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Exposure Draft
IFRS® Sustainability Disclosure Standard

[Draft] IFRS S2 Climate-related Disclosures
Appendix B Industry-based disclosure requirements
Volume B12—Oil & Gas—Midstream

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.
Oil & Gas – Midstream

Industry Description

The Oil and Gas - Midstream industry consists of companies involved in the transportation or storage of natural gas, crude oil, and refined petroleum products. Midstream natural gas activities involve gathering, transport, and processing of natural gas from the wellhead, as well as the removal of impurities, production of natural gas liquids, storage, pipeline transport, and shipping, liquefaction, or regasification of liquefied natural gas. Midstream oil activities mainly involve transport of crude oil and refined products over land, using a network of pipes and pumping stations, as well as trucks and rail cars, and over seas and rivers via tanker ships or barges. Companies that operate bulk stations and terminals, as well as those that manufacture and install storage tanks and pipelines, are also part of this industry.

Note: The standards discussed below are for “pure-play” midstream activities or independent midstream companies. Integrated oil and gas companies may own or operate midstream operations, but are also involved in the upstream operations of the oil and gas value chain and in the refining or marketing of products. SASB has separate standards for the Oil and Gas Exploration & Production (EM-EP) and Refining & Marketing industries (EM-MD). As such, integrated companies should also consider the disclosure topics and metrics from these standards.

Sustainability Disclosure Topics & Metrics

Table 1. Sustainability Disclosure Topics & Metrics

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>Gross global Scope 1 emissions, percentage methane, percentage</td>
<td>Quantitative</td>
<td>Metric tons (t)</td>
<td>EM-MD-110a.1</td>
</tr>
<tr>
<td></td>
<td>covered under emissions-limiting regulations</td>
<td></td>
<td>% CO₂-e, Percentage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussion of long-term and short-term strategy or plan to manage Scope 1</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>EM-MD-110a.2</td>
</tr>
<tr>
<td></td>
<td>emissions, emissions reduction targets, and an analysis of performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>against those targets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Activity Metrics

<table>
<thead>
<tr>
<th>ACTIVITY METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total metric ton-kilometers of: (1) natural gas, (2) crude</td>
<td>Quantitative</td>
<td>Metric ton (t)</td>
<td>EM-MD-000.A</td>
</tr>
<tr>
<td>oil, and (3) refined petroleum products transported, by mode of</td>
<td></td>
<td>kilometers</td>
<td></td>
</tr>
<tr>
<td>transport 14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14 Note to EM-MD-000.A – Relevant modes of transport include: pipeline, tanker, truck, etc.
Greenhouse Gas Emissions

Topic Summary
The midstream industry generates significant quantities of greenhouse gases and other air emissions from compressor engine exhausts, oil and condensate tank vents, natural gas processing, and fugitive emissions, in addition to emissions from mobile sources. GHG emissions contribute to climate change and create additional regulatory compliance costs and risks for midstream companies due to climate change mitigation policies. At the same time, the management of fugitive emissions of methane, a potent greenhouse gas, has emerged as a major operational, reputational, and regulatory risk. Financial impacts on companies will vary depending on the specific location of operations and the prevailing emissions regulations, and include higher operating or capital expenditures and regulatory or legal penalties. Companies that capture and monetize, or cost-effectively reduce emissions by implementing innovative monitoring and mitigation efforts and fuel efficiency measures could enjoy several benefits. These companies have the opportunity to reduce regulatory risks and to realize operational efficiencies in an environment of increasing regulatory and public concerns about air quality and climate change.

Metrics

**EM-MD-110a.1. Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations**

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 ($\text{CO}_2$), methane ($\text{CH}_4$), nitrous oxide ($\text{N}_2\text{O}$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ($\text{SF}_6$), and nitrogen trifluoride ($\text{NF}_3$).

   1.1 Emissions of all GHGs shall be consolidated and disclosed in metric tons of carbon dioxide equivalents (CO$_2$-e), calculated in accordance with published 100-year time horizon global warming potential (GWP) values. To date, the preferred source for GWP factors 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.


   2.1 These emissions include direct emissions of GHGs from stationary or mobile sources; these sources include but are not limited to: equipment at well sites, production facilities, refineries, chemical plants, terminals, fixed site drilling rigs, office buildings, marine vessels transporting products, tank truck fleets, mobile drilling rigs, and moveable equipment at drilling and production facilities.
2.2 Acceptable calculation methodologies include those that conform with 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:

2.2.1 GHG Reporting Guidance for the Aerospace Industry provided by International Aerospace Environmental Group (IAEG)

2.2.2 Greenhouse Gas Inventory Guidance: Direct Emissions from Stationary Combustion Sources provided by the U.S. Environmental Protection Agency (EPA)

2.2.3 India GHG Inventory Program

2.2.4 ISO 14064-1

2.2.5 Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011, published by IPIECA

2.2.6 Protocol for the quantification of greenhouse gas emissions from waste management activities provided by Entreprises pour l’Environnement (EpE)

2.3 GHG emission data shall be consolidated 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 as well as:


2.3.2 The approach provided by the Climate Disclosure Standards Board (CDSB) that is 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 shall disclose the percentage of gross global Scope 1 emissions from methane emissions.

