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IFRS[®] Sustainability Disclosure Standard

[Draft] IFRS S2 Climate-related Disclosures Appendix B Industry-based disclosure requirements

Volume B43—Pulp & Paper Products

Comments to be received by 29 July 2022



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Introduction

This volume is part of Appendix B of [draft] IFRS S2 Climate-related Disclosures and is an integral part of that [draft] Standard. It has the same authority as the other parts of that [draft] Standard.

This volume sets out the requirements for identifying, measuring and disclosing information related to an entity's significant climate-related risks and opportunities that are associated with specific business models, economic activities and other common features that characterise participation in this industry.

The industry-based disclosure requirements are derived from SASB Standards (see paragraphs B10–B12 of [Draft] IFRS S2 *Climate-related Disclosures*). Amendments to the SASB Standards, described in paragraph B11, are marked up for ease of reference. New text is underlined and deleted text is struck through. The metric codes used in SASB Standards have also been included, where applicable, for ease of reference. For additional context regarding the industry-based disclosure requirements contained in this volume, including structure and terminology, application and illustrative examples, refer to Appendix B paragraphs B3–B17.

Pulp & Paper Products

Industry Description

The Pulp & Paper Products industry consists of companies that manufacture a range of wood pulp and paper products, including pulp fiber, paper packaging and sanitary paper, office paper, newsprint, and paper for industrial applications. Companies in the industry typically function as business-to-business entities and may have operations in multiple countries, such as the U.S., Canada, and Brazil. While some integrated companies own or manage timber tracts and are engaged in forest management, sustainability issues arising from these activities are addressed in SASB's Forestry Management (RR-FM) industry standard.

Sustainability Disclosure Topics & Metrics

Table 1. Sustainability Disclosure Topics & Metrics

TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) CO ₂ -e	RR-PP-110a.1
	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	Discussion and Analysis	n/a	RR-PP-110a.2
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage from biomass, (4) percentage from other renewable energy ⁷¹	Quantitative	Gigajoules (GJ), Percentage (%)	RR-PP-130a.1
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m ³), Percentage (%)	RR-PP-140a.1
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RR-PP-140a.2
Supply Chain Management	Percentage of wood fiber sourced from (1) third-party certified forestlands and percentage to each standard and (2) meeting other fiber sourcing standards and percentage to each standard ⁷²	Quantitative	Percentage (%) by weight	RR-PP-430a.1
	Amount of recycled and recovered fiber procured ⁷³	Quantitative	Metric tons (t)	RR-PP-430a.2

⁷¹ Note to **RR-PP-130a.1** – The entity shall discuss risks and uncertainties associated with the use of biomass for energy.

⁷² Note to **RR-PP-430a.1** – The entity shall discuss due diligence practices for fiber that is not from certified forestlands or certified to other fiber sourcing standards.

⁷³ Note to **RR-PP-430a.2** – The entity shall discuss its strategy to incorporate environmental lifecycle analyses into decisions to source recycled and recovered fiber versus virgin fiber.

APPENDIX B OF [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Pulp production	Quantitative	Air-dried metric tons (t)	RR-PP-000.A
Paper production	Quantitative	Air-dried metric tons (t)	RR-PP-000.B
Total wood fiber sourced ⁷⁴	Quantitative	Metric tons (t)	RR-PP-000.C

⁷⁴ Note to RR-PP-000.C – The scope of wood-fiber-based raw materials includes all inputs that are processed to be sold as a finished good, including recycled raw materials, virgin raw materials, and goods that will be consumed directly in the production process and excluding biomass for energy use.

Greenhouse Gas Emissions

Topic Summary

The manufacturing of pulp and paper products generates direct greenhouse gas (GHG) emissions associated with the combustion of fossil fuels and biomass in stationary and mobile engines, cogeneration boilers, and other processing equipment. Companies in this industry also typically use significant amounts of carbon-neutral biomass for their energy needs, the use of which can reduce the costs associated with purchasing fossil fuels, as well as mitigate regulatory risk associated with carbon emissions. Emissions associated with fossil fuel sources can create regulatory compliance costs, depending on the magnitude of emissions and the prevailing emissions regulations. Companies that cost-effectively manage GHG emissions through greater energy efficiency, the use of alternative fuels, or manufacturing process improvements can benefit from improved operating efficiency and reduced regulatory compliance costs.

