reporting community.

Digitally formatted reports filed with GRI will also be subject to validation checks (see below), which will allow GRI to automatically check that reporters are adhering to certain requirements for reporting in accordance or with reference to the GRI Standards, including the use of omissions and application of Sector Standards. These checks will provide a tool to help drive improvements in the quality of reporting and recognize organizations who fulfil these requirements.

The GRI Sustainability Taxonomy will also provide a tool for regulators to define reporting requirements for new policies and regulations. This will help close the loop between the design of



future policies, where these are based on the GRI Standards, and the implementation of reporting against these using digital formats.

Finally, having a global set of digital sustainability reporting standards offers the opportunity for GRI to help harmonize the reporting landscape even further by providing a bridge between different sets of regulations that include non-financial sustainability disclosures.

Just as GRI has committed, along with EFRAG, to maximize interoperability between the GRI and ESRS taxonomies, GRI also aims to map the correspondence of its taxonomy to ones that are released alongside future sustainability regulations, ensuring that these are as aligned as far as possible to reduce the reporting burden for organizations.



3 Understanding the Structure of

the GRI Standards

The GRI Standards are a modular system of interconnected standards organized into three series: the GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards, see Figure 1.1.

The Universal Standards are used by all organizations when reporting in accordance with the GRI Standards. Organizations use the Sector Standards according to the sectors in which they operate, and the Topic Standards according to their list of material topics. Further information about each of these series of the GRI Standards is included below:

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GRI 2: General Disclosures 2021 contains disclosures that the organization uses to provide information about its reporting practices and other organizational details, such as its activities, governance, and policies. This information gives insight into the profile and scale of the organization and provides a context for understanding the organization's impacts.

GRI 3: Material Topics 2021 provides step-by-step guidance on how to determine material topics (i.e. topics that represent the organization's most significant impacts on the economy, environment, and people, including impacts on their human rights). GRI 3 also contains disclosures that the organization uses to report information about its process of determining material topics, its list of material topics, and how it manages each topic.

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The GRI Standards currently contain 33 Topic Standards.





Figure 3.1: The modular structure of the GRI Standards

All disclosures in the GRI Standards contain requirements that specify information that needs to be reported in order to comply with the GRI Standards. Some disclosures also contain compilation requirements, which specify how the information specified in the requirements must be collected, calculated or compiled. The [draft] GRI Sustainability Taxonomy has been designed to capture all the requirements of the GRI Standards including, where applicable, compilation requirements.

Disclosures may also contain guidance, which facilitates understanding of the reporting requirements by including background information, advice, explanations, and examples, and can also include recommendations, which specify reporting actions that are encouraged but not required. Both guidance and recommendations are advisory in nature and have not been integrated into the current version of the [draft] GRI Sustainability Taxonomy

Organizations can choose to either report 'in accordance' or 'with reference' to the GRI Standards. When organizations reporting in accordance, they provide a comprehensive picture of their most significant impacts on the economy, environment, and people, including impacts on their human rights, and how they manage these impacts. Organizations report with reference when they cannot comply with all the requirements for reporting in accordance with the GRI Standards or when they use selected GRI Standards, or parts of their content, to report information about specific topics for specific purposes.

The requirements that have to be met for an organization to claim it is reporting in accordance with, or with reference to, the GRI Standards are set out in GRI 1: Foundation 2021, Section 3. Reporting in accordance with the GRI Standards.

A reporting organization must comply with nine requirements, set out in GRI 1 Foundation 2021, in order to claim that it is reporting in accordance with the GRI Standards:

Requirement 1: Apply the reporting principles

Requirement 2: Report the disclosures in GRI 2: General Disclosures 2021



Requirement 3: Determine material topics.

Requirement 4: Report the disclosures in GRI 3: Material Topics 2021

Requirement 5: Report disclosures from the GRI Topic Standards for each material topic

Requirement 6: Provide reasons for omission for disclosures and requirements that the organization cannot comply with

Requirement 7: Publish a GRI content index.

Requirement 8: Provide a statement of use.

Requirement 9: Notify GRI

If the organization does not meet all nine requirements, it cannot claim that it is reporting in accordance with the GRI Standards.

To report with reference to the GRI Standards, a reporting organization must fulfill three requirements, as set out in GRI 1 Foundation 2021:

Requirement 1: Publish a GRI content index.

Requirement 2: Provide a statement of use.

Requirement 3: Notify GRI

For more information about reporting in accordance with the GRI Standards please see *GRI 1 Foundation 2021, Section 3: Reporting in accordance with the GRI Standards.*



4 The [draft] GRI Sustainability

Taxonomy Architecture

4.1 Considerations for determining the Taxonomy

Architecture

The [draft] GRI Sustainability Taxonomy represents the architecture of the GRI Standards: three Universal Standards (GRI 1, GRI 2 and GRI 3), thirty-three Topic Standards and four Sector Standards (GRI-11, GRI-12, GRI-13 and GRI-14).

The architecture of the [draft] GRI Sustainability Taxonomy is based on a methodical assessment of the relationship between the Universal Standards, Sector Standards and Topic Standards, to ensure that the architecture and contents of the Standards are reflected in the taxonomy and there are no duplication of elements and tags.

The [draft] GRI Sustainability Taxonomy is intended to accurately represent the GRI Standards in digital format as per specifications defined by XBRL standards¹. The creation of this taxonomy was guided by several assumptions:

(a) Its primary aim is to facilitate the tagging of sustainability reports that are prepared using the GRI Standards, ensuring data is presented in a machine-readable format while retaining the qualitative features of the human-readable format.

