# Climate-related Disclosures Prototype

Developed by the Technical Readiness Working Group, chaired by the IFRS Foundation, to provide recommendations to the International Sustainability Standards Board for consideration

November 2021











This document represents recommendations from the Technical Readiness Working Group (TRWG) for consideration by the International Sustainability Standards Board (ISSB) for a climate-related disclosures standard. While the recommendations build on the established work of the organisations represented on the TRWG, this document has not been subject to the due process of those organisations or the IFRS Foundation. After starting its work, the ISSB is expected to consult publicly on proposals for a climate-related disclosures standard informed by the TRWG's recommendations. The ISSB's work will be subject to the IFRS Foundation's due process.

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#### Climate-related disclosures

NOTE: the below 'IN' paragraphs do not form part of the Standard, they are an executive summary of the Standard.

#### Introduction

- IN1 [Draft] IFRS Sustainability Disclosure Standard SX *Climate-related Disclosures* (IFRS SX) sets out the requirements for the identification, measurement and disclosure of climate-related financial information.
- IN2 The objective of [Draft] IFRS SX is to require entities to provide information about their exposure to climate-related risks and opportunities. This information, along with other information provided as part of an entity's general purpose financial reporting, assists users of the information provided in assessing the entity's future cash flows, their amounts, timing and certainty, over the short, medium and long term. This information, together with the value attributed by users to those cash flows, supports their assessment of the entity's enterprise value.

#### Reasons for issuing [Draft] IFRS SX

- IN3 An entity's relationship with the environment has become increasingly important. While climate change presents significant risks for all entities, their activities and their economic sectors, it also includes creating opportunities for entities focused on climate-change mitigation and adaptation. Entities may be exposed to these risks and opportunities through upstream or downstream counterparties beyond their direct operations due to interconnected global value chains and distribution channels.
- IN4 [Draft] IFRS SX was developed in response to calls from users of general purpose financial reporting for more consistent, complete, comparable and verifiable information, including consistent metrics and decision-useful standardised qualitative disclosures, to help them assess how climate-related matters and the associated risks and opportunities affect:
  - the entity's financial position and performance;
  - the value, timing and certainty of the entity's future cash flows over the short, medium and long term and, therefore, assessment of enterprise value by users of general purpose financial reporting; and
  - the entity's response through its strategy and business model.
- IN5 Climate change affects all economic sectors. However, the level and type of exposure and the current and anticipated effects of climate-related risks and opportunities on the assessment of enterprise value are likely to differ by sector, industry, geography, size and entity. In assessing an entity's financial and operating results, investors and other capital market participants want insight into the governance, risk management and strategic context in which such results are derived as well as the targets and the metrics the entity uses to measure progress toward the targets.
- IN6 Recognising that investors and other capital market participants operate in global markets, IFRS SX requires consistent climate-related disclosures that are designed to enable users of general purpose financial reporting to assess entities' exposure to and management of climate-related risks and opportunities, across markets, to facilitate capital allocation and stewardship decisions.

#### Main features

IN7 [Draft] IFRS SX incorporates the recommendations by the Task Force on Climate-related Financial Disclosures, and uses as its starting point the relevant components of the

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frameworks and standards of international sustainability bodies, as published in a prototype climate-related financial disclosure standard in December 2020. The industry disclosure requirements (Appendix B) are an integral part of the Standard, thus forming part of the requirements, and have been derived from SASB Standards.

IN8 The [Draft] Standard requires an entity to provide information that enables users of general purpose financial reporting to assess:

- governance—the governance processes, controls and procedures the entity uses to monitor and manage climate-related risks and opportunities;
- strategy—the climate-related risks and opportunities that could enhance, threaten or change the entity's business model and strategy over the short, medium and long term, including:
  - whether and how information about climate-related risks and opportunities inform management's strategy and decision making;
  - the current and the anticipated effects of climate-related risks and opportunities on its business model;
  - the impact of climate-related risks and opportunities on the entity's financial position, performance and cash flows, both at the end of the reporting period and the anticipated effects over the short, medium and long term; and
  - o the resilience of the entity's strategy to climate-related risks;
- risk management—how climate-related risks are identified, assessed, managed and mitigated by the entity; and
- metrics and targets—the metrics and targets used to manage and monitor the entity's performance in relation to climate-related risks and opportunities over time.

<sup>&</sup>lt;sup>1</sup> https://29kjwb3armds2g3gi4lq2sx1-wpengine.netdna-ssl.com/wp-content/uploads/Reporting-on-enterprise-value\_climate-prototype\_Dec20.pdf

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Prototype IFRS SX is set out in paragraphs 1–17 and Appendices A and B. All the paragraphs have equal authority. [Paragraphs in bold type state the main principles]. [Terms defined in Appendix A are in italics the first time that they appear in the Standard]. Definitions of other terms are given in the [General Requirements for Disclosure of Sustainability-related Financial Information Standard]. The Standard should be read in the context of its objective and the [Basis for Conclusions] and the [Conceptual Framework].

## **Prototype IFRS Sustainability Disclosure Standard**

#### Climate-related disclosures

#### **Objective**

- 1 The objective of these disclosure requirements is to require an entity to disclose information about its exposure to *climate-related risks* and *opportunities*, enabling users of an entity's general purpose financial reporting:
  - (a) to determine the effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows, and to assist users in their assessment of the entity's future cash flows and their value, timing and certainty, over the short, medium and long term and, therefore, assist users in their assessment of the entity's enterprise value;
  - (b) to understand how management's use of resources, and corresponding inputs, activities, outputs and outcomes support the entity's response to and strategy for managing its climate-related risks and opportunities; and
  - (c) to evaluate the ability of the entity to adapt its planning, *business model* and operations in response to climate-related risks and opportunities.
- 2 An entity shall apply this [draft] Standard in preparing and disclosing climate-related disclosures in accordance with the IFRS Sustainability Disclosure Standard: General Requirements for the Disclosure of Sustainability-related Financial Information.

#### Scope

- 3 This Standard applies to:
  - (a) climate-related risks that the entity is exposed to, including but not restricted to:
    - (i) physical risks from climate change (physical risks); and
    - (ii) risks associated with the transition to a lower-carbon economy (transition risks); and
  - (b) climate-related opportunities available to and considered by the entity.

#### Governance

- 4 An entity shall disclose information that enables users of general purpose financial reporting to understand the governance processes, controls and procedures used to monitor and manage climate-related risks and opportunities. To achieve this objective, the entity shall disclose a description of the governance body or bodies (which can include a board, committee or equivalent body charged with governance) with oversight of climate-related risks and opportunities, and of management's role with respect to climate-related risks and opportunities, including:
  - (a) the identity of the body or individual within a body responsible for climate-related risks and opportunities;
  - (b) how the body's responsibilities for climate-related risks and opportunities are reflected in terms of reference, board mandates and other relevant entity policies;
  - (c) how the body ensures that the correct skills and competencies are available to oversee strategies designed to respond to climate-related risks and opportunities;
  - (d) the processes and frequency by which the body and its committees (audit, risk or other committees) are informed about climate-related matters and the associated climaterelated risks and opportunities;

- (e) how the body and its committees consider climate-related risks and opportunities when overseeing the entity's strategy, decisions on major transactions, and risk management policies, including any assessment of trade-offs and analysis of sensitivity to uncertainty that may be required;
- (f) how the body oversees the setting of climate-related targets and monitors progress towards them, including whether and how related performance metrics are incorporated into remuneration policies; and
- (g) a description of management's role in assessing and managing climate-related risks and opportunities (for example, whether climate-related responsibilities have been assigned to specific management-level positions or committees, and that appropriate controls have been put in place by management to monitor climate-related matters, including ways in which climate-related risks and opportunities are considered and coordinated across different internal functions) and how the body oversees management in that role.