Metrics

RR-PP-110a.1. Gross global Scope 1 emissions

- 1 The entity shall disclose its gross global Scope 1 greenhouse gas (GHG) emissions to the atmosphere of the seven GHGs covered under the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).
 - 1.1 Emissions of all GHGs shall be consolidated and disclosed in metric tons of carbon dioxide equivalent (CO₂-e), and calculated in accordance with published 100-year time horizon global warming potential (GWP) values. To date, the preferred source for GWP values is the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2014).
 - 1.2 Gross emissions are GHGs emitted into the atmosphere before accounting for offsets, credits, or other similar mechanisms that have reduced or compensated for emissions.
- 2 Scope 1 emissions are defined and shall be calculated according to the methodology contained in *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).
 - 2.1 Acceptable calculation methodologies include those that conform to the GHG Protocol as the base reference, but provide additional guidance, such as industry- or region-specific guidance. Examples include, but are not limited to:
 - 2.1.1 *GHG Reporting Guidance for the Aerospace Industry* published by International Aerospace Environmental Group (IAEG)
 - 2.1.2 *Greenhouse Gas Inventory Guidance: Direct Emissions from Stationary Combustion Sources* published by the U.S. Environmental Protection Agency (EPA)

APPENDIX B OF [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES

- 2.1.3 India GHG Inventory Program
 - 2.1.4 ISO 14064-1
 - 2.1.5 Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011, published by IPIECA
 - 2.1.6 Protocol for the quantification of greenhouse gas emissions from waste management activities published by Entreprises pour l'Environnement (EpE)
- 2.2 GHG emissions data shall be consolidated and disclosed according to the approach with which the entity consolidates its financial reporting data, which is generally aligned with the “financial control” approach defined by the GHG Protocol, and the approach published by the Climate Disclosure Standards Board (CDSB) described in REQ-07, “Organisational boundary,” of the *CDSB Framework for reporting environmental information, natural capital and associated business impacts* (April 2018).
- 3 The entity may discuss any change in its emissions from the previous reporting period, including whether the change was due to emissions reductions, divestment, acquisition, mergers, changes in output, and/or changes in calculation methodology.
- 4 In the case that current reporting of GHG emissions to the CDP or other entity (e.g., a national regulatory disclosure program) differs in terms of the scope and consolidation approach used, the entity may disclose those emissions. However, primary disclosure shall be according to the guidelines described above.
- 5 The entity may discuss the calculation methodology for its emissions disclosure, such as if data are from continuous emissions monitoring systems (CEMS), engineering calculations, or mass balance calculations.

RR-PP-110a.2. 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

- 1 The entity shall discuss its long-term and short-term strategy or plan to manage its Scope 1 greenhouse gas (GHG) emissions.
- 1.1 Scope 1 emissions are defined and shall be calculated according to the methodology contained in *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (GHG Protocol), Revised Edition, March 2004, published by the World Resources Institute and the World Business Council on Sustainable Development (WRI/WBCSD).
 - 1.2 The scope of GHG emissions includes the seven GHGs covered under the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).
- 2 The entity shall discuss its emission reduction target(s) and analyze its performance against the target(s), including the following, where relevant:

EXPOSURE DRAFT—MARCH 2022

- 2.1 The scope of the emission reduction target (e.g., the percentage of total emissions to which the target is applicable);
 - 2.2 Whether the target is absolute- or intensity-based, and the metric denominator, if it is an intensity-based target;
 - 2.3 The percentage reduction against the base year, with the base year representing the first year against which emissions are evaluated toward the achievement of the target;
 - 2.4 The timelines for the reduction activity, including the start year, the target year, and the base year;
 - 2.5 The mechanism(s) for achieving the target; and
 - 2.6 Any circumstances in which the target or base year emissions have been, or may be, recalculated retrospectively or the target or base year has been reset.
- 3 The entity shall discuss the activities and investments required to achieve the plans and/or targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.
 - 4 The entity shall discuss the scope of its strategies, plans, and/or reduction targets, such as whether they pertain differently to different business units, geographies, or emissions sources.
 - 5 The entity shall discuss whether its strategies, plans, and/or reduction targets are related to, or associated with, emissions limiting and/or emissions reporting-based programs or regulations (e.g., the EU Emissions Trading Scheme, Quebec Cap-and-Trade System, California Cap-and-Trade Program), including regional, national, international, or sectoral programs.
 - 6 Disclosure of strategies, plans, and/or reduction targets shall be limited to activities that were ongoing (active) or reached completion during the reporting period.

Energy Management

Topic Summary

Pulp and paper products manufacturing is energy-intensive. In most facilities, energy is derived primarily from the combustion of biomass and fossil fuels, while purchased electricity may also be used in some facilities. Decisions regarding the generation of electricity on-site versus sourcing it from the grid, as well as the use of biomass and other renewable energy, can create trade-offs related to the energy supply's cost and reliability for operations and the extent of the regulatory risk from Scope 1 or other air emissions. The manner in which a company manages its energy efficiency, its reliance on different types of energy and the associated sustainability risks, and its ability to access alternative energy sources is likely to mitigate impacts of energy cost variability.

Metrics

RR-PP-130a.1. (1) Total energy consumed, (2) percentage grid electricity, (3) percentage from biomass, (4) percentage from other renewable energy, (5) total self-generated energy

- 1 The entity shall disclose (1) the total amount of energy it consumed as an aggregate figure, in gigajoules (GJ).
 - 1.1 The scope of energy consumption includes energy from all sources, including energy purchased from sources external to the entity and energy produced by the entity itself (self-generated). For example, direct fuel usage, purchased electricity, and heating, cooling, and steam energy are all included within the scope of energy consumption.
 - 1.2 The scope of energy consumption includes only energy directly consumed by the entity during the reporting period.
 - 1.3 In calculating energy consumption from fuels and biofuels, the entity shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), ~~the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).~~
- 2 The entity shall disclose (2) the percentage of energy it consumed that was supplied from grid electricity.
 - 2.1 The percentage shall be calculated as purchased grid electricity consumption divided by total energy consumption.
- 3 The entity shall disclose (3) the percentage of energy it consumed that was supplied by biomass.
 - 3.1 The percentage shall be calculated as biomass energy consumption divided by total energy consumption.
- 4 For the purposes of this disclosure, the scope of renewable energy from biomass sources is limited to the following:
 - 4.1 Energy from biomass sources that meets at least one of the following criteria:

EXPOSURE DRAFT—MARCH 2022

- 4.1.1 Certification to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System)
 - 4.1.2 Classification as an “eligible renewable” according to the Green-e Energy National Standard Version 2.5 (2014)
 - 4.1.3 Eligibility for a state Renewable Portfolio Standard
- 5 The entity shall disclose (4) the percentage of energy it consumed that was renewable energy, excluding biomass energy.
- 5.1 Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, such as geothermal, wind, solar, and hydro.
 - 5.2 The percentage shall be calculated as renewable energy consumption divided by total energy consumption.
 - 5.3 The scope of renewable energy includes renewable fuel the entity consumed, renewable energy the entity directly produced, and renewable energy the entity purchased, if purchased through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs) or Guarantees of Origin (GOs), a Green-e Energy Certified utility or supplier program, or other green power products that explicitly include RECs or GOs, or for which Green-e Energy Certified RECs are paired with grid electricity.
 - 5.3.1 For any renewable electricity generated on-site, any RECs and GOs must be retained (i.e., not sold) and retired or cancelled on behalf of the entity in order for the entity to claim them as renewable energy.
 - 5.3.2 For renewable PPAs and green power products, the agreement must explicitly include and convey that RECs and GOs be retained or replaced and retired or cancelled on behalf of the entity in order for the entity to claim them as renewable energy.
 - 5.3.3 The renewable portion of the electricity grid mix that is outside of the control or influence of the entity is excluded from the scope of renewable energy.
 - 5.4 ~~For the purposes of this disclosure, the scope of renewable energy from hydro sources is limited to sources that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.~~
- 6 The entity shall disclose (5) the amount of energy self-generated by the entity as an aggregate figure, in gigajoules (GJ).
- 6.1 The entity may disclose the amount of self-generated energy that it sold to an electric utility or end-use customer.