(b) The taxonomy elements include only those necessary for disclosing the requirements and compilation requirements of the GRI Standards.

(c) The taxonomy structure is designed to establish a direct alignment between its elements and the presentation of requirements in the Standards, including paragraphs, subparagraphs, and suⁱb-subparagraphs.

4.2 Folder Structure

Taxonomy structure refers to the general composition of the files and folders within the taxonomy. The [draft] GRI Sustainability Taxonomy is distributed as a package according to the Taxonomy Packages 1.0 specification. This allows users to quickly identify relevant entry points and enables software to automatically configure the necessary remapping.

The [draft] GRI Sustainability Taxonomy contains:

- a. META-INF folder at root level which includes the taxonomyPackage.xml files. taxonomyPackage.xml – contains information about identifier, name, version, publisher, publisher URL, publisher country, publication date.
- b. gri_srs contains sub-folders of core and includes schema files and other related linkbase files (presentation, definition, label, and references)

¹ XBRL Specification 2.1, Dimensions 1.0, Enumeration Elements 2.0, Formula 1.0, Taxonomy Packages 1.0. Data type registry and Unit type registry. For the preparation of the tagged illustrative reports, the Inline XBRL specification 1.1 as well as the transformation registries have been used. The full specifications are available in https://specifications.xbrl.org/



- I. *gri_srs_entry_point_2024-06-11.xsd* is a schema which contains ELRs for disclosures reported under GRI Standards
- II. *core folder* includes schema files where GRI Standards elements are defined including extensible enumerations.
 - gri_srs_core_2024-06-11.xsd is the schema file which contains all the data points along with its properties.
 - gri_srs_part_2024-06-11.xsd includes the list of all the typed dimensions domain defined in the taxonomy.
 - country-current-PR-2024-01-31 folder includes all the country taxonomy files which are imported in the taxonomy.
 - lei folder includes LEI taxonomy files to capture LEI number and applicable validation rules.
- III. Formula folder includes validation rules defined in the taxonomy.
 - formula_gri-2_2024-06-11 includes validation rules specific to GRI 2 disclosure.
 - formula_gri-306-3_2024-06-11 includes validation rules specific to GRI 306-3 disclosure.
 - formula_gri-generic_2024-06-11 includes general validation rules applicable for all disclosures.
- *IV.* labels folder is the folder which contains label linkbases.
 - lab_gri_srs_2024-06-11.xml is the main English language label linkbase file.
- V. linkbases folder contain modular presentation, definition, and reference linkbase files for each GRI Standard
 - {pre\ def} _GRI disclosures number_2024-06-11_.xml are the modular presentation, definition, and reference linkbase files for each GRI Standards.
 - ref_gri_srs_2024-06-11.xml are the modular reference linkbase files for the GRI Standards.
 - rol_gri_srs_2024-06-11.xsd is the schema which contains the ELRs for the presentation and definition linkbases of the GRI Standards.

4.3 Taxonomy Package

The Taxonomy Package 1.0 specification provides a standardized mechanism for documenting the taxonomy's content. This includes information about the name, version, and publisher of the taxonomy, as well as a list of the "entry points" available within the taxonomy.

The [draft] GRI Sustainability Taxonomy package contains META-INF folder at root level which includes catalog.xml files and the taxonomyPackage.xml files.

- a. Catalog.xml contains dummy strings which has been provided for time being.
- b. taxonomyPackage.xml contains information about identifier, name, description, version, publisher, publisher URL, publisher country, publication date.

Within the taxonomy package xml, following xml elements are defined with their respective purposes.

- a. identifier <tp: identifier> provides a URI that uniquely identifies the package. The URI defined in identifier is different from the namespace defined in each extended link roles.
- b. name <tp:name> provides human readable name for the taxonomy.



- c. description <tp: description> provides human readable description for the taxonomy.
- d. version <tp: version> provides a version identifier for the taxonomy.
- e. publisher <tp: publisher> describes the entity responsible for publishing the taxonomy.
- f. publisherURL <tp:description> element provides a human-readable description for the entry point.
- g. publisherCountry <tp: publisherCountry> provides the country or region of taxonomy publisher.
- h. publicationDate <tp: publicationDate> provides a date on which the taxonomy was published.
- i. entry points <tp: entryPoints> provides list of all entry points.
- j. Each entry point can be documented with name, description, and version number.
 - I. Entry point <tp: entryPoint> defines a single-entry point. References to elements in the following sections refer only to those elements present as children of the <tp: entryPoint> element.
 - II. name <tp:name> provides a human-readable name for the entry point.
 - III. version <tp: version> provides a version identifier for the entry point.
 - IV. entryPointDocument <tp: entryPointDocument> defines a taxonomy schema or a linkbase document that forms part of this entry point.

4.4 Approaches used for data modelling in the Taxonomy

4.4.1 Simple Hierarchy Modelling

In the [draft] GRI Sustainability Taxonomy, most of the relationships between elements are defined using a simple hierarchy which denotes parent and child relationships. This linear hierarchy is used across presentation and definition link bases. In other words, the concepts are organized in the form of a list following a logical order.



GRI 2: General Disclosures

	Disclosure 2-1 Organizational details
REQUIREMENTS	— The organization shall:
REGUILEMENTS	a. report its legal name;
	b. report its nature of ownership and legal form;
	c. report the location of its headquarters;
	d. report its countries of operation.
	· · · · · · · ·

Hierarchy Structure presented in the Taxonomy.

