IFRS Sustainability

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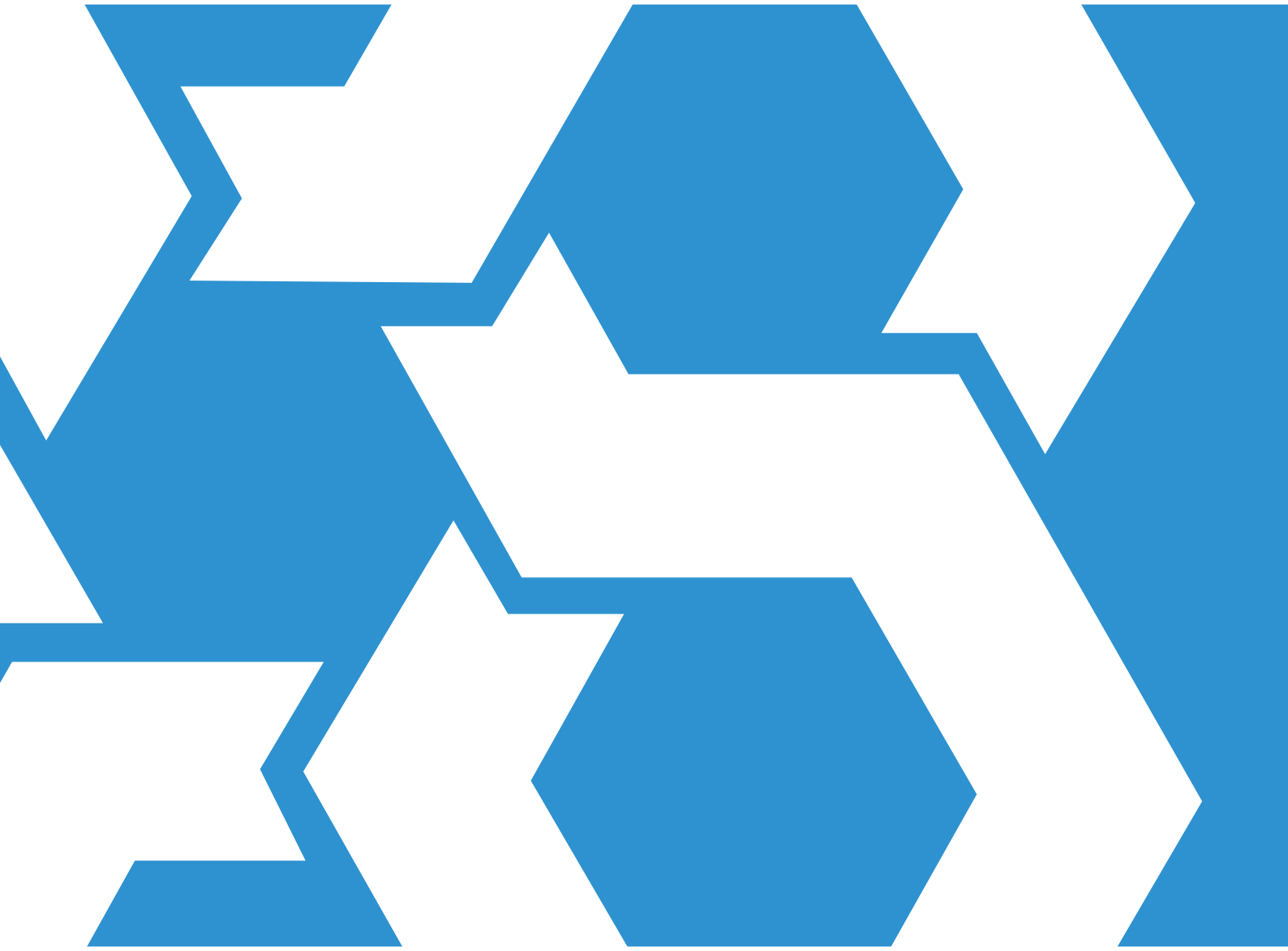
Exposure Draft

IFRS® Sustainability Disclosure Standard

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

Volume B46—Aerospace & Defense

Comments to be received by 29 July 2022



International Sustainability Standards Board

ED/2022/S2

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.

