IFRS® Sustainability

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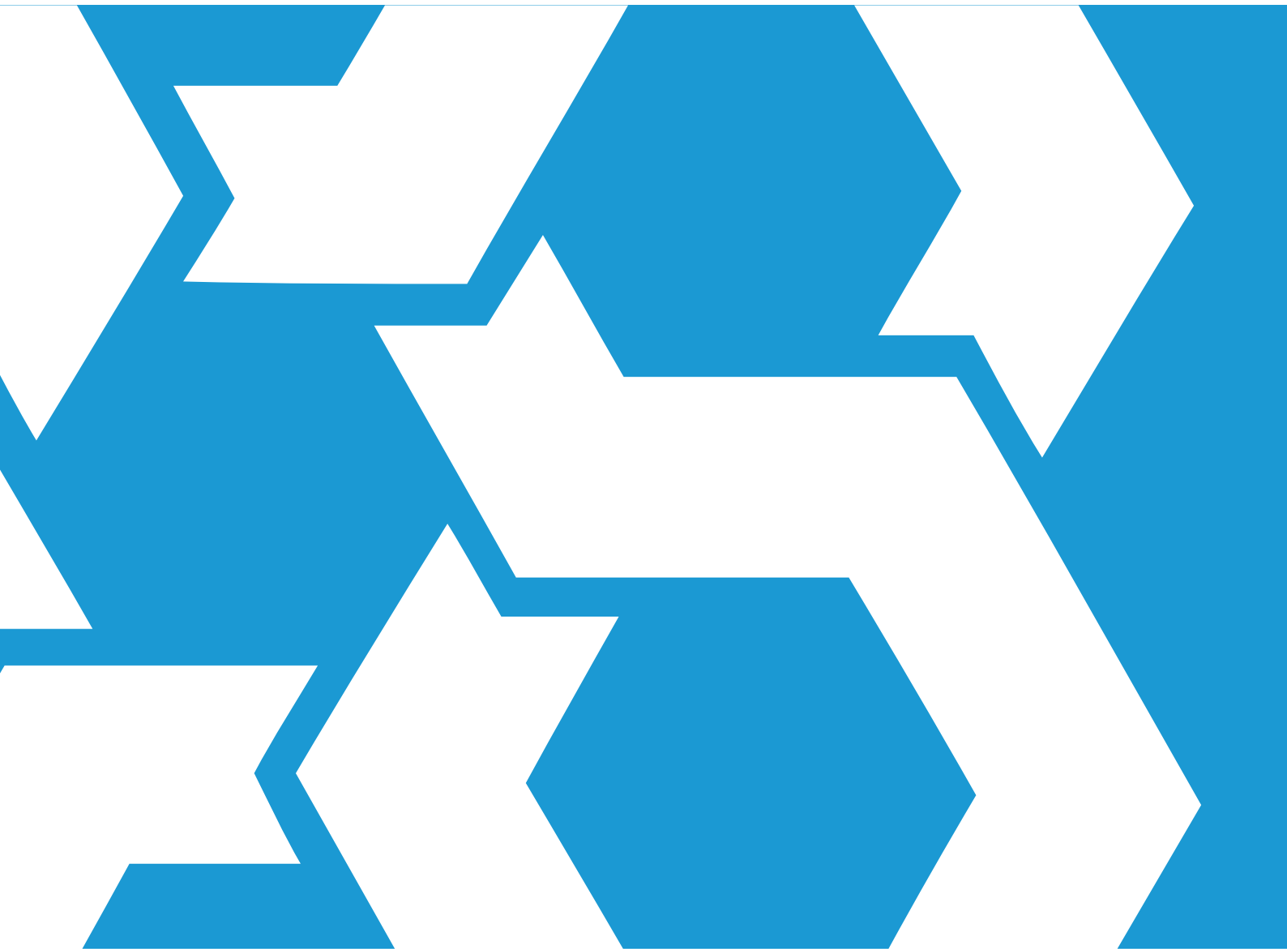
IFRS S2

IFRS® Sustainability Disclosure Standard

Industry-based Guidance on implementing Climate-related Disclosures

Volume 46—Aerospace & Defence



International Sustainability Standards Board

This Industry-based Guidance accompanies IFRS S2 *Climate related Disclosures* (published June 2023; see separate booklet) and is issued by the International Sustainability Standards Board (ISSB).