🖻 🔚 Disclosure 2-1 Organizational Details		
E L	egal Entity Identifier	
E G	RI Company Identifier Number	
- E 2	-1-a: Legal name	
- E 2	-1-b: Nature of ownership	
	-1-b: Legal form	
E 2	-1-c: Location of headquarters	
E 2	-1-d: Countries of operation	
- E v	Vhether the organization is reporting 'in accordance' or 'with reference'	
E N	lames of the sectors reported	

In some cases concepts that are related to the requirements of the GRI Standards have been blended with ones that are necessary for supporting the filing of reporting and facilitating the access and use of data. For example, for *Disclosure 2-1 Organizational details*, data points have been added to capture information about the organization (namely: 'Legal Entity Identifier', 'GRI Company Identifier Number', 'Whether the organization is reporting 'in accordance' or 'with reference'' and 'Names of the sectors reported') that is in addition to the requirements defined in GRI Standards (see above).

- The Legal Entity Identifier² (LEI) is a 20-character, alpha-numeric code based on the ISO 17442 standard. It provides a globally unique identifier for legal entities, such as companies. LEIs enable uniform and unique identification of legal entities and provide value when used in conjunction with structured, electronic reporting formats such as XBRL. This field will be optional to ensure that organizations who do not have an LEI can still submit reports digitally.
- GRI Company Identifier Number is a 12-digit numeric number that will be generated by GRI portal at the time of registering the company. This field will be mandatory as the system will need unique identifier apart from the name of the company.
- Organizations will have to declare whether they are reporting in accordance or with reference to the GRI Standards.
- Organizations will also have to declare which GRI Sector Standards they are using in their report, if any. The GRI Standards currently contain four Sector Standards: *GRI 11: Oil and Gas Sector 2021, GRI 12: Coal Sector 2021, GRI 13: Agriculture, Aquaculture and Fishing Sectors 2021* and *GRI 14: Mining Sector 2024*.

<u>,3.1%20LE1%20as%20a%20primary%20identifier,which%20that%20identifier%20is%20taken</u>." and https://www.gleif.org/en/about-lei/introducing-the-legal-entity-identifier-lei



² For more information on LEI number refer "<u>https://www.xbrl.org/guidance/lei-taxonomy-guidance/#:~:text=related%20entity%20identifier.-</u>

4.4.2 Dimensional Modelling

The second modelling technique used in the [draft] GRI Sustainability Taxonomy is modelling through tables (hypercube) and axes (explicit and typed dimensions). The non-dimensional elements are generally referred to as line items. Dimensions are generally used to model tabular data having information in both rows and columns. Dimensions are also used when detailed breakdowns are to be provided for any reporting concepts. For creating a dimensional model, the line items are linked to a table, and the table is linked to an axis, or axes. The sub-categories in the breakdown are referred as domain members. There are two types of dimensions used in the taxonomy: Explicit and Typed dimensions.

Boot Level [abstract]
Hypercube [Table]
Axis [Axis]
Domain [Domain]
Member [Member]
Primary Elements [line items]
Primary Element 1
Primary Element 2
Primary Element 3

Logical Structure of dimension

4.4.3 Modelling using explicit dimensions

Explicit dimensions are used where the subcategories against which information (i.e. line items) needs to be reported are defined explicitly by a requirement in the Standards. Dimensions are used for modelling concepts that frequently repeat when reporting certain facts. The axes of such dimensions have relationships with line items.

GRI 301-1 Materials used by weight or volume.





Hierarchy Structure presented in the Taxonomy.

□-Ed [GRI 301] Materials			
E Disclosure of Materials [abstract]	E Disclosure of Materials [abstract]		
Disclosure 301-1 Materials used by weight or volume	ne		
Materials Used by Weight or Volume [table]			
Haterial Resource [axis]			
🖻 🔚 Material Resource [domain]	4	Explicit dimensions	
Ea Non-renewable material			
Ea Renewable material			
Aterials Used by Weight or Volume [line items			
E 301-1-a: Total weight of materials that are u	sed to pr	roduce and package the o	rganization's prima
301-1-a: Total volume of materials that are	used to p	roduce and package the o	organization's prim
⊕ E Disclosure 301-2 Recycled input materials used			
E Disclosure 301-3 Reclaimed products and their pa	ckaging	materials	

For example, for *Disclosure 301-1 Materials used by weight or volume*, the dimension 'Material Resource' is classified into 'Non-renewable material' and 'Renewable material' as domain member and will be reported for line items "Total weight of material used" and "Total volume of material used" as required by Standard.

4.4.4 Modelling using typed dimensions

In the [draft] GRI Sustainability Taxonomy, typed dimensions are used when the subcategories against which information (i.e. line items) need to be reported are not defined explicitly by a requirement in the Standards. Typed dimension values are defined by the preparer and are not present in the taxonomy. The preparer can create any number of members as per the reporting requirement.

GRI 401-1: New employee hires and employee turnover.

	Disclosure 401-1 New employee hires and employee turnover		
REQUIREMENTS	The reporting organization shall report the following information:		
	a. Total number and rate of new <u>employee</u> hires during the reporting period, by age group, gender and region.		
	 Total number and rate of <u>employee turnover</u> during the reporting period, by age group, gender and region. 		

Hierarchy Structure presented in the Taxonomy.