#### **Strategy**

- An entity shall disclose information that enables users of general purpose financial reporting to understand its strategy for addressing climate-related risks and opportunities, including the entity's assessment of:
  - (a) the significant climate-related risks and opportunities that it reasonably expects could affect its business model, strategy and cash flows over the short, medium or long term (see paragraph 6);
  - (b) the impact of significant climate-related risks and opportunities on its business model (see paragraph 7);
  - (c) the impact of significant climate-related risks and opportunities on management's strategy and decision making (see paragraph 8);
  - (d) the impact of significant climate-related risks and opportunities on its financial position, financial performance and cash flows at the reporting period end, and the *anticipated* effects over the short, medium and long term (see paragraph 9); and
  - (e) the resilience of the entity's strategy to significant climate-related risks associated with the physical impacts of climate change and the transition to a lower-carbon economy (see paragraph 10).
- An entity shall disclose information that enables users of general purpose financial reporting to understand the significant climate-related risks and opportunities that are reasonably expected to affect the entity's business model, strategy and cash flows over the short, medium or long term. Specifically, the entity shall disclose:
  - (a) a description of the processes in place to identify climate-related risks and opportunities that it reasonably expects could positively or negatively affect its business model, strategy, and cash flows.
  - (b) how it defines short, medium and long term and how the definitions are linked to the entity's strategic planning horizons and capital allocation plans.
  - (c) a description of significant climate-related risks or opportunities and the time horizon over which each could reasonably be expected to have a financial effect on the entity.
  - (d) whether the risks identified are physical risks or transition risks. For example, acute physical risks such as increased severity of extreme weather events such as cyclones and floods, and chronic physical risks could include rising sea levels or rising mean temperatures. Transition risks could include regulatory, technological, market, legal or reputational risks.

- 7 An entity shall disclose information that enables users of general purpose financial reporting to understand its assessment of the impact of significant climate-related risks and opportunities on its business model. Specifically, the entity shall disclose:
  - (a) a description of the current and anticipated effects of significant climate-related risks and opportunities on its value chain for producing goods or services (for example, supply chains, operations, workforce, marketing and distribution channels); and
  - (b) where in its value chain significant climate-related risks or opportunities are concentrated, (for example, geographical areas, facilities or types of assets, inputs, outputs or distribution channels).
- 8 An entity shall disclose information that enables users of general purpose financial reporting to understand its assessment of the impact of significant climate-related risks and opportunities on management's strategy and decision making, including its *transition plans*. Specifically, the entity shall disclose:
  - (a) how it is responding to significant climate-related risks and opportunities including but not restricted to:
    - (i) how it plans to achieve any climate-related targets it has set, including how these plans will be resourced, the processes in place for review of those targets, and assumptions about the use of *carbon offsets* in achieving the target, including minimum quality or certification thresholds for the offsets.
    - (ii) how it is advancing research and development related to climate-change mitigation, adaptation, or opportunities.
    - (iii) whether it is adopting new technologies.
    - (iv) what direct adaptation and mitigation efforts it is undertaking (for example, through workforce, changes in materials used or product specifications, or introduction of efficiency measures).
    - (v) what indirect adaptation and mitigation efforts it is undertaking (for example, through working with customers and supply chains or use of certification schemes (for example, an internationally recognised scheme providing certification for the sustainability of a commodity such as lumber or palm oil)).
    - (vi) the extent to which mitigation efforts rely on offsetting strategies and the factors affecting the choice of any offsetting strategy; for example, following an assessment of multiple schemes, a technology company has decided to offset residual emissions within its value chain via an afforestation programme to meet its strategic commitment to mitigate climate risk. The company selected [] offset programmes because they led to permanent and additional outcomes, and met an accredited verification standard. The entity described each project, the geography in which the projects operate, the number of metric tonnes of offsets, the cost per metric tonne, the year in which the emission reduction occurred and the verification standard applying to the scheme.
  - (b) plans and critical assumptions for *legacy assets*, including strategies to manage carbonenergy- and water-intensive operations, and to decommission carbon- energy- and water-intensive assets.
  - (c) quantitative and qualitative information about the progress of plans previously disclosed in accordance with paragraphs 8(a) and 8(b).
  - (d) how significant climate-related risks and opportunities are included in the entity's financial planning decision making (for example, in relation to investment decisions and funding).

- An entity shall disclose information that enables users of general purpose financial reporting to understand the impact of significant climate-related risks and opportunities on its financial position, financial performance and cash flows at the reporting period end, and the anticipated effects over the short, medium and long term. Specifically, the entity shall disclose qualitatively, and quantitatively when feasible:
  - (a) how significant climate-related risks and opportunities have affected its most recently reported financial performance, financial position and cash flows;
  - (b) how management expects the entity's financial position to change over time in line with its strategy to address significant climate-related risks and opportunities, reflecting:
    - the entity's current and committed capital allocation plans and their anticipated impact on the financial position (for example, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas and asset retirements); and
    - (ii) the entity's planned sources of funding to implement the strategies; and
  - (c) how management expects the entity's financial performance to change over time given its strategy to address significant climate-related risks and opportunities (for example, increased revenue from or costs of products and services aligned with a lower-carbon economy, consistent with the Paris Agreement; physical damage to assets from climate events; and the total costs of climate adaptation or mitigation); and
  - (d) how the entity's assessment of significant climate-related risks and opportunities has affected judgements made or present sources of estimation uncertainty in the financial statements.
- 10 An entity shall disclose an analysis of the resilience of the entity's strategy to significant climate-related risks (physical and transition), including:
  - (a) how the analysis has been conducted, including:
    - (i) whether it has been conducted by comparing a diverse range of climate-related scenarios and whether it has used a Paris-aligned scenario and scenarios consistent with increased physical climate-related risks;
    - (ii) which scenarios were used for the assessment and the sources of the scenarios used (for example, Network for Greening the Financial System Net Zero 2050 scenarios, the International Energy Agency Net Zero 2050 scenario and the Intergovernmental Panel on Climate Change Representative Concentration Pathway 1.9 and 2.6);
    - (iii) an explanation of why the entity believes the chosen scenarios are relevant to assessing its resilience to climate-related risks and opportunities;
    - (iv) the time horizons over which the analysis has been conducted;
    - (v) the inputs into the scenario analysis, including but not limited to— the scope of risks (for example, the scope of physical risks included in the scenario analysis), the scope of operations covered (for example, the operating locations used), and the level of detail in the assumptions (for example, geospatial coordinates specific to company locations or national- or regional-level broad assumptions); and
    - (vi) management's assumptions about the way the transition to a lower-carbon economy will affect the entity, including policy assumptions for the jurisdictions in which the entity operates, macroeconomic trends, energy usage and mix, and technology assumptions; and
  - (b) the results of the analysis together with an assessment demonstrating how the entity's financial position and financial performance supports the resilience of the entity's strategy and business model over the short, medium and long term, including:

- how assets and investments are aligned with or are sufficiently flexible to be reallocated, decommissioned, repaired and upgraded, in the event of physical disruption or chronic changes in weather patterns resulting from climate change; and
- (ii) the current or planned investment in lower-carbon alternatives (and what proportion that represents of overall investment), reskilling the workforce and the degree of capital flexibility available to withstand the physical effects of climate change.

