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Educational material

Nature and social aspects of climate-related risks and opportunities

In June 2023, the International Sustainability Standards Board (ISSB) issued its inaugural standards, IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* (IFRS S1) and IFRS S2 *Climate-related Disclosures* (IFRS S2). The ISSB is committed to supporting the implementation of those Standards. This educational material, which has been developed by the staff of the ISSB, is a part of delivering on that commitment.

IFRS S2 requires an entity to disclose information about its climate-related risks and opportunities. Entities might identify climate-related risks and opportunities at the nexus of climate and nature (for example, those related to water or deforestation), as well as those closely associated with socioeconomic aspects, such as the just transition to a lower-carbon economy. Stakeholders have asked whether—and, if so, how—entities should consider such ‘nature and social aspects’ of climate-related risks and opportunities when they apply the requirements in IFRS S2 to prepare their climate-related disclosures. This educational material, which comprises three examples, explains and illustrates how entities might apply requirements in IFRS S2 and IFRS S1 in such circumstances to provide

material information to users of general purpose financial reports. The examples focus on particular requirements and therefore are not intended to explain or illustrate how the entity would apply all of the core content requirements in IFRS S2 and IFRS S1, even as they relate to the risks and opportunities discussed.

As set out in the IFRS Foundation *Due Process Handbook*, educational material is not part of IFRS Standards and cannot add or change requirements in the Standards. This educational material portrays hypothetical situations and explains and illustrates how an entity might apply some of the requirements in IFRS S2 and IFRS S1 but is not intended to provide interpretative guidance. The analysis in each example is not intended to represent the only manner in which the requirements could be applied, nor are the examples intended to apply only to the specific industries illustrated. The examples are illustrative and use fact patterns that are intentionally simple. Although some aspects of the examples may be present in actual fact patterns, an entity would need to evaluate all relevant facts and specific circumstances of a particular fact pattern when applying IFRS S2 and IFRS S1.

Example 1—Disclosing disaggregated information about a climate-related risk (nature aspect)

Example 1 illustrates how an entity might apply paragraph 13(b) of IFRS S2 and the principles of aggregation and disaggregation in paragraphs B29–B30 of IFRS S1 to disclose information about where in its business model and value chain a climate-related risk is concentrated. The example is not intended to illustrate all of the information the entity might need to disclose when it applies these paragraphs. The example also explains how the entity might disclose some metrics in the *Industry-based Guidance on Implementing IFRS S2*.

Fact pattern

The entity operates in the agricultural products industry. It grows wheat itself in two regions: Region 1 and Region 2. The entity also buys wheat from a supplier who grows the crop in Region 1. The entity mills the wheat and sells it to customers.

The entity's business model depends on water because growing wheat relies on rainfall and on irrigation from other water sources. Region 1 currently has high baseline water stress and the entity expects the water stress to become worse over the medium term.

The entity identifies water scarcity as a climate-related risk to which it is exposed. Climate change drives water scarcity in Region 1 through increasing temperatures and changing precipitation patterns. As a result, there is likely to be a significant reduction in the water available in this region. Water scarcity can affect the entity's prospects because, for example, reduced water availability can disrupt its own wheat production and can increase the price it pays to purchase the crop from its supplier.

Application of IFRS S2

In accordance with paragraph 10 of IFRS S2, the entity discloses information that enables users of general purpose financial reports to understand water scarcity in Region 1 as a climate-related risk that the entity has determined could reasonably be expected to affect its prospects.

Water scarcity is a location-specific risk. Therefore, the entity decides that disclosing information about the amount of wheat exposed to this risk by region will provide material information to users of general purpose financial reports. Accordingly, applying paragraph 13(b) of IFRS S2 and the principles of aggregation and disaggregation in paragraphs B29–B30 of IFRS S1, the entity disaggregates its total amount of wheat (grown and purchased, in metric tonnes) between the region that has high baseline water stress (Region 1) and the region that does not (Region 2). Table 1 illustrates this disaggregation.¹

Table 1: Disaggregation of crop by region (in metric tonnes)

	Region with high baseline water stress (Region 1)			Other region (Region 2)		
Total	<i>grown</i>	<i>purchased</i>	<i>total</i>	<i>grown</i>	<i>purchased</i>	<i>total</i>
E = C + D	A	B	C = A + B	D	—	D

¹ The ISSB staff observes that disaggregating information by location is consistent with other sustainability reporting standards and frameworks, including the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD).

