XBRL US State GHG Emissions Taxonomy

Taxonomy Guide

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1 Goal

This Preparers Guide is intended to assist preparers in using the XBRL US State GHG Emissions (SGHG) Taxonomy for reporting Greenhouse Gas (GHG) Emissions in an XBRL format to U.S. state regulators that collect GHG emissions data.

The guide covers the basics required to allow a preparer to create a report in XBRL format that contains company data about GHG emissions, Scope 1, 2, and 3, document and entity information, and further descriptive information that may be needed by the State regulator collecting the information. It is not intended as a guide to the XBRL specification. Software providers looking to incorporate modules into their software to support climate disclosure reporting in an XBRL format should read this guide as well as the XBRL specification.

The examples used in this Preparers Guide are based on sample emissions reports prepared for U.S. based companies. An XBRL glossary is attached which contains useful terms to know related to using the standard.

2 Background

The purpose of the XBRL US State GHG Emissions Taxonomy is to capture GHG emissions and identification information which is to be used by regulators, citizens, and the reporting company, to assess and monitor the climate impact of the company. Climate impact data can be used by the company to set measurable targets to reduce climate impact going forward, and by investors and citizens to make informed decisions about where they invest and what products they purchase. It will give reporting entities and those within their value chains a structured approach to data collection and disclosure – and prepare for submitted data to receive third-party assurance.

While this taxonomy and guide were created for use by organizations complying with regulations set by the California Air Resources Board (CARB) to satisfy SB 253, the expectation is that it can be repurposed for use by other states that may introduce similar emissions reporting requirements. This approach would minimize reporting burden as there is likely to be overlap between entities subject to multiple state-specific requirements. This approach will also ensure the reporting of consistent, interoperable, good quality data.

Limit the Need for Extensions

The SGHG Taxonomy supports all data required to satisfy state reporting requirements for SB 253, and like any XBRL Taxonomy, can be revised by the regulatory authority to adapt to new requirements over time. In the event that an individual reporting company wishes to XBRL-tag (associate digital metadata with a reported fact) more information, the taxonomy can be

extended to allow for additional facts to be tagged using company-created extensions. The state regulatory authority can set its regulations to allow companies to report additional company-specific information in tagged format or it can limit companies to reporting only required facts.

To include custom-created concepts, the reporting company will need to create an extension taxonomy which contains additional information describing the custom extension concepts. U.S. public companies complying with U.S. Securities and Exchange Commission (SEC) requirements for statutory financial reporting have been reporting in XBRL format since 2009. They are familiar with using extension concepts and creating company extension taxonomies as this is allowed when companies report using the US GAAP Financial Reporting Taxonomy. This Preparer's Guide will not address the use of extensions in detail but this can be covered at a later point if the state regulator opts for allowing extensions to be used.

Integration with ISSB Taxonomy

The SGHG Taxonomy incorporates concepts from the International Sustainability Standards Board (ISSB) Taxonomy[1], which was developed by the IFRS Foundation for reporting information about sustainability-related risks and opportunities, and climate-related risks and opportunities. The ISSB Taxonomy was selected as the base for the SGHG Taxonomy because IFRS accounting standards are followed by thousands of companies globally, many of which are likely to do business in the United States.

168 jurisdictions follow IFRS Accounting Standards worldwide and a recent IFRS progress report[2] noted that 30 jurisdictions have decided to use or are taking steps to introduce ISSB Standards in their legal or regulatory frameworks. Together, these jurisdictions represent more than half of global GHG emissions. 500 foreign private issuers are listed on U.S. exchanges and report financial data following IFRS accounting standards to the SEC. Furthermore, although the SEC rule for Climate-related Disclosures is on hold pending the outcome of various lawsuits, it requires companies to report GHG emissions data in structured, XBRL format. If in the future, this rule is implemented, it may require companies to use the same GHG emissions concepts in the ISSB Taxonomy that are being included in the SGHG Taxonomy, given the rapid pace of ISSB Taxonomy adoption in IFRS reporting jurisdictions.

Many businesses that will need to comply with state-specific GHG emissions reporting requirements like those in California, will also need to report the same data to non-US regulators using the ISSB Taxonomy. The burden on companies reporting to multiple regulators can be reduced if they are able to prepare a single report to satisfy more than one regulator.

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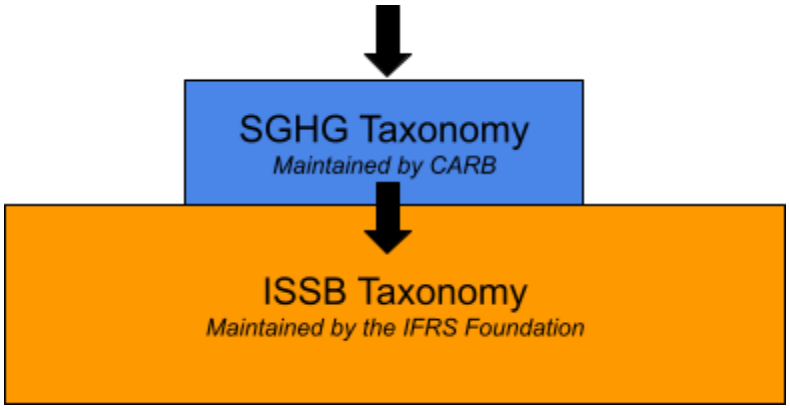
[1] IFRS Sustainability Disclosure Taxonomy:
https://www.ifrs.org/projects/completed-projects/2024/ifrs-sustainability-disclosure-taxonomy/
[2] Progress on Corporate Climate-related Disclosures - 2024 Report, November 2024:
https://www.ifrs.org/content/dam/ifrs/supporting-implementation/issb-standards/progress-climate-related-disclosures-2024.pdf

In addition, state regulations like those to be implemented by CARB call for data to be reported in line with the GHG Protocol for SB 253 and with the Task Force on Climate-related Financial Disclsoures (TCFD) for SB 261. The ISSB Taxonomy is aligned with both.

On June 24, 2024, the GHG Protocol launched an official partnership[3] with the IFRS Foundation to ensure collaboration with the ISSB; the partnership with the GHG Protocol ensures that the ISSB Taxonomy is in alignment with the requirements of SB 253. Separately, in July 2023, the Financial Stability Board (FSB) announced[4] the completion of the work of the TCFD. The TCFD was incorporated into the ISSB standards, and the FSB asked the IFRS Foundation to take over the monitoring of the progress on companies' climate-related disclosures from the TCFD. Eventually, the ISSB Taxonomy can also serve as the base for a separate taxonomy containing concepts needed for SB 261. The availability of TCFD concepts in the ISSB Taxonomy aligns appropriately with SB 261 reporting needs.

The SGHG Taxonomy, depicted in the visual below, contains an "entry point" into the ISSB Taxonomy that accesses only those concepts needed to satisfy U.S. state-specific reporting requirements. The ISSB Taxonomy contains a lot of concepts that are not needed by companies complying with SB 253. The entry point approach allows companies that may only need to comply with state-specific requirements to gain access to only those needed concepts to limit confusion about what needs to be reported. The SGHG Taxonomy has a second layer of concepts shown in blue which are state-specific concepts designed to support information about the entity, the document, assurance requirements, and other information that may be specific to that state and that are not already in the ISSB Taxonomy, for example, CARB Mandatory Reporting of GHG Gas Emissions (MRR) information.



[3] RELEASE: GHG Protocol Launches Official Partnership with IFRS Foundation: https://ghgprotocol.org/blog/release-ghg-protocol-launches-official-partnership-ifrs-foundation#:~:text=LONDON%20(June%2024%2C%202024),Sustainability%20Standards%20Board%20(ISSB).
[4] ISSB and TCFD, IFRS Foundation: https://www.ifrs.org/sustainability/tcfd/

Specifications Used

The SGHG taxonomy uses the 2.1 XBRL specification. It is expected with subsequent releases of the taxonomy, that XBRL rules (assertions that explain the relationship between reported facts, signage, etc.) will be added to support validation of the data reported using the taxonomy.

Maintaining and Updating

The SGHG Taxonomy should be reveiwed on a periodic (annual) basis and updated to reflect any changes in reporting requirements. The ISSB portion of the SGHG Taxonomy will be updated and maintained by the IFRS Foundation. The SGHG Taxonomy references the ISSB Taxonomy which means that when SGHG is used, it always points to the most recent official release of the ISSB Taxonomy to ensure that users always have the most current concepts.

