



March 2022

# Exposure Draft

IFRS<sup>®</sup> Sustainability Disclosure Standard

---

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

Volume B7—Coal Operations

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](mailto:commentletters@ifrs.org) or online at <https://www.ifrs.org/projects/open-for-comment/>.

All comments will be on the public record and posted on our website at [www.ifrs.org](http://www.ifrs.org) unless the respondent requests confidentiality. Such requests will not normally be granted unless supported by a good reason, for example, commercial confidence. Please see our website for details on this policy and on how we use your personal data. If you would like to request confidentiality, please contact us at [commentletters@ifrs.org](mailto:commentletters@ifrs.org) before submitting your letter.

**Disclaimer:** To the extent permitted by applicable law, the ISSB and the IFRS Foundation (Foundation) expressly disclaim all liability howsoever arising from this publication or any translation thereof whether in contract, tort or otherwise to any person in respect of any claims or losses of any nature including direct, indirect, incidental or consequential loss, punitive damages, penalties or costs.

Information contained in this publication does not constitute advice and should not be substituted for the services of an appropriately qualified professional.

© 2022 SASB, part of Value Reporting Foundation.

**All rights reserved.** Reproduction and use rights are strictly limited. Please contact the Foundation for further details at [permissions@ifrs.org](mailto:permissions@ifrs.org).

Copies of ISSB publications may be ordered from the Foundation by emailing [customerservices@ifrs.org](mailto:customerservices@ifrs.org) or visiting our shop at <https://shop.ifrs.org>.

The Foundation has trade marks registered around the world (Marks) including 'IAS<sup>®</sup>', 'IASB<sup>®</sup>', the IASB<sup>®</sup> logo, 'IFRIC<sup>®</sup>', 'IFRS<sup>®</sup>', the IFRS<sup>®</sup> logo, 'IFRS for SMEs<sup>®</sup>', the IFRS for SMEs<sup>®</sup> logo, 'International Accounting Standards<sup>®</sup>', 'International Financial Reporting Standards<sup>®</sup>', the 'Hexagon Device', 'NIIF<sup>®</sup>' and 'SIC<sup>®</sup>'. Further details of the Foundation's Marks are available from the Foundation on request.

The Foundation is a not-for-profit corporation under the General Corporation Law of the State of Delaware, USA and operates in England and Wales as an overseas company (Company number: FC023235) with its principal office in the Columbus Building, 7 Westferry Circus, Canary Wharf, London, E14 4HD.

## 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.

## Coal Operations

### Industry Description

The Coal Operations industry includes companies that mine coal and those that manufacture coal products. Mining activity covers both underground and surface mining, and thermal and metallurgical coal.

### 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, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)	EM-CO-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	EM-CO-110a.2
Water Management	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m <sup>3</sup> ), Percentage (%)	EM-CO-140a.1
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	EM-CO-140a.2
Reserves Valuation & Capital Expenditures	Sensitivity of coal reserve levels to future price projection scenarios that account for a price on carbon emissions	Quantitative	Million metric tons (Mt)	EM-CO-420a.1
	Estimated carbon dioxide emissions embedded in proven coal reserves	Quantitative	Metric tons (t) CO <sub>2</sub> -e	EM-CO-420a.2
	Discussion of how price and demand for coal and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	Discussion and Analysis	n/a	EM-CO-420a.3

**Table 2. Activity Metrics**

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Production of thermal coal	Quantitative	Million metric tons (Mt)	EM-CO-000.A
Production of metallurgical coal <sup>8</sup>	Quantitative	Million metric tons (Mt)	EM-CO-000.B

<sup>8</sup> Note to EM-CO-000.B – The scope includes pulverized coal injection.

## Greenhouse Gas Emissions

### Topic Summary

Coal operations are energy intensive and generate significant direct greenhouse gas (GHG) emissions, including carbon dioxide from fuel use and methane released from coal beds during mining and post-mining activities. Regulatory efforts to reduce GHG emissions in response to the risks posed by climate change may result in higher operating and capital expenditures based on the magnitude of their direct emissions. Operational efficiencies can be achieved through the cost-effective reduction of GHG emissions. Such efficiencies can mitigate the potential financial impact of increased fuel costs from regulations that seek to limit—or put a price on—GHG emissions.