GRI 401] Employment		
E Disclosure of Employment [abstract]		
Disclosure 401-1 New employee hires and en	nployee turnover	
Rew Employee Hires and Employee Turn	over [table]	
🕂 🕂 Age Group [axis]		
🗄 🔚 Age Group [domain]		
Gender [axis]	Turne dimensione	
Region [axis]		
Kew Employee Hires and Employee Turnover [line items]		
401-1-a: Total number of new employee hires during the reporting period		
401-1-a: Total rate of new employee hires during the reporting period		
401-1-b: Total number of employee turnover during the reporting period		
401-1-b: Total rate of employee turnover during the reporting period		



For example, for *Disclosure 401-1 New employee hires and employee turnover*, the employee turnover must be reported by region and gender. In the [draft] GRI Sustainability Taxonomy the region and gender category are not pre-defined and allows preparers to define under Region [axis], Gender [axis].

4.5 Element grouping in the Taxonomy

The [draft] GRI Sustainability Taxonomy organizes elements to streamline the reporting process, ensuring clarity and precision. The taxonomy groups elements based on their relevance to specific disclosure requirements within the GRI Standards. Grouping facilitates the tagging of sustainability data in a machine-readable format while maintaining the integrity of human-readable reports. By aligning elements with mandatory and optional information specified in the Standards, the taxonomy ensures comprehensive and accurate representation of sustainability data.

The taxonomy elements are organized according to the specific GRI Standards from which the data points are derived. For instance, elements related to *GRI 2 General Disclosure 2021* will be arranged in the same order as they appear in Standard (with minor adjustments for technical reasons, such as XBRL requirements) and grouped under a 'GRI 2' heading. Similarly, elements associated with *GRI 3 Material Topics 2021* will be organized under a 'GRI 3' heading. This method simplifies the process for preparers and users of sustainability reports, making it easier to find elements corresponding to disclosures in the GRI Standards. This structure aligns with the practices used in other digital taxonomies globally.

The GRI Standards are intended to provide a comprehensive and consistent basis for reporting sustainability impacts. Consequently, the [draft] GRI Sustainability Taxonomy restricts the creation of extension taxonomies and entity-specific elements within the taxonomy. Extension taxonomies³ require creating a new XBRL taxonomy that references to the base taxonomy, involving XML schema files and linkbases. The decision not to allow extensions ensures a consistent basis for reporting and future data use by maintaining uniformity in the data structure and content across different reporting entities, which minimizes discrepancies and ambiguities. This uniformity is essential for precise comparison, analysis, and aggregation of data.

4.6 General granularity of elements defined in the

Taxonomy

The [draft] GRI Sustainability Taxonomy maintains a consistent structure for data points that reflect the presentation of requirements in the GRI Standards (namely, by replicating the breakdown of GRI disclosures with paragraphs, sub-paragraphs, and sub-subparagraphs).

The disclosure structure was established according to Universal and Topic Standard disclosures, forming a hierarchy with three levels:

- Level 1: Represents the entire disclosure.
- Level 2: Represents requirements identified using alphabetical labels (a, b, c, etc).
- Level 3: Represents requirements identified using roman numerals labels (i, ii, iii, etc).

Exclusion of Level 1 Information: GRI has decided not to base any taxonomy data points on Level 1 information. This decision helps to reduce the overall number of data points and simplifies the taxonomy. However, GRI may consider introducing Level 1 tags in the upcoming versions of the taxonomy based on requirement and feedbacks.

³ Extension taxonomies are built upon the existing taxonomy (referred to as a base taxonomy). Typically, these are created by preparers, known as entity-specific extension taxonomies. There are challenges in preparing the XBRL/iXBRL instances using these taxonomies, since all the Schema files and linkbases files (xsd and xml) need to be provided.



Inclusion of Level 2 and Level 3 Information: To ensure comprehensive coverage of the General and Topic Standards disclosures, GRI mandates that all Level 2 and Level 3 information must be represented by at least one data point in the taxonomy. Level 2 and Level 3 information is more specific and detailed than Level 1.

Identification of Independent 'Items of Information': For all Universal and Topic Standards disclosures, GRI reviewed Level 2 and Level 3 information to identify independent 'items of information'. These items represent distinct pieces of information that are need to be reported to meet the disclosure requirements. Each identified item forms the basis for a data point in the taxonomy.



Disclosure 2-2 Entities included in the organization's sustainability reporting.

Level 1	Disclosure 2-2 Entities included in the organization's sustainability reporting
REQUIREME	The organization shall:
	a. list all its entities included in its sustainability reporting;
Level 2	 b. if the organization has audited consolidated financial statements or financial information filed on public record, specify the differences between the list of entities included in its financial reporting and the list included in its sustainability reporting; c. if the organization consists of multiple entities, explain the approach used for
	consolidating the information, including:
Level 3	 whether the approach involves adjustments to information for minority interests; how the approach takes into account mergers, acquisitions, and disposal of entities or parts of entities; whether and how the approach differs across the disclosures in this Standard and across material topics.

Hierarchy Structure presented in the Taxonomy.

	E Disclosure 2-2 Entities included in the organization's sustainability reporting	
2		E 2-2-a: List of all entities included in the sustainability reporting
evel		E 2-2-b: Does the organization have audited consolidated financial statements or financial information filed on public r
Ľ		E 2-2-b: Differences between the list of entities included in financial reporting and the list included in sustainability repo
		E 2-2-c: Does the organization consist of multiple entities?
		E 2-2-c: Explanation of the approach used for consolidating the information
e		-E 2-2-c-i: Does the approach used for consolidating the information involve adjustments to information for minority i
-eve		2-2-c-ii: Explanation of how the approach takes into account mergers, acquisitions, and disposal of entities or par
		E 2-2-c-iii: Does the approach used for consolidating the information differ across the disclosures in this Standard (
		E 2-2-c-iii: Explanation of how the approach differs across the disclosures in this Standard (GRI 2) and across mate

By focusing on Level 2 and Level 3 information and identifying specific items of information within these levels, GRI aims to ensure that all necessary disclosure requirements are captured efficiently without overburdening reporting organizations with excessive data points. This approach also facilitates more precise and manageable reporting, enhancing the usability and relevance of the taxonomy for stakeholders.