Non-ISSB portions should be updated and maintained by the state regulatory body, for example, CARB. Generally taxonomies, when updated, should be published for public review and comment to ensure input is received from all stakeholders each year.

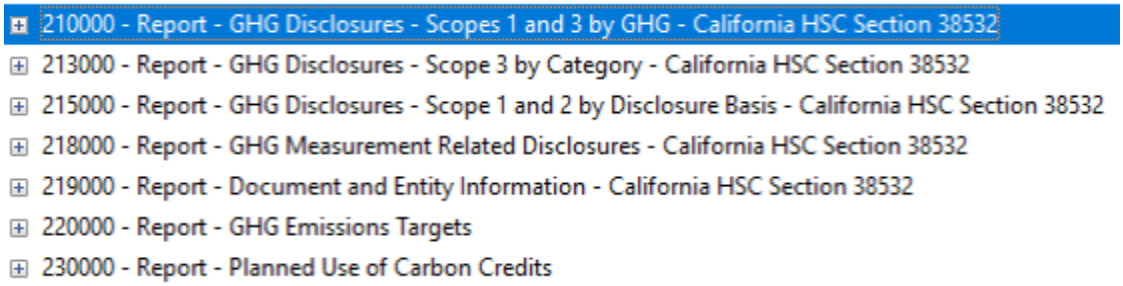
3 State GHG Emissions Taxonomy Logical Structure

To report state-required GHG emissions data in an XBRL format, the SGHG Taxonomy should be used. This taxonomy references concepts in the ISSB Taxonomy and contains additional concepts which are specific to state requirements.

Groups

The taxonomy has seven groups that contain concepts and relationships between concepts. Groups are containers of concepts that are used for a specific purpose, for example the reporting of Scope 3 GHG emissions by the GHG Protocol category. Each group has an associated group number as shown in the visual below that indicates the ordering of the group within the taxonomy presentation. This screen clip and others to follow show portions of the taxonomy in the Spidermonkey software, an off-the-shelf commercial tool provided by CoreFiling to build and manage taxonomies. There are other software tools, including open-source, on the marketplace because the XBRL standard is extensively used around the world.

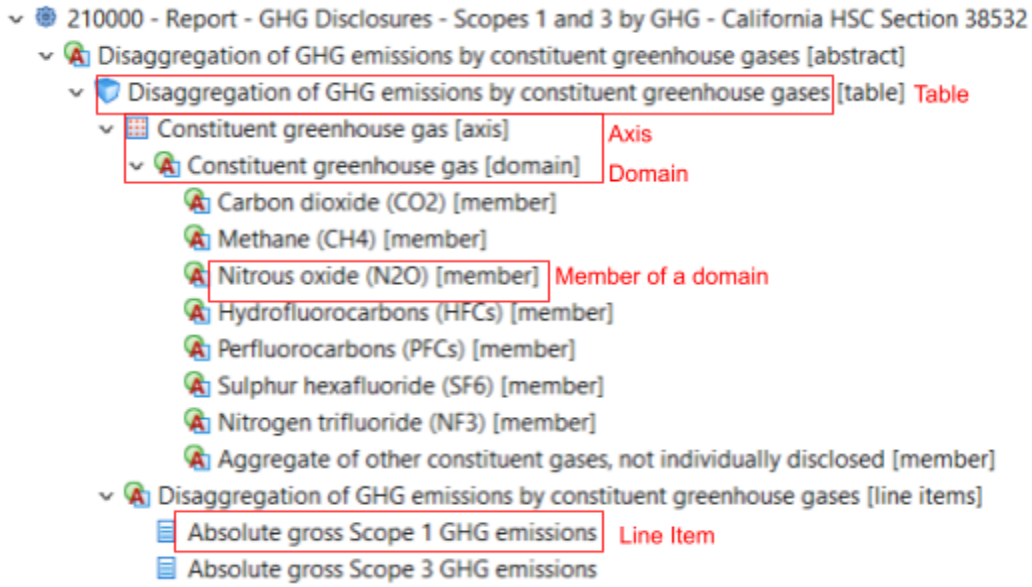
The first five groups in the taxonomy presentation are to be used to satisfy requirements of California HSC Section 38532 (SB 253). The two remaining groups provide optional concepts that can be used by companies wishing to digitally report data about GHG emissions targets or planned use of carbon credits.



Emissions Data Details

Emissions by greenhouse gas

Group 210000 - Report - GHG Disclosures - Scopes 1 and 3 by GHG - California HSC Section 38532, contains the Disaggregation of GHG emissions by constituent greenhouse gases [table], which is an ISSB Taxonomy concept defined as "*Schedule illustrating the disclosure of a disaggregation of greenhouse gas emissions by constituent greenhouse gases. Based on illustrative examples 3A-3B*." The visual below shows the construction of the table which contains line items (typically considered the rows on a table, although in some cases they may be presented in columns), along with ways to disaggregate a reported line item like scope 1 emissions into types of emissions, like methane or nitrous oxide, which are called "members" on an XBRL table.

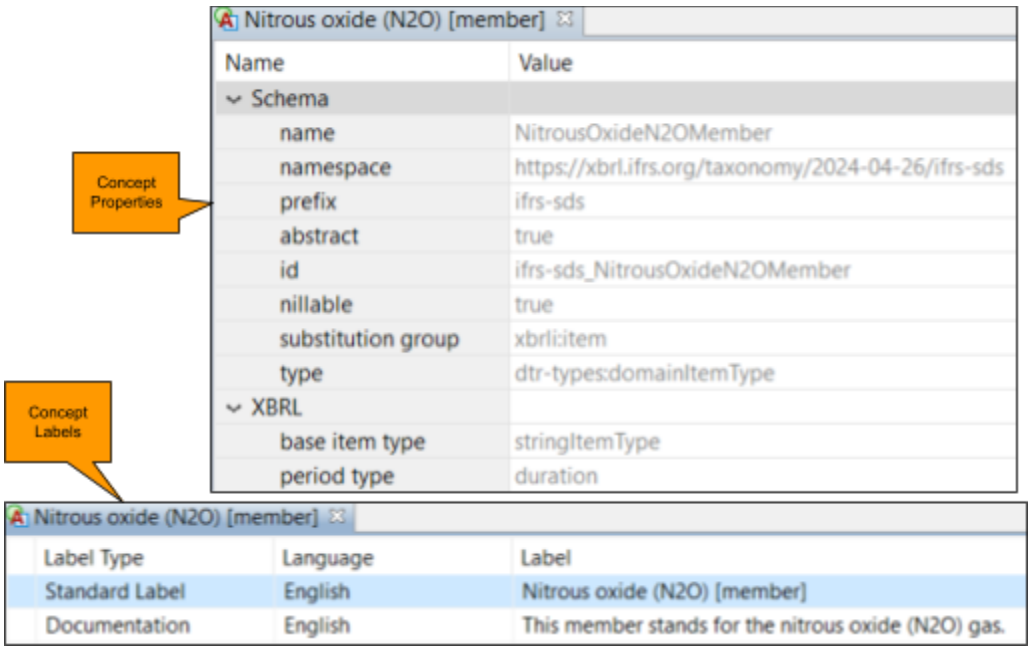


This XBRL table is designed to allow preparers (reporting companies) to identify facts reported by associating a line item such as Absolute gross Scope 1 GHG emissions in conjunction with a constituent greenhouse gas like Nitrous oxide (N20) with the fact. The taxonomy relies on an XBRL construct called an axis to enable the cross-section of these two identifiers. The line item

Absolute gross Scope 1 GHG emissions is further defined by Nitrous oxide (N20) which is a “member” of the Constituent greenhouse gas domain of the axis. The Constituent greenhouse gas [axis] is called an “explicit” dimension because the domain of the axis contains all possible members of the domain, e.g., Carbon dioxide, Methane, Nitrous oxide, etc. The preparer can only report emissions data represented by one of these seven gases, or by the member, “*Aggregate of other constituent gases, not individually disclosed*”, or in total. This table provides all the concepts needed for a preparer to report its Scope 1 and Scope 3 GHG emissions by type of greenhouse gas.