#### Risk management

- 11 An entity shall disclose information that enables users of general purpose financial reporting to understand how climate-related risks are identified, assessed, managed and mitigated. To achieve this objective the entity shall describe:
  - (a) the process by which climate-related risks are identified:
  - (b) the process, or processes, by which the entity assesses the significance of climate-related risks, including, where relevant:
    - (i) how it determines the likelihood and impact of such risks (such as the qualitative factors or quantitative thresholds used);
    - (ii) how it prioritises climate-related risks relative to other types of risks, including the use of risk assessment tools (for example, science-based risk assessment tools or other sources);
    - (iii) which significant input parameters it uses (for example, data sources, the scope of operations covered and the level of detail used in assumptions); and
    - (iv) whether it has changed the processes used compared to the prior reporting period;
  - (c) for each significant climate-related risk, information that enables an understanding of how the risk is being monitored, managed, and mitigated, including related policies; and
  - (d) the extent to which, and how, these climate-related risk identification, assessment and management processes are integrated into the entity's overall risk management process.

#### **Metrics and targets**

- 12 An entity shall disclose information that enables users of general purpose financial reporting to understand the entity's performance in managing significant climate-related risks and opportunities. To achieve this objective, an entity shall disclose:
  - (a) cross-industry metrics (see paragraph 13);
  - (b) industry-based metrics (see Appendix B);
  - (c) targets set by management to mitigate or adapt to climate-related risks or maximise climate-related opportunities; and
  - (d) other key performance indicators used by the board or management to measure progress towards the targets identified in paragraph 12(c).

NOTE: Included in the TRWG's recommendations for consideration by the ISSB is the suggestion to develop (as a priority and building on existing content where possible) detailed technical protocols for the cross-industry metrics listed in paragraph 13, to ensure consistency and comparability across reporting entities (for example, the consolidation and disclosure of Scope 3 emissions and denominators for intensity disclosures). As it stands, some of the cross-industry metrics listed in paragraph 13

represent categories that need to be built upon further to become metrics. The TRWG also recommends that further guidance be developed regarding the relationship between cross-industry disclosures and the industry-based disclosures.

- 13 An entity shall disclose the following cross-industry metrics:
  - (a) greenhouse gas emissions—in terms of absolute gross Scope 1, Scope 2 and Scope 3, expressed as metric tonnes of CO<sub>2</sub> equivalent, in accordance with the Greenhouse Gas Protocol, and emissions intensity;
  - (b) transition risks—the amount and percentage of assets or business activities vulnerable to transition risks;
  - (c) physical risks—the amount and percentage of assets or business activities vulnerable to physical risks;
  - (d) climate-related opportunities—the proportion of revenue, assets or other business activities aligned with climate-related opportunities, expressed as an amount or as a percentage;
  - (e) capital deployment—the amount of capital expenditure, financing or investment deployed toward climate-related risks and opportunities, expressed in the reporting currency;
  - (f) internal carbon prices—the price for each metric tonne of greenhouse gas emissions used internally by an entity, including how the entity is applying the carbon price in decision-making (for example, investment decisions, transfer pricing, and scenario analysis), expressed in the reporting currency per metric tonne of CO<sub>2</sub> equivalent; and
  - (g) remuneration—the proportion of executive management remuneration affected by climate-related considerations in the current period (also see paragraph 4(f)), expressed in a percentage, weighting, description or amount in reporting currency.
- 14 For Scope 3 greenhouse gas emissions, the entity shall provide an explanation of the activities included within the disclosed metric. For example, an online retailer may be exposed to risks or opportunities related to the greenhouse gas emissions arising out of third-party transportation and distribution services purchased by the reporting entity for outbound logistics of products sold to customers. The retailer may determine that information about such emissions is material to the users of its general purpose financial reports in their assessment of its enterprise value. Therefore, the retailer will explain how the emissions information provided by entities in its supply chain has been included in the determination of Scope 3 greenhouse gas emissions.
- 15 The entity shall disclose its climate-related targets, and:
  - (a) the objective of the targets (for example, mitigation, adaptation and conformance with sector and science-based initiatives);
  - (b) whether the target is absolute or intensity-based;
  - (c) whether the target is *science-based*, and if so, whether it has been validated by a third party;
  - (d) whether the target was derived using a sectoral decarbonisation approach;
  - (e) the timeframe over which the target applies;
  - (f) the base year from which progress is measured;
  - (g) any milestones or interim targets; and
  - (h) metrics used to assess progress towards reaching targets and achieving strategic goals.

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#### **Effective date**

- 16 [IFRS SX] was issued in [Month, Year]. An entity shall apply [IFRS SX] for annual reporting periods beginning on or after 1 January 20XX. Earlier application is permitted. If an entity applies [IFRS SX] earlier, it shall disclose that fact.
- 17 An entity is not required to provide the disclosures specified in paragraphs [4-15] for any period before the date of initial application, if it is impracticable to do so.

## Appendix A—Defined terms

Term	Definition
Absolute target	A target defined by reduction in absolute emissions over time, for
7 is coluite tal got	example, reducing CO <sub>2</sub> emissions by 25% below 1994 levels by 2010.
Anticipated	Refers to the effects of risks and opportunities in future periods.
7 introspatou	Troisis to the shoots of hore and opportunities in ratars periods.
	If the anticipated effect in future periods is provided as a monetary
	amount it can be expressed as a single amount or a range.
Business Model	The integrated set of processes by which the entity seeks to create value
business would	
Carban diavida ramaval	and generate cash flows, including in the long term.
Carbon dioxide removal	Anthropogenic activities removing carbon dioxide (CO <sub>2</sub> ) from the
	atmosphere and durably storing it in geological, terrestrial, or ocean
	reservoirs, or in products. It includes existing and potential anthropogenic
	enhancement of biological or geochemical sinks and direct air capture
	and storage but excludes natural CO <sub>2</sub> uptake not directly caused by
	human activities.
Carbon offset	An emissions unit issued by a carbon crediting program that represents
	an emission reduction or removal of a greenhouse gas emission. Carbon
	offsets are uniquely serialised, issued, tracked, and cancelled by means
	of an electronic registry.
Carbon price	Price used by entities to assess the financial implications of changes to
-	investment, production, and consumption patterns, as well as potential
	technological progress and future emissions abatement costs. Entities'
	internal carbon prices can be used for a range of business applications.
	There are two types of internal carbon prices commonly used by Entities.
	The first type is a shadow price, which is a theoretical cost or notional
	amount that the organization does not charge but that can be used in
	assessing the economic implications or trade-offs for such things as risk
	impacts, new investments, net present value of projects, and the cost-
	benefit of various initiatives.
	bottom of various minauros.
	The second type is an internal tax or fee, which is a carbon price charged
	to a business activity, product line, or other business unit based on its
	greenhouse gas emissions (these internal taxes or fees are similar to
	intracompany transfer pricing).
Climate resilience or	Involves an entity developing capacity to adapt to climate change to
resilience to climate	manage the associated risks and seize opportunities, including the ability
change	to respond to transition risks and physical risks. Opportunities include
onding c	improving efficiency, designing new production processes and
	developing new products. Opportunities related to resilience may be
	especially relevant for entities with long-lived fixed assets or extensive
	supply or distribution networks; those that depend critically on utility and
	infrastructure networks or natural resources in their value chain; and
Climata agararia	those that may require longer-term financing and investment.
Climate scenario	Scenario analysis is a process for identifying and assessing a potential
analysis	range of outcomes of future events under conditions of uncertainty. In the
	case of climate change, for example, scenarios allow an entity to explore
	and develop an understanding of how the physical and transition risks of
	climate change may impact its businesses, strategies, and financial
	performance over time.