APPENDIX B OF [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES

- 6.2 The entity may disclose the amount of self-generated energy that was renewable energy, where renewable energy is defined above.
- 7 The entity shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kilowatt hours (kWh) to GJ (for energy data including electricity from solar or wind energy).

Note to **RR-PP-130a.1**

- 1 The entity shall describe risks and uncertainties associated with the use of biomass as an energy source, and it shall describe how it manages those risks.
- 2 Risks and uncertainties associated with the use of biomass as an energy source can include, but are not limited to:
 - 2.1 Risks from air emissions (such as oxides of nitrogen and sulfur), including costs to comply with emissions restrictions and reputational impacts from violations.
 - 2.2 Regulatory risks, including financial impacts associated with compliance with potential biogenic carbon dioxide regulations or reputational impacts associated with biomass failing to meet the definition of eligible renewable energy in a state Renewable Portfolio Standard.
 - 2.3 Sourcing risks, including reputational risks associated with a lack of transparency about whether purchased biomass was sustainably harvested.

Water Management

Topic Summary

Pulp and paper products manufacturing is typically a water-intensive process, with water use occurring during in materials processing, process cooling, and steam generation at on-site energy plants. Companies require ample, stable water supplies and may produce large volumes of wastewater, the majority of which is treated and returned to the environment. Process water typically contains dissolved organic compounds and other solids, underscoring the importance of water treatment. In addition to water effluents, water availability is an important consideration for the industry, as water scarcity could result in higher supply costs, supply disruptions, or tension with local water users. Companies can adopt various strategies to address water supply and treatment issues, such as cost-effectively enhancing the recycling of process water, improving production techniques to lower water intensity, and ensuring compliance with water-effluent regulations.

Metrics

RR-PP-140a.1. (1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

- 1 The entity shall disclose the amount of water, in thousands of cubic meters, that was withdrawn from all sources.
 - 1.1 Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the entity, and water and wastewater obtained from municipal water supplies, water utilities, or other entities.
- 2 The entity may disclose portions of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources.
 - 2.1 Fresh water may be defined according to the local laws and regulations where the entity operates. Where there is no legal definition, fresh water shall be considered to be water that has less than 1,000 parts per million of dissolved solids ~~per the U.S. Geological Survey.~~
 - 2.2 Water obtained from a water utility in compliance with ~~U.S. National Primary Drinking Water Regulations~~ jurisdictional drinking water regulations can be assumed to meet the definition of fresh water.
- 3 The entity shall disclose the amount of water, in thousands of cubic meters, that was consumed in its operations.
 - 3.1 Water consumption is defined as:
 - 3.1.1 Water that evaporates during withdrawal, usage, and discharge;
 - 3.1.2 Water that is directly or indirectly incorporated into the entity's product or service;
 - 3.1.3 Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.

APPENDIX B OF [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES

- 4 The entity shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80 percent) or Extremely High (>80 percent) Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.
- 5 The entity shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.
- 6 The entity shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

RR-PP-140a.2. Description of water management risks and discussion of strategies and practices to mitigate those risks