In accordance with paragraphs 23 and 32 of IFRS S2, the entity discloses industry-based metrics. In determining the industry-based metrics to disclose, it refers to and considers the applicability of the industry-based metrics associated with disclosure topics described in the *Industry-based Guidance on Implementing IFRS S2*. The entity identifies metrics related to water management in Volume 20—Agricultural Products.

The entity discloses, in thousands of cubic metres, the total amount of water withdrawn from all sources in its operations and the total amount of water consumed in its operations, presenting separately the percentage of each in Region 1, which has high baseline water stress (see metric FB-AG-140a.1).

The entity also discloses that 100% of its purchased wheat is sourced from Region 1, which has high baseline water stress (see metric FB-AG-440a.2), to provide information about water scarcity risk in its supply chain related to its purchased wheat.

Example 2—Disclosing information about a company’s response to a climate-related opportunity (nature aspect)

Example 2 explains how an entity might apply some of the requirements in paragraph 14(a) of IFRS S2 to disclose information about how it has responded to, and how it plans to respond to, a climate-related opportunity. The example is not intended to explain all of the information the entity might need to disclose when it applies this paragraph, but instead focuses on particular information, including information the entity might disclose about its mitigation efforts. The example also explains how the entity might disclose a metric set out in the *Industry-based Guidance on Implementing IFRS S2*.

Fact pattern

The entity operates in the forestry management industry. It grows and harvests trees and sells the timber to companies that manufacture wood-based products for the building sector.

The building sector generates significant greenhouse gas (GHG) emissions, which are the primary driver of climate change. In recent years, a number of new regulations, building codes and other industry standards have been developed with an aim to reduce such emissions in the sector. As a result, the market demand for timber is growing because using wood instead of other building materials (such as steel and concrete) can help to meet the new regulations, building codes and other industry standards and achieve decarbonisation goals in the sector. That is because trees absorb and store carbon and manufacturing wood-based products produces lower GHG emissions compared to other materials.

The entity identifies the growing market demand for timber in the building sector as a climate-related opportunity to which it is exposed. The entity determines that it can increase its revenue by responding to that demand, which can affect the entity’s prospects.

Application of IFRS S2²

In accordance with paragraph 10 of IFRS S2, the entity discloses information that enables users of general purpose financial reports to understand the growing market demand for timber in the building sector as a climate-related opportunity that the entity has determined could reasonably be expected to affect its prospects.

The entity decides that disclosing information about how it has responded to, and how it plans to respond to, that climate-related opportunity in its strategy and decision-making will provide material information to users of general purpose financial reports. Accordingly, applying paragraph 14(a) of IFRS S2, the entity explains how it has responded to, and how it plans to respond to, the growing demand for timber.

² IFRS S1 provides an exemption that permits a company, in limited circumstances in which information is not already publicly available, to omit information about a sustainability-related opportunity when the information is commercially sensitive (see paragraphs 73 and B34–B37 of IFRS S1). Example 2 assumes that the information discussed is not eligible for this exemption.

The entity explains that its forestlands have recently been certified to a third-party forest management standard. That forest management standard certified that the entity harvests its forestlands in a sustainable manner based on environmental criteria including forest management plans, forest management practices and environmental impact (such as GHG emissions, protection of biological diversity, land use and land use change). The entity explains that, because of decarbonisation goals in the building sector and the related new regulations, building codes and other industry standards, its customers are willing to pay more for certified timber grown in a sustainable manner—particularly when they can pass on that price premium to their customers. In addition, the entity explains that the certification has enabled it to enter into some sales contracts to lock in these prices and manage some of the volatility in the timber market.

In accordance with paragraphs 23 and 32 of IFRS S2, the entity discloses industry-based metrics. In determining the industry-based metrics to disclose, it refers to and considers the applicability of the industry-based metrics associated with disclosure topics described in the *Industry-based Guidance on Implementing IFRS S2*. The entity identifies metrics in Volume 41—Forestry Management. The entity discloses that 100% of its current forestland area (X00,000 acres) is certified to the third-party forest management standard (see metric RR-FM-160a.1).