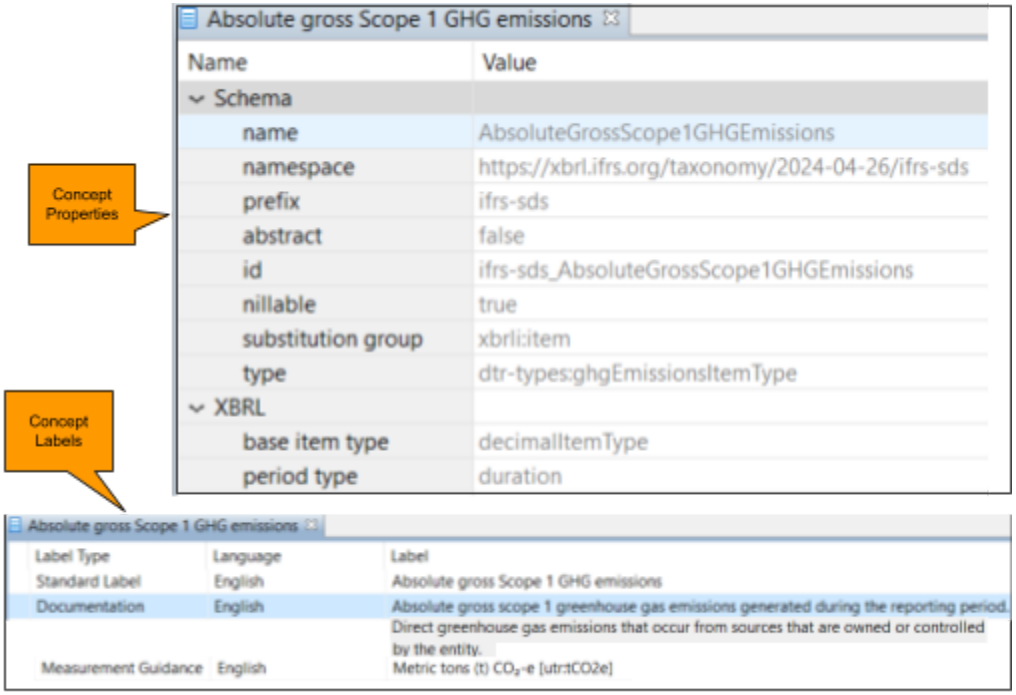
Preparers can also use this table to report Absolute Scope 1 and Absolute Scope 3 GHG emissions in total, as the sum of all constituent greenhouse gases by using one of the line items with no associated member. The default in this case is the total.

Every concept on this table is referenced from the ISSB Taxonomy which has a namespace of https://xbrl.ifrs.org/taxonomy/2024-04-26/ifrs-sds. The visual below shows the properties for the Nitrous oxide (N20) [member]. Every concept has associated properties like this which help the preparer and the user of the data fully understand the meaning of a datapoint that is XBRL-tagged with that concept. For instance, this concept has a documentation label (or definition), “*This member stands for the nitrous oxide (N20) gas*.” The concept has a name, a period type and authoritative references to the Kyoto Protocol and other sources along with other needed technical properties.



The concept Absolute gross Scope 1 GHG emissions, as shown below, has a documentation label, “*Absolute gross scope 1 greenhouse gas emissions generated during the reporting period. Direct greenhouse gas emissions that occur from sources that are owned or controlled*

by the entity." and a data type of ghgEmissionsItemType. This data type was established in the XBRL International Data Type Registry[5] in 2022[6] to express emissions data found in climate reports and is used in conjunction with the unit of measure, "Metric tons of CO2 equivalent" which is found in the XBRL International Units Registry[7]. It has a period type of duration indicating that the fact is reported over the course of the reporting period.



The sample company report below depicts Scope 1 emissions data by constituent GHG. This report has been prepared in XBRL format, in a version that is both human-readable (XHTML) and machine-readable (XBRL), called Inline XBRL. This is a visual of the report in a browser where every value highlighted in yellow has embedded information which can be digitally read by a machine. The digital information can also be read by humans in the browser; the fact 2,028 for example, is defined as shown in the popup box in green below. It represents Scope 1 GHG emissions of Nitrous Oxide in metric tons of CO2 for the period January 1, 2022 to December 31, 2022. The popup box is part of the viewing tool and incorporated into the software that was used to create this report.

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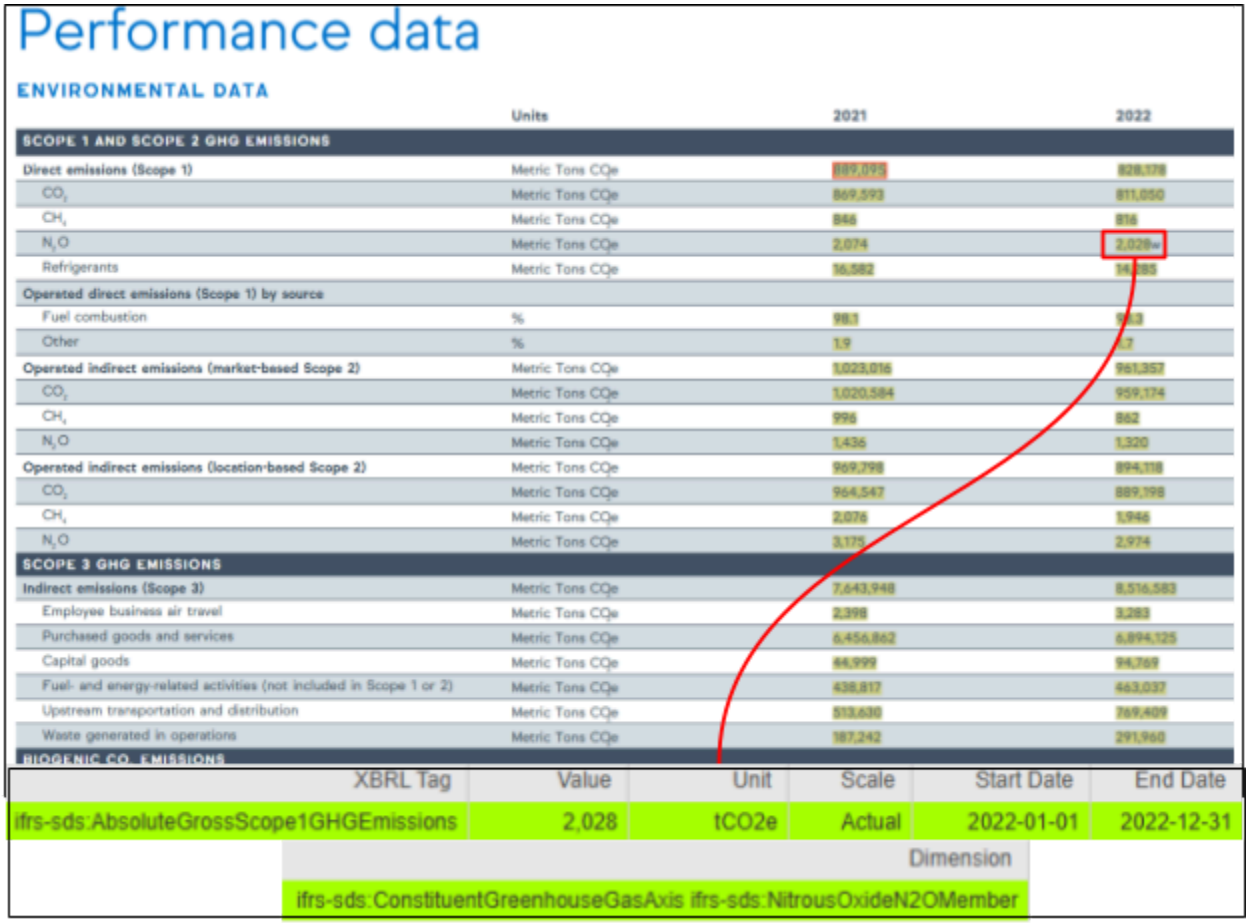
[5] XBRL International Data Type Registry:
https://specifications.xbrl.org/work-product-index-registries-dtr-1.0.html
[6] New data type facilitates digital climate disclosures:
https://www.xbrl.org/news/new-data-type-facilitates-digital-climate-disclosures/
[7] XBRL International Units Registry:
https://specifications.xbrl.org/work-product-index-registries-units-registry-1.0.html