Climate-related opportunities	The potential positive impacts on an entity related to climate change.  Efforts to mitigate and adapt to climate change can produce opportunities for entities, such as through resource efficiency and cost savings,
	building resilience along the supply chain, the adoption and utilisation of low-emission energy sources, and the development of new products and services. Climate-related opportunities will vary depending on the region, market and industry in which an entity operates.
Climate-related risks	Refers to the potential negative impacts of climate change on an entity. Physical risks emanating from climate change can be event-driven (acute) such as increased severity of extreme weather events (for example, cyclones, droughts, floods, and fires). They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (for example, sea level rise). Climate-related risks can also be associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses, and reputational considerations.
CO <sub>2</sub> equivalent (CO <sub>2</sub> -e)	The universal unit of measurement to indicate the global warming potential of each of the seven greenhouse gases, expressed in terms of the global warming potential of one unit of carbon dioxide for 100 years. It is used to evaluate releasing (or avoiding releasing) any greenhouse gas against a common basis.
Greenhouse gases	The seven greenhouse gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); nitrogen trifluoride (NF <sub>3</sub> ); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).
Intensity target	A target defined by reduction in the ratio of emissions to a business metric over time, for example, reduce CO <sub>2</sub> per tonne of cement by 12% by 2008.
Legacy asset	An asset that has remained on an entity's statement of financial position for a long period of time and has since become obsolete or has lost nearly all of its initial value.
Paris-aligned scenario	Scenarios consistent with limiting global warming to below 2 degrees Celsius above pre-industrial levels and pursuing efforts to limit warming to 1.5 degrees Celsius.
Physical risks	Risks resulting from climate change that can be event-driven (acute) or from longer-term shifts (chronic) in climate patterns. These risks may carry financial implications for entities, such as direct damage to assets, and indirect impacts from supply chain disruption. Entities' financial performance may also be affected by changes in water availability, sourcing and quality; food security and extreme temperature changes affecting entities' premises, operations, supply chain, transportation needs and employee safety.
Science-based targets	Targets are considered 'science-based' if they are in line with what the most recent climate science sets out is necessary to meet the goals of the Paris Agreement—limiting global warming to below 2 degrees Celsius above pre-industrial levels and pursuing efforts to limit warming to 1.5 degrees Celsius.
Scope 1 emissions	Direct greenhouse gas emissions that occur from sources that are owned or controlled by an entity, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles; or emissions from chemical production in owned or controlled process equipment.
Scope 2 emissions	Indirect greenhouse gas emissions that occur from the generation of purchased electricity, heat or steam consumed by an entity. Purchased electricity is defined as electricity that is purchased or otherwise brought into an entity's boundary. Scope 2 emissions physically occur at the facility where electricity is generated.

Scope 3 emissions	Indirect emissions outside of Scope 2 that occur in the value chain of the reporting entity, including both upstream and downstream emissions. The 15 categories of scope 3 emissions, per the GHG Protocol are—  1. Purchased Goods and Services 2. Capital Goods 3. Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2 4. Upstream Transportation and Distribution 5. Waste Generated in Operations 6. Business Travel 7. Employee Commuting 8. Upstream Leased Assets 9. Downstream Transportation and Distribution 10. Processing of Sold Products 11. Use of Sold Products 12. End-of-Life Treatment of Sold Products# 13. Downstream Leased Assets 14. Franchises 15. Investments  Scope 3 emissions could include—the extraction and production of purchased materials and fuels; transport-related activities in vehicles not owned or controlled by the reporting entity; electricity-related activity (for example, transmission and distribution losses), outsourced activities, and waste disposal.
Transition plan	An aspect of an entity's overall strategy that lays out a set of targets and actions supporting its transition toward a lower-carbon economy, including actions such as reducing its greenhouse gas emissions.
Transition risks	Moving to a lower-carbon economy may entail extensive policy, legal, technology and market changes to address mitigation and adaptation requirements relating to climate change. Depending on the nature, speed and focus of these changes, transition risks may pose varying levels of financial and reputational risk to entities.

## **Appendix B—Industry disclosure requirements**

NOTE: See Summary Document for a summary of the TRWG's proposed architecture for standards, including how thematic and industry requirements relate to each other. Industry-based disclosures have the same authority as the other parts of the Thematic Standard, i.e., they are mandatory disclosure requirements.

- 1 To meet the requirements in paragraph 12(b) an entity shall use the tables below, which contain a summary of the industry-based disclosure requirements.
- The summary of industry disclosure requirements below is organised by sector and industry. For each industry, disclosure topic(s) related to climate risks or opportunities are identified. A set of accounting metrics is associated with each disclosure topic. The full requirements can be found in the Prototype Climate-related Disclosures Standard Supplement: Technical Protocols for Disclosure Requirements. This document contains industry descriptions, disclosure topic descriptions, metrics with technical protocols (which provide guidance on definitions, scope, implementation, compilation, and presentation), and activity metrics (which quantify the scale of an entity's activities and are intended for use in conjunction with accounting metrics to normalise data and facilitate comparison).
- The disclosure topics and associated metrics below are listed by reference to industry-based activities. An entity shall disclose those metrics relevant to its activities in line with its business model and in relation to specific climate-related risks or opportunities. Some entities will have a range of activities that span across more than one industry.
- 4 The list below is not exhaustive. An entity may need to provide further industry disclosures and key performance indicators to meet the requirements of this Standard in relation to climate-related risks or opportunities that are unique to an entity's business model.

NOTE: Included in the TRWG's recommendations for consideration by the ISSB is the suggestion to develop comprehensive guidance for the selection of appropriate industry classification(s) when the business model comprises a wide range of activities.

NOTE: The below summarised version of the industry disclosures has been included as part of the Climate-related Disclosures Prototype for ease of review. Please see the Technical Protocols for Disclosure Requirements Supplement for the industry definitions and technical protocols for each metric. Furthermore, included in the TRWG's recommendations for consideration by the ISSB, is the tagging of industry disclosures with respect to the following issues that need to be resolved by the ISSB:

- International applicability (all sectors);
- Duplication (certain sectors); and
- Financed emissions and portfolio alignment (financial sector).