- 1 The entity shall describe its water management risks associated with water withdrawals, water consumption, and discharge of water and/or wastewater.
 - 1.1 Risks associated with water withdrawals and water consumption include risks to the availability of adequate, clean water resources, including, but not limited to:
 - 1.1.1 Environmental constraints—such as operating in water-stressed regions, drought, concerns of aquatic impingement or entrainment, interannual or seasonal variability, and risks due to the impact of climate change
 - 1.1.2 Regulatory and financial constraints—such as volatility in water costs, stakeholder perceptions and concerns related to water withdrawals (e.g., those from local communities, non-governmental organizations, and regulatory agencies), direct competition with and impact from the actions of other users (e.g., commercial and municipal users), restrictions to withdrawals due to regulations, and constraints on the entity's ability to obtain and retain water rights or permits
 - 1.2 Risks associated with the discharge of water and/or wastewater, include, but are not limited to, the ability to obtain rights or permits related to discharges, compliance with regulations related to discharges, restrictions to discharges, the ability to maintain control over the temperature of water discharges, liabilities and/or reputational risks, and increased operating costs due to regulation, stakeholder perceptions and concerns related to water discharges (e.g., those from local communities, non-governmental organizations, and regulatory agencies).
- 2 The entity may describe water management risks in the context of:
 - 2.1 How risks may vary by withdrawal source, including surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the entity, and water and wastewater obtained from municipal water supplies, water utilities, or other entities; and
 - 2.2 How risks may vary by discharge destinations, including surface water, groundwater, or wastewater utilities.

EXPOSURE DRAFT—MARCH 2022

- 3 The entity may discuss the potential impacts that water management risks may have on its operations and the timeline over which such risks are expected to manifest.
 - 3.1 Impacts may include, but are not limited to, those associated with costs, revenues, liabilities, continuity of operations, and reputation.
- 4 The entity shall discuss its short-term and long-term strategies or plan to mitigate water management risks, including, but not limited to:
 - 4.1 The scope of its strategy, plans, goals and/or targets, such as how they relate to different business units, geographies, or water-consuming operational processes.
 - 4.2 Any water management goals and/or targets it has prioritized, and an analysis of performance against those goals and/or targets.
 - 4.2.1 Goals and targets may include, but are not limited to, those associated with reducing water withdrawals, reducing water consumption, reducing water discharges, reducing aquatic impingements, improving the quality of water discharges, and regulatory compliance.
 - 4.3 The activities and investments required to achieve the plans, goals and/or targets, and any risks or limiting factors that might affect achievement of the plans and/or targets.
 - 4.4 Disclosure of strategies, plans, goals, and/or targets shall be limited to activities that were ongoing (active) or reached completion during the reporting period.
- 5 For water management targets, the entity shall additionally disclose:
 - 5.1 Whether the target is absolute or intensity-based, and the metric denominator if it is an intensity-based target.
 - 5.2 The timelines for the water management plans, including the start year, the target year, and the base year.
 - 5.3 The mechanism(s) for achieving the target, including:
 - 5.3.1 Efficiency efforts, such as the use of water recycling and/or closed-loop systems;
 - 5.3.2 Product innovations such as redesigning products or services to require less water.
 - 5.3.3 Process and equipment innovations, such as those that enable the use of less water in manufacturing or operations;
 - 5.3.4 The use of tools and technologies (e.g., the World Wildlife Fund Water Risk Filter, The Global Water Tool, and Water Footprint Network Footprint Assessment Tool) to analyze water use, risk, and opportunities; and
 - 5.3.5 Collaborations or programs in place with the community or other organizations.

APPENDIX B OF [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES

- 5.4 The percentage reduction or improvement from the base year, where the base year is the first year against which water management targets are evaluated toward the achievement of the target.
- 6 The entity shall discuss whether its water management practices result in any additional lifecycle impacts or tradeoffs in its organization, including tradeoffs in land use, energy production, and greenhouse gas (GHG) emissions, and why the entity chose these practices despite lifecycle tradeoffs.

Supply Chain Management

Topic Summary

Pulp and paper products companies source wood and wood fiber from forestry management companies, paper fiber recyclers, and forests that the companies themselves manage. Supply-chain risks include decreased productivity of forestlands due to management practices or climate change, regulations addressing sustainable forest management, and reputational impacts. To mitigate such risks and satisfy growing customer demand for sustainably sourced fiber and paper products, manufacturers implement forest certification and fiber chain-of-custody standards which verify that virgin and recycled fiber originate from sustainably managed forests. In addition, pulp and paper manufacturers face trade-offs from the use of recovered fiber. Products with recycled content are increasingly in demand, providing a possible avenue for product differentiation, while using recycled fiber can minimize the need for virgin fiber. Conversely, manufacturing products with a greater recycled content can increase waste generation and energy consumption, while recycled fiber can be costlier, given demand-supply gaps. Therefore, companies can benefit by optimizing recycled fiber use to balance its environmental and economic trade-offs.