Performance data

ENVIRONMENTAL DATA

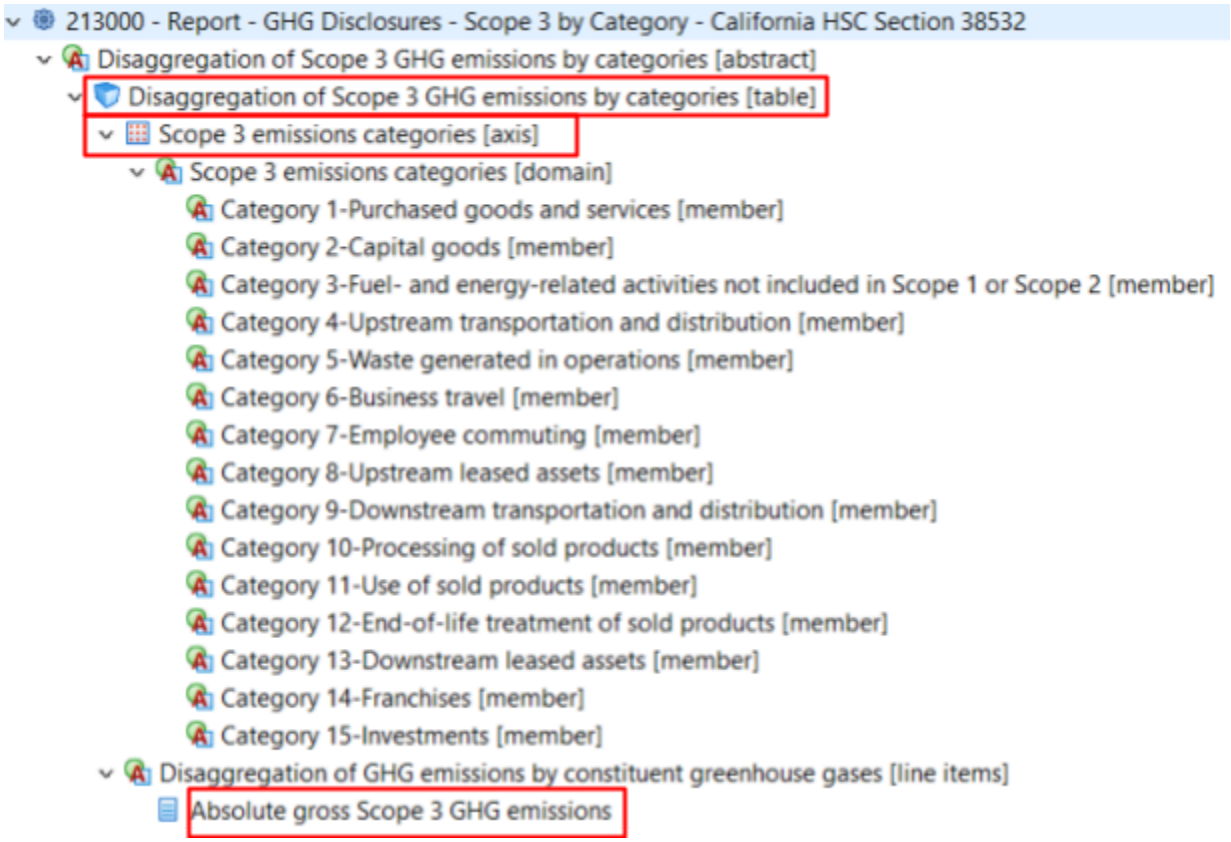
	Units	2021	2022
SCOPE 1 AND SCOPE 2 GHG EMISSIONS			
Direct emissions (Scope 1)	Metric Tons CO_2e	889,095	828,178
CO_2	Metric Tons CO_2e	869,593	811,050
CH_4	Metric Tons CO_2e	846	816
N_2O	Metric Tons CO_2e	2,074	2,028w
Refrigerants	Metric Tons CO_2e	16,582	14,285
Operated direct emissions (Scope 1) by source			
Fuel combustion	%	98.1	98.3
Other	%	1.9	1.7
Operated indirect emissions (market-based Scope 2)	Metric Tons CO_2e	1,023,016	961,357
CO_2	Metric Tons CO_2e	1,020,584	959,174
CH_4	Metric Tons CO_2e	996	862
N_2O	Metric Tons CO_2e	1,436	1,320
Operated indirect emissions (location-based Scope 2)	Metric Tons CO_2e	969,798	894,118
CO_2	Metric Tons CO_2e	964,547	889,198
CH_4	Metric Tons CO_2e	2,076	1,946
N_2O	Metric Tons CO_2e	3,175	2,974
SCOPE 3 GHG EMISSIONS			
Indirect emissions (Scope 3)	Metric Tons CO_2e	7,643,948	8,516,583
Employee business air travel	Metric Tons CO_2e	2,398	3,283
Purchased goods and services	Metric Tons CO_2e	6,456,862	6,894,125
Capital goods	Metric Tons CO_2e	44,999	94,769
Fuel- and energy-related activities (not included in Scope 1 or 2)	Metric Tons CO_2e	438,817	463,037
Upstream transportation and distribution	Metric Tons CO_2e	513,630	769,409
Waste generated in operations	Metric Tons CO_2e	187,242	291,960
BIOGENIC CO_2 EMISSIONS			

XBRL Tag	Value	Unit	Scale	Start Date	End Date
ifrs-sds:AbsoluteGrossScope1GHGEmissions	2,028	tCO2e	Actual	2022-01-01	2022-12-31

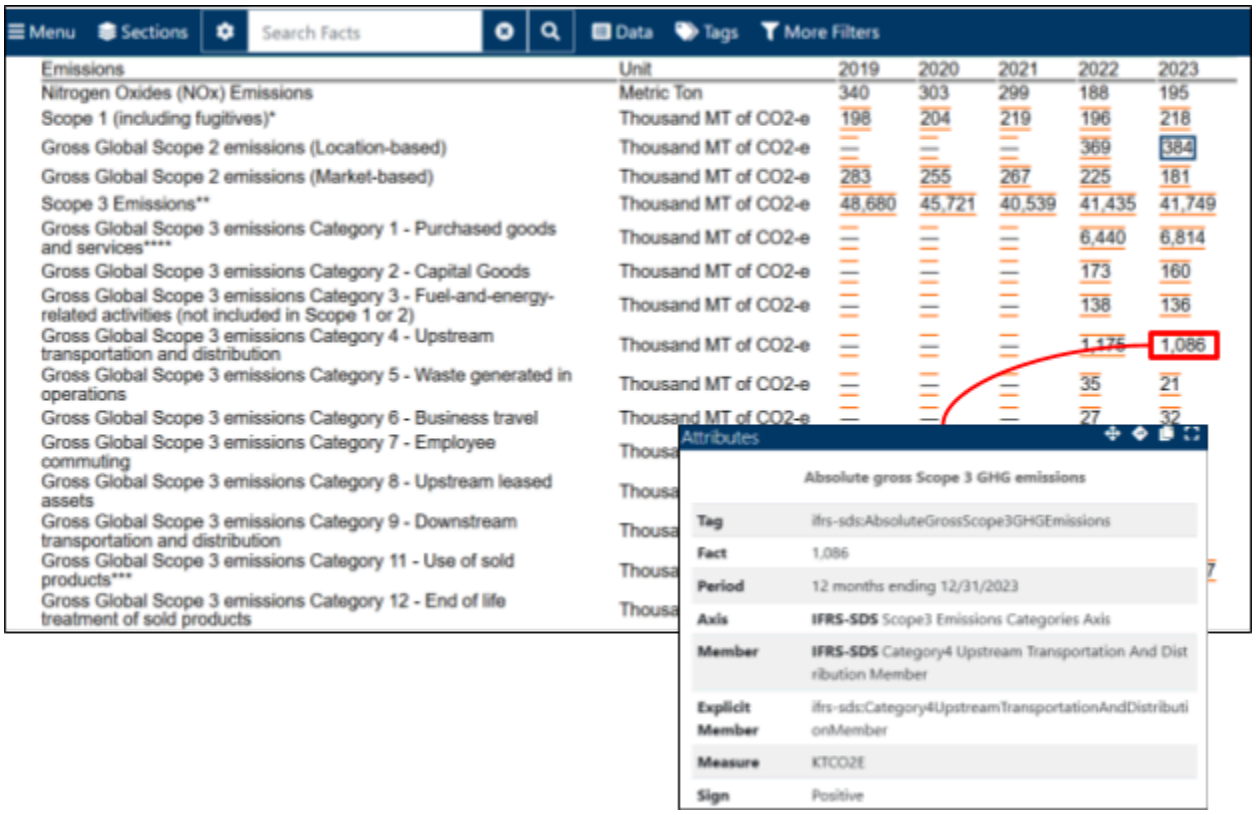
Dimension
ifrs-sds:ConstituentGreenhouseGasAxis ifrs-sds:NitrousOxideN2OMember

Scope 3 emissions by category

Group 213000 - Report - GHG Disclosures - Scope 3 by Category - California HSC Section 38532 contains the table Disaggregation of GHG emissions by categories [table]. This table relies on the Scope 3 emissions categories [axis] to allow preparers to disaggregate scope 3 emissions into the GHG Protocol categories 1 through 15. The axis is an explicit dimension because the preparer can only select from one of the 15 categories in the taxonomy or by total. There is a single line item for Absolute gross Scope 3 GHG emissions as this is the only emissions category that would be reported with a breakdown by category.