### Metrics

#### *EM-CO-110a.1. Gross global Scope 1 emissions, 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 (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>).
  - 1.1 Emissions of all GHGs shall be consolidated and disclosed in metric tons of carbon dioxide equivalent (CO<sub>2</sub>-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 These emissions include direct emissions of GHGs from stationary or mobile sources; these sources include but are not limited to: equipment at mine sites, mine mouth electric generating facilities, coal seam methane emissions, production and processing facilities, storage facilities, office buildings, and transportation (marine, road, and rail).
  - 2.2 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:
    - 2.2.1 *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 published by Entreprises pour l'Environnement (EpE)
  - 2.3 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 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 its gross global Scope 1 GHG emissions that are covered under an emissions-limiting regulation or program 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.
- 3.1 Examples of emissions-limiting regulations include, but are not limited to:
    - 3.1.1 California Cap-and-Trade (California Global Warming Solutions Act)
    - 3.1.2 European Union Emissions Trading Scheme (EU ETS)
    - 3.1.3 Quebec Cap-and-Trade (Draft Bill 42 of 2009)
  - 3.2 The percentage shall be calculated as the total amount of gross global Scope 1 GHG emissions (CO<sub>2</sub>-e) that are covered under emissions-limiting regulations divided by the total amount of gross global Scope 1 GHG emissions (CO<sub>2</sub>-e).
    - 3.2.1 For emissions that are subject to multiple emissions-limiting regulations, the entity shall not account for those emissions more than once.
  - 3.3 The scope of emissions-limiting regulations excludes emissions covered under voluntary emissions-limiting regulations (e.g., voluntary trading systems), as well as reporting-based regulations—[e.g., the U.S. Environmental Protection Agency (EPA) GHG Reporting Program].
- 4 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.

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

- 5 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.
- 6 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-CO-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 (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>).
- 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.
- 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.

EXPOSURE DRAFT—MARCH 2022

- 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.

## Water Management

### Topic Summary

Coal operations have an impact on both the quality and quantity of local water resources. Coal operations are water intensive. The use of water in coal washing to remove sulfur, in cooling drilling equipment, and in transporting coal in slurry pipelines can impact resources. The severity of these risks can vary depending on the region's water availability and the regulatory environment. Reducing water use and contamination could also create operational efficiencies for companies and lower their operating costs. Wastewater treatment and discharge is often regulated by national or local agencies. Violating limits on selenium, sulfate, and dissolved solids could affect coal operations companies through significant penalties, compliance costs, delays in production, or higher costs related to mine closure.

### Metrics

#### *EM-CO-140a.1. (1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage 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 freshwater sources:
  - 1.1 Fresh water may be defined according to the local statutes and regulations where the entity operates. Where there is no regulatory definition, fresh water shall be considered to be water that has less than 1000 parts per million of dissolved solids ~~per the U.S. Geological Survey~~.
  - 1.2 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.
- 2 The entity shall disclose the percentage of water recycled as the volume, in thousands of cubic meters, recycled divided by the volume of water withdrawn.
  - 2.1 Any volume of water reused multiple times shall be counted as recycled each time it is recycled and reused.
- 3 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%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.
- 4 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.
- 5 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.

#### *EM-CO-140a.2. Number of incidents of non-compliance associated with water quality permits, standards, and regulations*

- 1 The entity shall disclose the total number of instances of non-compliance, including violations of a technology-based standard and exceedances of quantity and/or quality-based standards.

EXPOSURE DRAFT—MARCH 2022

- 2 The scope of disclosure includes incidents governed by national, state, and local statutory permits and regulations, including, but not limited to, the discharge of a hazardous substance, violation of pretreatment requirements, or total maximum daily load (TMDL) exceedances.
  - 2.1 Typical parameters of concern include selenium, total dissolved solids (TDS), sulfate, total suspended solids (TSS), and pH.
- 3 The scope of disclosure shall only include incidents of non-compliance that resulted in a formal enforcement action(s).
  - 3.1 Formal enforcement actions are defined as governmental recognized actions that address a violation or threatened violation of water quantity and/or quality laws, regulations, policies, or orders, and can result in administrative penalty orders, administrative orders, and judicial actions, among others. ~~For example, the U.S. Environmental Protection Agency (EPA) provides guidance on the scope of formal enforcement actions in, Informal and Formal Actions, Summary Guidance and Portrayal on EPA Websites.~~
- 4 Violations shall be disclosed, regardless of their measurement methodology or frequency. These include violations for:
  - 4.1 Continuous discharges, limitations, standards, and prohibitions that are generally expressed as maximum daily, weekly average, and monthly averages
  - 4.2 Non-continuous discharges and limitations that are generally expressed in terms of frequency, total mass, maximum rate of discharge, and mass or concentration of specified pollutants