Metrics

RR-PP-430a.1. Percentage of wood fiber sourced from (1) third-party certified forestlands and percentage to each standard and (2) meeting other fiber sourcing standards and percentage to each standard

- 1 The entity shall disclose the percentage of its total wood-fiber-based materials that have been sourced from forestlands that are certified to forest management standards, where:
 - 1.1 Third-party forest management standards are those that certify that forests are harvested in a sustainable manner and that cover environmental and social criteria including legal compliance, land rights, community and worker relations, environmental impact and biodiversity, forest management plans and practices, land use, wildlife habitat conservation, and water conservation, among others.
 - 1.2 Third-party forest management certifications include, but are not limited to, those promulgated by the following organizations (or the equivalent):
 - 1.2.1 American Tree Farm System (ATFS) (i.e., ATFS Certification)
 - 1.2.2 Forest Stewardship Council (FSC) (i.e., FSC Forest Management and Chain of Custody certifications)
 - 1.2.3 Programme for the Endorsement of Forest Certification (PEFC) (i.e., PEFC Chain of Custody certifications)
 - 1.2.4 Forest certification systems endorsed by the PEFC
 - 1.2.5 Sustainable Forest Initiative (SFI) (i.e., SFI Forest Management and Chain of Custody certifications)

APPENDIX B OF [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES

- 1.3 The scope of wood-fiber-based materials includes all inputs that are processed to be sold as a finished good, including recycled raw materials, virgin raw materials, and goods that will be consumed directly in the production process and excluding biomass for energy.
- 2 The percentage of wood-fiber-based materials from third-party certified forestlands shall be calculated as the total weight (in air dried metric tons) of the entity's wood-fiber-based materials that have been sourced from third-party certified forestlands divided by the total weight (in air dried metric tons) of wood-fiber-based materials sourced.
- 3 The entity shall disclose the percentage of the total wood-fiber-based materials from third-party certified forestlands that is certified to each standard (e.g., FSC Chain of Custody, PEFC Chain of Custody, and SFI Chain of Custody).
 - 3.1 The entity shall calculate the percentage of wood-fiber-based materials certified to each standard as the amount of wood-fiber-based materials that is third-party certified to the respective standard divided by the total amount of wood fiber sourced by the entity.
 - 3.2 Where wood-fiber is certified to multiple third-party certifications, the entity shall include the amount of such fiber in its calculations for each relevant certification.
- 4 The entity shall disclose the percentage of its total wood-fiber-based materials that is sourced from non-third-party certified forestlands but meets other fiber sourcing standards, including, but not limited to:
 - 4.1 Responsible fiber sourcing standards (e.g., SFI Fiber Sourcing Standard)
 - 4.2 Controlled wood standards (e.g., FSC Controlled Wood Certification, PEFC Controlled Wood)
 - 4.3 Recycled fiber standards that include post- and pre-consumer reclaimed material (e.g., PEFC Controlled Sources, FSC Recycled Label, and SFI Recycled Label)
 - 4.4 Any other due diligence standards that cover sourcing requirements for fiber from non-certified forestlands
- 5 For fiber from non-certified forestlands that meets multiple fiber sourcing standards, the entity shall not account for the weight more than once when calculating the total percentage of fiber from non-certified forestlands that meets other fiber sourcing standards.
- 6 The entity shall disclose the percentage of wood fiber that meets each sourcing standard (e.g., FSC Controlled Wood, SFI Fiber Sourcing Standard, and PEFC Controlled Sources).
 - 6.1 Where wood-fiber meets multiple sourcing standards, the entity shall include the amount of such fiber in its calculations for each relevant sourcing standard.