The entity provides disclosures explaining that it has just acquired sites in order to increase its timber production. The entity explains why it is particularly well positioned to reforest or afforest these sites and that it intends to certify the new forestlands to meet the same third-party forest management standard as its other forestlands.

The entity also describes uncertainties related to this climate-related opportunity, such as increasing competition for market share, which could affect the price that its customers are willing to pay for timber, and the growing demand for available forestry sites.

Example 3—Disclosing information about a company’s response to a climate-related risk (social aspect)

Example 3 explains how an entity might apply some of the requirements in paragraph 14(a) of IFRS S2 to disclose information about how it has responded to, and how it plans to respond to, a climate-related risk. The example is not intended to explain all of the information the entity might need to disclose when it applies this paragraph, but instead focuses on particular information, including information the entity might disclose about anticipated changes to its business model and its climate-related transition plan.

Fact pattern

An entity operates in the electric utilities and power generators industry. It generates electricity from both renewable and fossil fuel sources and sells that electricity to customers in its jurisdiction.

The entity operates in a jurisdiction with a nationally determined contribution (NDC) arising from the latest international agreement on climate change (as defined in Appendix A of IFRS S2). To align with that NDC, the entity has set a greenhouse gas (GHG) emissions reduction target for 20XY.

To achieve its GHG emissions reduction target, the entity plans to phase out its coal-based plants by 20X0 and increase its renewable energy production by X%. The entity currently has X00 employees working in its coal-based plants. Those plants operate next to the only remaining coal mining site in the jurisdiction, which currently employs more than X,000 people.

Considering the NDC in the entity’s jurisdiction, the entity is pursuing a ‘just transition’ to a lower-carbon economy. That is, the entity is transitioning to a lower-carbon economy in a way that is as fair and inclusive as possible to everyone concerned and maximises opportunities for decent work among all communities, workers and social groups. The entity anticipates that its jurisdiction will introduce regulation requiring entities to undertake their transition to a lower-carbon economy in this manner.

Consequently, the entity identifies regulatory risk associated with the NDC in its jurisdiction as a climate-related risk to which it is exposed. The latest international agreement on climate change, and the NDC arising from it, were developed to combat climate change. If the entity is not able to comply with the 'just transition' requirements associated with the NDC, there can be regulatory, reputational and legal consequences, which can affect the entity's prospects.

Application of IFRS S2

In accordance with paragraph 10 of IFRS S2, the entity discloses information that enables users of general purpose financial reports to understand the regulatory risk associated with how the entity manages its workforce as it transitions to a lower-carbon economy as a climate-related risk that it has determined could reasonably be expected to affect its prospects.

The entity decides that disclosing information about how it has responded to, and how it plans to respond to, that climate-related regulatory risk in its strategy and decision-making will provide material information to users of general purpose financial reports. Accordingly, applying paragraph 14(a) of IFRS S2, the entity discloses information about its plans for its workforce as a consequence of phasing out its coal-based plants and increasing its renewable energy production.

The entity explains its plan to retrain and redeploy as many coal-based plant employees as possible to other roles in the entity, particularly to its growing renewable

energy business. The entity explains how it plans to work with trade unions to support onward transition for other employees (for example, retirement plans and voluntary resignation packages).

Specifically, the entity discloses the following information:³

- the type and scope of programmes it will implement and training it will provide to redeploy employees to other parts of the entity; and
- the type, scope and expected cost of packages and programmes it will provide to support and facilitate onward employability and management of career endings, for example, resulting from voluntary resignation and retirement.

In accordance with paragraph 33 of IFRS S2, the entity also discloses a quantitative climate-related target it has set to monitor progress towards achieving its goal to redeploy as many coal-based plant employees as possible. Specifically, the entity discloses information about its target to redeploy X% of the X00 employees in its coal-based plants to other parts of the entity by 20X0 and about how it plans to achieve that target.

The entity also explains how it plans to cooperate with local authorities and union representatives, because phasing out its coal-based plants will accelerate the decline of local coal production and directly cause the loss of X,000 coal mining jobs in a difficult employment market in the entity's jurisdiction.

³ The ISSB staff observes that disclosing this information is similar to disclosures set out in the Global Reporting Initiative (GRI) Standards—specifically, some of this information is aligned with Disclosure 404-2 in *GRI 404: Training and Education 2016*.