## Reserves Valuation & Capital Expenditures

### Topic Summary

Estimates suggest that coal companies may be unable to extract a significant proportion of their coal reserves if greenhouse gas (GHG) emissions are to be controlled to limit global temperature increases to two degrees Celsius per the Paris Agreement. Stewardship of capital resources while taking into account medium- to long-term trends, particularly related to climate change mitigation actions, is critical in order to prevent asset impairment and maintain profitability and creditworthiness. Globally, regulations and policies are and may continue to be put into place to limit GHG emissions from coal-fired power plants—the customers of coal companies—thus lowering the demand for, and subsequently the prices of, coal. Coal demand is also being affected by regulations governing other harmful air emissions that apply to coal-fired power plants. An expansion of GHG-mitigation regulations may increase the magnitude of potential financial impacts in the medium to long term. Along with improved competitiveness of alternative energy technologies, this poses a long-term risk for the reserves and capital expenditures of coal operations companies.

### Metrics

#### *EM-CO-420a.1. Sensitivity of coal reserve levels to future price projection scenarios that account for a price on carbon emissions*

- 1 The entity shall perform a sensitivity analysis of its reserves to determine how several future scenarios may affect its determination of whether the reserves are proven or probable.
- 2 The entity shall analyze the sensitivity of its current proven and probable reserves using the price trajectories published by the International Energy Agency (IEA) in its World Energy Outlook (WEO) publication, including:
  - 2.1 Current Policies Scenario, which assumes no changes in policies from the mid-point of the year of publication of the WEO.
  - 2.2 New Policies Scenario, which assumes that broad policy commitments and plans that have been announced by countries—including national pledges to reduce greenhouse gas emissions and plans to phase out fossil-energy subsidies—occur, even if the measures to implement these commitments have yet to be identified or announced. This broadly serves as the IEA baseline scenario.
  - 2.3 Sustainable Development Scenario, which assumes an energy pathway occurs that is consistent with the goal of limiting the global increase in temperature to ~~2°C~~ 1.5°C by limiting concentration of greenhouse gases in the atmosphere to ~~around 450 parts per million of CO<sub>2</sub>e.~~
  - ~~2.4~~ 2.3 The entity shall consider the WEO scenarios as a normative reference, thus any updates to the WEO made year-on-year shall be considered updates to this guidance.

EXPOSURE DRAFT—MARCH 2022

4 ~~Reserves are defined by U.S. Securities and Exchange Commission (SEC) Industry Guide 7, Description of Property by Issuers Engaged or to Be Engaged in Significant Mining Operations:~~

~~2.5 4.1 Reserves, as that part of a are defined as mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination.~~

~~2.6 4.2 Proven reserves, as are reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings, or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling, and measurement are spaced so closely and the geographic character is so well defined that size, shape, depth, and mineral content of reserves are well established.~~

~~2.7 4.3 Probable reserves, as are reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.~~

5 ~~The entity shall follow guidance published by the Securities and Exchange Commission (SEC) in its Oil and Gas Reporting Modernization (Section §229.1202 (Item 1202) Disclosure of Reserves) for conducting a reserves sensitivity analysis.~~

3 ~~The entity shall conduct a reserves sensitivity analysis and disclose, in the aggregate, an estimate of reserves estimated for each product type based on different price and cost criteria, such as a range of prices and costs that may reasonably be achieved, including standardized futures prices or management's own forecasts.~~

4 ~~The entity shall also disclose the price and cost schedules and assumptions on which disclosed values are based.~~

5 6 The entity may summarize its findings in the following table format:

**Table 1. Sensitivity of Reserves to Prices By Principal Product Type and Price Scenario**

PRICE CASE	PROVEN RESERVES		PROBABLE RESERVES	
	Coal	Product A	Coal	Product A
(Scenario)	(tons)	(measure)	(tons)	(measure)
Current Policies Scenario (base)				
New Policies Scenario				
Sustainable Development Scenario				

