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Exposure Draft

IFRS[®] Sustainability Disclosure Standard

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

Volume B67—Rail Transportation

Comments to be received by 29 July 2022



This industry from Appendix B Industry-based disclosure requirements accompanies the Exposure Draft ED/2022/S2 *Climate-related Disclosures* (published March 2022; see separate booklet). It is published by the International Sustainability Standards Board (ISSB) for comment only. Comments need to be received by 29 July 2022 and should be submitted by email to commentletters@ifrs.org or online at <https://www.ifrs.org/projects/open-for-comment/>.

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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.

Rail Transportation

Industry Description

The Rail Transportation industry consists of companies that provide rail freight shipping and support services. Key activities include shipping containerized and bulk freight, including consumer goods and commodities. Rail companies typically own, maintain, and operate their rail networks, which may require significant capital expenditures. The U.S. operates the longest railroad network in the world, followed closely by Russia, China, India, Canada, Germany, and France. The industry exhibits economies of density due to its network effects, lending itself to natural monopoly conditions. Together with the large sunk costs of rail infrastructure, this provides a competitive advantage to incumbent firms in the industry and creates barriers to entry for new firms.

Note: The scope of the Rail Transportation industry does not include passenger rail transportation.

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	TR-RA-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	TR-RA-110a.2
	Total fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	TR-RA-110a.3

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of carloads transported ¹²⁵	Quantitative	Number	TR-RA-000.A
Number of intermodal units transported ¹²⁶	Quantitative	Number	TR-RA-000.B
Track miles ¹²⁷	Quantitative	Miles	TR-RA-000.C

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¹²⁵ Note to **TR-RA-000.A** – The scope of disclosure includes all carloads that the entity transported in conjunction with the shipping of freight (including freight that is not containerized) for its customers.

¹²⁶ Note to **TR-RA-000.B** – Intermodal units include shipping containers and truck trailers that can be transported across modes of transportation.

¹²⁷ Note to **TR-RA-000.C** – Track miles include route miles (the total extent of routes available for trains to operate) and take into account multiple track routes such that each route mile with double track is considered two track miles.

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ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Revenue ton miles (RTM) ¹²⁸	Quantitative	RTM	TR-RA-000.D
Number of employees	Quantitative	Number	TR-RA-000.E

¹²⁸ Note to **TR-RA-000.D** – A revenue ton mile (RTM) is defined as one ton of revenue traffic transported one mile. Revenue ton miles are calculated by multiplying the miles traveled on each leg by the number of tons of revenue traffic carried on that leg.

Greenhouse Gas Emissions

Topic Summary

The Rail Transportation industry generates emissions mainly through the combustion of diesel in locomotive engines. Despite relatively low emissions compared to other transportation industries, fuel management has implications for companies in the industry in terms of operating costs and regulatory compliance. Greenhouse gases (GHGs) including carbon dioxide (CO₂) are of particular importance to government regulators concerned about climate change. Intensifying regulation of locomotive exhaust emissions and high fuel costs provide incentives for rail companies to invest in fuel efficiency enhancements to manage emissions. This can increase operational efficiency and impact the cost structure of rail companies, with chronic and acute impacts on value and competitive position both within the industry and compared to other modes of transport.

Metrics

TR-RA-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 equivalents (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)
 - 2.1.3 India GHG Inventory Program

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- 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.

TR-RA-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 according to *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:
 - 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.
 - 3.1 Relevant activities and investments may include, but are not limited to, operational improvements (such as decreased idling, trip optimization, and maximizing loads) and fleet enhancements (such as new engines, fuel optimization technology and aerodynamic fleet modifications, and upgrading the fleet with new locomotives).
 - 4 The entity shall discuss the scope of its strategies, plans, and/or reduction targets, such as how they relate 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.

TR-RA-110a.3. Total fuel consumed, percentage renewable

- 1 The entity shall disclose the total amount of fuel consumed from all sources as an aggregate figure, in gigajoules (GJ).
 - 1.1 The calculation methodology for fuel consumed shall be based on actual fuel consumed as opposed to design parameters.
 - 1.2 Acceptable calculation methodologies for fuel consumed include, but are not limited to, methodologies based on:
 - 1.2.1 Adding fuel purchases made during the reporting period to beginning inventory at the start of the reporting period, less any fuel inventory at the end of the reporting period
 - 1.2.2 Tracking fuel consumed by vehicles

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1.2.3 Tracking fuel expenses

- 2 The entity shall disclose the percentage of fuel consumed that is renewable fuel.
 - 2.1 Renewable fuel is generally defined ~~by the U.S. Renewable Fuel Standard (U.S. 40 CFR 80.1401)~~, as fuel that meets all of the following requirements:
 - 2.1.1 Produced from renewable biomass;
 - 2.1.2 Used to replace or reduce the quantity of fossil fuel present in a transportation fuel, heating oil, or jet fuel; and
 - 2.1.3 Achieved net Has lifecycle greenhouse gas (GHG) emissions reduction on a lifecycle basis ~~that are at least 20 percent less than baseline lifecycle GHG emissions, unless the fuel is exempt from this requirement pursuant to U.S. 40 CFR 80.1403.~~
 - 2.2 The entity shall disclose the standard or regulation used to determine if a fuel is renewable.

~~The scope of renewable fuel includes fuel that qualifies for Renewable Identification Numbers (RINs) under the U.S. Renewable Fuel Standard.~~
 - 2.3 The percentage shall be calculated as the amount of renewable fuel consumed (in GJ) divided by the total amount of fuel consumed (in GJ).
- 3 The scope of disclosure only includes fuel directly consumed by the entity.
- 4 In calculating energy consumption from fuels, 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, ~~the U.S. Department of Energy, or the U.S. Energy Information Agency.~~
- 5 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).