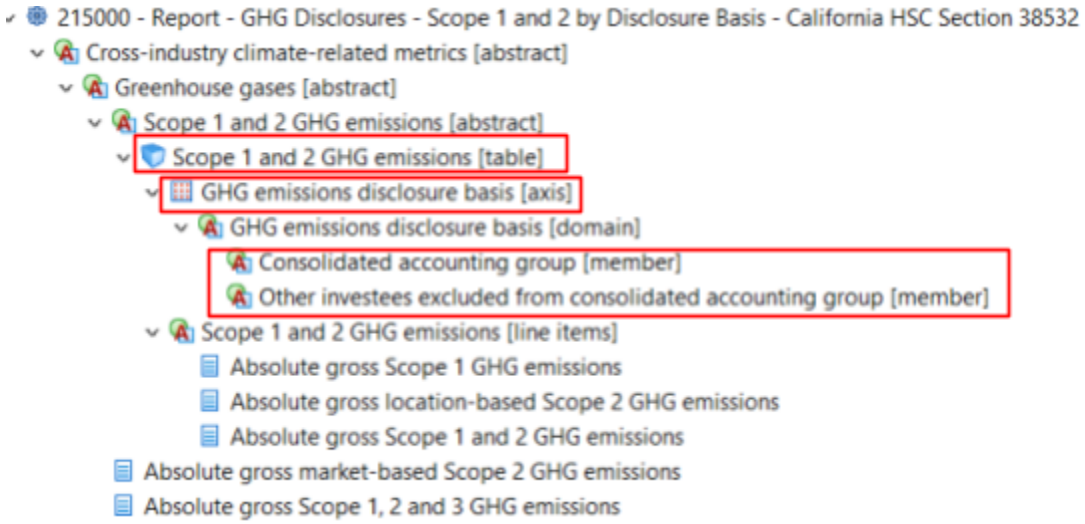
The sample company report below shows how a fact like 1,086 is XBRL-tagged with the concepts Absolute gross Scope 3 GHG emissions and the concept Category 4-Upstream transportation and distribution [member]. This example shows the Inline XBRL report in an open-source viewing tool developed by the SEC and made freely available to the public.



Scope 1 and 2 emissions by disclosure basis

The group 215000 - Report - GHG Disclosures - Scope 1 and 2 by Disclosure Basis - California HSC Section 38532, expresses scope 1 and 2 emissions data by accounting disclosure basis. It relies on the Scope 1 and 2 GHG emissions [table] and the GHG emissions disclosure basis [axis] to allow preparers to report emissions data broken down by "*consolidated accounting group*" or by the accounting category, "*other investees excluded from consolidated accounting group*". The table allows preparers to define Absolute gross Scope 1 GHG emissions and Absolute gross location-based Scope 2 GHG emissions to be reported by accounting disclosure basis.

This group also allows the reporting of Absolute gross market-based Scope 2 GHG emissions and the reporting of the sum of Scope 1, 2, and 3 emissions in total.



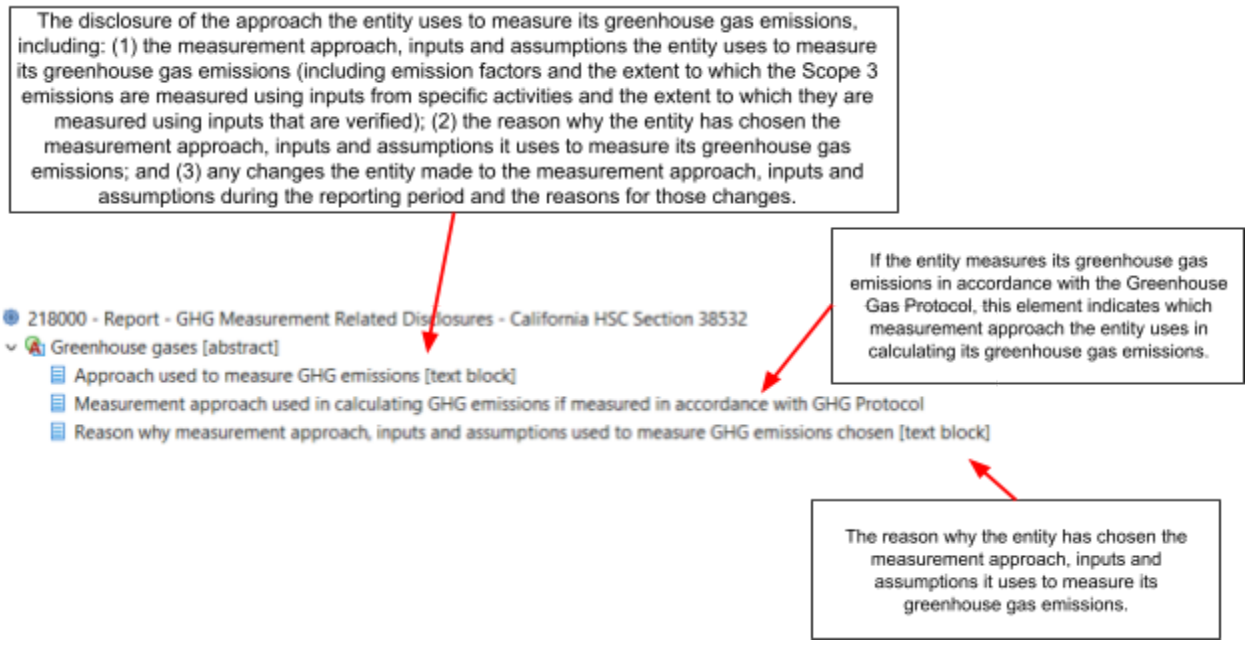
GHG measurement related disclosures

Group 218000 - Report - GHG Measurement Related Disclosures - California HSC Section 38532, allows the preparer to identify information in its report about how the report measures emissions data as shown below. Documentation labels for each concept are shown in inset boxes. All concepts are drawn from the ISSB Taxonomy.

Note that the first and third concepts shown in the presentation have a data type of “text block”. This type is used to express information that may be textual or even tabular in nature. To XBRL-tag a text block, the preparer identifies the starting point and end point of the information within the report to be tagged. Text blocks retain the integrity of the reported data, for example, indentations, paragraphs, and even tables are retained in their entirety to ensure ease of readability. Text block tagging allows users of the data to easily extract information such as policy statements or measurement approaches easily and quickly across a large volume of entities; or to extract narratives for a single entity to compare changes over time. Shorter text information can be captured using a data type of “string” which does not retain the presentation of the text in the document.