To assist the ISSB in addressing these and other potential challenges, the TRWG has identified and categorized the subset of issues into four areas as outlined in the table below:

Industry disclosure issue	Description and example
International applicability	Metrics that cite jurisdiction-specific regulations or standards, such as Energy Star (U.S. Environmental Protection Agency)
Climate scope	Metrics indirectly related to climate change, such as water quality
Duplication of governance, strategy, or risk management requirements	Metrics that duplicate or counter disclosures required in the main body of the standard, such as descriptions of risks
Duplication of cross-industry metrics	Metrics that are the same as or similar to required cross-industry measures, such as Scope 1 GHG emissions

#### **Consumer goods**

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Apparel, Accessories & Footwear	Raw Materials Sourcing	Description of environmental and social risks associated with sourcing priority raw materials	n/a
		Percentage of raw materials third-party certified to an environmental and/or social sustainability standard, by standard	Percentage (%) by weight
Appliance Manufacturing	Product Lifecycle Environmental Impacts	Percentage of eligible products by revenue certified to the ENERGY STAR® program	Percentage (%) by revenue
		Percentage of eligible products certified to an Association of Home Appliance Manufacturers (AHAM) sustainability standard	Percentage (%) by revenue
		Description of efforts to manage products' end-of- life impacts	n/a

Household & Personal Products	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress  Description of water management risks and discussion of strategies and practices to mitigate those risks	Thousand cubic meters (m³), Percentage (%)
	Environmental & Social Impacts of Palm Oil Supply Chain	Amount of palm oil sourced, percentage certified through the Roundtable on Sustainable Palm Oil (RSPO) supply chains as (a) Identity Preserved, (b) Segregated, (c) Mass Balance, or (d) Book & Claim	Metric tons (t), Percentage (%)
Building Products & Furnishings	Energy Management in Manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Product Lifecycle Environmental Impacts	Description of efforts to manage product lifecycle impacts and meet demand for sustainable products	n/a
		(1) Weight of end-of-life material recovered, (2) percentage of recovered materials recycled	Metric tons (t), Percentage (%) by weight
	Wood Supply Chain Management	(1) Total weight of wood fiber materials purchased, (2) percentage from third-party certified forestlands, (3) percentage by standard, and (4) percentage certified to other wood fiber standards, (5) percentage by standard	Metric tons (t), Percentage (%) by weight
E-Commerce	Hardware Infrastructure Energy & Water	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Discussion of the integration of environmental considerations into strategic planning for data center needs	n/a
	Product Packaging & Distribution	Total greenhouse gas (GHG) footprint of product shipments	Metric tons (t) CO <sub>2</sub> -e
		Discussion of strategies to reduce the environmental impact of product delivery	n/a
Multiline and Specialty Retailers & Distributors	Energy Management in Retail & Distribution	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)

#### Extractives and minerals processing (1)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Coal Operations	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)

		Number of incidents of non-compliance associated	Number
		with water quality permits, standards, and regulations	
	Reserves Valuation & Capital Expenditures	Sensitivity of coal reserve levels to future price projection scenarios that account for a price on carbon emissions	Million metric tons (Mt)
		Estimated carbon dioxide emissions embedded in proven coal reserves	Metric tons (t) CO <sub>2</sub> -e
		Discussion of how price and demand for coal and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	n/a
Construction Materials	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Air Quality	Air emissions of the following pollutants: (1) NOx (excluding N2O),	Metric tons (t)
		(2) SOx, (3) particulate matter (PM10), (4) dioxins/furans, (5) volatile organic compounds (VOCs), (6) polycyclic aromatic hydrocarbons (PAHs), and (7) heavy metals	
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage alternative, (4) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
	Waste Management	Amount of waste generated, percentage hazardous, percentage recycled	Metric tons (t), Percentage (%)
	Product Innovation	Percentage of products that qualify for credits in sustainable building design and construction certifications	Percentage (%) by annual sales revenue
		Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/ or production	Reporting currency, Percentage (%)
Iron & Steel Producers	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
		(1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)

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	Supply Chain Management	Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues	n/a
Metals & Mining	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number

#### Extractives and minerals processing (2)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Oil & Gas – Exploration & Production	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	Metric tons CO <sub>2</sub> -e (t), Percentage (%)
		Amount of gross global Scope 1 emissions from: (1) flared hydrocarbons, (2) other combustion, (3) process emissions, (4) other vented emissions, and (5) fugitive emissions	Metric tons CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Water Management	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Volume of produced water and flowback generated; percentage  (1) discharged, (2) injected, (3) recycled; hydrocarbon content in discharged water	Thousand cubic meters (m³), Percentage (%), Metric tons (t)
		Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used	Percentage (%)
		Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline	Percentage (%)
	Reserves Valuation & Capital Expenditures	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	Million barrels (MMbbls), Million standard cubic feet (MMscf)
		Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves	Metric tons (t) CO <sub>2</sub> -e

		Amount invested in renewable energy, revenue generated by renewable energy sales	Reporting currency
		Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	n/a
Oil & Gas - Midstream	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
Oil & Gas – Refining & Marketing	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
	Product Specifications & Clean Fuel Blends	Percentage of Renewable Volume Obligation (RVO) met through:  (1) production of renewable fuels, (2) purchase of "separated" renewable identification numbers (RIN)	Percentage (%)
		Total addressable market and share of market for advanced biofuels and associated infrastructure	Reporting currency, Percentage (%)
Oil & Gas – Services	Emissions Reduction Services & Fuels Management	Total fuel consumed, percentage renewable, percentage used in:  (1) on-road equipment and vehicles and (2) off-road equipment	Gigajoules (GJ), Percentage (%)
		Discussion of strategy or plans to address air emissions-related risks, opportunities, and impacts	n/a
		Percentage of engines in service that meet Tier 4 compliance for non-road diesel engine emissions	Percentage (%)
	Water Management Services	(1) Total volume of fresh water handled in operations, (2) percentage recycled	Thousand cubic meters (m³), Percentage (%)
		Discussion of strategy or plans to address water consumption and disposal-related risks, opportunities, and impacts	n/a

#### Food and beverage (1)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
		Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e

	Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		Fleet fuel consumed, percentage renewable	Gigajoules (GJ), Percentage (%)
	Energy Management	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
Agricultural Products	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
Froducts		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
		Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Number
	Ingredient Sourcing	Identification of principal crops and description of risks and opportunities presented by climate change	n/a
		Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	Percentage (%) by cost
Alcoholic Beverages	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
	Environmental & Social Impacts of Ingredient Supply Chain	Suppliers' social and environmental responsibility audit (1) non- conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Rate
	Ingredient Sourcing	Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress	Percentage (%) by cost
		List of priority beverage ingredients and description of sourcing risks due to environmental and social considerations	n/a
Meat, Poultry & Dairy	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
Juny	Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a

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		Number of incidents of non-compliance with water quality permits, standards, and regulations	Number
	and Use & cological Impacts	Amount of animal litter and manure generated, percentage managed according to a nutrient management plan	Metric tons (t), Percentage (%)
		Percentage of pasture and grazing land managed to Natural Resources Conservation Service (NRCS) conservation plan criteria	Percentage (%) by hectares
		Animal protein production from concentrated animal feeding operations (CAFOs)	Metric tons (t)
1	Animal & Feed Sourcing	Percentage of animal feed sourced from regions with High or Extremely High Baseline Water Stress	Percentage (%) by weight
		Percentage of contracts with producers located in regions with High or Extremely High Baseline Water Stress	Percentage (%) by contract value
		Discussion of strategy to manage opportunities and risks to feed sourcing and livestock supply presented by climate change	n/a