Note to **RR-PP-430a.1**

- 1 The entity shall discuss its due diligence practices for fiber that is not from certified forestlands or certified to other fiber sourcing standards and its policies to verify the forestry management and harvesting practices of suppliers, which may include codes of conduct, audits, and/or contracts, among others.
- 2 The entity shall disclose how it verifies that its non-certified fiber includes criteria for the following:
 - 2.1 ~~Wood legality and compliance with the Lacey Act of 1990 (16 U.S.C. §§ 3371–3378);~~
 - 2.2 Wood sourced from areas of protected conservation status or high biodiversity value;
 - 2.3 Logging in or near areas of endangered species habitat;
 - 2.4 Logging in or near areas of indigenous peoples' land;
 - 2.5 The forestry management and harvesting practices of suppliers, including reviews of environmental impact assessments or forestry management plans;
 - 2.6 The use of genetically modified organisms (GMOs), pesticides, or other chemicals in forests; and
 - 2.7 Criteria outlined in the definition of SFI “controversial sources,” the definition of FSC “controlled wood,” or the equivalent.
- 3 The entity may also disclose the sources of its wood fiber (e.g., from corporate, private, or federally owned forestlands and whether fiber is grown domestically or internationally) and the potential risks associated with procuring fiber from these sources.

RR-PP-430a.2. Amount of recycled and recovered fiber procured

- 1 The entity shall disclose the amount of recycled and recovered fiber it procured in metric tons from suppliers as well as recycled and recovered fiber it obtained directly through collection programs.
- 2 Recycled content is defined, consistent with definitions in ISO 14021:1999, “Environmental labels and declarations—Self-declared environmental claims (Type II environmental labelling),” as the portion, by mass, of recycled or recovered material in a product or packaging, where only pre-consumer and post-consumer materials shall be considered as recycled content, and where:
 - 2.1 Recycled material is defined as material that has been reprocessed from recovered (or reclaimed) material by means of a manufacturing process and made into a final product or a component for incorporation into a product.
 - 2.2 Recovered material is defined as material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered (or reclaimed) as a material input, in lieu of new primary material, for a recycling or manufacturing process.

APPENDIX B OF [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES

- 2.3 Pre-consumer material is defined as material that has been diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap that are generated in a process and are capable of being reclaimed within the same process that generated them.
- 2.4 Post-consumer material is defined as material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of a product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
- 2.5 Fiber shall be considered recycled or recovered if it meets the SFI definition of recycled content, the FSC definition of reclaimed material, or the PEFC definition of recycled wood and fibres.

Note to **RR-PP-430a.2**

- 1 The entity shall discuss its strategy to incorporate environmental lifecycle analyses into decisions to source recycled and recovered fiber versus virgin fiber.
 - 1.1 An environmental lifecycle tradeoff is defined as an environmental benefit or consequence of choosing to source one type of fiber over another.
 - 1.1.1 Environmental lifecycle benefits from using recycled and recovered fiber can include, but are not limited to, reducing the need for deforestation, reducing GHG emissions from paper in landfills, and reducing landfill waste.
 - 1.1.2 Environmental lifecycle consequences of using recycled and recovered fiber can include increased resource consumption and generation of air emissions during the transportation and processing of fiber.
- 2 The entity shall discuss how lifecycle tradeoff assessments are incorporated into its fiber sourcing decisions, including how the following risks and opportunities are managed:
 - 2.1 Costs of recycled and recovered materials;
 - 2.2 Constraints related to accessing the necessary supply of recycled and recovered fiber;
 - 2.3 Recycling infrastructure needed by the entity or external paper collection facilities;
 - 2.4 Consumer behavior to improve recovery of paper for recycling;
 - 2.5 Virgin wood-fiber sourcing risks;
 - 2.6 Improving paper recovery rates;
 - 2.7 Regulation related to consumer recycling or minimum recycled content usage;
 - 2.8 Quality of fiber needed for products and the intended use of fiber for different product segments;

EXPOSURE DRAFT—MARCH 2022

- 2.9 Product innovation opportunities; and
 - 2.10 Increased revenue and reputational benefits related to products with recycled or recovered content.
- 3 The entity may disclose a breakdown of its recycled and recovered fiber use by product segment.