5 Reporting Material Topics and

Omissions

Reporting Material Topics:

The organization's material topics are disclosed in accordance with *GRI 3 Material Topics 2021*. The requirements for reporting include listing the material topics, detailing the process undertaken to identify them, including how stakeholders are involved, and describing the approach taken to manage each topic.

In the [draft] GRI Sustainability Taxonomy, reporting using GRI 3 disclosures is structured in a way to also enable reporting using Sector Standards

When reporting [Disclosure 3-2 List of material topics (Sector specific)], organizations must also disclosure which, if any, of the 'likely material topics' listed in the applicable Sector Standards are being used ("List of likely material topics"). They must also identify which disclosures are relevant to their material topics and will be used for reporting ("List of applicable disclosures").

Hierarchy Structure presented in the Taxonomy

E Disclosure 3-2 List of material topics (Sector specific)		
🖻 🤪 Material Topics Sector Specific [table]		
List of Material Topics [axis]		
E B Material Topics Sector Specific [line items]		
3-2-a: List of likely material topics for Oil and Gas Sector		
3-2-a: List of likely material topics for Coal Sector		
3-2-a: List of likely material topics for Agriculture, Aquaculture and Fishing Sectors		
3-2-a: List of likely material topics for Mining Sector		
3-2-a: List of applicable disclosures for Oil and Gas Sector		
3-2-a: List of applicable disclosures for Coal Sector		
E 3-2-a: List of applicable disclosures for Agriculture, Aquaculture and Fishing Sectors		
E 3-2-a: List of applicable disclosures for Mining Sector		

When reporting [Disclosure 3-2 List of material topics (Sector agnostic)], organizations must also disclosure 'List of material topics' listed in the applicable Sector Standards which are being used. They must also identify which disclosures are relevant to their material topics and will be used for reporting from 'List of applicable disclosures'.

Hierarchy Structure presented in the Taxonomy

Disclosure 3-2 List of material topics (Sector agnostic)	
🖃 🤪 Material Topics [table]	
List of Material Topics [axis]	
Material Topics [line items]	
E 3-2-a: List of applicable disclosures	
. E Disclosure 3-3 Management of material topics	
E 3-2-b: Changes to the list of material topics compared to the previous reporting period	

The GRI Sector Standards offer organizations guidance on identifying their likely material topics. These topics are derived from the sectors' most significant impacts, based on multi-stakeholder expertise, authoritative intergovernmental instruments, and other relevant evidence.



When reporting in accordance with the GRI Standards, if any of the GRI Sector Standards are applicable to them, the organizations must use the Sector Standard to help determine their material topics (see Requirement 3-b in GRI 1: Foundation 2021).

Note: Use of the Sector Standards is intended to assist, not replace, the process of determining material topics. Organizations must still consider their specific circumstances when identifying their material topics.

Organizations are required to review each of the likely material topics listed in the Sector Standards applicable to them and determine which of these are relevant to them. It is possible, however, that not all likely material topics will be material to the organization. In this case, the organization is required to report information separately under "[GRI 6666] Topics in Sector Standards determined as not material" and explain why they are not considered to be relevant (see Requirement 3-b-ii in GRI 1).

Hierarchy Structure presented in the Taxonomy

GRI 6666] Topics in Sector Standards determined as not material	
E Disclosure of Topics Applicable for Sector Standards Determined as Not Material [abstract]	
Topics in Applicable Sector Standards Determined as Not Material [table]	
Topics in Oil and Gas Sector Determined as Not Material [axis]	
Topics in Coal Sector Determined as Not Material [axis]	
🗉 💠 Topics in Agriculture, Aquaculture and Fishing Sectors Determined as Not Material [axis]	
Topics in Mining Sector Determined as Not Material [axis]	
E Topics in Applicable Sector Standards Determined as Not Material [line items]	
Explanation of why the topic applicable for sector standards is determined as not material	

Note: The [draft] GRI Sustainability Taxonomy does not include separate ELRs for each of the GRI Sector Standards. Besides the common disclosures applicable to each GRI Sector Standards, this first version of the taxonomy excludes additional disclosures and recommendations.

Reporting Omissions

For organizations reporting in accordance with the GRI Standards, if the organization cannot comply with a Topic Standard disclosure that is determined to be relevant to its material topics (or any of the requirements in a relevant disclosure) they must:

- a. specify the disclosure or the requirement it cannot comply with.
- b. provide a reason for omission (chosen from a list of four options, as set out in *GRI 1 Foundation 2021*) and provide an explanation for the omission.