Aerospace & Defense

Industry Description

Companies in the Aerospace & Defense industry include manufacturers of commercial aircraft, aircraft parts, aerospace and defense products, as well as defense prime contractors. Commercial aircraft manufacturers represent approximately one quarter of industry revenues and sell mainly to commercial airlines and governments. Aerospace and defense parts manufacturers represent the largest segment of the industry by total revenue, selling primarily to governments. Both aerospace and defense manufacturers operate globally and serve a global customer base. Defense primes represent approximately one quarter of total industry revenues and manufacture products including military aircraft, space vehicles, missile systems, ammunition, small arms, naval ships, and other commercial and military vehicles. Their customers consist of various government agencies and related businesses with global operations. The defense prime category also includes firearms manufacturers that sell to law enforcement agencies, businesses, distributors, retailers, and consumers. Key sustainability topics within the industry include the energy efficiency and emissions profile of products and management of manufacturing energy and waste.

Sustainability Disclosure Topics & Metrics

Table 1. Sustainability Disclosure Topics & Metrics

TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	RT-AE-130a.1
Fuel Economy & Emissions in Use-phase	Revenue from alternative energy-related products	Quantitative	Reporting currency	RT-AE-410a.1
	Description of approach and discussion of strategy to address fuel economy and greenhouse gas (GHG) emissions of products	Discussion and Analysis	n/a	RT-AE-410a.2

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Production by reportable segment [82]	Quantitative	Number	RT-AE-000.A
Number of employees	Quantitative	Number	RT-AE-000.B

[82] Note to **RT-AE-000.A** – Production should be disclosed as the number of units produced by product category, where relevant product categories include (1) ground vehicles, (2) aircraft, (3) marine vehicles, (4) vehicle and aircraft components, and (5) space and weapons systems.

Energy Management

Topic Summary

Energy is a critical input to the manufacturing processes of aerospace and defense companies. Purchased electricity represents the largest share of energy expenditures in the industry, followed by purchased fuels. The type of energy used, magnitude of consumption, and energy management strategies depends on the type of products manufactured. A company's energy mix, including the use of electricity generated on-site, grid-sourced electricity, and the use of alternative energy, can play an important role in influencing the cost and reliability of energy supply, and ultimately affect the company's cost structure and regulatory risk.

Metrics

RT-AE-130a.1. (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable

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 is renewable energy.

3.1 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, hydro, and biomass.

3.2 The percentage shall be calculated as renewable energy consumption divided by total energy consumption.

3.3 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.

3.3.1 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.

3.3.2 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.

3.3.3 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.

3.4 For the purposes of this disclosure, the scope of renewable energy from ~~hydro and~~ biomass sources is limited to ~~the following:~~

~~3.4.1 Energy from hydro sources is limited to those that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard;~~

~~3.4.2~~ ~~Energy from biomass sources is limited to~~ materials certified 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), materials considered eligible sources of supply according to the *Green-e Framework for Renewable Energy Certification, Version 1.0* (2017) or Green-e regional standards, and/or materials that are eligible for an applicable state renewable portfolio standard.

4 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).

Fuel Economy & Emissions in Use-phase

Topic Summary

Customer preferences and regulatory drivers are increasing the demand for energy-efficient and reduced-emissions products in the Aerospace & Defense industry. Many of the industry's products are powered by fossil fuels and release greenhouse gases (GHGs) and other air emissions during use. As the designers and manufacturers of most of the global aerospace and defense transportation fleet, companies in this industry have a unique opportunity to support many industries and government agencies that are striving to meet GHG emissions and fuel-management goals and imperatives. Products with higher fuel economy and lower use-phase emissions may be well positioned to capture expanding market share and adapt to changing customer preferences and regulations around fuel economy and emissions.