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

- 6.7 The entity may disclose the sensitivity of its reserve levels in other price and demand scenarios in addition to those described above, particularly if these scenarios differ depending on the type of coal reserves, regulatory environment in the countries or regions where mining occurs, end-use of the entity's products, or other factors.
- 7.8 For additional sensitivity analyses, the entity should consider disclosing the following, per the Task Force on Climate-Related Financial Disclosures (TCFD) Recommendations Report Figure 8 as well as the Implementing the Recommendations of the TCFD Report, Section E:
- 7.1 8.1 The alternative scenarios used, including other 2°C or lower scenarios.
- 7.2 8.2 Critical input parameters, assumptions, and analytical choices for the climate-related scenarios used, particularly as they relate to key areas such as policy assumptions, energy deployment pathways, technology pathways, and related timing assumptions.
- 7.3 8.3 Time frames used for scenarios, including short-, medium-, and long-term milestones (e.g., how organizations consider timing of potential future implications under the scenarios used).

*EM-CO-420a.2. Estimated carbon dioxide emissions embedded in proven coal reserves*

- 1 The entity shall calculate and disclose an estimate of the carbon dioxide emissions embedded in its proven coal reserves.
- 1.1 *Nota bene* — this estimate applies a factor for potential CO<sub>2</sub> only and does not include an estimate for all potential greenhouse gas emissions, as these are dependent on downstream use (e.g., utility electricity generation, industrial heating and electricity generation, cement production, or steel production).
- 2 Estimated potential carbon dioxide emissions from proven coal reserves shall be calculated according to the following formula, derived from Meinshausen et al:
- 2.1  $E = R \times V \times C$ , where:
- 2.1.1 E are the potential emissions in kilograms of carbon dioxide (kg CO<sub>2</sub>);
- 2.1.2 R are the proven reserves in gigagrams (Gg);
- 2.1.3 V is the net calorific value in terajoules per gigagram (TJ/Gg); and
- 2.1.4 C is the effective carbon dioxide emission factor in kilograms CO<sub>2</sub> per terajoule (kg/TJ).
- 3 In the absence of data specific to the entity's coal reserves, carbon content shall be calculated using default data for each major type of coal resource published by the Intergovernmental Panel on Climate Change (IPCC) in its 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

- 3.1 The entity shall use default carbon content values per unit of energy that is listed in IPCC Table 1.3 Default Values of Carbon Content, Volume 2: Energy, Chapter 1.
- 3.2 The entity shall use calorific values per weight of coal resource contained in IPCC Table 1.2 Default Net Calorific Values (NCVs) and Lower and Upper Limit of the 95% Confidence Intervals, Volume 2: Energy, Chapter 1.
- 4 The entity shall use engineering estimates to determine the weight of its coal reserves in gigagrams.
- 5 For other assumptions required to estimate the carbon content of coal reserves, the entity shall rely on guidance from the IPCC, Greenhouse Gas Protocol, U.S. Energy Information Agency (EIA), or the International Energy Agency (IEA).

*EM-CO-420a.3. Discussion of how price and demand for coal and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets*

- 1 The entity shall discuss how projections for price and demand for coal and the path of air quality and climate regulation influence the entity's capital expenditure (CAPEX) strategy.
  - 1.1 This discussion should include the entity's projections and assumptions about future coal prices and the likelihood that certain price and demand scenarios occur.
- 2 The entity shall discuss the implications of price and demand scenario planning (i.e., EM-CO-420a.1) and how they may affect decisions to explore, acquire, and develop new reserves.
- 3 The entity may discuss factors that materially influence its CAPEX decision making, including, but not limited to:
  - 3.1 How the scope of air quality and climate change regulation—such as which countries, regions, and/or industries are likely to be impacted—may influence where the entity focuses its exploration and development
  - 3.2 Its view of the alignment between the time horizon during which price and demand for coal may be affected by climate regulation and time horizons for returns on capital expenditures on reserves
  - 3.3 How the structure of climate regulation—i.e., a carbon tax versus cap-and-trade—may differently affect price and demand, and thus the entity's capital expenditure decision making
- 4 The entity may discuss how these trends affect decision-making in the context of different types of reserve expenditures, including development of assets, acquisition of properties with proven reserves, acquisition of properties with unproven resources, and exploration activities.