Reasons for omission are also permitted for all disclosures in GRI 2 and GRI 3 except for:

- a. Disclosure 2-1 Organizational details
- b. Disclosure 2-2 Entities included in the organization's sustainability reporting
- c. Disclosure 2-3 Reporting period, frequency and contact point
- d. Disclosure 2-4 Restatements of information
- e. Disclosure 2-5 External assurance
- f. Disclosure 3-1 Process to determine material topics
- g. Disclosure 3-2 List of material topics

When reporting in accordance with the GRI Standards, an organization can report its omissions using ELR [GRI 7777] Information on Omission



6 Technical features

This section summarizes the technical features of the [draft] GRI Sustainability Taxonomy and is intended to:

- a. provide technical details on usability of the taxonomy as per XBRL specification.
- provide better understanding on the content used in the [draft] GRI Sustainability Taxonomy

The features will address the following components of the [draft] GRI Sustainability Taxonomy:

6.1 Categorical Elements - Extensible

Enumerations

The use of extensible enumerations in the [draft] GRI Sustainability Taxonomy is to maintain the enumerations list in a standardized manner. Enumerations⁴ are predefined lists (analogous to 'drop-down menus') within the taxonomy, enabling users to select the most appropriate item (single choice) or multiple items (multiple choices) from the list. The inclusion of these element type in the taxonomy is intended to enhance the usability and comparability of information.

Below are several examples of elements having "enum2: enumerationItemType" and "enum2: enumerationSetItemType".

Data type	Assigned to data element
enum2: enumerationItemType	2-1-b: Nature of ownership,2-1-b: Legal form,2-3-a: Frequency of sustainability reporting
enum2: enumerationSetItemType	 302-3-c: Types of energy included in the energy intensity ratio, 305-4-d: Gases included in the calculation of the GHG emissions intensity ratio 302-4-b: Types of energy included in the reductions 2-1-b: Legal form 3-2-a: List of applicable disclosures

Illustrated example of tagging enumerationItemType and enumerationSetItemType:

Tagging enumeration elements, with single select and multi select fact values will be represented as shown below in the XBRL instances:

<ix:nonNumeric contextRef="D20231231" name="gri:NatureOfOwnership" id="Tag5">https://www.globalreporting.org/standards/standards-development/digitalization-ofthe-gri-standards-project/consultation-for-xbrl-specialists/draft-gritaxonomy/gri_srs/core#PubliclyOwnedMember</ix:nonNumeric>

⁴ Extensible Enumerations 2.0 specification permits the use of predefined domain members within the taxonomy as an enumerated list for reporting any XBRL item. Software vendors are required to include this functionality in their platforms for reporting purposes.



<ix:nonNumeric contextRef="D20231231" name="gri:CountriesOfOperation" id="Tag7">

https://xbrl.org/2023/iso3166/PR/2024-01-31#AE

https://xbrl.org/2023/iso3166/PR/2024-01-31#AR

https://xbrl.org/2023/iso3166/PR/2024-01-31#AT

https://xbrl.org/2023/iso3166/PR/2024-01-31#AU </ix:nonNumeric>

6.2 Categorical Elements - BooleanItemType

This data type is valuable for reporting financial or business information that can be framed as yes/no, or true/false. The usage of BooleanItemType contributes to the standardization and interoperability of data, ensuring that stakeholders can easily interpret and analyse information with a clear understanding of the binary nature of the reported elements.

These data types are used in the taxonomy to reflect disclosure requirements including conditions. All the booleanItemType element starts with word "Whether...." (Example; Whether the organization has consolidated financial statements that are audited or financial information filed on public record).

However, in addition to the BooleanItemType "Whether...", narrative elements (textblockItemType) are frequently introduced to capture complimentary information according to the requirements of the Standards.

Data Type	Element Name
booleanItemType	WhetherConsolidatedFinancialStatementsAreAuditedOrFinanciall nformationFiledOnPublicRecord
booleanItemType	WhetherOrganizationConsistsOfMultipleEntities
booleanItemType	WhetherApproachUsedForConsolidatingInformationInvolvesAdjus tmentsToInformationForMinorityInterests
booleanItemType	WhetherApproachUsedForConsolidatingInformationDiffersAcross DisclosuresInThisStandardAndAcrossMaterialTopics

See below examples of booleanItemType used in the taxonomy.

Illustrated example of tagging BooleanItemType:

Boolean facts can be tagged with a true or false value using the Inline XBRL transformations and will be represented as shown below in the XBRL instances:

<ix:nonNumeric contextRef="D20231231" name="gri:WhetherOffsetsWereUsedToMeetGHGEmissionsTargets" id="Tag13">false</ix:nonNumeric>



6.3 Different Datatypes used across the Taxonomy

The [draft] GRI Sustainability Taxonomy uses item types as defined in XBRL 2.1 specification under "The Data Type Registry⁵" which is a centralised list of data types to be used in XBRL taxonomies. Below is the list of datatypes used in the [draft] GRI Sustainability Taxonomy:

Data Type	Assigned to element
arealtemType	SizeOfOperationalSite
domainItemType	Scope1GHGEmissionsMember
energyItemType	TotalEnergyConsumptionWithinOrganization
energyPerMonetaryItemType	EnergyIntensityRatioForOrganization
enum2:enumerationItemType	NatureOfOwnership
enum2:enumerationSetItemTyp e	GasesIncludedInCalculationOfGHGEmissionsIntensityRatio
ghgEmissionsItemType	GrossGHGEmissions
ghgEmissionsPerMonetaryItem Type	GHGEmissionsIntensityRatio
lengthItemType	DistanceOfSiteToEcologicallySensitiveArea
massItemType	WeightOfWasteGenerated
percentItemType	PercentageOfTotalEmployeesCoveredByCollectiveBargaini ngAgreements
textBlockItemType	DescriptionOfMethodologiesAndAssumptionsUsedToCompi leEmployeeDataTextBlock
volumeItemType	WaterWithdrawal
xbrli:booleanItemType	WhetherSustainabilityReportingHasBeenExternallyAssured
xbrli:dateItemType	StartDateOfSustainabilityReporting
xbrli:decimalItemType	TotalNumberOfEmployees
xbrli:durationItemType	NumberOfHoursWorked
xbrli:integerItemType	TotalNumberOfConfirmedIncidentsOfCorruption
xbrli:monetaryItemType	EconomicValueDistributed
stringItemType	LegalName