Metrics

RT-AE-410a.1. Revenue from alternative energy-related products

1 The entity shall disclose its total revenue from the sale of alternative energy-related products, where:

1.1 Alternative energy-related products include products such as vehicles, vehicle components, and stationary power generation equipment that rely on alternative fuel or energy as a primary means of propulsion and/or energy production.

1.2 Alternative energy and fuel includes:

1.2.1 Renewable fuel and energy, which is defined as that from sources that are capable of being replenished in a short time through ecological cycles, such as geothermal, wind, solar, hydroelectric, and biomass (including ethanol, first-generation biofuels, and advanced biofuels)

1.2.2 Hydrogen fuel and fuel cells including those that operate using natural gas, propane, and methanol

1.3 Electric, hybrid electric, and dual-fueled products for which one of the fuel sources is an alternative fuel shall be considered within the scope of disclosure.

RT-AE-410a.2. Description of approach and discussion of strategy to address fuel economy and greenhouse gas (GHG) emissions of products

1 The entity shall describe its approach and discuss its strategies for improving the fuel economy and reducing the use-phase greenhouse gas (GHG) emissions of its products.

2 Relevant aspects of the approach and strategy include improvements to existing products and technologies, the introduction of new technologies, research and development efforts into advanced technologies, and partnerships with peers, academic institutions, and/or customers (including governmental customers).

3 Relevant technologies to describe include, but are not limited to, those related to materials design and engineering, advanced powertrains, renewable fuels, energy storage and batteries, aerodynamic design, and products and fuels that otherwise result in reduced GHG emissions, where:

3.1 Advanced powertrain technologies include vehicles and vehicle components that are electric, hybrid electric, plug-in hybrid, dual-fuel, and zero-emissions (e.g., fuel cell).

3.2 Renewable fuels and energy technologies are those that operate on sources that are capable of being replenished in a short time through ecological cycles, including geothermal, wind, solar, hydroelectric, and biomass (including ethanol, first-generation biofuels, and advanced biofuels).

3.3 Products that result in reduced GHG emissions include any vehicle or technology that achieves a significant reduction in petroleum consumption as well as advanced lean burn technology vehicles and technologies~~, as described in the U.S. National Defense Authorization Act of 2008~~.

3.4 Fuels that result in reduced GHG emissions further include denatured alcohol, methanol, mixtures containing up to 85 percent methanol or denatured ethanol, natural gas, and propane (liquefied petroleum gas)~~, as described in the U.S. Energy Policy Act (EP Act) of 2005~~.

3.5 Where relevant, the entity shall discuss the technologies it is prioritizing to improve the fuel economy and reduce the GHG emissions of its products, such as the specific type of fuel systems it is developing (e.g., hybrid, electric, or fuel cell).

4 The entity shall describe the factors influencing these efforts, such as meeting civil customer demand, alignment with industry initiatives, and/or meeting requirements of federal procurement programs and initiatives, where:

4.1 Relevant programs and initiatives to describe include~~,~~ but are not limited to,~~ U.S. Executive Order 13693 and~~ the International Civil Aviation Organization Resolution A38-18.

5 The entity may describe the benchmarks it uses to measure improvements in product fuel efficiency for relevant vehicles and/or vehicle system segments, including a description of targets for fuel efficiency improvements.

6 The entity may provide measurements of fuel efficiency and fuel efficiency improvements for its relevant vehicle and/or vehicle systems segments.

6.1 Measurements of fuel efficiency and fuel efficiency improvements may include:

6.1.1 Inherent fuel efficiency measurements, such as miles per gallon for vehicles and vessels and 1/Specific Air Range for aerospace vehicles

6.1.2 Year-over-year fuel efficiency improvements

7 The entity may discuss how customer demand and requirements affect fuel efficiency measures and improvements, where relevant.