3.1 The percentage of gross global Scope 1 GHG emissions from methane emissions shall be calculated as the methane emissions in metric tons of carbon dioxide equivalents (CO₂-e) divided by the gross global Scope 1 GHG emissions in metric tons of carbon dioxide equivalents (CO₂-e).

4 The entity shall disclose the percentage of its emissions that are covered under an emissions-limiting regulation or that is intended to directly limit or reduce emissions, such as cap-and-trade schemes, carbon tax/fee systems, and other emissions control (e.g., command-and-control approach) and permit-based mechanisms.

4.1 Examples of emissions-limiting regulations include, but are not limited to:

4.1.1 California Cap-and-Trade (California Global Warming Solutions Act)
4.1.2 European Union Emissions Trading Scheme (EU ETS)

4.1.3 Quebec Cap-and-Trade (Draft Bill 42 of 2009)

4.2 The percentage shall be calculated as the total amount of gross global Scope 1 GHG emissions ($\text{CO}_2\text{-e}$) that are covered under emissions-limiting regulations divided by the total amount of gross global Scope 1 GHG emissions ($\text{CO}_2\text{-e}$).

4.2.1 For emissions that are subject to multiple emissions-limiting regulations, the entity shall not account for those emissions more than once.

4.3 The scope of emissions-limiting regulations excludes emissions covered under voluntary emissions-limiting regulations (e.g., voluntary trading systems) as well as disclosure-based regulations [e.g., the U.S. Environmental Protection Agency (EPA) GHG Reporting Program].

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.

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.

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.

EM-MD-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.


1.2 The scope of GHG emissions includes the seven GHGs covered under the Kyoto Protocol—carbon dioxide ($\text{CO}_2$), methane ($\text{CH}_4$), nitrous oxide ($\text{N}_2\text{O}$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ($\text{SF}_6$), and nitrogen trifluoride ($\text{NF}_3$).

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 towards
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 which may include, but are not limited to energy efficiency efforts,
energy source diversification, carbon capture and storage, or the
implementation of leak detection and repair processes.

3 The entity shall discuss activities and investments required to achieve the plans
and/or targets, and any risks or limiting factors that might affect achievements 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.

4.1 Categories of emissions—sources generally correspond to those defined in
the API Compendium of Greenhouse Gas Emissions Methodologies for the
Oil and Natural Gas Industry (2009), and may include:

4.1.1 Flared hydrocarbons, including all emissions emitted from flares
and which are associated with the management and disposal of
unrecoverable natural gas via combustion of hydrocarbon products
from routine operations, upsets, or emergencies

4.1.2 Other combusted emissions, including, but not limited to: (1)
emissions from stationary devices, including, but not limited to
boilers, heaters, furnaces, reciprocating internal combustion
engines and turbines, incinerators, and thermal/catalytic oxidizers,
(2) emissions from mobile sources, including, but not limited to
barges, ships, railcars, and trucks for material transport; planes/
helicopters and other company vehicles for personnel transport;
forklifts, all terrain vehicles, construction equipment, and other
off-road mobile equipment, and (3) other combusted emissions
shall exclude those emissions disclosed as flared hydrocarbons

4.1.3 Process emissions, including, but not limited to those emissions
that are not combusted and are intentional or designed into the
process or technology to occur during normal operations and are a
result of some form of chemical transformation or processing step.
Such emissions include, but are not limited to those from hydrogen
plants, amine units, glycol dehydrators, fluid catalytic cracking
unit and reformer generation, and flexi-coker coke burn

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4.1.4 Vented emissions, including those emissions that are not combusted and are intentional or designed into the process or technology to occur during normal operations, and which include, but are not limited to: (1) venting from crude oil, condensate, or natural gas product storage tanks, gas-driven pneumatic devices, gas samplers, chemical injection pumps, exploratory drilling, loading/ballasting/transit, and loading racks, (2) venting resulting from maintenance/turn-arounds, including, but not limited to, decoking of furnace tubes, well unloading, vessel and gas compressor depressurizing, compressor starts, gas sampling, and pipeline blowdowns, and (3) venting from non-routine activities, including but not limited to pressure relief valves, pressure control valves, fuel supply unloading valves, and emergency shut-down devices.

4.1.5 Fugitive emissions, including those emissions which can be individually found and “fixed” to make emissions “near zero” and which include, but are not limited to, emissions from valves, flanges, connectors, pumps, compressor seal leaks, catadyne heaters, and wastewater treatment and surface impoundments.

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.

Disclosure of strategies, plans, and/or reduction targets shall be limited to activities that were ongoing (active) or reached completion during the reporting period.