6.4 Use of specific labels within the Taxonomy

The labels defined in the [draft] GRI Sustainability Taxonomy are implemented to maintain as closely as possible the original wording of the GRI Standards. The purpose of defining these labels is to ensure that organizations can easily navigate and relate to the disclosures and requirements. The element labels are named according to the disclosures:

- Level 2 represents requirements identified using alphabetical labels.
- Level 3 represents requirements identified using Roman numeral labels.

⁵ http://www.xbrl.org/dtr/type/2024-01-31/types.xsd



Example; In the *Disclosure 2-2 Entities included in the organization's sustainability reporting*, the requirements labelled with alphabetical letters are Level 2 tags. In contrast, those labelled with Roman numerals are Level 3 tags as defined in the taxonomy.

Disclosure 2-2 Entities included in the organization's sustainability reporting



Hierarchy Structure presented in the Taxonomy

E Disclosure 2-2 Entities included in the organization's sustainability reporting		
E 2-2	-a: List of all entities included in the sustainability reporting	
- 🕒 2-2	-b: Does the organization have audited consolidated financia	statements or financial information f
- E 2-2	-b: Differences between the list of entities included in financia	I reporting and the list included in su
E 2-2-c: Does the organization consist of multiple entities?		
E 2-2-c: Explanation of the approach used for consolidating the information		
E	2-2-c-i: Does the approach used for consolidating the information	ation involve adjustments to informati
E	2-2-c-ii: Explanation of how the approach takes into account	mergers, acquisitions, and disposal
- E	2-2-c-iii: Does the approach used for consolidating the inform	nation differ across the disclosures in
E	2-2-c-iii: Explanation of how the approach differs across the o	disclosures in this Standard (GRI 2) a

The elements within the taxonomy are initially assigned a 'standard label' by default, but there are additional preferred labels designated for these elements, namely "terse" and "verbose".

The 'terse' labels are structured in the taxonomy so that the labels are read along with the corresponding GRI Disclosure number (para, subpararagraph and sub-subparagraph). This helps the user navigate the taxonomy more effectively and connect with specific disclosures.

Conversely, the 'verbose' labels are assigned for certain elements utilized across various ELRs (Extended Link Role).

6.5 Tagging of intensity ratios

In [draft] GRI Sustainability Taxonomy there are intensity-related datapoints that require specific implementation in the taxonomy. Below is the list of elements related to intensity ratio:

Intensity ratio	DataType	Element ID
Energy intensity ratio	decimalItemType	gri_EnergyIntensityRatioForOrganization
GHG Emission intensity ratio	decimalItemType	gri_GHGEmissionsIntensityRatio



Intensity ratios are metrics that quantify the extent of an impact (like CO2 emissions, energy use, or waste production) in relation to a particular activity, output, or relevant denominator. GRI Standard allows reporters to report intensity ratio by the organization-specific metric (the denominator) as defined by organization. For example, intensity ratios can be provided for,

- products (such as energy consumed/metric tons of CO2 emissions per unit produced);
- services (such as energy consumed/ metric tons of CO2 emissions per function or per service);
- sales (such as energy consumed/ metric tons of CO2 emissions per monetary unit of sales).

Organization-specific metrics (denominator) can include

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

These intensity ratios express the energy or amount of GHG emission required per unit of activity, output, or any other organization specific metric.

Intensity ratios have been implemented in the taxonomy to allow various denominator factors specific to organizations. The [draft] GRI Sustainability taxonomy has implemented those elements with a decimalItemType to facilitate digital reporting. In addition to the intensity ratio, organizations are required to report unit for measurement and denominator used for calculating intensity ratio when preparing their XBRL reports

Example: GHG emission intensity ratio is expressed as CO2 equivalent emissions per monetary unit. This will be expressed as 'actual value' in the XBRL/iXBRL reports due to datatype being 'decimalItemType'.



7 Validation rules

The [draft] GRI Sustainability Taxonomy implements several validations rules based on Formula Linkbase 1.0 specification⁶. The formula linkbase is created to define all the validation rules which can ensure consistency of data and adherence to the Sustainability standards. These validation rules cover or require operations such as comparing values, totaling values, checking if values are reported, checking if proper signs are provided, etc. The validation rules are classified by different categorizations within the taxonomy.

7.1 Modelling of validation rules in formula

linkbase

The GRI taxonomy uses existenceAssertion and valueAssertion for modelling the validation rules in formula linkbase. The modelling of different categories of business rules and the assertions used for them are explained in this section. The approach for modelling business rules in the GRI Taxonomy is considering a positive outcome. Thus, the result "true" indicates that the rule is passed, while "false" indicates that the rule is not passed.

7.1.1 Derived Mandatory

There are some elements which are required to be reported depending on the values submitted for other elements. These are termed as derived mandatory elements. A derived mandatory element is only required under certain circumstances. The derived mandatory items are modelled using preconditions and valueAssertions. In precondition, the base element and its expected value are provided, and the dependent element is mentioned as part of valueAssertion.

Example: When reporting in accordance with the GRI Standards, the legal name must be reported.

