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Exposure Draft

IFRS[®] Sustainability Disclosure Standard

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

Volume B54—Electronic Manufacturing Services &
Original Design Manufacturing

Comments to be received by 29 July 2022

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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.

Electronic Manufacturing Services & Original Design Manufacturing

Industry Description

The Electronic Manufacturing Services (EMS) & Original Design Manufacturing (ODM) industry consists of two main segments. EMS companies provide assembly, logistics, and after-market services for original equipment manufacturers. The ODM segment of the industry provides engineering and design services for original equipment manufacturers and may own significant intellectual property. Although EMS & ODM companies produce equipment for a variety of sectors, the industry is closely associated with the Hardware industry, which consists of companies that design technology hardware products such as personal computers, consumer electronics, and storage devices for both personal consumers and businesses.

Note: The Electronic Manufacturing Services & Original Design Manufacturing industry does not include the design of technology hardware products. Companies that design and manufacture technology hardware products should consider the separate SASB Hardware Industry Standard (TC-HW) in addition to the SASB Electronic Manufacturing Services & Original Design Manufacturing Industry Standard (TC-ES).

Sustainability Disclosure Topics & Metrics

Table 1. Sustainability Disclosure Topics & Metrics

TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m ³), Percentage (%)	TC-ES-140a.1
Product Lifecycle Management	Weight of end-of-life products and e-waste recovered, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	TC-ES-410a.1

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of manufacturing facilities	Quantitative	Number	TC-ES-000.A
Area of manufacturing facilities	Quantitative	Square feet (ft ²)	TC-ES-000.B
Number of employees	Quantitative	Number	TC-ES-000.C

Water Management

Topic Summary

The manufacturing of computers, computer components, and other electronics requires significant volumes of water. Water is becoming a scarce resource around the globe, due to increasing consumption from population growth and rapid urbanization, and reduced supplies due to climate change. Without careful planning, water scarcity can result in higher supply costs, social tensions with local communities and governments, and/or loss of access to water in water-scarce regions thereby presenting a critical risk to production, and thus revenues. Electronic Manufacturing Services (EMS) & Original Design Manufacturing (ODM) companies that are able to increase the efficiency of water use during manufacturing can reduce operating costs and maintain a lower risk profile, ultimately impacting cost of capital and market valuation. Furthermore, firms that prioritize reducing water use and greater efficiency can face lower regulatory risks as local, regional, and national environmental laws place increasing emphasis on resource conservation.

Metrics

TC-ES-140a.1. (1) Total water withdrawn, (2) total water consumed, percentage of each 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 all sources.
 - 1.1 Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the entity, and water and wastewater obtained from municipal water supplies, water utilities, or other entities.
- 2 The entity may disclose portions of its supply by source if, for example, significant portions of withdrawals are from non-freshwater sources.
 - 2.1 Fresh water may be defined according to the local laws and regulations where the entity operates. Where there is no legal definition, fresh water shall be considered to be water that has less than 1,000 parts per million of dissolved solids ~~per the U.S. Geological Survey~~.
 - 2.2 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.
- 3 The entity shall disclose the amount of water, in thousands of cubic meters, that was consumed in its operations.
 - 3.1 Water consumption is defined as:
 - 3.1.1 Water that evaporates during withdrawal, usage, and discharge;
 - 3.1.2 Water that is directly or indirectly incorporated into the entity's product or service;

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3.1.3 Water that does not otherwise return to the same catchment area from which it was withdrawn, such as water returned to another catchment area or the sea.

- 4 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 percent) or Extremely High (>80 percent) Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.
- 5 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.
- 6 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.

Product Lifecycle Management

Topic Summary

Companies in the Electronic Manufacturing Services (EMS) & Original Design Manufacturing (ODM) industry, along with the industry's customers such as hardware companies, face increasing challenges associated with environmental externalities attributed to product manufacturing, transport, use, and disposal. Rapid obsolescence of hardware products exacerbates such externalities. The industry's products commonly contain hazardous materials, making safe end-of-life disposal a critical aspect to manage. Companies unable to minimize the environmental externalities of their products may face increased regulatory costs as local, regional, and national environmental laws place increasing emphasis on resource conservation and waste management. Through product innovation that facilitates end-of-life product recovery and the use of less-impactful materials, EMS & ODM manufacturers can achieve improvements in lifecycle impacts, reduce regulatory risk, and realize cost savings.

Metrics

TC-ES-410a.1. Weight of end-of-life products and e-waste recovered, percentage recycled

- 1 The entity shall disclose the weight, in metric tons, of end-of-life material that was recovered, including through reverse logistics services, recycling services, product take-back programs, and refurbishment services.
 - 1.1 End-of-life material that was recovered is defined as products, materials, and parts, including electronic waste material (e-waste), that at the end of their useful life would have otherwise been disposed of as waste or used for energy recovery, but have instead been collected.
 - 1.2 The scope of end-of-life material that was recovered includes materials physically handled by the entity.
 - 1.3 The scope of end-of-life material that was recovered includes materials that the entity did not take physical possession of, but were collected by a third party for the expressed purpose of reuse, recycling, or refurbishment.
 - 1.4 The scope of end-of-life material that was recovered excludes materials that have been collected for repair or that are in-warranty and subject to recall.
- 2 The entity shall disclose the percentage of end-of-life material that was recovered and subsequently recycled.
 - 2.1 The percentage shall be calculated as the weight of end-of-life material that was recovered and subsequently recycled divided by the total weight of end-of-life material that was recovered.
 - 2.2 Recycled material (including remanufactured material) is defined as waste material that has been reprocessed or treated by means of production or manufacturing processes and made into a final product or a component for incorporation into a product.

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- 2.3 The scope of recycled material includes material that was reused or reclaimed.
 - 2.3.1 Reused material is defined as recovered products or components of products that are used for the same purpose for which they were conceived, including products donated and/or refurbished by the entity or by third parties.
 - 2.3.2 Reclaimed material is defined as material processed to recover or regenerate a usable product.
 - 2.4 The scope of recycled material includes primary recycled material, co-products (outputs of equal value to primary recycled materials), by-products (outputs of lesser value to primary recycled materials), and material sent externally for further recycling.
 - 2.5 The scope of recycled material excludes portions of products and materials that are disposed of in landfills.
- 3 Electronic waste material (e-waste) shall be considered recycled only if the entity can demonstrate that this material was transferred to entities with third-party certification to a standard for e-waste recycling such as Basel Action Network's e-Steward® standard ~~or the U.S. EPA's Responsible Recycling Practices (R2) standard.~~
- 3.1 The entity shall disclose the standard(s) with which the entities it has transferred e-waste to are compliant.