Introduction

This volume is part of the Industry-based Guidance on Implementing IFRS S2 Climate-related Disclosures. *This guidance suggests possible ways to apply some of the disclosure requirements in IFRS S2 but does not create additional requirements.*

This volume suggests possible ways to identify, measure and disclose information about climate-related risks and opportunities that are associated with particular business models, economic activities and other common features that characterise participation in this industry.

This industry-based guidance has been derived from Sustainability Accounting Standards Board (SASB) Standards, which are maintained by the International Sustainability Standards Board (ISSB). The metric codes used in SASB Standards have been included for ease of reference. For additional context regarding the industry-based guidance contained in this volume, including structure and terminology, application and illustrative examples, refer to Section III of the Accompanying Guidance to IFRS S2.

Volume 46—Aerospace & Defence

Industry Description

Entities in the Aerospace & Defence industry include manufacturers of commercial aircraft, aircraft parts, aerospace and defence products, as well as defence prime contractors. Commercial aircraft manufacturers represent approximately one quarter of industry revenue and sell mainly to commercial airlines and governments. Aerospace and defence parts manufacturers represent the largest segment of the industry by total revenue, selling primarily to governments. Both aerospace and defence manufacturers operate globally and serve a global customer base. Defence primes represent approximately one quarter of total industry revenue 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 defence prime category also includes firearms manufacturers that sell to law enforcement agencies, businesses, distributors, retailers and consumers. Important 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 and (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	RT-AE-130a.1
Fuel Economy & Emissions in Use-phase	Revenue from alternative energy-related products	Quantitative	Presentation 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 [80]	Quantitative	Number	RT-AE-000.A
Number of employees	Quantitative	Number	RT-AE-000.B

[80] 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 aerospace and defence manufacturing processes. Purchased electricity is the largest share of the industry's energy expenditures, followed by purchased fuels. The type of energy used, magnitude of consumption and energy management strategies depend on the type of products manufactured. An entity's energy mix, including electricity generated on-site, grid-sourced electricity and alternative energy, may influence the cost and reliability of energy supply and, ultimately, affect the entity's cost structure and regulatory risk.

Metrics

RT-AE-130a.1. (1) Total energy consumed, (2) percentage grid electricity and (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 external sources 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 measured directly or taken from the Intergovernmental Panel on Climate Change (IPCC).

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 was 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 programme, 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 shall be retained (not sold) and retired or cancelled on behalf of the entity for the entity to claim them as renewable energy.

3.3.2 For renewable PPAs and green power products, the agreement shall explicitly include and convey that RECs and GOs be retained or replaced and retired or cancelled on behalf of the entity 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 biomass sources is limited to materials certified to a third-party standard (for example, 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, or materials eligible for an applicable jurisdictional 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 incentives are increasing the demand for energy-efficient and reduced-emissions products in the Aerospace & Defence 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 defence transportation fleet, entities 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 capture expanding market share and adapt to changing customer preferences and regulations around fuel economy and emissions more effectively.

Metrics

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

1 The entity shall disclose 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 or energy production.

1.2 Alternative energy and fuel includes:

1.2.1 Renewable fuel and energy, which is defined as deriving from sources capable of being replenished quickly 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-fuelled 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 or customers (including governmental customers).

3 Relevant technologies to describe may include 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 (for example, fuel cell).

3.2 Renewable fuels and energy technologies are those that operate on sources capable of being replenished quickly 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.

3.4 Fuels that result in reduced GHG emissions further include denatured alcohol, methanol, mixtures containing up to 85% methanol or denatured ethanol, natural gas and propane (liquefied petroleum gas).

3.5 If relevant, the entity shall discuss the technologies it is prioritising to improve the fuel economy and reduce the GHG emissions of its products, such as the specific type of fuel systems it is developing (for example, 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, or meeting requirements of federal procurement programmes and initiatives, in which:

4.1 Relevant programmes and initiatives to describe include the International Civil Aviation Organization Resolution A38-18.

5 The entity may describe the benchmarks used to measure product fuel efficiency improvements for relevant vehicles 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 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, if relevant.

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