#### Food and beverage (2)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Non-Alcoholic Beverages	Fleet Fuel Management	Fleet fuel consumed, percentage renewable	Gigajoules (GJ), Percentage (%)
	Energy Management	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
	Environmental & Social Impacts of Ingredient Supply Chain	Suppliers' social and environmental responsibility audit (1) non- conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Rate
	Ingredient Sourcing	Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress	Percentage (%) by cost
		List of priority beverage ingredients and description of sourcing risks due to environmental and social considerations	n/a
Processed Foods	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Number

	1	I Description of motors as	Ι ,
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
	Environmental & Social Impacts of Ingredient Supply Chain	Percentage of food ingredients sourced that are certified to third- party environmental and/or social standards, and percentages by standard	Percentage (%) by cost
		Suppliers' social and environmental responsibility audit (1) non- conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Rate
	Ingredient Sourcing	Percentage of food ingredients sourced from regions with High or Extremely High Baseline Water Stress	Percentage (%) by cost
		List of priority food ingredients and discussion of sourcing risks due to environmental and social considerations	n/a
Food Retailers & Distributors	Fleet Fuel Management	Fleet fuel consumed, percentage renewable	Gigajoules (GJ), Percentage (%)
	Air Emissions from Refrigeration	Gross global Scope 1 emissions from refrigerants	Metric tons (t) CO <sub>2</sub> -e
		Percentage of refrigerants consumed with zero ozone-depleting potential	Percentage (%) by weight
		Average refrigerant emissions rate	Percentage (%)
	Energy Management	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Management of Environmental & Social Impacts in the Supply Chain	Revenue from products third-party certified to environmental or social sustainability sourcing standards	Reporting currency
		Discussion of strategy to manage environmental and social risks within the supply chain, including animal welfare	n/a
		Discussion of strategies to reduce the environmental impact of packaging	n/a
Restaurants	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
	Supply Chain Management & Food Sourcing	Percentage of food purchased that (1) meets environmental and social sourcing standards and (2) is certified to third-party environmental and/or social standards	Percentage (%) by cost
		Discussion of strategy to manage environmental and social risks within the supply chain, including animal welfare	n/a

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#### **Financials**

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Asset Management & Custody Activities	Incorporation of Environmental, Social, and Governance Factors in Investment Management & Advisory	Amount of assets under management, by asset class, that employ  (1) integration of environmental, social, and governance (ESG) issues, (2) sustainability themed investing, and (3) screening	Reporting currency
		Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment and/or wealth management processes and strategies	n/a
		Description of proxy voting and investee engagement policies and procedures	n/a
Commercial Banks	Incorporation of Environmental, Social, and	Commercial and industrial credit exposure, by industry	Reporting currency
	Governance Factors in Credit Analysis	Description of approach to incorporation of environmental, social, and governance (ESG) factors in credit analysis	n/a
Insurance	Incorporation of Environmental, Social, and	Total invested assets, by industry and asset class	Reporting currency
	Governance Factors in Investment Management	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment management processes and strategies	n/a
	Policies Designed to Incentivize Responsible Behavior	Net premiums written related to energy efficiency and low carbon technology	Reporting currency
		Discussion of products and/or product features that incentivize health, safety, and/or environmentally responsible actions and/or behaviors	n/a
	Environmental Risk Exposure	Probable Maximum Loss (PML) of insured products from weather- related natural catastrophes	Reporting currency
		Total amount of monetary losses attributable to insurance payouts from (1) modeled natural catastrophes and (2) non-modeled natural catastrophes, by type of event and geographic segment (net and gross of reinsurance)	Reporting currency
		Description of approach to incorporation of environmental risks into (1) the underwriting process for individual contracts and (2) the management of firm-level risks and capital adequacy	n/a
Investment Banking & Brokerage	Incorporation of Environmental, Social, and Governance Factors in Investment Banking & Brokerage Activities	Revenue from (1) underwriting, (2) advisory, and (3) securitization transactions incorporating integration of environmental, social, and governance (ESG) factors, by industry	Reporting currency
		(1) Number and (2) total value of investments and loans incorporating integration of environmental, social, and governance (ESG) factors, by industry	Number, Reporting currency

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		Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment banking and brokerage activities	n/a
Mortgage Finance	Environmental Risk to Mortgaged Properties	(1) Number and (2) value of mortgage loans in 100-year flood zones	Number, Reporting currency
		(1) Total expected loss and (2) Loss Given Default (LGD) attributable to mortgage loan default and delinquency due to weather-related natural catastrophes, by geographic region	Reporting currency, Percentage (%)
		Description of how climate change and other environmental risks are incorporated into mortgage origination and underwriting	n/a

#### **Health care**

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Health Care Delivery	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Waste Management	Total amount of medical waste, percentage (a) incinerated, (b) recycled or treated, and (c) landfilled	Metric tons (t)
		Total amount of: (1) hazardous and (2) non-hazardous pharmaceutical waste, percentage (a) incinerated, (b) recycled or treated, and (c) landfilled	Metric tons (t), Percentage (%)
	Climate Change Impacts on Human Health & Infrastructure	Description of policies and practices to address: (1) the physical risks due to an increased frequency and intensity of extreme weather events and (2) changes in the morbidity and mortality rates of illnesses and diseases, associated with climate change	n/a
		Percentage of health care facilities that comply with the Centers for Medicare and Medicaid Services (CMS) Emergency Preparedness Rule	Percentage (%)
Health Care Distributors	Fleet Fuel Management	Payload fuel economy	Gallons, Tons (U.S.), Miles
		Description of efforts to reduce the environmental impact of logistics	n/a
Managed Care	Climate Change Impacts on Human Health	Discussion of the strategy to address the effects of climate change on business operations and how specific risks presented by changes in the geographic incidence, morbidity, and mortality of illnesses and diseases are incorporated into risk models	n/a
Medical Equipment & Supplies	Product Design & Lifecycle Management	Discussion of process to assess and manage environmental and human health considerations associated with chemicals in products, and meet demand for sustainable products	n/a

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		Total amount of products accepted for take- back and reused, recycled, or donated, broken down by: (1) devices and equipment and (2) supplies	Metric tons (t)
Drug Retailers	Energy Management in Retail	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)

#### Infrastructure (1)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Electric Utilities & Power Generators	Greenhouse Gas Emissions & Energy Resource Planning	Gross global Scope 1 emissions, percentage covered under     emissions-limiting regulations, and (3) emissions-reporting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Greenhouse gas (GHG) emissions associated with power deliveries	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market	Number, Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Number
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
	End-Use Efficiency & Demand	Percentage of electric utility revenues from rate structures that  (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	Percentage (%)
		Percentage of electric load served by smart grid technology	Percentage (%) by megawatt hours (MWh)
		Customer electricity savings from efficiency measures, by market	Megawatt hours (MWh)
	Nuclear Safety & Emergency Management	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	Number
		Description of efforts to manage nuclear safety and emergency preparedness	n/a
	Grid Resiliency	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	Number