7.1.2 Non-negative checks

Non-negative checks are a crucial validation process in various fields, ensuring that certain values or quantities are not reported to be less than zero. Implementing non-negative checks helps keep data accurate, prevents errors, and ensures operations make sense.

Example: The total weight of waste generated must not be negative.

7.1.3 Validation related to omissions

In the [draft] GRI Sustainability Taxonomy there are specific scenarios identified where validation checks will be applied for organizations reporting in accordance with the GRI Standards.

Example: When reporting in accordance with the GRI Standards, if [disclosure name] is relevant to the impacts in relation to a material topic, [requirement level] information must be reported. If this information is not reported, a reason for omission must be provided.

7.1.4 Generic checks

The [draft] GRI Sustainability Taxonomy includes checks related to pattern of company identifier number. The GRI Company Identifier Number should be a 12-digit numeric number which will be mandatory field to be reported by each organization.

GRI will introduce additional validation rules and consistency checks in future versions of the Taxonomy to enhance the quality of digital report and assist preparers in using the XBRL taxonomy for reporting

⁶ https://specifications.xbrl.org/spec-group-index-formula.html



In the [draft] GRI Sustainability Taxonomy, assertion severity is assigned to cater to unsatisfied or failed scenarios only. Every validation rule is assigned an assertion severity to distinguish it as either an "Error" or a "Warning", along with unsatisfied error message.

- A WARNING constitutes a recommendation to check or review the data submitted but does not prevent filing from being accepted.
- An ERROR constitutes an issue with the data submitted that has to be corrected in order for filing to be accepted.



Appendix A: XBRL Glossary

Abstract	An attribute of an element used to indicate that the element is only used in a hierarchy to group related elements together. An abstract element cannot be used to tag data in an instance document.
Arc	According to XBRL Specification 2.1 arcs relate concepts to each other by associating their locators; they also link concepts with resources by connecting the concept locators to the resources themselves; arcs are also used to connect fact locators to footnote resources in footnote extended links; arcs have a set of attributes that document the nature of the expressed relationships; in particular they possess attributes: type (whose value must be "arc"), from, to and arcrole.
Attribute	A property of an element such as its name, balance, data type, and whether the element is abstract. Attributes of XBRL taxonomy elements cannot be changed.
Axis	An instance document contains facts; an axis differentiates facts, and each axis represents a way that the facts may be classified.
Context	Entity and report-specific information (reporting period, segment information, and so forth) required by XBRL that allows tagged data to be understood in relation to other information.
Data type	Data types (monetary, string, share, decimal, and so forth) define the kind of data to be tagged with the element name.
Decimal	Instance document fact attribute used to express the number of decimal places to which numbers have been rounded.
Dimension	A dimension represents a specific aspect or characteristic of data being reported. Dimensions can be explicit, where members are explicitly named, or typed dimensions, where the number of members is too large to enumerate individually.
Domain	An element that represents a complete set of other elements; the domain and its members are used to classify facts along the axis of a table.
Domain member	An element representing one of the possibilities within a domain.
Element	XBRL components (items, domain members, dimensions, and so forth). The representation of a financial reporting concept, including line items in the face of the financial statements, important narrative disclosures, and rows and columns in tables.
Element ID	Represents refers to a unique identifier assigned to each data element within an XBRL taxonomy.
Element definition	A human-readable description of a reporting concept. From an XBRL technical point of view, the element definition is the label with the type "documentation," and there are label relationships in a label relationships file, but from a user point of view the definition is an unchangeable attribute of the element.
Extended linkrole (ELR)	Refers to a specific type of link role in the XBRL taxonomy. Link roles are used to define relationships between elements within an XBRL instance document, providing a structured way to organize and present data.
Extension taxonomy or extension	A taxonomy that allows users to add to a published taxonomy to define new elements or change element relationships and attributes (presentation, calculation, labels, and so forth) without altering the original.
Explicit dimension	Explicit dimensions are those classifications which are known and can be defined in the taxonomy



Fact	The occurrence in an instance document of a value or other information tagged by a taxonomy element.
Hierarchy	Trees (presentation, calculation, and so forth) used to express and navigate relationships.
Hypercube	XBRL technical term for a table.
Instance document	XML file that contains business reporting information and represents a collection of financial facts and report-specific information using tags from one or more XBRL taxonomies.
iXBRL	iXBRL stands for Inline eXtensible Business Reporting Language. iXBRL combines the human-readable presentation of a financial and non-financial statement with the machine-readable XBRL data
Label	Human-readable name for an element; each element has a standard label that corresponds to the element name and is unique across the taxonomy.
Line item	Elements that conventionally appear on the vertical axis (rows) of a table.
Linkbase	XBRL technical term for a relationships file. It provides a way to express linkages and connections between various elements in a standardized manner
Schema	Defines the structure and semantics of XBRL documents. It serves as a blueprint or a set of rules that dictate how data should be organized and what types of elements are allowed within an XBRL instance document
Typed dimension	Typed dimensions are those classifications which cannot be ascertained or defined in the taxonomy
Taxonomy	Electronic dictionary of business reporting elements used to report business data. A taxonomy is composed of an element names file (.xsd) and relationships files directly referenced by that schema. The taxonomy schema files together with the relationships files define the concepts (elements) and relationships that form the basis of the taxonomy. The set of related schemas and relationships files altogether constitute a taxonomy.
Validation	Process of checking that instance documents and taxonomies correctly meet the rules of the XBRL specification and adhere to requirements of reporting in accordance or with reference to the GRI Standards