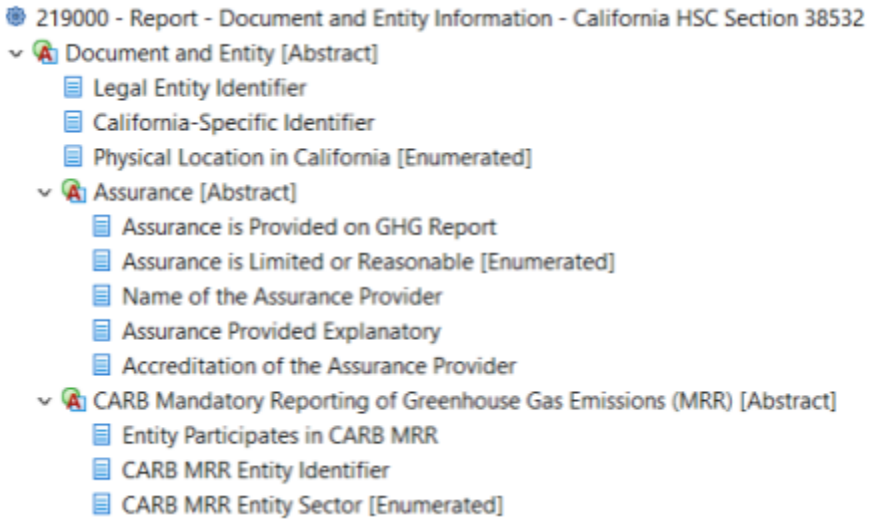
The second concept, Measurement approach used in calculating GHG emissions if measured in accordance with GHG Protocol is an enumerated list with options: Equity Share Approach and Control Approach. Preparers using this concept are limited to selecting one of these options.

This group does not have a table as there is no need to disaggregate the reported facts.



Information about the entity and the document

The group 219000 - Report - Document and Entity Information - California HSC Section 38532 provides concepts used to express identifiers, assurance, and participation in CARB Mandatory GHG Reporting - Reported Emissions (MRR). Concepts in this group are not part of the ISSB Taxonomy; they are contained in the state-specific module of the taxonomy as described earlier in the section on integration with the ISSB Taxonomy.



Entity information

States may have their own identifiers that entities must use when reporting to them. For example, the State of California has an identifier to track the facility or entity for organizations participating in the MRR program. That identifier could be used for all entities or there may be another California-specific identifier that the state wishes to use. We do however, urge any state using this taxonomy to require the use of the Legal Entity Identifier (LEI) as the LEI is a global, widely used, open identifier that has recently been proposed for use to comply with the Financial Data Transparency Act (FDTA). The LEI is supported and maintained by the nonprofit Global LEI Foundation[8]. There are 2,614,316 active LEIs in use today worldwide[9]. Adopting the same single entity identifier for companies reporting to state and federal regulators, as well as non-US regulators, will vastly improve the ability to track and monitor information reported.

In addition to identifiers, the taxonomy contains the element Physical Location in California which is an enumerated list giving preparers the options to choose from "Headquartered in the State of California","Has one or more physical locations in California", or "Not located in California".

Assurance

Assurance requirements can be captured by using the concepts contained in the Assurance [Abstract] in the taxonomy visual above. These concepts are defined as shown in the table below.

Label	Data Type	Documentation
Assurance is Provided on GHG Report	Boolean (true/false)	Indicates if the company has assurance on their GHG report. If assurance is provided, report as true; if it is not provided, report as false.
Assurance is Limited or Reasonable [Enumerated]	Enumerated list with options: limited or reasonable	Indicates if the assurance is limited or reasonable.
Name of the Assurance Provider	string	Name of the assurance provider.
Assurance Provided Explanatory	Text block	Description of the type of assurance provided.
Accreditation of the Assurance Provider	Text block	Description of the accreditation of the assurance provider.

[8] Global LEI Foundation (GLEIF): https://www.gleif.org/en
[9] LEI Statistics: https://www.gleif.org/en/lei-data/global-lei-index/lei-statistics#

CARB Mandatory Reporting of GHG Emissions (MRR)

CARB is already collecting GHG emissions data from certain organizations through the MRR program. It may be useful to determine if the reporting entity is already reporting data to CARB at the same time that it is reporting emissions data for SB 253. Additional data that may be collected through the MRR program could also be reported in machine-readable, XBRL format so that all information is fully interoperable. This would reduce the burden on reporting entities as they can submit a single report to satisfy MRR and SB 253 program requirements.

Label	Data Type	Documentation
Entity Participates in CARB MRR	Boolean (true/false)	Indicates if the company participates in the CARB MRR. If it does, report as true; if it does not, report as false..
CARB MRR Entity Identifier	string	Identifier used by the company when reporting to the CARB MRR.
CARB MRR Entity Sector [Enumerated]	Enumerated list with options: electricity generators, industrial facilities, fuel suppliers, or electricity importers	The Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR) is applicable to electricity generators, industrial facilities, fuel suppliers, and electricity importers.

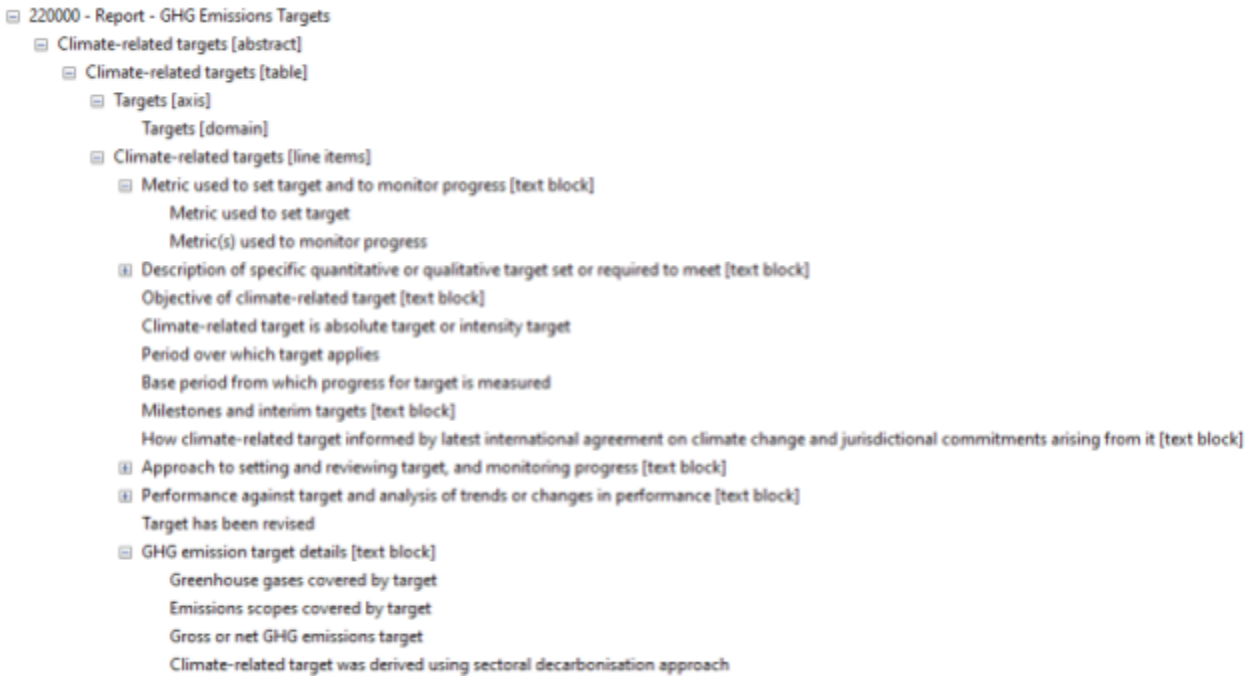
Optional Reporting

The SGHG Taxonomy contains two additional groups which are part of the ISSB Taxonomy and can be used by companies reporting GHG emissions targets and planned use of carbon credits. These sections represent data that is not required to be reported per SB 253 however they may be of use for companies reporting target and carbon credit data to other regulators.

Targets

Group 220000 - Report - GHG Emissions Targets contains the Climate-related targets [table] which represents line items to tag information about various company-selected targets. The table relies on the axis Targets [axis] which is a typed dimension. Typed dimensions differ from the explicit dimensions presented earlier in that there are no predefined members for the Targets [domain].