		(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	Minutes, Number
Engineering & Construction Services	Environmental Impacts of Project Development	Number of incidents of non-compliance with environmental permits, standards, and regulations	Number
		Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction	n/a
	Structural Integrity & Safety	Amount of defect- and safety-related rework costs	Reporting currency
		Total amount of monetary losses as a result of legal proceedings associated with defectand safety-related incidents	Reporting currency
	Lifecycle Impacts of Buildings & Infrastructure	Number of (1) commissioned projects certified to a third-party multi-attribute sustainability standard and (2) active projects seeking such certification	Number
		Discussion of process to incorporate operational-phase energy and water efficiency considerations into project planning and design	n/a
	Climate Impacts of Business Mix	Amount of backlog for (1) hydrocarbon- related projects and (2) renewable energy projects	Reporting currency
		Amount of backlog cancellations associated with hydrocarbon- related projects	Reporting currency
		Amount of backlog for non-energy projects associated with climate change mitigation	Reporting currency

#### Infrastructure (2)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Gas Utilities & Distributors	End-Use Efficiency	Percentage of gas utility revenues from rate structures that (1) are decoupled or (2) contain a lost revenue adjustment mechanism (LRAM)	Percentage (%)
		Customer gas savings from efficiency measures by market	Million British Thermal Units (MMBtu)
	Integrity of Gas Delivery Infrastructure	Number of (1) reportable pipeline incidents, (2) Corrective Action Orders (CAO), and (3) Notices of Probable Violation (NOPV)	Number
		Percentage of distribution pipeline that is (1) cast and/or wrought iron and (2) unprotected steel	Percentage (%) by length
		Percentage of gas (1) transmission and (2) distribution pipelines inspected	Percentage (%) by length
			Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions

Home Builders	Land Use & Ecological Impacts	Number of (1) lots and (2) homes delivered on redevelopment sites	Number
		Number of (1) lots and (2) homes delivered in regions with High or Extremely High Baseline Water Stress	Number
		Total amount of monetary losses as a result of legal proceedings associated with environmental regulations	Reporting currency
		Discussion of process to integrate environmental considerations into site selection, site design, and site development and construction	n/a
	Design for Resource Efficiency	(1) Number of homes that obtained a certified HERS® Index Score and (2) average score	Number, Index score
		Percentage of installed water fixtures certified to WaterSense® specifications	Percentage (%)
		Number of homes delivered certified to a third-party multi-attribute green building standard	Number
		Description of risks and opportunities related to incorporating resource efficiency into home design, and how benefits are communicated to customers	n/a
	Climate Change Adaptation	Number of lots located in 100-year flood zones	Number
		Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks	n/a
Real Estate	Energy Management	Energy consumption data coverage as a percentage of total floor area, by property subsector	Percentage (%) by floor area
		Total energy consumed by portfolio area with data coverage,     percentage grid electricity, and (3) percentage renewable, by property subsector	Gigajoules (GJ), Percentage (%)
		Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property subsector	Percentage (%)
		Percentage of eligible portfolio that (1) has an energy rating and (2) is certified to ENERGY STAR, by property subsector	Percentage (%) by floor area
		Description of how building energy management considerations are integrated into property investment analysis and operational strategy	n/a
	Water Management	Water withdrawal data coverage as a percentage of (1) total floor area and (2) floor area in regions with High or Extremely High Baseline Water Stress, by property subsector	Percentage (%) by floor area

This document represents recommendations from the Technical Readiness Working Group (TRWG) for consideration by the International Sustainability Standards Board (ISSB) for a climate-related disclosures standard. While the recommendations build on the established work of the organisations represented on the TRWG, this document has not been subject to the due process of those organisations or the IFRS Foundation. After starting its work, the ISSB is expected to consult publicly on proposals for a climate-related disclosures standard informed by the TRWG's recommendations. The ISSB's work will be subject to the IFRS Foundation's due process.

(1) Total water withdrawn by portfolio area with data coverage and (2) percentage in regions with High or Extremely High Baseline Water Stress, by property subsector	Thousand cubic meters (m³), Percentage (%)
Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property subsector	Percentage (%)
Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a

#### Infrastructure (3)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Real Estate (cont.)	Management of Tenant Sustainability Impacts	(1) Percentage of new leases that contain a cost recovery clause for resource efficiency-related capital improvements and (2) associated leased floor area, by property subsector	Percentage (%) by floor area, Square feet (ft²)
		Percentage of tenants that are separately metered or submetered for (1) grid electricity consumption and (2) water withdrawals, by property subsector	Percentage (%) by floor area
		Discussion of approach to measuring, incentivizing, and improving sustainability impacts of tenants	n/a
	Climate Change Adaptation	Area of properties located in 100-year flood zones, by property subsector	Square feet (ft²)
		Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks	n/a
Real Estate Services	Sustainability Services	Revenue from energy and sustainability services	Reporting currency
		(1) Floor area and (2) number of buildings under management provided with energy and sustainability services	Square feet (ft²), Number
		(1) Floor area and (2) number of buildings under management that obtained an energy rating	Square feet (ft²), Number
Water Utilities & Services	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Distribution Network Efficiency	Water main replacement rate	Rate
		Volume of non-revenue real water losses	Thousand cubic meters (m³)
	End-Use Efficiency	Percentage of water utility revenues from rate structures that are designed to promote conservation and revenue resilience	Percentage (%)
		Customer water savings from efficiency measures, by market	Cubic meters (m³)
	Water Supply Resilience	Total water sourced from regions with High or Extremely High Baseline Water Stress, percentage purchased from a third party	Thousand cubic meters (m³), Percentage (%)
		Volume of recycled water delivered to customers	Thousand cubic meters (m³)

		Discussion of strategies to manage risks associated with the quality and availability of water resources	n/a
	Network Resiliency & Impacts of Climate Change	Wastewater treatment capacity located in 100-year flood zones	Cubic meters (m³) per day
		(1) Number and (2) volume of sanitary sewer overflows (SSO), (3) percentage of volume recovered	Number, Cubic meters (m³), Percentage (%)
		(1) Number of unplanned service disruptions, and (2) customers affected, each by duration category	Number
		Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure	n/a
Waste Management	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under     emissions-limiting regulations, and (3) emissions-reporting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		(1) Total landfill gas generated, (2) percentage flared, (3) percentage used for energy	Million British Thermal Units (MMBtu), Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 and lifecycle emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Fleet Fuel Management	(1) Fleet fuel consumed, (2) percentage natural gas, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
		Percentage of alternative fuel vehicles in fleet	Percentage (%)

#### Renewable resources and alternative energy (1)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Biofuels	Water Management in Manufacturing	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
		Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number
	Lifecycle Emissions Balance	Lifecycle greenhouse gas (GHG) emissions, by biofuel type	Grams of CO <sub>2</sub> -e per megajoule (MJ)
	Sourcing & Environmental Impacts of Feedstock	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	n/a
	Production	Percentage of biofuel production third-party certified to an environmental sustainability standard	Percentage (%) of gallons

	Management of the Legal & Regulatory Environment	Amount of subsidies received through government programs	Reporting currency
		Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	n/a
Forestry Management	Ecosystem Services & Impacts	Area of forestland certified to a third-party forest management standard, percentage certified to each standard	Acres (ac), Percentage (%)
		Area of forestland with protected conservation status	Acres (ac)
		Area of forestland in endangered species habitat	Acres (ac)
		Description of approach to optimizing opportunities from ecosystem services provided by forestlands	n/a
	Climate Change Adaptation	Description of strategy to manage opportunities for and risks to forest management and timber production presented by climate change	n/a
Fuel Cells & Industrial Batteries	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
Zanonio	Product Efficiency	Average storage capacity of batteries, by product application and technology type	Specific energy (Wh/ kg)
		Average energy efficiency of fuel cells as (1) electrical efficiency and	Percentage (%)
		(2) thermal efficiency, by product application and technology type	
		Average battery efficiency as coulombic efficiency, by product application and technology type	Percentage (%)
		Average operating lifetime of fuel cells, by product application and technology type	Hours (h)
		Average operating lifetime of batteries, by product application and technology type	Number of cycles
Pulp & Paper Products	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage from biomass, (4) percentage from other renewable energy, (5) total self-generated energy	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a

Supply Chair Managemen		Percentage (%) by weight
	Amount of recycled and recovered fiber procured	Metric tons (t)

#### Renewable resources and alternative energy (2)

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Solar Technology & Project Developers	Energy Management in Manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management in Manufacturing	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
	Management of Energy Infrastructure Integration & Related Regulations	Description of risks associated with integration of solar energy into existing energy infrastructure and discussion of efforts to manage those risks	n/a
		Description of risks and opportunities associated with energy policy and its impact on the integration of solar energy into existing energy infrastructure	n/a
Wind Technology & Project	Materials Efficiency	Top five materials consumed, by weight	Metric tons (t)
Developers		Average top head mass per turbine capacity, by wind turbine class	Metric tons per megawatts (t/MW)
		Description of approach to optimize materials efficiency of wind turbine design	n/a

#### **Resource transformation**

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Aerospace & Defense	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Fuel Economy & Emissions in Use- phase	Revenue from alternative energy-related products	Reporting currency
		Description of approach and discussion of strategy to address fuel economy and greenhouse gas (GHG) emissions of products	n/a
Chemicals	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and	n/a

		an analysis of performance against those targets	
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number
		Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a
	Product Design for Use-phase Efficiency	Revenue from products designed for use- phase resource efficiency	Reporting currency
Containers & Packaging	Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Description of water management risks and discussion of strategies and practices to mitigate those risks	Number
		Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number
	Waste Management	Amount of hazardous waste generated, percentage recycled	Metric tons (t), Percentage (%)
	Supply Chain Management	Total wood fiber procured, percentage from certified sources	Metric tons (t), Percentage (%)
		Total aluminum purchased, percentage from certified sources	Metric tons (t), Percentage (%)
Electrical & Electronic Equipment	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	Percentage (%) by revenue
		Percentage of eligible products, by revenue, that meet ENERGY STAR® criteria	Percentage (%) by revenue
		Revenue from renewable energy-related and energy efficiency- related products	Reporting currency
	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)

Industrial Machinery & Goods	Fuel Economy & Emissions in Use- phase	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Gallons per 1,000 ton-miles
		Sales-weighted fuel efficiency for non-road equipment	Gallons per hour
		Sales-weighted fuel efficiency for stationary generators	Watts per gallon
		Sales-weighted emissions of: (1) nitrogen oxides (NOx) and	Grams per kilowatt- hour
		(2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavyduty engines, and (d) other non-road diesel engines	

#### **Services**

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Casinos & Gaming	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
Hotels & Lodging	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
	Climate Change Adaptation	Number of lodging facilities located in 100- year flood zones	Number
Leisure Facilities	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)

#### **Technology and communications**

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Electronic Manufacturing Services & Original Design Manufacturing	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
	Product Lifecycle Management	Weight of end-of-life products and e-waste recovered, percentage recycled	Metric tons (t), Percentage (%)
Internet Media & Services	Environmental Footprint of Hardware Infrastructure	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
		(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Discussion of the integration of environmental considerations into strategic planning for data center needs	n/a

Semiconductors	Greenhouse Gas Emissions	(1) Gross global Scope 1 emissions and (2) amount of total emissions from perfluorinated compounds	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
	Energy Management in Manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
	Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	Percentage (%)
		Processor energy efficiency at a system- level for: (1) servers, (2) desktops, and (3) laptops	Various, by product category
Software & IT Services	Environmental Footprint of Hardware Infrastructure	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
		(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)
		Discussion of the integration of environmental considerations into strategic planning for data center needs	n/a
	Managing Systemic Risks from Technology Disruptions	Number of (1) performance issues and (2) service disruptions; (3) total customer downtime	Number, Days
	2 iorapaione	Description of business continuity risks related to disruptions of operations	n/a
Telecommunication Services	Environmental Footprint of Operations	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Managing Systemic Risks from Technology Disruptions	(1) System average interruption frequency and (2) customer average interruption duration	Disruptions per customer, Hours per customer
		Discussion of systems to provide unimpeded service during service interruptions	n/a
Hardware	Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	Percentage (%)
		Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Percentage (%)
		Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria	Percentage (%)
		Weight of end-of-life products and e-waste recovered, percentage recycled	Metric tons (t), Percentage (%)

#### **Transportation**

Industry	Disclosure Topic	Accounting Metric	Accounting Metric Unit of Measure
Airlines	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		(1) Total fuel consumed, (2) percentage alternative, (3) percentage sustainable	Gigajoules (GJ), Percentage (%)
Air Freight & Logistics	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		Fuel consumed by (1) road transport, percentage (a) natural gas and (b) renewable, and (2) air transport, percentage (a) alternative and (b) sustainable	Gigajoules (GJ), Percentage (%)
	Supply Chain Management		
		Total greenhouse gas (GHG) footprint across transport modes	Metric tons (t) CO <sub>2</sub> -e per ton- kilometer
Automobiles	Fuel Economy & Use- phase Emissions	Sales-weighted average passenger fleet fuel economy, by region	Mpg, L/km, gCO <sub>2</sub> /km, km/L
		Number of (1) zero emission vehicles (ZEV), (2) hybrid vehicles, and	Number
		(3) plug-in hybrid vehicles sold	
		Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities	n/a
Auto Parts	Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
	Design for Fuel Efficiency	Revenue from products designed to increase fuel efficiency and/or reduce emissions	Reporting currency
Car Rental & Leasing	Fleet Fuel Economy & Utilization	Rental day-weighted average rental fleet fuel economy, by region	Mpg, L/km, gCO <sub>2</sub> /km, km/L
		Fleet utilization rate	Rate
Cruise Lines	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		(1) Total energy consumed, (2) percentage heavy fuel oil, (3) percentage	Gigajoules (GJ), Percentage (%)

		onshore power supply (OPS), (4) percentage renewable	
		Average Energy Efficiency Design Index (EEDI) for new ships	Grams of CO <sub>2</sub> per ton-nautical mile
Marine Transportation	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		(1) Total energy consumed, (2) percentage heavy fuel oil, (3) percentage renewable	Gigajoules (GJ), Percentage (%)
		Average Energy Efficiency Design Index (EEDI) for new ships	Grams of CO <sub>2</sub> per ton-nautical mile
Rail Transportation	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		Total fuel consumed, percentage renewable	Gigajoules (GJ), Percentage (%)
Road Transportation	Greenhouse Gas Emissions	Gross global Scope 1 emissions	Metric tons (t) CO <sub>2</sub> -e
		Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a
		(1) Total fuel consumed, (2) percentage natural gas, (3) percentage renewable	Gigajoules (GJ), Percentage (%)