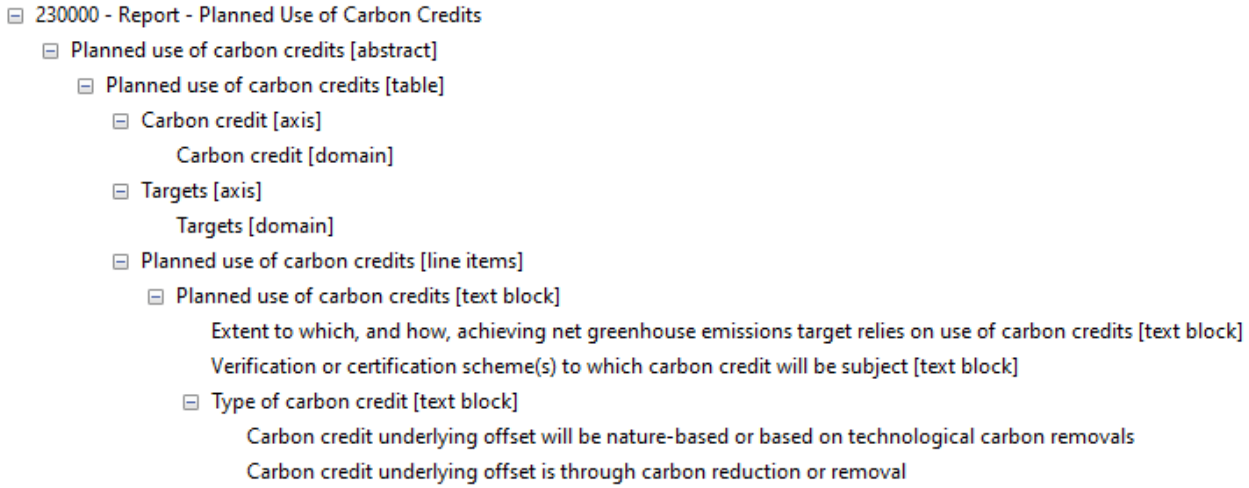
The taxonomy contains commentary guidance for this concept stating, “*Entities are expected to create specific members for their needs and include them under the 'domain' member. The 'domain' member is provided as a default member to facilitate aggregation of entity-specific members, and to represent the 'overall' value where this axis breakdown is not-applicable. All climate-related risks and opportunities are sustainability-related risks and opportunities. Entities should use the element reference to find the appropriate element for tagging.*”



Each target can then be explained by line items such as metrics used to set and monitor progress on targets, descriptive information, objectives, boolean elements on whether a target is absolute or intensity, the period over which the target applies, etc as shown on the visual above.

Planned use of carbon credits

Group 230000 - Report - Planned Use of Carbon Credits provides concepts that companies can use to XBRL-tag their carbon credit information as noted below.



5 State GHG Emissions Taxonomy Physical Structure

As described earlier, the SGHG Emissions Taxonomy sits on top of the ISSB Taxonomy. It is an entry point to a specified set of concepts in the ISSB Taxonomy and contains a separate set of concepts that are not in the ISSB Taxonomy.

6 What Tools do I Need?

Using the XBRL US State GHG Emissions Taxonomy requires preparing XBRL reports (called instance documents) that use dimensions to represent the data. The preparer should use software that supports expressing dimensional data using explicit dimensions.

Preparers will also need a tool that renders the data that they have created into human-readable format to determine that the data reported in an XBRL format matches the data reported. Generally all XBRL enabled tools render the data in some form or another that allows review.

There are many tools available supporting these requirements that can be found on the XBRL US website.

7 How do I Create the XBRL Report (Instance)?

First, the preparer needs to load the SGHG Taxonomy into a tool of their choice.

There are various methods to create an instance. There are tools that allow the preparer to enter the data into a taxonomy template, and tools that allow the preparer to tag the data directly. Alternatively, the preparer can build the instance by creating the XML directly in an XML editor. Unless the user is familiar with the XBRL specification, creating an instance in an XML editor is not recommended.

This guide goes through each of the logical steps that need to be performed to create an XBRL instance.

Defining Units of Measure

Units refer to units of measure associated with a number. Every number has a unit of measure. A company's amount of emissions for example, could be measured in metric tons of CO2 equivalent or thousand metric tons of CO2 equivalent. Company revenue, for example, could be measured in USD, EUR or any other currency. In addition, a percentage will have its own

measurement unit. When USD is divided by another USD amount, the unit disappears and is referred to as a pure unit. The pure unit is typically used for percentages, such as percentage of completion. Only numbers will have a unit associated with them. For the reporting of GHG emissions, the data type used will be GhgEmissions with specified units of measure. If the regulator chooses to collect other climate-related data however, other data types and units of measure may be required, for example, energy, power, or volume data.

Preparers have to define the units that will appear in the instance document. For a GHG emissions report, these will generally be defined as:

Unit ID	***Description***
tCO2e	Metric tons of CO2 equivalent
ktCO2e	Thousand metric tons of CO2 equivalent
MtCO2e	Million metric tons of CO2 equivalent
GtCO2e	Thousand million metric tons of CO2 equivalent

Units used with the SGHG Taxonomy are restricted to those units defined in the UTR Registry. See https://www.xbrl.org/utr/utr.xml for a list of available units.

Defining Scale

Preparers should not scale values for emissions data in the instance documents. Scale is determined by the units of measure chosen in the instance document.

Defining Time Period

Preparers should set the time period in their reporting tool based on a defined year for the reported fact. Emissions data has a duration period type and is reported over the year being reported.

Validation

When the instance is completed, the preparer should validate the filing. Software tools that preparers use to prepare the XBRL GHG emissions report should incorporate XBRL validation. This is an automated process that takes a couple of seconds to perform. Validation ensures that the filing conforms to the XBRL specification, that values are entered in the appropriate format and that values in the instance document calculate correctly when calculations are defined. Additional validation rules can be added to the taxonomy over time that provide additional checks to ensure that values are entered appropriately.

Glossary

abstract – An attribute of a concept to indicate that the concept is only used in a hierarchy to group related concepts together. An abstract concept cannot be used to tag data in an instance document. In the XBRL US GAAP Taxonomy, every concept that has calculation children also has a corresponding abstract concept.

ASCII character – Technical term preparers may see in warning messages; the characters are only English letters, digits, and common punctuation marks. ASCII stands for American Standard Code for Information Interchange, and omits commonly used formatting characters: forward- and backward-tilted apostrophes and double quotes, non-breaking spaces, and bullets.

attribute – A property of a concept including its name, balance, data type, and whether the concept is abstract. Attributes of XBRL US GAAP Taxonomy concepts cannot be changed.

authoritative reference – Citations to specific authoritative accounting literature (pronouncements, standards, rules, and regulations) derived from various authoritative sources (SEC, FASB, and AICPA) and used to help define a concept.

axis (pl. axes) – An instance document contains facts; an axis differentiates facts and each axis represents a way that the facts may be classified. For example, Revenue for a period might be reported along a business unit axis, a country axis, a product axis, and so forth.

axis-default relationship – The dimensional relationship indicating that the table axis has a default domain member. In the XBRL US GAAP Taxonomies 1.0, the default is always the domain concept.

axis-domain relationship – The dimensional relationship indicating that the table axis has members drawn from a domain.

balance – An attribute of a monetary item type designated as debit, credit, or neither; a designation, if any, should be the natural or most expected balance of the concept “credit” or “debit” and thus indicates how calculation relationships involving the concept may be assigned a weight attribute (-1 or +1).

calculation relationships – Additive relationships between numeric items expressed as parent-child hierarchies. Each calculation child has a weight attribute (+1 or -1) based upon its natural balance of the parent and child items.

calculation relationships file – A file containing only calculation relationships. An extension taxonomy will typically have at least one calculation relationships file.

camel case – Method used to articulate the name of a concept with no spaces. For example, the phrase “Net Change in Assets” is transformed into “NetChangeInAssets” in camel case. When software requires preparers to provide a name containing no spaces, and changing an English phrase into the symbol makes it hard to read, use camel case. Contrasted with either lower case or upper case, camel case uses capitalization of each word in the phrase to create visual ”humps ” Punctuation is always removed. Even an acronym occurring in a phrase also should be converted to camel case (for example, “US GAAP Report” becomes “UsGaapReport”).

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. A context can also contain dimensional qualifiers such as the contract identifier.

concept – XBRL technical term for concept.

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.

decimal – Instance document fact attribute used to express the number of decimal places to which numbers have been rounded.

default – mechanism used in a dimension to describe the aggregation of values.

definition relationships file – technical term for dimensional relationships file.

dimension – XBRL technical term for axis used to define dimensional relationships between concepts. The XBRL technical name for this file is a definition relationships file. Dimensions can be explicit, with a finite, defined set of members; or typed, where members can be defined by the reporting entity.

domain – An concept that represents an entire set of other concepts; the domain and its members are used to classify facts along the axis of a table. For example, “Arkansas” is a domain member in the domain “States,” and would be used to classify concepts such as revenues and assets in Arkansas as distinct from other states. When a fact does not have any domain member specified, that means it applies to the entire domain.

domain member – An concept representing one of the possibilities within a domain.

domain-member relationship – Dimensional relationship indicating that a domain contains the member.

concept – 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.

concept definition – A human-readable description of a reporting concept. From an XBRL technical point of view, the concept definition is the label with the type “documentation ” and there are label relationships in a label relationships file. From a user point of view, the definition is an unchangeable attribute of the concept.

concept names file – Part of the taxonomy that defines XBRL concepts and their attributes as well as relationship groups.

entry point – XBRL file that brings together a set of relationships files. The file name ends with “.xsd” just like a concept name file.

extended link – XBRL technical term for a relationship group.

extension taxonomy *or* **extension** – A taxonomy that allows users to add to a published taxonomy in order to define new concepts or change concept relationships and attributes (presentation, calculation, labels, and so forth) without altering the original.

face of the financial statements – Financial statements without the notes or schedules.

fact – The occurrence in an instance document of a value or other information tagged by a taxonomy concept.

GAAP – Generally Accepted Accounting Principles.

group *or* **relationship group** – Highest level of a parent-child hierarchy used to categorize item relationships at the financial statement, schedule, or industry level.

hierarchy – Trees (presentation, calculation, and so forth) used to express and navigate relationships.

hypercube – XBRL technical term for a table.

imputed value – A value that is not specifically provided but could be calculated based on other provided numbers and calculation weights.

instance *or* **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.

integer – A data type indicating that the concept is stated in whole numbers.

item – XBRL technical term for a kind of concept.

label – Human-readable name for an concept; each concept has a standard label that corresponds to the concept name, and is unique across the taxonomy.

label relationships file – Part of a taxonomy used to associate labels to concepts.

label type – A distinguishing name for each distinct concept indicating the circumstances in which it should be used; each is given a separate defining “role” to use in different presentation situations.

line item – concepts that conventionally appear on the vertical axis (rows) of a table.

linkbase – XBRL technical term for a relationships file.

mapping – Process of determining the concepts that correspond to lines and columns in a financial statement and which concepts must be created by extension.

name – Unique identifier of an concept in a taxonomy.

namespace – Every concept has a Universal Resource Identifier (URI) that identifies the organization that maintains the concept definitions, with an indication of what the term covers. In the XBRL US WIP Taxonomy, namespaces start with “http://xbrl.us/wip/”. A namespace prefix is not the namespace.

negating label – A label type that causes numeric values of an concept to be displayed with their sign flipped.

nillable – An attribute that appears on all taxonomy concepts, and is used (false) on concepts that, if used in an instance document, must have a non-empty value. XBRL taxonomy tools normally have the default value for nillable as “true”. There is no need for any extension to define a concept with nillable “false”.

non-GAAP – As used in this guide and the XBRL US GAAP Taxonomies v1.0, this term applies to the taxonomies of non-financial information; it does not mean “non-GAAP” in the sense of Regulation S-K Item 10(e).

parent-child hierarchy – Relationship between concepts that indicates subordination of one to the other as represented in a print listing or financial statement presentation. Relationships files use parent-child hierarchies to model several different relationships, including presentation,

summation of a set of facts, and membership of concepts within a domain used as the axis of a table.

period type – An attribute of a concept that reflects whether it is reported as an instant or duration time period.

prefix *or* **namespace prefix** – A shorthand sequence of letters for a namespace; “us-gaap”, for example, is a common prefix for the namespace http://xbrl.us/us-gaap/2008-01-31.

presentation relationships – Relationships that arrange concepts allowing them to navigate the taxonomy content in parent-child tree structures (hierarchies).

presentation relationships file – Defines the organizational relationships (order) of concepts using parent-child hierarchies; it presents the taxonomy concepts to users and allows them to navigate the content.

reference relationships file – Part of a taxonomy used to associate references to authoritative literature with concepts.

relationship group – A set of relationships that are given a name and description and treated as a whole set.

relationship group description – A human-readable name for a relationship group, specifically used for sorting. For example, —148600 – Statement – Statement of Income is the name of a relationship group that begins with a number so that it can be sorted easily.

relationship group role or relationship group name – A unique identifier, resembling a namespace, that is shared by related calculation, presentation, and dimension relationships all used together. For example, http://xbrl.us/us-gaap/role/statement/StatementOfIncome is a relationship group role.

relationships file – Part of a taxonomy used to define specific relationships and other data about concepts. There are five standard relationship file types: Presentation, Calculation, Definition (Dimensions), Label, and Reference.

render or rendering – To process an instance document into a layout that facilitates readability and understanding of its contents.

root – The top level of a tree; can appear only once in that tree.

scaling – A process that automatically scales numeric data by value, thus saving time of entering zeros during the entry or creation process. XBRL does not support the scaling of

numeric values (all values must be reported in their entirety); however, it is a feature commonly found in instance document creation software.

scenario – Tag that allows for additional information to be associated with facts in an instance document; this information encompasses in particular the reporting circumstances of the fact, as for example “actual” or “forecast”. The scenario of any fact can be left unspecified.

schema – Technical term for an concept declaration file.

segment – Tag that allows additional information to be included in the context of an instance document; this information captures segment information such as an entity’s business units, type of debt, type of other income, and so forth.

sign value – Denotes whether a numeric fact in an instance has a positive (+) or negative (-) value.

standard label – The default label for an concept. An extension may override the standard label.

suppress (a relationship) – An extension effectively can remove a parent-child relationship in a presentation, calculation, or dimension relationship. It is not actually deleted from the XBRL US GAAP Taxonomy, just made ineffectual. The technical term is “prohibiting the arc.”

table – An concept that organizes a set of axes and a set of line items so as to indicate that each fact of one of the line items could be further characterized along one or more of its axes. For example, if a line item is “Sales” and an axis is “Scenario” this means that an instance document could have facts that are either for an “unspecified scenario” or for a specific scenario such as “actual” or “forecast”.

table-axis relationship – Dimensional relationship indicating that a table uses a particular axis. The XBRL technical name for this is the “hypercube-dimension” relationship; software tools may provide other names.

tag (noun) – Markup information that describes a unit of data in an instance document and encloses it in angle brackets (“<>” and “</>”). All facts in an instance document are enclosed by tags that identify the concept of the fact.

tag (verb) – To apply markup to an instance document.

target namespace – The namespace for which an concept names file defines concepts. The uniqueness of the target namespace prevents concept name collisions between the various concept names files, assisting taxonomy users to recognize the restrictions between the original concept names files and extension concept names files.

taxonomy, taxonomies – Electronic dictionary of business reporting concepts used to report business data. A taxonomy is composed of an concept names file (.xsd) and relationships files directly referenced by that schema. The taxonomy schema files plus the relationships files define the concepts (concepts) and relationships that form the basis of the taxonomy. The set of related schemas and relationships files altogether constitute a taxonomy.

tree – Common name for a display of a hierarchy, with “roots”, “branches” and “leaves.”

type *or* **data type** – Data types (monetary, string, share, decimal, and so forth) define the kind of data to be tagged with the concept name.

unit of measure – The units in which numeric items have been measured, such as dollars, shares, Euros, or dollars per share.

validation – Process of checking that instance documents and taxonomies correctly meet the rules of the XBRL specification.

weight – Calculation relationship attribute (-1 or +1) that works in conjunction with the balance of the parent and child numeric concepts to determine the arithmetic summation relationship between them. A parent with a balance credit that has two children, one with a balance type debit and the other with a balance type credit, would, in an XBRL calculation relationships file, have the parent with a weight of +1, the debit child with a weight of -1, and the credit child with a weight of +1. As can be seen, the parent’s balance drives the weight of the children addends.

XBRL – Stands for Extensible Business Reporting Language; an XML-based standard for electronic communication of financial and business data.

XBRL footnote – An instance document concept that provides additional information for specified values by creating linkages between them and a footnote concept containing this additional information.

XBRL specification – Detailed description of XML syntax, semantics, and structures, and so forth that prescribe how XBRL is constructed. The current Specification 2.1 is used primarily by IT professionals in developing tools and software for XBRL applications.

XBRL table – A table.

XML – Stands for Extensible Markup Language, which is used to describe and define data by allowing users to define their own tags (in contrast to HTML where the tags are predefined). XBRL is an XML based standard.